Most companies would consider a receiver with any one of these innovations remarkable.
But Pioneer isn't just any company. And our 270-watt SX 1980 is somewhat better than remarkable.

Every month, somebody introduces something called "the world's most incredible hi fi receiver." Yet when you compare their features and technology to Pioneer's SX 1980, these "miracles of modern science" begin to look, and sound rather pedestrian.

The greatest DC power story ever told.

It's a simple fact of life that the more pure power a receiver possesses, the easier it can reproduce music without straining.

And at 270 watts per channel, even the most demanding piece of music will hardly cause the SX 1980 to flex its considerable muscle.

But when we built the SX 1980, we did more than just create an incredibly powerful receiver. We created a whole new high powered technology.

Each channel, for example, has a separate DC power configuration that helps to provide richer and more accurate bass.

Where some high powered receivers try to get by with ordinary transformers, Pioneer has developed a 22 pound toroidal core transformer that's far less susceptible to minor voltage variations. So you get cleaner, clearer sound.

And instead of pushing conventional power transistors to their limits (the way some manufacturers do), we've actually invented new transistors that last longer and eliminate the need for fans that can cause electrical interference.

All told, these innovations give the SX 1980 a total harmonic distortion level of less than 0.03% from 20 to 20,000 hertz. A figure that not only taxes the imagination, but also the abilities of most scientific measuring equipment.

A totally unique tuning system.

Deep inside the SX 1980 there's a quartz crystal generating the perfect frequencies of every FM station in the United States and Canada.

As you rotate the tuning dial, a special Pioneer integrated circuit compares the station you're trying to tune to its perfect frequency. When the station is tuned exactly right (all this takes about half a second), a "fine tuned" light comes on; the receiver then senses when you've let go of the tuning dial and automatically "locks" onto that broadcast.

Luckily, the benefit of all this is far easier to explain than the technology: FM drift is eliminated. A fact that's easily appreciated by anybody who's ever tried to record a long concert off a less formidable receiver.

In addition, the SX 1980 features a five gang variable capacitor that helps pull distant FM stations into weak areas. And there's also a multipath button for adjusting your antenna to eliminate multipath distortion. So even tall buildings won't stand between you and better sound. (FM sensitivity is an incredible 1.5 microvolts; the signal to noise ratio is an equally superb 83 decibels. Both better than most separate tuners.)

Still other innovations.

When we designed the SX 1980, we knew it would represent a remarkable engineering achievement. But it also represents the kind of thinking and value you get in every high fidelity component we make.

That's why besides everything else, the SX 1980 features a suggested price of less than $1250.

Which only sounds expensive until you hear what our competition is asking for other high powered receivers that lack this kind of sophistication.

The SX 1980 is currently inspiring awe at your local Pioneer dealer. But before you go listen be warned: it'll spoil you for anything ordinary.
Wattage meters that let you see what you're hearing.

High powered transistors that don't need fans.

Impedance switches that let you get the most out of your cartridge.

Quartz sampled tuning for near perfect FM reception.

A power section that puts out a continuous power output of 270 watts per channel from 20 to 20000 hertz with less than 0.03% total harmonic distortion.
Empire's Blueprint for Better Listening...

No matter what system you own, a new Empire phone cartridge is certain to improve its performance.

The advantages of Empire are threefold:

One, your records will last longer. Unlike other magnetic cartridges, Empire's moving iron design allows our diamond stylus to float free of its magnets and coils. This imposes much less weight on the record surface and assures longer record life.

Two, you get better separation. The small, hollow iron armature we use allows for a tighter fit in its positioning among the poles. So, even the most minute movement is accurately reproduced to give you the space and depth of the original recording.

Three, Empire uses 4 poles, 4 coils, and 3 magnets (more than any other cartridge) for better balance and hum rejection. The end result is great listening. Audition one for yourself or write for our free brochure, "How To Get The Most Out Of Your Records." After you compare our performance specifications with those of other cartridges, you'll agree that, for the money, you can't do better than Empire.

Empire Scientific Corp., Garden City, New York 11530

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**Track 2000**

---|---|---|---|---|---|---|---
**Frequency Response** | 10kHz-50kHz ±3dB | 15kHz-45kHz ±3dB | 20kHz-20kHz ±2dB | 20kHz-20kHz ±1dB | 20kHz-20kHz ±2dB | 20kHz-20kHz ±2dB | 20kHz-20kHz ±3dB | 20kHz-20kHz ±3dB
**Tracking Force Range** | 2.5 mil elliptical | 2.5 mil elliptical | 2.5 mil elliptical | 2.5 mil elliptical | 3 mil elliptical | 3 mil elliptical | 7 mil spherical
**Separation** | 1/4-11/4 gm | 1/4-11/4 gm | 1/4-11/4 gm | 1/4-11/4 gm | 1/4-11/4 gm | 1/4-11/4 gm | 1/4-11/4 gm | 1/4-11/4 gm
**Channel Balance** | within 1 dB @ 1kHz | within 1/2 dB @ 1kHz | within 1/2 dB @ 1kHz | within 1/2 dB @ 1kHz | within 1/2 dB @ 1kHz | within 1/2 dB @ 1kHz | within 1/2 dB @ 1kHz | within 1/2 dB @ 1kHz
**Input Load** | 100kOhms/channel | 100kOhms/channel | 47kOhms/channel | 47kOhms/channel | 47kOhms/channel | 47kOhms/channel | 47kOhms/channel | 47kOhms/channel
**Total Capacitance** | under 100 pF/channel | under 100 pF/channel | 300 pF/channel | 300 pF/channel | 400 pF/channel | 400 pF/channel | 400 pF/channel | 400 pF/channel
**Output** | 3 mW/channel | 3 mW/channel | 3 mV/channel | 3 mV/channel | 3 mV/channel | 4.5 mV/channel | 4.5 mV/channel | 7 mV/channel

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CIRCLE NO. 21 ON READER SERVICE CARD
Why lust after our $6500 Quantum Reference Standard when you can take home our new Qe?

$105 and it will sit on your bookshelf.

If you thought the Infinity Qa was an incredible speaker—and an incredible buy at $150—wait till you hear our new Qe.

The least expensive Infinity speaker, it has the clarity and sweetness in the upper registers; the definition and delicacy in the mid-range; and the tight, clean bass that is characteristic of all Infinity speakers.

This is a true audiophile component. No speaker at its price has ever come close to its accuracy, openness and transparency.

The reason is simple: Qe is the beneficiary of Infinity state-of-the-art technology. It has our EMIT™ Electromagnetic Induction Tweeter (same as all our much more expensive Quantum and Q Series speakers). It has an 8-inch version of the remarkable Q-woofer™ (with its phosphor bronze voice-coil former, butyl surround and special cone treatment) found in our highly acclaimed Qa and Qb.

Equally important, Qe has had built into it a year of sonic measurements, creative listening and critical adjustments by our scientist/musician designers, in order to optimize its sound for bookshelf rather than open floor space, and to create an unparalleled bookshelf instrument.

Test Qe with your most demanding records in an Infinity dealer’s listening room. It will be a revelation.

You'll hear orchestral colors, subtle nuance of inner voices and a sense of three-dimensional depth you've rarely heard from records.

The Maazel/Respighi Feste Romane on London, for example: the massive, stabbing trombone pedal tones are clear and undistorted; the soaring violins are forte but un-screchy. Listen to the liquid warmth of Janet Baker, the hard-driving rock lyricism of the Bee Gees, the solid velvet-edge of Chuck Mangione—all revealed with a musicality never before possible from a speaker of such modest size and price.

Just 18 by 12 by 10 inches, the Qe speaks from 47 Hz through a spectacular 32,000 Hz ±3 dB and can live happily ever after with amplifiers or receivers of from 12 to 100 watts of RMS power per channel.

A formidable achievement. And, at $105, a remarkable price.

So don't worry about not having the space for a set of our 6-foot 6-inch Quantum Reference Standard speakers. Now you have the Qe.

A free call to 800-423-5244 (in California: 800-382-3372) gets you Qe literature and the name of your nearest Infinity dealer. Run, don’t walk.

About that “e” in Qe:

This is the speaker for everyone.

We get you back to what it’s all about. Music.
The Equipment

- COURSES IN AUDIO RECORDING will be added to the music school curriculum of the prestigious Aspen (Colorado) Music Festival for the first time this summer. The Aspen Audio Recording Institute, an intensive full-time workshop in basic recording techniques, will be held four times in two-week sessions (June 26-July 9, July 10-23, July 24-August 6, and August 7-20). Courses will be taught by industry professionals, including Thomas Frost, a director of Columbia Records' Masterworks Division, and RCA's executive producer John Pfeiffer. Recording equipment will be provided by the Ampex Corporation and loudspeakers by James B. Lansing Sound. Tuition is $200 for a two-week session. For information write to Aspen Music Festival, Suite 401, 1860 Broadway, New York, N.Y. 10023, or call (212) 581-2196.

- THE FIRST AMERICAN DIGITAL RECORDINGS for general release are beginning to appear. "A Tribute to Ethel Waters," with Diahann Carroll and the Duke Ellington Orchestra, was released on April 1 as a limited-edition item by Orinda Recording Corporation (23 Altarinda Road, Orinda, Calif. 94563). More recently, Telarc recorded works by Bach, Handel, and Holst in a two-day session with the Cleveland Symphonic Winds, Frederick Fennell conducting. Both productions employed the Soundstream PCM recorder, and editing has been (or will be) carried out in cooperation with Soundstream, using that company's newly developed digital editing technique. Disc versions of the Cleveland production are expected to be available by mid-summer from Telarc Records (4150 Mayfield Road, Cleveland, Ohio 44121).

- AN EXHIBITION OF HI-FI PRODUCTS is being held at, of all places, the Museum of Modern Art in New York. MOMA, which regularly singles out excellence in industrial design, is currently honoring Bang & Olufsen of Denmark with a display of thirty of that company's electronic products. On view until June 18, the exhibition is in the museum's Goodwin Galleries on the second floor. Museum hours are 11 a.m. to 6 p.m. (11 to 9 on Thursdays, closed Wednesdays).

- A UNIQUE NEW DESIGN IN MOVING-COIL CARTRIDGES has been developed by JVC. Working with large-scale integrated-circuit (LSI) techniques, the company has succeeded in "printing" tiny coils on a minute wafer substrate. The wafer is affixed to the cantilever quite close to the stylus tip—a position that is said to keep translation losses to a minimum. Availability of the cartridge is very limited now, and future marketing plans are pending. But if response to the design is favorable, JVC may begin importing the cartridge in quantity.

- A TAPE GAP OF ONLY 0.9 MICRONS has been developed by Nakamichi for a record/playback cassette head. This exceedingly narrow gap, heretofore considered impractical because of anticipated saturation problems in the record mode, is the result of new research into the propagation of magnetic fields. Two-head machines equipped with the new head are said to be easily capable of record-play response beyond 20,000 Hz.

- A THREE-HEAD CASSETTE DECK with speeds of both 1 7/8 and 3 3/4 is said to be on its way to market. The two-speed approach was attempted some years ago by the now-defunct Astrocom/Marlux, but lack of support by the cassette's parent company, Philips of Holland, ended the project. The new cassette deck, to be marketed by an as yet undisclosed manufacturer, reportedly has the tacit approval of Philips.
The Music

- THE GODDARD LIEBERSON FELLOWSHIPS have been established by the American Academy and Institute of Arts and Letters with a grant of $300,000 in memory of the late president of the CBS Records Group. Lieberson, who was a CBS executive for thirty-six years, died in May 1977. (See a personal reminiscence by Peter Reilly on page 136.) An additional $100,000 is being given to the Academy-Institute for the fellowship endowment by CBS/Sony Inc., of Tokyo. The income from these funds will be used to make annual awards to gifted young composers.

- THE RIAA CULTURAL AWARD was presented to Joan Mondale at the Recording Industry Association of America's tenth annual cultural award dinner in Washington on April 18. Previous recipients of the award include Senator Jacob K. Javits, Willis Conover, Nancy Hanks, and the late Senator Hubert H. Humphrey. At the dinner honoring Mrs. Mondale entertainment was provided by Loretta Lynn, Conway Twitty, and Jane Olivor.

- WHAT DO Eleanor Roosevelt, Bea Lillie, Sean Connery, George Raft, Arthur Godfrey, and David Bowie have in common? Why, they've all recorded the narration for Prokofiev's Peter and the Wolf. Bowie's version, backed by rising pop stars Gene Ormandy and the Philadelphians, will be released by RCA later this month on (for unspecified reasons) a special green vinyl.

- SATURDAY NIGHT FEVER's producer (and RSO Records' president) Robert Stigwood fired off a telegram to the Motion Picture Academy's Board of Governors on Oscar night to express his anger "at the total exclusion of the Bee Gees and their music... from any and all nominations." At last count, the soundtrack album had sold over ten million copies after sixteen weeks on the chart.

- CONDUCTOR KURT HERBERT ADLER is celebrating both gold and silver anniversaries this year—his fiftieth in the field of opera and his twenty-fifth as General Director of the San Francisco Opera Company. Adler's recent recordings include an album of operatic duets sung by Renata Scotto and Placido Domingo, awaiting release on the Columbia label, and an album of operatic intermezzi to be issued soon by London Records.

- INVITATION TO PIRACY: Atlantic Records is launching a new series of live albums that will be available only to radio stations. Each month at least one Atlantic act will tape a performance before an invited audience, which will then be given to a different radio station for premiere broadcast. First up: Jimmy Page's Swan Song label mates, Detective.

- GROUPS TO DO WITHOUT: KSAN radio station (San Francisco) has announced the winners of a contest held to find names for new punk-rock bands. Prizes went to, among others, Son of Spam and Adolph Hitler and the Casuals.

- SELECTIONS FROM THE OLD REMINGTON AND DECCA catalogs will be reissued by a new California-based company, Varèse International, P.O. Box 148, Glendale, Calif. 91209.

- THE SWEDISH BIS LABEL, whose records were formerly distributed in this country by HNH Distributors, is now represented here by Qualiton, 65-37 Austin Street, Rego Park, N.Y. 11374.
We put Melissa Manchester to the Memorex test: was she listening to Ella Fitzgerald singing live, or a recording on Memorex cassette tape with MRX₂ Oxide?
It was Memorex with MRX₂ Oxide, but Melissa couldn't tell. It means a lot that Memorex can stump a singer, songwriter and musician like Melissa Manchester.
It means a lot more that Memorex can help you capture and play back your favorite music the way it really is.

MEMOREX Recording Tape
Is it live, or is it Memorex?
WORKING LATE AT THE PATENT OFFICE

Does it sometimes seem to you, as it does to me, that we expect too much of ourselves—or maybe that we expect too much of our fellow human beings? Too many of us have lately been carrying on, with tedious self-righteousness and at stultifying length, about how nothing (or nobody) seems to work any more, how everything either conks out the day after the warranty expires or didn't work properly from the day it was unpacked and plugged in, that half the industrial establishment appears to be united in a conspiracy to Rip Us Off and the other half might as well be because they are too inept to manufacture a working mousetrap. We are, I fear, in the grip of an epidemic of knee-jerk disaffection that threatens to make a nation of unhappy, whining complainers of us all. I, for one, have had enough of wall-to-wall bitching, enough of seeing the bad guys—those who persist in telling us that the glass is half empty—get all the press, and am ready to welcome a few yea-sayers who will step up and point out that the glass is, in fact, better than half full.

Despite the irritating minor inconveniences and even major hardships of our recent nasty winter, despite a persistent cough whose purpose seems to be to bring up my shoelaces, and despite a little personal list of industry shortcomings, I'm feeling pretty good this spring, disposed to do some yea-saying of my own. I am, in brief, well content, convinced that we audiophiles—or melomanes, if you prefer—are living in a time when we can get more music of higher artistic and sonic quality at less cost than at any other time in the history of recording. Note that I did not say that we are living in the best of all possible audio times, for that time lies still in the future; but we have much to enjoy, more to look forward to, and the patent office will be working late for some time to come.

CONTRIBUTING EDITORS
CHRIS ALBERTSON
NOEL COGGAGE
RICHARD FREED
PHVL. GARLAND
DAVID HALL
ROY HEMMING
JULIUS D. HIRSCH
GEORGE JELINEK
IGOR KIPNIS
IVRIN KOLDIN
PAUL KRESH
STOYDARD LINDOLN
J MARKS-HIGHWATER
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LINCOLN PERRY
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PRODUCTION EDITOR
JOHN HARRISON

ASSISTANT EDITOR, RESEARCH
RICHARD SARBIN

COPY EDITOR
DAVID STEIN

EDITORIAL ASSISTANTS
BARBARA AIKEN, DIANE NAKAMURA

While it is true that some few of our fellow human beings appear to have scuttled the good ship Quadraphonics successfully, I am sure they did so while in the innocent grip of an unenlightened competitive fit, each convinced that he alone knew best how to make her seaworthy. But she will very likely reappear in some new guise during the coming decade, sailing out of a cornucopia of other audio innovations. The video tape (and perhaps even disc) era is almost certainly dawning, some kind of four-channel FM broadcasting seems to be a very strong possibility, and stereo AM is practically a shoo-in. New metal-alloy tapes will carry the cassette format to scarcely imagined heights of fidelity and probably spark revolutionary advances in microcassettes in the bargain. Digital techniques especially will be popping up all over—in artificial delay and reverberation units, in tape recorders, and, just possibly, in digitally encoded discs (digitally recorded tapes are already, of course, being transferred to unencoded discs—see Bulletin, page 5).

At least one new wrinkle coming to my attention recently does not merit inclusion in the big-time audio technology listed above, but it is fascinating nonetheless. The National Audubon Society is marketing a hand-size, battery-operated toy microphonograph that weighs less than a pound. Designed for the bird-watching fraternity, the package consists of the phonograph and a series of bird recognition cards (eighty-one of them, available in three sets). A bird is pictured in color on one side of the card and a text giving its physical description and habitat is printed on the other—under a transparent, embossed plastic recording of the bird's call. All you do is insert the card in the machine, press a button, and it plays. The gimmick here is that you do use the card that rotates, but the diamond pickup stylus—a first in my experience. Further details are available from the National Audubon Society, 950 Third Avenue, New York, N.Y. 10022. Have a nice spring.
ALL THREE-HEAD CASSETTE DECKS
LET YOU HEAR AS YOU RECORD.
OURS LETS YOU RECORD PRECISELY
WHAT YOU HEAR.

Not all three-head cassette decks are created equal. Some manufacturers have designed their decks with separate erase, record, and playback heads primarily for convenience. So you can tape monitor as you record. But our new KX-1030 uses separate heads primarily for performance. Each designed with the optimum gap to record or playback sound more accurately.

As a result, the KX-1030 has a frequency response of 35-18,000 Hz (± 3 dB using CrO2 tape.) And to let you take full advantage of the separate record and playback heads, the KX-1030 has a Double Dolby* system with separate circuits for the record amplifier and the playback preamplifier. That way, as you record

with Dolby, you can also tape monitor with Dolby, so you hear the sound precisely as it's being recorded.

The KX-1030 also has a Variable Bias Adjustment Control and a built-in oscillator, so you can adjust the exact bias for the type or brand of tape you use.

We also built in a number of other features like MIC/LINE mixing, memory rewind and a peak indicator.

But as good as all this sounds, wait until you hear the price. Because at $400.00**, no other comparably priced cassette deck can match the performance and features of our new KX-1030.

Of course the only way you're really going to appreciate the KX-1030 is to visit your Kenwood dealer. Once you do, you'll be convinced: Performance, convenience, and value set the KX-1030 apart from all the rest.

*Dolby is the trademark of Dolby Laboratories, Inc.

**Nationally advertised value. Actual prices are established by Kenwood dealers.

KENWOOD®

For the Kenwood dealer nearest you, see your yellow pages, or write, KENWOOD, P.O. Box 6243, Carson, CA 90749
THE JVC RECEIVER.
Every bit as revolutionary as they look, and then some.

In our case, looks are never deceiving. Because all our new DC integrated stereo receivers combine unprecedentedly revolutionary styling with electronic design features that reflect JVC’s more than 50 years’ experience in audio development and innovation.

DC POWER AMPLIFIER DESIGN
Usually found only in costlier separates, JVC offers DC amplifier circuitry in all four of our new receivers. By eliminating distortion-causing capacitors in our interconnecting circuit sections, JVC designers have created an amplifier that offers virtually distortion-free performance (0.03% THD) not only over the entire audio spectrum, but above and below it. As a result, all the sounds you hear are clearer, cleaner and crisper. Moreover, our DC design improves square wave performance and eliminates phase-shift—both factors being of paramount importance in distortion-free music reproduction. In addition, Triple Power Protection circuits and dual power meters give you safety and full indication of receiver operation. There are four new JVC DC integrated receivers, offering your choice of 120, 85, 60 and 35 watts/channel respectively.

S.E.A.—ALL THE WAY
JVC was the first receiver manufacturer to offer a built-in S.E.A. Graphic Equalizer in a quality receiver, and we continue this tradition by incorporating this convenient feature in our entire new receiver line. Far superior to even triple tone controls, this JVC exclusive gives you complete control over the entire musical spectrum. You can attenuate or accentuate any of five separate bands, covering the entire audible range of music. And as an added feature, we’ve incorporated a special button so that the S.E.A. equalizer circuit can also be switched to your tape deck, so you record exactly what you hear.

PUSHBUTTON SOURCE SELECTORS
Unlike conventional receivers, ours incorporate an advanced pushbutton source selection panel. Color-keyed LEDs indicate the program source, and a full-function horizontal pushbutton panel provides total control over all receiver operations. Professional-type slider controls set volume and balance.

SUPERIOR TUNER SECTION
High sensitivity and tuning precision are featured in all four new JVC receivers. Multi-gang FM tuning capacitors, PLL MPX demodulators and other circuit refinements provide optimum frequency response and stereo separation for FM, with maximum sensitivity for AM reception—a feature often neglected in receiver designs. A thumb-control tuning wheel and accurate metering make station location and fine-tuning easy. Other features include Mode/Loudness/Subsonic Filter switches and provision for connecting two sets of speakers.

Features, styling, innovation and performance are the four main things to look for in a DC integrated stereo receiver. And you’ll find them all in a JVC JVC America Company, Division of US JVC Corp., Maspeth, N.Y. 11378. In Canada, JVC Electronics of Canada, Ltd., Ont.

We build in what the others leave out.

CIRCLE NO. 31 ON READER SERVICE CARD

JR-S501 (featured at left); Below: JR-S401 (top); JR-S201 (bottom left) & JR-S301 (bottom right).

8 Ohms, both channels driven from 20Hz-20 KHz, with no more than 0.03% THD.
LETTERS TO THE EDITOR

Piano Archives

The otherwise excellent reviews by Igor Kipnis and David Hall (in the April issue) of several recent International Piano Archives releases unfortunately carried some incorrect information about the prices and availability of these albums. The Rachmaninoff Third Concerto with William Kapell (IPA 507) and the Grieg Concerto with Percy Grainger (IPA 508) are available only by subscribing to membership in the I.P.A. A year’s subscription costs $15 and entitles the subscriber to one of the albums; to receive both of them it is necessary to subscribe for two years, at $30. (The contributions are tax deductible.) The Sigismond Stojowski recording (IPA 115) is available for $6.98 from I.P.A., c/o the University of Maryland Music Department, College Park, Md. 20742. All the others mentioned in the Kipnis review are distributed by Desmar and are available from record stores at $7.98 each. Also, contrary to David Hall’s remarks in his review of the Kapell recording, the dates, orchestras, conductors, and the reason why the overside Mozart concerto is missing its first movement are all given on both the record jacket and the label.

GREGOR BENKO, President
International Piano Archives
College Park, Md.

Music Editor James Goodfriend replies: We regret having added to an already confusing situation. Readers should carefully note in the above letter the source, method of purchase, and price of any specific record they are interested in.

Bossa Nova

Thanks to Paulette Weiss for “Flying Down to Rio” (April “Pop Beat”). I wish I could say it in Portuguese, but English will have to do. I thought I was the only one who still loved bossa nova. In one page Ms Weiss said it all—and then some!

MICHAEL CHARLES SZEKELY
Fairview Park, Ohio

Paulette Weiss replies: Obrigado.

Faint Praise

In David Hall’s April review of the Deutsche Grammophon recording of the Brahms Second Piano Concerto with Pollini and Abt lado, there is praise for the performance and sound quality but a complaint about surface noise: “swishes, pops, and clicks . . . throughout the first couple of inches of each side.” If

Shostakovich Sonatas

In Richard Freed’s April review of the Aurora issue of Shostakovich’s Viola Sonata, he mentions hearing of an even better version by Fyodor Druzhnin (for whom the work was written) and pianist Michael Muntyan. Readers who do not wish to wait for a possible domestic release may find this performance on EMI/Melodiya HSQ 1369 at shops carrying imported discs. The work is not only more warmly recorded than on the Aurora release, but it is an exceptionally moving performance. Moreover, whereas Aurora spreads the sonata over both sides, on EMI it takes only one side, leaving the other for a reissue of the classic Oistrakh/Richter version of the Shostakovich Violin Sonata—a most apt coupling. Although the latter is still available domestically on Angel/Melodiya S-40189, the British disc has far better sound and surfaces, making it an excellent value even at the import price.

GERALD J. CANTER
Evanston, Ill.

Censored Midler

The photograph topping Peter Reilly’s review of Bette Midler’s new album, “Broken Blossom,” in the April issue bears the disc title in a place that suggests either a lack of good sense or a sardonic sense of humor that deserves recognition. Even giving the party responsible the benefit of the second explanation, it is questionable whether the value of the humor in this anatomical comment outweighs that of the appearance obscured by it.

ED H. HEATH
Lexington, Ind.

Genesis

Joel Vance’s April review of Genesis’ “Seconds Out” was the most biased, unsupported piece of trash I have ever read! As a critic myself, I feel that it is all very fine to pan an album if you’ve got legitimate reasons to do so and examples to support your thesis, but this review was ridiculous! A good critic should try to be objective, but it’s quite obvious that Mr. Vance hates Genesis with a passion, so he can’t even attempt to admit that the album is superbly produced or that the playing on it is fantastic.

R. MILLER
DeKalb, Ill.

Contrary to pop gossip, record companies do not handpick records going out for review; it’s just too time-consuming and therefore too expensive.

Dating Louise

Regarding the April review of Charpentier’s Louise, I hope that it was George Jelinek and not annotator Andrew Porter who has the opera performed a thousand times by 1856—fifty-six years before its premiere and four years before the composer was born.

WILLIAM C. DICKERMAN
Houston, Texas

It was neither of these gentleman, but an errant typesetter. The correct date is 1956. We apologize for not catching the mistake.

Michael Tucci
Bayonne, N.J.

Carlo Bergonzoni

George Jelinek’s comments on the new recording of Puccini’s Edgar (April issue) were right on the mark! Carlo Bergonzoni’s performance as Edgar was nearly hypnotic, with both bracing dramatic declamation and uncanny musical perception. Now we need new

(Continued on page 14)

STEREO REVIEW
AN ANT IN TROUBLE SCREAMS FOR HELP.

BASF'S NEW PROFESSIONAL II CASSETTE CAN PROVE IT.

THE PEOPLE WHO INVENTED MAGNETIC RECORDING TAPE HAVE INVENTED A COATING FORMULA SO SENSITIVE IT CAN RECORD THE SOUNDS OF A TERRIFIED ANT.

OTHER WORLDS
Using an anechoic chamber, the finest sound equipment available, and the most sensitive tape ever made, we were able to record the sound of a desert ant in distress...a sound something like a fire alarm.

It's a startling demonstration of the sensitivity of our new second generation chrome formulation. Its brand new, patented, coating process gives it more headroom, greater dynamic range, and a better signal-to-noise ratio. In other words, it gives it superb sensitivity.

And since Professional II is a pure chromium dioxide tape, and not a "chrome substitute", you not only get better sound performance, test results prove you get substantially less headwear.

PROFESSIONAL SERIES CASSETTES
In the Professional Series, Professional II is just one of three superb new BASF formulations. Professional I is our new ferric formulation with unsurpassed maximum output. And Professional III is our new ferrochrome formulation. It gives excellent results in all.

recorders from car cassettes with only a ferric setting to more expensive recorders with Chrome and Ferrochrome settings.

If you would like to discover the sounds of an ant running, an ant in distress, an eye lash blinking, a butterfly in flight, and a number of other never-before-recorded sounds, send just $3.50 to BASF OTHER WORLDS, Box 18367, Boston, Mass. 02118.

We will send you a $4.99 Professional II C-90 cassette with the sounds of other worlds. Half of the cassette will be blank so that you can use it to discover other worlds in music. This offer will be available while supplies last. Please allow four weeks for delivery.
Bob Welch

- For several years now I've put up with Steve Simels' narrow-minded and perverted opinions about music, but his March review of Bob Welch's "French Kiss" was the last straw. It is beyond comprehension how he can eulogize a Gong Show reject like Elvis Costello and then call a superb talent like Welch "insipid, watery, and undistin-

guished." When Peter Green left Fleetwood Mac, Welch did an excellent job of filling the void by composing some very catchy melodies. When you add in his innovative style of guitar playing and his smooth, tight vocal harmonies, he is reponsible for some of the most refreshing music since the Beatles.

William Sniger
Raynham, Mass.

Whence Billy Joel?

- Philadelphia can make many claims to entertainment fame, but Billy Joel isn't a native son. If Peter Reilly really is hooked on Joel's lyrics (as he implies in his answer to Greg Teta), he would know that Billy is from Oyster Bay, Long Island, as he clearly states in The Ballad of Billy the Kid on his second album, "Piano Man."

Mary Gildea
Lancaster, Pa.

- Billy Joel is not from Philadelphia, as Peter Reilly said in the April "Letters to the Editor." (reply to Greg Teta). He was born in Levittown, Long Island, and currently lives in New York City. As for his musical abilities, he was trained in classical music and started playing the piano at age four. I enjoy listening to Billy Joel not only for the lyrics but also for the music, including his lovely piano playing.

Claudia L. Dowe
Cambridge, Mass.

Critical Vocabulary

- I am a recent subscriber to Stereo Review, and I particularly enjoy reading the classical-music reviews. However, I have a hard time understanding what the critics mean in their capsule comments on the recording quality of the albums. Perhaps the terms they use were explained in an earlier issue of the magazine. Without some explanation, I find it difficult to tell what is intended by such remarks as "excellent," "crisp," "fine," "good," "first-rate," "soloist prominent," "quite good," "superb," "resonant," "fair," and "very good." For example, where does "fine" fit in? Is that better than "good" but not equal to "very good"? And what about "first-rate"? Is that better than "excellent"? Perhaps other readers are equally confused.

Richard E. Rieder
New York, N.Y.

The Editor replies: Despite all efforts to make it otherwise, the art of criticism remains an inexact science. We have several times tried to impose a formal vocabulary of praise (and disdain) upon our reviewers, but though they may use it grudgingly for a while, they soon drift back into their old slipshod ways. This has led me to conclude that this is the way of the world, and probably a good thing, too. If things got too cut and dried around here, it might occur to someone that a computer could be programmed to do the work of criticism. And with that done, another might be programmed to do the listening. So when a reviewer tells me that a recording's quality is "fine" rather than "excellent" or "first-rate," I am content to believe that he finds real differences between the three—and I'd better read his review in full to see just what those differences are.

Capitol Reissues

- In the past year Capitol Records has been reissuing albums that were unavailable for a long time, such as some recordings by Frank Sinatra, Peggy Lee, Blossom Dearie, and others. It's good to have these back in the bins.
ers' royalties made it possible to reissue the album, "The Mort de Wallenstein" in the Vassilovian segment of his Wallenstein trilogy. This is great music—powerful, highly melodic, and superbly orchestrated—and the record is not to be missed.

Michael S. Flynn
Leland, Miss.

**Disco Again**

- I must disagree with K. Blain's condemnation of Paulette Weiss' "Discomania" column of last December and disco music in general ("Letters," March 1978). When rock-and-roll was in its infancy it too was said to be without shape or form and lacking in any virtues. The realm of music is ever expanding, and if we try to suppress disco, we haven't learned from our mistakes, have we?

R. Rosenberg
Grand Forks AFB, N.D.

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**Price Corrections**

- The correct price of Blossom Dearie's album "Winchester in Apple Blossom Time," reviewed on page 124 of the May issue, is $9.98, and the correct price of the B&W DM-7 speaker system described in the April "New Products" on page 20 is $499.

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**First Electric Guitar**

- In Chris Albertson's March review of George Barnes' "Blues Going Up," he says that Barnes' "Sissy," recorded in 1938, was the first recording using an amplified guitar and mentions a later recording by Floyd Smith that is "generally hailed as the pioneer recording." I have just received a collection of albums pressed by Columbia Special Products for the Nostalgia Book Club, and it includes Lazy Rhythm by the Jeter-Pillars Club Plantation Orchestra with Floyd Smith, electric guitar, recorded 8/26/37 (CL1993-1, Vocalion 3715).

Bryan C. Ringo
Canton, N.Y.

Chris Albertson replies: My review said that Barnes' 1938 recording appears to have been the first to include an amplified guitar. The Floyd Smith recording Mr. Ringo cites does, indeed, predate Barnes' "Sissy," but on it Smith plays an electrified Hawaiian guitar, not a genuine electrically amplified jazz guitar.

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**Vincent d'Indy**

- In the March issue, Richard Freed made a plea for recordings of Vincent d'Indy's orchestral works, notably the Second Symphony and Istar. I am very happy to report that there is a superb stereo recording of Istar, with Zoltan Fekete conducting the Prague Symphony Orchestra, on Supraphon SLA 30735. The performance is both sensuous and detailed, and the recorded sound is excellent. On the same disc there are also fine performances of two Berlioz overtures and an outstanding reading of D'Indy's tone poem Le Mort de Wolrad in the final segment of his Wallenstein trilogy. This is great music—powerful, highly melodic, and superbly orchestrated—and the record is not to be missed.

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**Price Corrections**

- The correct price of Blossom Dearie's album "Winchester in Apple Blossom Time," reviewed on page 124 of the May issue, is $9.98, and the correct price of the B&W DM-7 speaker system described in the April "New Products" on page 20 is $499.
ASK ANY AUDIO ENGINEER ABOUT PHILIPS 4 NEW RECEIVERS. HE KNOWS.

You're a tough customer. Before you buy any piece of equipment you check it out. You talk to experts. And that's exactly what we want you to do. Talk directly to any audio engineer. Or any expert you trust. Ask him any question you like. We're not afraid of your questions, because we've got the right answers.

Before we designed our four new receivers we carefully researched audiophiles like you. Because we know that if we can please a tough customer like you, we'll please everybody.
Why Four Receivers?
Our engineers wanted to cover the full range of people's needs. And give everyone the advantages of Philips technology. The efficient Philips AH 784, with a four speaker capability, can fill any apartment with clean, accurate sound. The AH 787 is for those who like power behind their bass notes and drive behind their highs. A big, powerful receiver with a six speaker capability, the AH 787 is one receiver even audiophiles admire.

Honestly, How Much Distortion?
Honestly, not much. All four of our receivers, from our AH 784 with 20 watts per channel, minimum RMS, to our AH 787 with a big 60 watts per channel, minimum RMS, have less than 0.1% total harmonic distortion from 20 Hz to 20kHz at 8 ohms. Which means that in one crucial area, our least sophisticated receiver is just as sophisticated as our best. No matter how much power you need nobody needs distortion.

How Good is the AM Section?
An unusual question. Normally, everyone neglects AM and touts their FM. Which is exactly the point. We neglected nothing in designing our receivers. Not even the AM. After all, you pay for AM, too. You might as well get the best. Our circuitry provides clear, sensitive reception with very low distortion. And on the AH 787 there's a center-tuned meter—just like the FM. For precision tuning and optimum reception—just like the FM. And that's a Philips AM exclusive.

Like Our AM? You'll Love Our FM.
It's state of the art all the way. A Phase Locked Loop Multiplex Decoder locks onto the 19kHz pilot and holds it. High Q RF tuned circuits reject unwanted signals. Dual gate MOS FET's provide optimum gain and immunity to overload.

And to all this we add a Philips FM exclusive—Automatic Stereo Noise Cancelling. It virtually eliminates annoying noisy broadcasts on the AH 787 receiver. Highly accurate sensors monitor the interference. If the noise level rises too high a switching FET kicks in to kick out the noise.

What if I Get Overloaded or Overheated?
Then special Philips circuits will come to your rescue. With a complete, reliable series of protection systems. The AH 785, AH 786 and AH 787 are all protected against overloads and short circuits. The AH 787 automatically disconnects your speakers when sensors detect abnormal DC voltages at the receiver output. And thermal protection is provided on the AH 786 and AH 787.

You're just one toll-free call away from all the answers. Just dial 800-243-5000 and we'll send you a free copy of "Ask us about stereo. We know." It's our new brochure and it's filled with important facts and information. Prepared by a team of Philips audio engineers it can help answer a great many of your questions.

When you want to know about stereo, ask us. Because when you've got the right answers, you can answer all the questions.

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EVERYONE WHO KNOWS, KNOWS PHILIPS
High Fidelity Laboratories, Ltd.
CIRCLE NO. 48 ON READER SERVICE CARD
Nortronics Cassette Eraser Requires No Power Source

Nortronics’ QM-230 is a hand-held cassette bulk eraser that requires no power source; it is essentially a large permanent magnet with a slot into which a cassette can be inserted. The QM-230 has two strontium-ferrite ceramic magnet pieces enclosed in a Cyclolac plastic case with a wood-grain finish. To erase, the user slides a cassette through the slot; one “pass” will suffice to provide up to 66 dB of erasure. Price: $24. Nortronics Company, Inc., 8101 Tenth Avenue North, Minneapolis, Minn. 55427.

New Preamp From Van Alstine

Van Alstine’s Model 1 preamplifier employs modular construction with separate sealed circuit assemblies for the phono-equalizer/amplifier and the high-level sections. The design eliminates all interconnecting wiring, except in the power supply. All components, including the front-panel switches and controls and the rear-panel jacks, are soldered directly onto a printed-circuit board. The Model 1 has no tone controls; the user is advised to resort to an equalizer if frequency-balance adjustments are necessary.

It is a direct-coupled preamp, with no coupling capacitors in the signal path or in the feedback loops. The phono preamp is said to interact minimally with phono cartridges, and therefore it has no impedance-matching or buffer stages. There are lugs at the phono inputs for inserting loading capacitors for phono cartridges that may require them. All rear-panel jacks are mounted on a horizontal ledge for easy access. There is a 25-amp power switch that controls only the switched convenience outlets; the preamp itself is on at all times when plugged in. There are front-panel switches for program source, power, audio muting (−20 dB), and tape monitor, plus volume and balance controls and a pilot light.

Van Alstine does not provide performance specifications on the Model 1 or any other of its components. However, the Model 1 can be used to amplify color video signals, and this suggests a bandwidth somewhat in excess of 5 MHz. Dimensions of the Model 1 are 31/2 x 17 x 9 inches; weight is about 10 pounds. Price: $600.

New Record/Tape Accessories From Memorex

Memorex has introduced several new record- and tape-care accessories, including a record cleaner, stylus-care kit, tracking record cleaner, and tape-recorder care kit. The record-cleaner kit consists of a special brush/applicator pad and a bottle of cleaning fluid. The fluid is intended to reduce record-surface static as well as clean off dirt. The stylus-care kit has a tracking-force gauge plus a bottle of cleaning fluid, a brush, and a mirror. The tracking-force gauge has a magnifier built in to simplify reading the gauge.

The tracking record cleaner is a conventional type with a pad mounted on a tracking arm that is in turn mounted on the turntable base. A bottle of record-cleaning fluid is included with the arm. The tape-recorder care kit includes a bottle of head-cleaning fluid, a set of cleaning pads, and cleaning tools (a stiff brush, a mirror, and a pad holder). Prices are $14.99 for the record cleaner, $7.99 for the stylus-care kit, $7.99 for the tracking record cleaner, and $8.99 for the tape-recorder kit.

Double-ground Audio Cables from Verion

Verion Audio’s Triaxial Audio Cables are specially constructed hi-fi cables that have two ground shields instead of the usual one. They have an eight-strand inner conductor and two concentric outer braids, one for the signal ground and one for the system (chassis) ground. The braids are made of silver-plated wire; metal-foil wraps are layered on either side of each braid. The purpose of the double ground is to eliminate hum, radio-frequency interference, and similar effects. Currents resulting from interfering fields will be induced entirely in the outermost conductor and flow directly to system ground. The cables are available terminated in RCA-type phone plugs, DIN connectors, or with bare leads. They have a pigtail lead for the chassis ground, terminating in a spade lug. Verion Triaxial Audio Cables are available in 1/2-meter gradations above a minimum length of 1 meter. The basic charge is $30 for 1 meter; each additional 1/2 meter is $5.

Analog’s New Products Include Pre-preamplifier

The Analogue A-515 (shown) from AEA (Analogue Engineering Associates) is a moving-coil cartridge preamplifier that boosts the output of a low-output moving-coil cartridge sufficiently to drive a standard magnetic-phono input. It provides a wide selection of gain values (0, 16, 20, 24, 28, and 32 dB) as

(Continued on page 20)
To get a superb performance, you need a precision machine.

To command a great performance, a cassette shell and cassette tape must be engineered to the most rigorous standards. Which explains why we get so finicky about details. Consider:

**Precision Molded Cassette Shells**—are made by continuously monitored injection molding that virtually assures a mirror-image parallel match. That's insurance against signal overlap or channel loss in record or playback from A to B sides. Further insurance: high impact styrene that resists temperature extremes and sudden stress.

**An Ingenious Bubble Surface Liner Sheet**—commands the tape to follow a consistent running angle with gentle, fingertip-embossed cushions. Costly lubricants forestall drag, shedding, friction, edgewear, and annoying squeal. Checks channel loss and dropouts.

**Tapered, Flanged Rollers**—direct the tape from the hubs and program it against any up and down movement on its path towards the heads. Stainless steel pins minimize friction and avert wow and flutter, channel loss.

**Resilient Pressure Pad and Holding System**—spring-mounted felt helps maintain tape contact at dead center on the head gap. Elegant interlocking pins moor the spring to the shell, and resist lateral slipping.

**Five-Screw Assembly**—for practically guaranteed warp-free mating of the cassette halves. Then nothing—no dust or tape snags—can come between the tape and a perfect performance.

**Perfectly Circular Hubs and Double Clamp System**—insures there is no deviation from circularity that could result in tape tension variation producing wow and flutter and dropouts. The clamp wedges the tape to the hub with a curvature impeccably matched to the hub's perimeter.

**Head Cleaning Leader Tape**—knocks off foreign matter that might interfere with superior tape performance, and prepares the heads for...

**Our famous SA and AD Tape Performance**—two of the finest tapes money can procure are securely housed inside our cassette shells. SA (Super Avilyn) is the tape most deck manufacturers use as their reference for the High (Cr02) bias position. And the new Normal bias AD, the tape with a hot high end, is perfect for any type of music, in any deck. And that extra lift is perfect for noise reduction tracking.

TDK Cassettes—despite all we put into them, we don't ask you to put out a lot for them. Visit your TDK dealer and discover how inexpensive it is to fight dropouts, level variation, channel loss, jamming, and other problems that interfere with musical enjoyment. Our full lifetime warranty* is your assurance that our machine is the machine for your machine. TDK Electronics Corp., Garden City, N.Y. 11530. Canada: Superior Electronics Ind., Ltd.

*In the unlikely event that any TDK cassette ever fails to perform due to a defect in materials or workmanship, simply return it to your local dealer or to TDK for a free replacement.
well as a frequency-compensation switch which can be used to reduce high-frequency response by 3 or 6 dB at 15,000 Hz. Frequency response is 10 to 30,000 Hz +0, -0.5 dB with total harmonic and intermodulation distortion both below 0.005 per cent. Input sensitivity is 0.0005 millivolt (mV), and rated signal-to-noise ratio is 127 dB. The 515 has a double-wrapped nickel-steel chassis and gold-plated phono jacks. Its maximum output is rated at 100 mV. Dimensions are 3½ x 9½ x 4½ inches; price, $179.

Also new from AEA is the model A-555 power amplifier, which features logic control for all its protective circuits. These circuits will disconnect the amplifier from the speakers in the event of overload, overheating, or a short circuit. The amplifier has peak-reading power meters with adjustable sensitivities (0, -10, and -20 dB) as well as LED's that indicate overload. There is a front-panel reset switch for restoring power to the outputs if they are momentarily shut down by the protective circuits. The A-555 utilizes FET circuitry throughout, with the exception of a bipolar Darlington output stage. Feedback is relatively low (12 dB) to minimize transient intermodulation distortion (TIM). Rated power output is 55 watts per channel into 8 ohms from 5 to 30,000 Hz; total harmonic and intermodulation distortion are no more than 0.05 per cent from ¼ watt to rated output. The A-555 has a satin-black-finish metal cabinet with a 19-inch rack-mounting front panel. Dimensions are 5½ x 19 x 11½ inches; weight is 27 pounds. Price: $590.

AR Introduces Its Model 9 System

AR's latest product is the Model 9, a large speaker system of the column type utilizing two 12-inch woofers, an 8-inch lower midrange, a ½-inch upper midrange, and a ¾-inch dome tweeter. The woofers and lower midrange are acoustic-suspension drivers; the upper midrange is fully sealed in the rear. The AR9's woofers radiate out on either side of the tall enclosure and the other three drivers, mounted in a vertical line, radiate to the front. Sound-absorbing material is placed on the front baffle around the midrange drivers and tweeter to eliminate sound reflections from the baffle surfaces. Crossover points are 200, 1,200, and 7,000 Hz.

Typical frequency response of the AR9 is 28 to 25,000 Hz ±3 dB. The system has a nominal impedance of 4 ohms (3.2 ohms is the minimum impedance) and produces a sound-pressure level of 87 dB with a 1-watt input at 1 meter on axis. It may be used with amplifiers rated up to 400 watts continuous power per channel. The AR9 has level controls for the tweeter and upper and lower midranges in the form of three-position switches with settings of "flat," -3 dB, and -6 dB. The enclosure has approximate dimensions of 32½ x 15 x 13½ inches; the system weighs 130 pounds. Price: $650.

Dual’s Direct-drive Automatic Turntable

The Dual 621 is a new single-play, direct-drive automatic turntable with automatic start and manual stop. It uses an electronic switching system for speed regulation. It has the Dual tone arm with double mechanical filters to damp arm/cartridge resonances. The antiskating control is calibrated for the three common stylus types (conical, elliptical, and Shibata). There is an illuminated strobe for speed monitoring, and a pitch control permits up to 10 per cent speed variation. Tone-arm cueing is damped in both directions.

Wow and flutter are rated at under ±0.03 per cent (wrms), and the rumble level is better than -70 dB. The 621 comes with base and dustcover and measures 6 x 16½ x 14½ inches. Price: under $300. Dual also offers the model 604, which is similar to the 621 except that it requires a manual start and has an automatic shut-off. Price: $260.

Seven Speakers in Electro-Voice “Interface” Line

The complete "Interface" line of loudspeaker systems now includes seven models, ranging from the low-cost Interface:1 to the top-of-the-line Interface:D. Some of them involve only slight structural changes to speakers that have been in the Electro-Voice line for some time (the Interface: A has been available since 1973). The Interface:D is a large floor-standing system that utilizes a 12-inch downward-firing woofer in a vented enclosure. The mid-range is a 6½-inch cone unit (also in a vented enclosure) that crosses over to the woofer at 320 Hz. The novel-design horn-loaded tweeter crosses over to the midrange at 3,000 Hz. Like the Interface models A, B, and C, the Interface:D comes with an "equalizer" module that provides bass boost at very low frequencies to compensate for the acoustic rolloff characteristics of the system. The equalizer, which is inserted between the preamp and power amp (or in the tape-monitor loop), provides a maximum of 6 dB bass boost at 32 Hz and rolls off at 12 dB per octave below this frequency. Its high-frequency settings are 0 ("flat"), -3, and -6 dB at 10,000 Hz. The rated frequency response of the Interface:D is 28 to 18,000 Hz ±3 dB; nominal impedance is 8 ohms. The system is highly efficient, producing 97 dB at 1 meter with a 1-watt input. Minimum input is 1.5 watts, and it can be used with amplifiers delivering up to 500 watts per channel continuous power. Cabinet size is 32 x 21½ x 15½ inches.

At the other end of the line is the Interface:1, a two-way bookshelf system. It has an 8-inch woofer in a vented enclosure and a 2½-inch cone tweeter. Frequency response is rated at 54 to 18,000 Hz ±4 dB, and the nominal impedance is 8 ohms. A 92dB sound-pressure level is produced at one meter with a 1-watt input. Crossover frequency is 1,500 Hz. The speaker can be used with amplifiers delivering as little as 3.6 watts per channel or as much as 200 watts per channel. Dimensions are 21½ x 11½ x 10½ inches. Prices for the Interface loudspeakers range from $100 each for the Interface:1 to $1,500 per pair for the Interface:D speakers and equalizer.

(Continued on page 22)
This is the full text of the review of the Polk 10's which appeared in the AUDIOGRAM, a discerning and independent audiophile journal which is entirely supported by its readers and accepts no manufacturers' advertisements. Subscriptions are available for $15.00 per year.

POLK MODEL 10 LOUDSPEAKER

POLK AUDIO
1205 South Carey Street
Baltimore, MD 21230

When we heard the Polk speakers at Summer CES we knew we had to test them. We were so impressed that we could not believe the prices, but first let us say that there are a few factors that might make us prejudiced in their favor. The Polk people use the Spendor as a reference. They like the sound of ARC tubes. They are the East coast distributors of the Formula 4 tone arm. We, at AUDIOGRAM, share so many likes with the folks at Polk that it is hard for us not to like their speakers. And the company is a local one that has made good - the pride of Baltimore and Washington.

Nonetheless, the sound coming forth from the Model 10 "monitors" is something really special. It is a sound that is open, well defined and very low in coloration. One does not generally expect such low coloration in a modestly priced box speaker, and certainly not anything like the definition exhibited by these speakers. How does Polk do it? We think it is mostly execution. They hear very well and they care.

The Model 10 uses a 1-inch soft dome tweeter, two 6 1/2-inch plasticized midrange drivers and one 10-inch sub-bass radiator (which is really a passive radiator). Polk calls the crossover between the bass and midrange drivers "fluid-coupling". It occurs at 60 Hz and provides fourth order Butterworth loading for the energizing cones.

We auditioned the speaker on the optional stand which Polk sells. The stand, or one like it, is highly recommended. It tilts the front of the speaker slightly back from the listener, providing better phasing between drivers and reducing undesirable floor-coupled resonant effects. We would say that the sound of most bookshelf speakers currently placed on the floor would certainly be improved by such a stand.

Inasmuch as Polk had indicated that they use the Spendor as a reference and inasmuch as we had one on hand, we compared the Model 10 to this speaker. In fact, we have compared many speakers to the Spendor and most of them have sounded extremely colored by comparison. (The only speaker systems that have been able to make the Spendor sound colored have been a well-tuned Fulton J and the Rogers LS3/SAc.) Although the Spendor did manage to make the Model 10 sound a trifle nasal, we were amazed at the similarity of sound - and that's good!

But the Spendors cost upwards from $700 a pair (if one can find them), will not handle much power and cannot reproduce the bass of the Polks. It really isn't fair to compare the Model 10 to a reference monitor. It should be compared with other modestly priced speakers. However such a comparison is no fairer than the Spendor comparison. Other $200 speakers simply do not come close to the standards set by the Model 10. In fact the Polks compare very favorably with the Magnepan and Dahlquist DQ 10's. Bass response of the Model 10 surpasses that of the DQ 10. Definition is almost on the par with the Magnepan (stereo imaging is better). Driver blending is excellent, the midrange is open and exceptionally clear, and there is much less hint of boxiness than that which is found in most box speakers.

If we had to fault the Model 10's, we would say that they are slightly bright and just a little fat in the low end. However, they are extremely neutral throughout most of their range. Only in comparison with some of the world's best speaker systems do they sound the least bit colored. They are a high definition speaker system deserving the very best associated electronics. And at their price, they are simply a steal.
New Products latest audio equipment and accessories

Novel Transistors in Hitachi Amplifier

The Hitachi HMA-7500 stereo power amplifier is the first such product marketed in the U.S. to utilize MOSFET power transistors in its output stages. MOSFET transistors, which have the advantages of high linearity and fast response, are common in audio circuits but have not been used before for power applications. The HMA-7500 can be switched into a direct-coupled mode with a rear-apron switch, bypassing any input capacitors. The front panel has two average-reading power meters, switches for two sets of speakers, and a headphone jack. An unswitched convenience outlet is provided on the rear panel.

The rated output of the HMA-7500 is 75 watts per channel into 8 ohms. Total harmonic distortion at this output is 0.01 per cent or less from 20 to 20,000 Hz. Intermodulation distortion is also 0.01 per cent or less. Input sensitivity is 1 volt (into 50,000 ohms). The signal-to-noise ratio is 120 dB (IHFA weighting). The HMA-7500 measures approximately 6 1/2 x 19 x 14 inches, and the front panel has grab handles. Weight is about 33 pounds. Price: $500. Hitachi also offers a 100-watt-per-channel MOSFET power amplifier, the HMA-9500, priced at $1,350.

Circle 123 on reader service card

Car-stereo Speaker “Separates” From Jensen

Jensen’s new car loudspeaker system features separate woofer, mid-range, and tweeter units. This “separates” system includes two 6 x 9-inch oval woofers, two 3 1/4-inch cone mid-ranges, and two 2-inch cone tweeters, all with grille covers. In addition, the system includes a separate level control for the mid-ranges and tweeters, with concentric knob controls for each channel. The woofers are intended for mounting in the rear deck of the car; the mid-ranges and tweeters are to be mounted in the front doors. The tweeters are placed on top and the mid-ranges on the bottom of the door. The level-control module is designed for under-dash mounting. The frequency response of the total system is said to be 35 to 20,000 Hz. Maximum continuous power input is 35 watts per channel. Cut-out dimensions (including required depth) are 6 x 8 1/4 x 3/4 inches for the woofers, 3 1/4 x 3 1/4 x 1 1/2 inches for the mid-ranges, and about 3 x 3 x 1 inches for the tweeters. Price for the entire seven-piece system: about $160.

Circle 124 on reader service card

Colored Racks from Vero Electronics

Vero Electronics is now offering attractively colored 19-inch audio-equipment racks. The Vero rack is constructed of steel uprights with an aluminum base; the base has four plastic casters and two locking feet that can be raised or lowered either to give the rack mobility or to keep it rigidly positioned on the floor. Aluminum strips with pre-tapped holes are placed both front and back so that extra supports for heavy equipment can be installed in the rear of the unit. The rack will hold a stack of equipment up to 63 inches high; this is equivalent to 36 standard 1 3/4-inch EIA rack spaces. Weight capacity is 450 pounds.

The Vero audio rack has approximate dimensions of 79 1/4 x 26 3/4 x 23 1/2 inches. It is available in bright red, orange, or green, as well as flat black, and it is supplied in kit form. The kit consists of the pre-assembled vertical frame with tapped strips and two base sections with casters. Various equipment-mounting accessories are available. Price: $175. Price to Vero Electronics, 171 Bridge Road, Hauppauge, N.Y. 11787.

Circle 125 on reader service card

Low-mass Tone Arm from Mayware

Mayware Ltd. has announced the introduction of the new Formula 4 Mk III tone arm. The arm has a straight shaft and a single-point pivot damped with silicone lubricant. The shaft is aluminum and has a sliding collar for adjusting effective mass. The low-mass cut-away headshell is detachable, held on by a small Allen screw, and is said to be non-resonant. Tracking force is adjusted with a sliding counterweight, and there is an adjustable anti-skating mechanism consisting of a thread attached to the arm and held taut by a shaft with a sliding counterweight. The entire arm pivot may be moved up and down for vertical-tracking-angle adjustments. Viscous-damped cueing is provided.

The Formula 4 Mk III arm has an effective length of 224 millimeters, and the minimum effective mass is 4 1/2 grams. Adapter plates are available for installation on turntables with SME cut-outs. Price: $169.50.

Circle 126 on reader service card

New Scott Cassette Deck: Front-load, Rack-mount

The CD-87 front-loading cassette deck from Scott features a front-panel tape-running indicator that shows the direction and speed of tape travel. There is also a standard tape counter with memory rewind. The CD-87 (Continued on page 24)
Yes, the new Dual 604 is direct drive.
Now let’s talk about something really important.

You may have noticed that most turntable stories begin and end with the drive system. The tonearm is more or less an afterthought.

But not with Dual. Because the tonearm can make a big difference in how records sound and how long they last. Which is why Dual is very serious about tonearm design and performance. And why we can be very serious about tonearms in our advertising.

Let’s consider the 604 tonearm.
The straight-line tubular design provides maximum rigidity with minimum mass. The four-point gimbal centers and pivots the tonearm precisely where the vertical and horizontal axes intersect. And the counterbalance houses two specially-tuned anti-resonance filters that absorb parasitic resonances originating in the tonearm/cartridge system and chassis.

Operation is semi-automatic, with another unique Dual difference: the mechanical sensor. Switch it in and you feel when the stylus is positioned precisely over the 12” and 7” lead-in grooves. At the end of play, the tonearm lifts and returns to its post, and the motor shuts off. Automatically.

Now let’s talk about the drive system. It employs a newly developed DC electronic motor with a highly sensitive CMOS regulator circuit and integral frequency generator. Platter speed is checked against rated speed 120 times per revolution. Wow and flutter are less than 0.03 percent, rumble is better than 70 dB. Well beyond the limits of audibility.

But the important story with any turntable is simply this. The drive system merely turns the record. It’s the tonearm that plays it.

Dual 604, semi-automatic, less than $260. Dual 621, fully automatic plus continuous repeat, less than $300. Both with base and cover. Actual resale prices are determined individually and at the sole discretion of authorized Dual dealers.
has bias and equalization switches for the three common tape types and a multi-position Dolby switch with settings for normal recording and for recording Dolbyized broadcasts. There are record- and output-level controls for each channel, and LED's indicate the recording mode and peak input levels.

Rated frequency response of the CD-87 with chromium-dioxide and ferrichrome tapes is 25 to 17,000 Hz ±3 dB (at a recording level of −20 dB). Response with ferric tape is 25 to 14,000 Hz ±3 dB. Signal-to-noise ratios are 56 dB without and 62 dB with Dolby. The channel separation at 1,000 Hz is rated at 53 dB. Wow and flutter are 0.06 per cent (wrms). Input sensitivity is 0.5 millivolt (mV) at the microphone inputs and 50 mV at the line inputs. Microphone overload level is 55 mV. The maximum output level is 580 mV.

The CD-87 will wind a C-60 cassette in 80 seconds in the fast-forward or rewind modes. Approximate dimensions are 5½ x 19 x 13¼ inches; the unit is designed for rack mounting and has grab handles. Price: about $330.

Scott also offers the CD-87R, essentially identical to the CD-87 except that it is not meant for rack mounting. Price: about $330.

Circle 126 on reader service card

The Magnum Opus is a new loudspeaker system from Elite Systems that features a two-cabinet design, with the low-frequency section separable from the mid/high-frequency enclosure. It utilizes horn-loaded drivers over its entire frequency range. The bass driver is a 15-inch woofer loaded with a 48-inch folded horn with a 6-square-foot mouth. The mid-range driver has a 30-inch re-entrant exponential horn of cast aluminum, and the tweeter is a diffraction horn unit with a 10½-square-inch mouth. Crossover frequencies are 450 and 3,500 Hz, with slopes of 12 dB per octave.

The Magnum Opus will handle a maximum continuous input of 130 watts per channel (short-term input is as high as 1,140 watts). The bass driver can handle 50 watts continuous input, the mid-range is rated at 60 watts, and the tweeter at 20 watts. Impedance of the system is a nominal 8 ohms. The bass cabinet measures 42 x 16¾ x 16¾ inches, while the separate upper enclosure of 12 x 16½ x 16½ inches houses the mid- and high-frequency units. The enclosures are constructed of ¾-inch birch plywood and have an oiled-walnut finish. Each complete system weighs 120 pounds. Price: $690.

Circle 127 on reader service card

Phasor Research's Add-on Phono Preamp

Phasor Research's Phono Spec Booster is a phono preamplifier intended to be used with a stereo receiver or integrated amplifier to upgrade phono reproduction. It is connected between the phono-cartridge output and the "auxiliary" input of the receiver or amplifier. Its purpose is to improve the signal-to-noise ratio and transient response in the phono preamplification path. There is a pilot light on the front panel and connecting jacks on the rear.

The Phono Spec Booster has a maximum output (at clipping) of 9.3 volts rms; it provides 40 dB of gain. An input of 10 millivolts (mV) provides a 1-volt output and 1 mV a 100-mV output (well suited to the high-level-input sensitivities of most receivers). Total harmonic distortion at 1,000 Hz is 0.09 per cent. The signal-to-noise ratio is 86 dB (A weighted). Slew rate is 4.7 volts per microsecond. Dimensions of the Phono Spec Booster are approximately ½ x 8 x 3 inches. Price: about $100.

Phasor Research Group, Inc., 1510 Val leylake Drive, Suite 310, Schaumberg, Ill. 60195.

Circle 128 on reader service card

Leader Instruments Catalog Available

Leader Instruments Corp. has published a "short form" 1977-1978 catalog of their test instruments that includes a number of recent introductions. The twelve-page catalog lists such audio test instruments as oscilloscopes, signal generators, and various kinds of signal analyzers. There are also various basic electronic testing devices, plus more specialized equipment for broadcast applications. The catalog is free on request from Leader Instruments Corp., 151 Dupont Street, Plainview, N.Y. 11803.

NOTE: All product descriptions and specifications quoted in these columns are based on materials supplied by the manufacturer. Recent fluctuations in the value of the dollar will have an effect on the price of merchandise imported into this country. Please be aware that the prices quoted in this issue may be subject to change.
The First Speaker System
Thoroughly Engineered to Sound Right
In a Car.

The listening space inside a car is nothing like a listening room at home. A car is a cave-like acoustic environment made of metal, glass and vinyl. It has a tendency toward rich but boomy and uneven sound. And that tendency is reinforced by the usual (and sensible) rear-deck, package shelf placement of stereo speakers. As the sound tunnels out of the rear-window cavity, it gets even muddier.

Instead of simply translating Advent home speaker technology into a speaker that physically fits a car, we have designed a car stereo speaker system that’s specifically meant for the real conditions of car listening.

The speakers themselves, 6x9" dual cone units intended for rear-deck placement, are excellent. The low-frequency cone is low-vacuum-formed for the same smooth, no-breakup behavior as a good home speaker, and the inner free-edge "whizzer" cone that takes over for highs avoids the audible difficulties of coaxial (and more-axial) design. (The lack of separate baffling of co-ax and more-ax drivers can and does produce interference effects that result in sharp peaks and dips in response.)

But the dramatic audible difference in the EQ-1’s sound is provided by the power amplifier built into each speaker of the stereo pair the system provides. The amplifiers not only provide satisfying listening levels, but are frequency-equalized to smooth out the jagged acoustics of a car and provide beautifully balanced sound. Convincing, wide-range, high-fidelity sound. The first we have heard inside a car.

The Advent EQ-1 system connects to any car stereo radio, tape deck, or component configuration. Its cost, complete with its two speakers, power amplifiers, grilles, wires and a separate power switch that keeps turn-on thumps and CB or other interference out of the speakers, is $180.*

Only hearing the Advent EQ-1 in the actual listening space of a car will tell you just how special it sounds in real use on the road. But we will be happy to send more information, including a list of Advent dealers, if you will send us the coupon.

Thank you.

To: Advent Corporation, 195 Albany Street, Cambridge, Massachusetts 02139
Please send information on the Advent EQ-1 Car Speaker System.

Name _____________________________
Address ____________________________
City _______________________________
State _____________________________ Zip _____________

(*Suggested price, subject to change without notice.)
Feast Your Ears.

Hear The System.
You’ll hear the sound faithfully reproduced. Not artificially manufactured by the equipment. Because the equipment is Mitsubishi.

And Mitsubishi has a standard: what comes out must be as real as what went in.

You’ll hear a system where every component has been perfectly matched to every other component. Yet each a precision instrument in its own right.

You’ll see new equipment with new capabilities, new features, new designs.

The new amplifier. Not mere stereo, but dual monaural. We call it the DM Factor. For inter-channel separation at 20kHz at better than 80dB. And specially developed to effectively handle the moving coil cartridge. For a signal-to-noise ratio of -77dB. Unheard of in any other preamplifier.

The new frequency synthesizing tuner. With THD in stereo at barely 0.08% at 1kHz. Conservative, at that. With switched selectivity for uncompromising reception. With digital read-out. With LED’s to determine signal strength and precise tuning. With an uncanny ability to zero in on the quietest signal.

The turntable. Our direct drive high torque servometer eliminates gears, belts and pulleys. And with them wow, flutter and noise. Our logic control eliminates unreliable mechanisms in the nerve center. Our high resolution tone arm eliminates virtually all resonance. Everything you never wanted in a turntable.

The loudspeakers. Meticulously constructed. Painstakingly tested. For the exact response that sounds like music, not speaker. The final link in a faultless system.

And not least, the equipment rack. As unique as The System. As clean and uncluttered as the sound.

We could go on reprinting specifications. We could go on employing adjectives. But nothing will tell you more about our audio equipment than your audio equipment.

So hear The System. See it. Take it apart. Compare all the possibilities. All Mitsubishi or only a part. You won’t settle for anything less than the whole.

Because if we’ve got you so far, just wait till we get your ears.


For more information write Melco Sales, Inc., Dept. SR, 3030 East Victoria Street, Compton, California 90221.

CIRCLE NO. 38 ON READER SERVICE CARD
A DIFFERENT KIND OF RECORD CLUB

Everything is guaranteed factory fresh and free-no "agree-to-purchase" obligations of any kind. Look at these benefits:

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.

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lists thousands of titles: classical, pop, jazz, ballet, opera, musical shows, folk, rock, vocal, instrumental, country, etc.

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happenings in the world of music, concerts, critiques, new releases...special super-sale listings at discounts of up to 73%.

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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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on all products and services. Everything is guaranteed factory fresh and free of defects or damages of any sort. Your total satisfaction is unconditionally guaranteed.

Discount Music Club is a 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. These are just a few of the money-saving reasons to write for free details. You can't lose so why not fill out and mail the coupon below for immediate information.

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CIRCLE NO. 18 ON READER SERVICE CARD

FREE

Audio Q. and A.

By Larry Klein

MARK RAFTOGIANIS
San Dimas, Calif.

Q. I think it would be easier to read Julian Hirsch's equipment test reports if instead of just stating specifications in the text they were listed in a separate table. And why not contrast the test results against similar products and the manufacturer's own specs? It could make comparison shopping much easier.

A. At the outset I should acknowledge that my answer to Mr. Rafteganis is not likely to satisfy him totally—nor other readers who have asked me the same question.

Over the years the editorial writers for this magazine have campaigned in their various columns against overreliance on specifications as a guide to listening quality. At one time or another, Ralph Hodges, Craig Stark, Julian Hirsch, and I have warned against unscientific enthronement of one specification or another as an infallible indicator of product merit.

One reason is this: logically there has to be a point—determined by the threshold of perception of the human ear—where a numerical improvement in a specification provides no audible improvement. We can argue about the exact point at which distortion or noise reaches this threshold, but I don't think anyone would seriously debate whether such thresholds of perception exist in human hearing.

Given the fact that many readers tend to overvalue or misconstrue the significance of specifications, we prefer to keep specs within the context of the overall report where we can verbally "weight" them appropriately according to our best judgment of the degree to which various particular specification is or isn't significant.

For those readers who object to being led by the hand, or who value certain specifications more—or less—than we do, the test-result numbers are provided in the text; for those readers who appreciate some overall guidance as to the significance of the numbers, we've provided that for them. For the same reasons, we generally refrain from specifically contrasting the test data for any one unit against the test data for "similar products"—however that may be interpreted. Each product should be evaluated not as a collection of test-result numbers, but rather as a functional Gestalt, so to speak. Our view is that numbers alone do not adequately describe a component in sufficient detail for anyone to make a knowledgeable buying decision. However, in the test reports we usually do indicate the relative "standing" of each test figure in respect to the average found within the price range of the component. And when any component's test results vary significantly from the manufacturer's specs we naturally say so. Our purpose—in the test reports, at least—is not to make comparison shopping easier (although we certainly wish we could), but to make it more precise in fulfilling specific needs.

In our how-to-buy articles, we do try to make shopping easier by discussing the practical significance of specifications and features. The following past h-t-b articles (with ordering numbers) are available:

(1) How to Buy a Turntable (16) How to Buy a Cassette Deck
(2) Guidelines to Speaker Shopping (17) How to Buy a Phono Cartridge
(3) How to Select an FM Tuner (18) How to Buy a Phono Cartridge
(4) Loudspeaker Power Requirements (19) How to Buy a Phono Cartridge
(5) How to Choose an Amplifier (Continued on page 30)
(6) How to Select an FM Tuner
(7) How to Select a Tuner
(8) How to Choose an Amplifier
(9) How to Select a Tuner
(10) Speaker Myths (How to Avoid Bad Choices)
(11) How to Buy a Turntable
(12) How to Select a Tuner
(13) How to Buy a Tape Player (How to Buy a Receiver)
(14) How to Select a Tuner
(15) How to Buy a Tape Player

Adequate Power

Q. After consulting several articles, I am still not sure how inadequate amplifier power resulting in clipping is audibly manifested. I have inefficient speakers with a suggested minimum of 45 watts rms per channel and a moderate-power integrated amplifier rated at 60 watts rms per channel set up in a medium-to-large, fairly "dead" room. The system is
Announcing Reference:

A significant new generation of high fidelity components from Quadraflex. Reference — the alternative for people who are serious about sound, and tired of never-ending competitive performance claims.

Reference components are the sensible choice for people with a keen eye for value. Instead of costly expendable wattage and superfluous gadgetry, we offer clean sound that is comparable to any electronic mammoth — but in the price range of every music lover.

Reference provides as much power as most people would ever need, plus models with unique features that assure maximum performance within actual listening environments. What we include is there solely to control and improve the appreciable quality of recorded music. To give you exactly what you need in a high quality music system. Not what you've been told you need.

Reference components. They're beautiful because they're functional. And because what really matters is the sound.

Proof that superlative sound doesn't need to come in an over-whelming package — the Reference: 650FETR. The world's first receiver with MOSFET output devices. THD under 0.01% at most listening levels, yet priced under $500.

The Sound Answer.

Reference: by Quadraflex, 1301 65th Street, Emeryville, California 94608

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Loudspeakers designed for your room

Allison Acoustics has consolidated, in a new publication, information on all Allison loudspeaker systems with a description of the room-matching principle. An introductory section explains why loudspeakers designed for flat response in anechoic chambers (the usual procedure) cannot be flat in a listening room, and how the design of Allison Room-Matched speaker systems enables them to generate flat power output in a real room.

An entirely new class of direct-radiator drivers has been developed for use as mid-range and tweeter units in Allison systems. They employ convex diaphragms driven centrally. In the case of the tweeter, the diaphragm is forced to flex in a manner simulating the motion of a pulsating hemisphere. This yields high acoustic output combined with almost perfectly uniform dispersion up to 20 kHz. The operative principle is described in the catalog for the first time.

The rest of the catalog is devoted to descriptions of the four Allison models, a statement of FulL Warranty for Five Years, and what we believe to be the most comprehensive set of mechanical, electrical, and performance specifications ever published on loudspeaker systems for consumer use. A free copy of the catalog, review reprints, and a list of Allison dealers are available on request.

Allison Acoustics
7 Tech Circle, Natick, Massachusetts 01760
CIRCLE NO. 8 ON READER SERVICE CARD

Audio Q. and A.

The best I've owned, so although it sounds great, I don't know what I may be missing. "Advisors" rate my power as "anemic" for the speakers. Yet, when I consider devasting my budget with a trade-up to approximately 110 watts rms, I am told such an increase is almost inconsequential. I would consider stepping up the power if I could feel justified in doing so. Help!

H. George Kagan
Coral Gables, Fla.

Q. When you don't have adequate power available for a specific pair of speakers playing specific kinds of music in a given acoustic environment, then, depending upon the variables, you might hear a slight raspiness, a mushiness, or simply lack of clarity. Since to a certain degree these are all relative qualities, your best bet is to compare the sound of your present amplifier in your present circumstances with one of suggested high- or medium-power. Your advisors are correct in stating that the increase in power from 60 to 110 watts is almost trivial. An increase to 200 watts per channel would be significant—assuming that you can use or need it. Considering all the theoretical variables, the best procedure would be to borrow, if you can, a 150 or 200 watt per channel amplifier and determine by use if it sounds better (1) with your music, (2) in your home, (3) to your ears. A reprint of an article describing actual listening tests on the power requirements of loudspeakers is available for $1 as Reprint SR-4 from Stereo Review Reprints, P.O. Box 178, Pratt Station, Brooklyn, N.Y. 11205.

Broken Records

Q. How can I repair broken records? I have some classic 78's of Caruso, John McCormack, Nellie Melba, Geraldine Farrar, and so forth. I would like your ideas on the problem.

Vincent O'Neill
San Francisco, Calif.

A. I don't know how the professionals do it (assuming that there are professionals in the record-repair business) and I've never done it myself, but here's how I would if I wanted to. Obviously the first step is to put together some sort of positioning jig that will let you align the pieces with reasonable accuracy. A flat piece of plywood or chipboard will serve as a work surface. Draw a circle on the board using a record as a template and drive in two screws 10 inches apart on the drawn arc to provide a backstop against which you can push the disc when positioning the broken-off parts. Any of today's epoxy or special "instant" cements will probably hold the disc together successfully, but obviously the grooves have to be in alignment (you'll need a powerful magnifying glass to check this), and you don't want any excess cement leaking into the grooves. It would probably be best to practice on an unwanted broken disc in order to perfect your repair technique.

For a simple crack, drill or melt a small hole, say 1/8 inch in diameter, at the point where the crack passes through the lead-in groove area. Fill the hole with epoxy cement (a bit of tape over the other side of the hole will keep the epoxy in place.) If you are lucky, the epoxy will hold the edges of the crack together.

If your stylus tends to jump grooves after the repair, try forcing a bit of crayon into the cracked area and then, with the aid of the magnifier, use a needle to reinstate the groove path. Once you can get the disc to play through without repeating or jumping, then one of the new impulse-noise suppressors teamed up with a high-frequency noise reducer may make the disc sound as good as—better than—new. Frankly, however, I find it difficult to believe that the results will be worth the effort, since most of the material worth salvaging from historical 78's is now available professionally redubbed onto LP's.

Juke-box 45's

Q. I've been offered several dozen recent 45's at a good price. I'm told that they are labeled "Reproduction." I've examined the records and they seem in fine condition, no scratches or dirt. Can you think of any reason why I shouldn't buy them?

Warren Summers
Detroit, Mich.

A. I certainly can. I suspect that you've been misled by superficial appearances. When the average user mistrusts his discs the evidence is there for all to see in the form of fingerprints, scratches, and dirt. However, a juke box is fingerless, never frets its tone arm, and is fairly well sealed against dirt and dust. What it does do, however, is play the groove-wall modulations well into extinction by using a tracking force more than high enough to ensure that there won't be any groove jumping or sticking because the stylus is mistracking or is clogged with months of dirt.

However, I may be overly pessimistic about the condition of the discs. See if you can get a sample play with a few; if there's anything wrong with them, your ears will tell you quickly enough.

Dolby Discs?

Q. Some of my Nonesuch records indicate on their covers that they are Dolby-system recordings. Do they require Dolby decoding to hear the improved signal-to-noise ratio?

J. Y. Woo
Los Angeles, Calif.

A. About eleven years ago the Dolby noise-reduction system was first employed by two record companies—Vanguard and Nonesuch. Thereduction in tape noise (his) on the two discs made from the Dolbyized master tapes was substantial enough for the manufacturers to publicize on the record jacket the fact that Dolby processing was used. The tape was decoded at the time the disc was cut, and hence decoding is not required in disc playback—in fact, it would cause trouble.

Today, the professional Dolby A system—or one of its latter-day competitors such as dbx—is virtually universal use in recording studios, and hence the record companies justifiably feel that they can gain no special sales advantage by promoting that fact.
Today's most refreshing low 'tar.'

KOOL SUPER LIGHTS

Refreshing like no other low "tar" cigarette. You can feel the difference its special kind of coolness makes.

America's most refreshing low 'tar' cigarette.

mg. 'tar' in both sizes.


9 mg. "tar", 0.8 mg. nicotine av. per cigarette, by FTC method.
Your tuning band is like every
The LR-120DB helps you pick

In many cities, there are hundreds of stations crowded shoulder-to-shoulder across the tuning band. So moving across the band, you get hum, and hiss, and static.

The LR-120DB has adjustable FM muting, which allows you to mute out as much interference as you want, and zero in easily on your station.

The LR-120DB costs $600. You can’t get adjustable FM muting anywhere else for under $900!

*A trademark of Dolby Labs Inc.
**120 watts per channel, both channels driven into 8 ohms from 20 to 20,000 Hz, with no more than 0.09% THD.
thing else in the city. Crowded.
your way through the crowd.

Adjustable FM muting may be the LR-120DB's biggest exclusive in its price range.

But it is by no means the only one.
The LR-120DB is the only receiver anywhere near this price level that offers you all of the following features in addition to the adjustable FM muting.

RESERVE POWER. One measure of a fine receiver (like a fine automobile) is pure power. The LR-120DB gives you 120 watts per channel: more power than you'll ever need. The lesser power of lesser receivers can distort the signal just when you're enjoying the music most—but the LR-120DB has the power to capture even the most demanding passages with perfect fidelity...even at the highest listening levels.

BUILT-IN FM DOLBY.* You know what Dolby* does; you know why it's a virtual necessity in a fine FM receiver. During the critical passages when an oboe or a violin carries a delicate solo, the hissing of the signal can literally destroy the beauty of the sound. Dolby* lets you reduce such disruptive sounds to the vanishing point—and enjoy the music unimpeded. Nothing—not even your own receiver—should be allowed to hiss great music.

There is one more significant advantage to the built-in Dolby:* money. With more and more top-quality FM stations broadcasting in Dolby,* many receivers now offer a provision for adding a Dolby* decoder—at your expense. But the LR-120DB, with Dolby* built-in, lets you enjoy the highs (and escape the hissing) without spending extra for a decoder.

TRIPLE TONE CONTROLS. Most receivers give you two tone controls: bass and treble. The LR-120DB gives you a third control: a mid-range control, which is vital, because it lets you control the frequencies where most of the music is.

In addition, the LR-120DB has dual rollovers on the bass and treble controls.

Having Triple Tone Controls and dual rollovers in one receiver is almost like having five tone controls. It's an essential combination for a discerning listener.

DUAL POWER METERS with adjustable range read-out, one for each channel. There are other receivers which offer this feature—but there are very few in this price range.

At the risk of repeating ourselves: the LR-120DB is the only receiver in its price range which offers all of these features. As well as two-position high- and low-cut filters; two-position loudness contour; three-position phono-sensitivity switching; built-in Mic mixing; and provision for three sets of speakers in any combination of two. (For a complete list of features, write for a free brochure: Lafayette, 111 Jericho Turnpike, Syosset, N.Y. 11791.)

It's good to know that Lafayette's interest in its receivers (or in any of the other many things we sell) does not disappear the day they leave our stores. We do not expect them to need a lot of service—but if they need it, we're swift to provide it. The same goes for parts.

Lafayette will put a lot of pleasure in your ears—without a lot of worry on your mind.
A TAPE BREAKTHROUGH

A recent Nakamichi press conference in New York, called for the purpose of introducing that company's first receiver and several other products, turned into a startling news event in its own right when the company's president, the irrepressible Etsuro Nakamichi, casually took a cassette from his pocket, popped it into a Model 100 deck, and hit the "play" button. This was no ordinary cassette, nor even a "rew. improved" oxide, but a totally new kind of metal-alloy tape that is quite possibly destined to revolutionize the recording industry.

Regrettably, Stereo Review readers may recall that some months ago ("Tape Talk," August 1977) I reported that 3M had announced its readiness to produce a metal-particle tape called Metafine IV as soon as the recorder manufacturers could develop the new generation of tape decks needed to use it. Other major tape makers—Philips, BASF, TDK, Maxell, and Fuji, to name just those I actually know of—had also been working very actively along the same lines. In the article I rather optimistically predicted that machines capable of handling the new tapes might appear in the second half of 1978—or a couple of years ahead of most industry estimates. As of this writing, it is expected that Nakamichi will demonstrate the tape itself at the Consumer Electronics Show in Chicago this month, and I'd give odds that he—and perhaps others—will be ready to exhibit a consumer cassette deck capable of recording the tape at the Las Vegas show next January.

Metal-alloy tape has been a recurrent subject at audio press conferences for several years, but three obstacles have stood in the way of its realization. First, in developing it, the tape makers set themselves the monumental task of coming up with an (almost) pure iron particle that would be both chemically stable and resist oxidation. Some of the early powders experimented with were pyrophoric—that is, when exposed to air they would catch fire. Needless to say, such particles were just too "hot" for consumer products, however useful they might have been for Mission: Impossible. Then, for a time, even though proper binder materials permitted manufacturers to coat a wide sheet ("web") of base film with metal particles, the tape was slittable into usable widths it tended to "rust" (oxidize) along the edges. Happily, the tape manufacturers seem to have overcome all such developmental problems.

Two other obstacles have been hardware-related, and these are what Nakamichi seems to have resolved. The first was the development of a suitable recording head. The bias-current requirement of metal-alloy tapes is about twice that of chromium dioxide, and normal heads—especially ferrite types—tend to saturate magnetically when you try to drive that much bias current through them. Nakamichi has been deeply involved in record-head development, however, and now expresses himself as satisfied that he has come up with a head so good that, as he put it to me, "The tape manufacturers couldn't know how good their own tape was without it." Be that as it may, there are now confirmed reports that some other head manufacturers (including Noritronics, in this country) have also developed suitable heads.

No less important, however, has been the remaining obstacle: that of establishing some measure of standardization to govern the characteristics of the new metal-particle tapes. With no less than half a dozen (and probably more) tape manufacturers working independently, and with numerous machine manufacturers suggesting their own parameters, the danger of a simultaneous introduction of several incompatible metal-alloy tapes and decks has worried many thoughtful observers. With the recent history of incompatible four-channel formats and home video-tape systems, that's one hassle we most assuredly don't need.

Mr. Nakamichi himself has been very worried about this problem, and before making his surprise announcement he went the rounds of major tape manufacturers to ensure product compatibility. While few tape makers were willing to comment for the record at this time (all of them were caught off-guard by the timing of the press-conference disclosure, and all are still talking with other recorder manufacturers as well), "between the lines" comments seemed generally to be consistent with the Nakamichi claim.

One company willing to comment openly was 3M, and its statement is all the more significant in that there is no particular reason to believe that the tape inside the cassette Nakamichi played at the press conference was not 3M's Metafine IV, which they are "seriously considering" showing at this June's CES. (Nakamichi does not manufacture any tape on its own, and, quite properly, Mr. Nakamichi gave no hints as to whose tape was used.)
Five years ago last March, ESS, a small California corporation, electrified the high fidelity world by introducing the AMT-1, the first loudspeaker to incorporate the Heil air-motion transformer as its midrange and tweeter. Two thousand AMT-1's were sold in the first ten days; twenty thousand in the remaining nine months of 1973 — more loudspeakers than any similarly priced loudspeaker in history.

Like all great breakthroughs, the Heil was not just a mere improvement on conventional technology; it was the discovery of a better way that applied the principle of leverage to loudspeaker technology for the first time. All speakers are “transducers”. They all convert electrical energy into acoustic energy. But only the Heil is also a “transformer” that increases the energy velocity 430 percent.

This increase in velocity is the crucial difference. Acceleration capacity is as vital to a loudspeaker as power is to an amplifier. That extraordinary increase in velocity gives the Heil its great clarity and definition, superb dynamic range, crisp transients and superior dispersion — in short, its audible superiority.

The Heil achieves this virtually “instant acceleration” by squeezing air rather than pushing it. A simple experiment dramatically illustrates the superiority of the squeezing motion. Imagine trying to “shot put” or push a light object like a cherry pit (air) with the palm of your hand (a speaker cone). It won't travel very far or fast (Fig. 1). Now put the pit between your thumb and forefinger and squeeze (Fig. 2). It squirts out at high velocity. The physics of the Heil are just this simple and brilliant.

Transar/atd, the first full range Heil air-motion sound system, uniting the Heil air-motion transformer with the new Heil low frequency driver, is an equally astounding breakthrough. Transar’s technical brilliance can be explicated at great length, but not in a few paragraphs. However, we invite requests for ESS’s theoretical monograph “Transar: A Study in Genius, A Study in Physics”. But Transar is not the kind of product that stands or falls on theory. Its profound superiority is something one experiences with a sudden “shock of recognition”. Treat yourself to the loudspeaker of the future. Experience Transar.
Fine tune your living room.

Drapes muffle lows.  
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Your stereo probably doesn't have the sound you thought you bought. Because you first heard it in a sound room. Not listening.

That's why you need a Sound Shaper One or Two. The frequency equalizers that re-shape music to fit your ears. And your living room.

Sound Shaper One has ten frequency controls, five for each stereo channel. But if your system is more sophisticated, you'll want Sound Shaper Two with twenty-four frequency controls (twelve for each stereo channel). So highlight the vocal. Suppress the bass. Wipe out the flute entirely. And if you want the real professional touch, get the SLM-100 Sound Level Meter which can help you to achieve perfectly flat frequency response.

Without redesigning your living room, turn it into a listening room.

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Audio News . . .

used in the demonstration cassette). To paraphrase retail product manager Don Ruskin and Andy Persoon, technical director of the Magnetic Audio/Video Products Division, 3M understands that the basic magnetic characteristics it has decided upon for its Metafine IV meet Nakamichi's requirements.

What will be the characteristics of this radically new tape? In the first place, it seems pretty certain that it will use a standard 70-microsecond CrO2 playback equalization. This may not be optimum for the tape (several manufacturers have told me that the 50-microsecond characteristic used for 7½- and 15-ips open-reel might be better), but apparently Philips is not about to compromise still a third official playback equalization. This means that whether or not you own a deck capable of recording the new tape, you will be able to play back any prerecorded material that's on it.

Second, the problem of high-frequency saturation that has plagued the cassette since its introduction should all but disappear. What reporters heard at the press conference gave persuasive evidence of that. In addition, Mr. Nakamichi's proposal to turn out a calibrated playback test cassette with a frequency response extending to 20,000 Hz at a recorded level of -7 dB was enough to blow my mind. At present, the best we can do in this respect is a cassette calibrated to 12,500 Hz at a recorded level of -20 dB. This suggests that the recording equalization (treble boost) required may be even somewhat less than is typically used for 7½-ips open-reel recording.

And, third, it seems clear that the new metal-particle tapes will have a far better signal-to-noise ratio than any existing cassettes. Even if retaining the 70-microsecond playback equalization is something of a compromise, an improvement of three or four decibels—perhaps more—seems probable, and along with this will go reduced distortion at moderate recording levels.

Does it then make sense for you to delay a prospective purchase of a cassette deck until the "metal compatible" recorders are available? If you insist on having nothing but absolutely "state-of-the-art," cost-no-object equipment, the answer is obviously "yes," just as it's obviously "no" if your recording needs are being adequately met by today's cassettes. The impact of the new metal-alloy tape will undoubtedly fall most heavily on those who already use chromium-dioxide (or equivalent) cassettes, and it may be well to bear in mind that when CrO2 was first introduced it took several years before the inclusion of chrome bias and equalization became more or less standard.

Looking down the road a bit, I suggest that the metal-particle tapes (perhaps combined with the new dynamic noise-reduction system Nakamichi is also working on) may be the realistic home alternative to digital recording. My computer-wise friends say that analog recording is obsolete and can never be improved enough to compete with their "bit streams." But when I look at the phonograph as a method of home music reproduction, it seems no less "outdated" and yet it's still going strong. Time alone will tell. —Craig Stark
While others are reaching for this technology, Sony brings it within your reach.

It takes a sharpened technical sense to deliver innovation at sensible prices.

Who else but Sony could manage it? We know turntables backwards and forwards. As far back as 1966, we were breaking ground; in that year, we applied a slow-speed, servo-controlled motor to turntables.

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The X-tal Lock system is worth x-actly nothing, unless the right information is relayed to it. Our system uses a precise magnetic pulse signal, recorded on the platter's outer rim.

An 8-pole magnetic pick-up head receives it. Then transmits it to the servo electronics.

Most systems use only one pole. By using 8—and averaging them—we get above average accuracy.

**Want functional controls?**

**The case is closed!**

Our dust cover lives down to its name. It remains closed, protecting record and machine, allowing immediate access to controls without lifting the cover. (On the X7 and X6, the controls are touch sensitive.)

Underneath the cover, you'll find a safety clutch mechanism to protect the tone arm, should it accidentally be grabbed while in motion.

And on the X7 and X6, an optical sensing system—to automatically return the arm at record's end. (In the X7, a carbon fiber tone arm.)

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Vibration is also cut by our thick rubber mat, heavy aluminum platter and viscous filled rubber feet. (The X7’s mat is filled with the same damping material).

Much has been engineered into these turntables that we haven't mentioned, including lightweight tone arms with a cast aluminum alloy headshell.

So tightly built are they that we didn't even have room for bigger prices.

Cartridges are not included.
Audio Basics
By Ralph Hodges

HOW AMPLIFICATION WORKS

There are a number of new and interesting amplifier circuits coming up in the next few months to join the class G, class H, and "switching" output stages, among other innovations that have appeared recently. In these days of technical complexity it is good to remind ourselves now and again that an amplifier is—in concept at least—a rather simple device.

The phonograph had been in use for some time before anyone got around to connecting an amplifier to it. Originally, a playback needle was wiggled by a record groove, and the needle vibrations were passed on to a lightweight diaphragm via a mechanical linkage. The diaphragm emitted audible sound, as will almost anything if it is vibrated at the proper frequencies, and that was more or less that. One minor problem was that the reproduced sound was at a fixed level; there was no practicable way to get it any louder or softer. In short, the system lacked a volume control.

Soon it became the practice to attach gracefully flared horns to the diaphragm, the antique "morning glory" horn probably being the best-known example. This made the sound louder, but not by amplifying it. The horn was really an acoustic transformer, bringing about a more efficient coupling of the diaphragm's motion to the outside air. (A rough analogy: your unaided back and leg muscles cannot lift the family car to fix a flat, but with the help of an automobile jack they can. Your strength has not been "amplified" by the jack; instead, the jack has "transferred" your exertions, applying them more efficiently to the task through a mechanical advantage.) Later the horn was enclosed in a cabinet. This amounted to a volume control of sorts, but it still had nothing to do with amplification.

The aerophone, patented by Edison in 1876, was one of the first true amplifiers for audio purposes ever proposed. It was intended for public-address work and consisted of a length of hose with a megaphone-like device at one end, a source of high-pressure air (a bellows, or even a man blowing into the hose) at the other, and a mouthpiece in the middle. The performer spoke or played into the mouthpiece, vibrating a little valve assembly that acted to reduce or enlarge the inner diameter of the hose, thus modulating the flow of air reaching the megaphone. This is pneumatic amplification; a little analogous reasoning tells us that hydraulic amplification is also possible, a small stream of water being used to control (modulate) a larger one.

What does any of this have to do with amplifiers as we know them today? Almost everything. Edison had a weak signal source (the speaking voice) that he proposed to strengthen by tapping an external source of specially conditioned power (the bellows), shaping it into a magnified replica of the signal by means of a modulating device (the valve).

In a modern electronic amplifier we merely substitute a power supply (energized by your local light and power company) for the bellows, a vacuum tube or transistor for the valve (in British usage, a vacuum tube is in- deed called a "valve"), and the minuscule signal from a phono cartridge, tuner, or tape machine for the speaking voice. The concept is identical, and the execution is not really all that different. The way in which a transistorized circuit modulates the flow of electrons through a wire as we might modulate the flow of air through a hose may be a bit more difficult to grasp, but that is only a detail.

How, then, do amplifiers get to be so complex? The explanation is basically logical. For one thing, internally a modern amplifier is really a series of amplifiers. Returning to the example of the aerophone, suppose we wish to get very high air pressures out for the very small signal we are putting in. It stands to reason that the valve will have to be quite rugged to regulate such pressures, and the term "rugged" implies that it might also be heavy and relatively unresponsive to the weak impulses of the human voice. A rugged valve could also be noisy, obscuring the voice signal with the clunks and clatters of its operation. So let's set up a series of aerophones, the first employing comparatively low air pressures and a delicate, precise valve, the second (which is driven via its mouthpiece by the first) employing higher pressures and a huskier valve, and so on, until we've achieved the sound level we're after.

This is essentially equivalent to a block diagram of a modern amplifier. The first transistor in the series—the one that receives the input signal directly—is a highly responsive low-noise device that amplifies the signal only enough to drive the next device while maintaining a good signal-to-noise ratio. By the time the signal has reached the final amplification "stage," it is being processed by a fairly heavy and relatively "noisy" transistor. But it has grown enough in the intermediate stages to prevail over the shortcomings of the final transistor, at least in theory. However, it is true that much of the engineering and advertising debate you hear concerning the merits of various amplifier designs suggests that the ever-more-rugged transistors in the chain are still not responsive and "noise-free" enough for their applications. This controversy is certain to be a lively one as long as the goal of high fidelity is pursued.

This discussion has of course had to overlook some of the subtleties of high-fidelity amplification, such as corrective "feedback" (imagine a tiny bleeder pipe at the final aerophone, bringing a trickle of its output back to the input for a comparison with the original and a correction of what, if anything, went wrong in the intermediate stages.) A discussion of such advanced techniques would go beyond our purpose here, which is to explain the basic idea of amplification as it applies to the electronic equipment that gives us so much pleasure today. There are, to be sure, some few antiquarian "purists" who still refuse the assistance of electronic amplification, preferring hand-ground cactus needles wigging lightweight diaphragms via mechanical linkages. The rest of us Sybarites can be grateful that our phonograph "needles" are tiny, delicate, and precise in response, that they need wiggle only enough to produce an infinitesimal electrical output that we can then make just as big as we want.
Better stereo records are the result of better playback pick-ups

The recording engineer can only produce a product as good as his ability to analyze it. Such analysis is best accomplished through the use of a playback pick-up. Hence, better records are the result of better playback pick-up. Naturally, a calibrated pick-up is essential.

There is an additional dimension to Stanton’s new Professional Calibration Standard cartridges. They are designed for maximum record protection. This requires a brand new tip shape, the Stereohedron®, which was developed for not only better sound characteristics but also the gentlest possible treatment of the record groove. This cartridge possesses a revolutionary new magnet made of an exotic rare earth compound which, because of its enormous power, is far smaller than ordinary magnets.

Stanton guarantees each 881S to meet the specifications within exacting limits. The most meaningful warranty possible, individual calibration test results, come packed with each unit.

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Each rack is designed to hold many combinations of components. And since Sansui offers a complete line, it's easy to create a system that's just right for you.

The GX-7 deluxe rack (shown at the left) is 36" tall with three 19" wide adjustable shelves to easily accommodate a wide variety of Sansui components, and it has lots of room for records and tapes. The full-length smoked tempered glass door protects your equipment from dust, and the handsome simulated wood grain finish fits beautifully in any home environment. The rack is mounted on lockable casters, so it can be easily swiveled to check and change connections or moved to a different part of the house.

In the photo, we're showing the GX-7 with an easily affordable but super-sounding Sansui system. The G-3000 receiver is a mid-power model with high sensitivity and low distortion. The turntable is Sansui's SR-232, a very professional-looking ultraquiet automatic return model. Model SC-1100 cassette deck offers Sansui's exclusive Direct-O-Matic loading and unique Tape Lead-in system, plus Dolby.
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of course.

The GX-5 (shown at the right) is 19" wide to hold any EIA standard-width rack-mountable components. The inside tracks can be adjusted to accommodate any vertical arrangement of your equipment. The Sansui GX-5 stands 37-1/2" tall and has strong 3/4" thick side panels. There are record separators and lots of room for the records and tapes you listen to most. Like the GX-7, it is handsomely finished in a beautiful simulated wood grain and has lockable casters for mobility and accessibility.

The components shown in the GX-5 are from Sansui’s excellent pro-quality rack-mounting series. The SR-838 turntable is a Quartz-Servo direct-drive unit with the most stable performance of any turntable made. The SC-3110 cassette deck provides you with adjustable bias and equalization, microphone / line input mixing, memory rewind and Direct-O-Matic loading and lead-in. The TU-717 AM/FM tuner offers an extremely high level of performance, and operating features not commonly found at its price. The amplifier is the extremely flexible, high power AU-717 that has gotten rave reviews from the audio critics. It is a DC design with the widest frequency response (from main-in) of any integrated amplifier.

Visit your nearest franchised Sansui dealer today. Get to know Sansui’s “space programs” and listen to Sansui super fidelity sound.
ON TESTING TAPE

ONCE in a while even good friends and professional colleagues disagree about the significance (or lack thereof) of certain kinds of measurements. So when I read Technical Editor Ralph Hodges' March "Audio Basics," entitled "On Not Testing Tape," I was moved to present the other side of an admittedly controversial matter.

Let me begin with a point on which he and I agree: since a tape deck's internal adjustments (bias, equalization, Dolby calibration, etc.) are made with a specific tape, you have to use that tape (or one very similar to it) if you're going to evaluate the recorder manufacturer's claims for a test report. Thus, in testing a tape deck, Julian Hirsch asks for (and uses, when provided) not only the brand of tape, but even the very same cassette or reel that was used for the recorder's factory set-up. And when neither the information nor the specification is provided, he has to check through his collection of blank cassettes and reels to find the one that will make the machine perform best, particularly with respect to the manufacturer's claimed frequency response.

Tape tests, on the other hand, are not intended to tell you which specific tape your deck was set up with, but rather how different tapes compare against each other on a basis that is as "recorder-neutral" as possible. Tape tests try to show the relative frequency sensitivities, high-frequency overload margins, bias requirements, maximum output levels, signal-to-noise ratios, etc., that are potentially available to you, even though to realize that potential fully you would have to get your machine readjusted. If (and that's the point in dispute) such information on tape characteristics is obtainable, it would do several things:

1. Assuming you have a tape that works well with your deck, it would tell you which other tapes are, in fact, basically similar. Recorder manufacturers' lists of "recommended tapes" often group together formulations that are just as likely to give widely differing performance.

2. If your deck is giving unsatisfactory performance (an over-bright or an insufficient treble response, for example), tape-test data would give you a good starting point for picking the formulations most likely to solve the problem.

3. If your recorder is more than a couple of years old, tape-test data would show you where the current "state of the art" is, which might lead you either to have your present deck reset for an improved tape or to buy a more up-to-date machine.

The major weight of Ralph Hodges' objections—and where we disagree—is on whether reasonably "recorder-neutral" tape tests are possible. In his column he painted a rather grim picture of a thickly-coated cassette tape alternately tested on "one of the better two-head cassette decks" and on "an exemplary three-head machine." On the first machine, the tape's maximum output level tested much lower in the bass range. The stiffness of the oxide coating (along with a "mediocre pressure pad") caused mid- and high-frequency losses on the two-head deck that the superior dual-capstan drive of the three-head machine overcame. And, of course, the narrow-gap playback head of the three-head model was able to pick up signals of extremely high frequency that the more conventional machine missed. The same tape, then, seemed like two very different animals on the two decks. Since most people own two-head decks rather than the fancy three-head variety invariably used in tape testing, Mr. Hodges concluded that misleading, hardly "recorder-neutral" results are obtained by such "comparative lab tests."

Working backward from these objections, it's clear that only a narrow-gap playback head (characteristic of three-head decks) can resolve the extremely high frequencies, but surely no misinformation is generated here by its use. What would be misleading would be a report in which genuine differences between two tapes in their very short wavelength (extreme high-frequency) performance were masked by the test recorder's limitations. Those differences may not be significant for you if you own a conventional deck, but it is clear that three-head models are becoming increasingly popular as their prices fall.

So far as mid- and high-frequency differences between the two decks' readouts arising from coating stiffness and a poor pressure pad are concerned, I simply disagree. In the first place, with coatings in the 130- to 250-microinch thicknesses used for cassette tape, differences in coating flexibility are minuscule compared to the basic flexibility of the tape, which is determined by the polyester base film. Secondly, the effect of a mediocre pressure pad will show up on both machines, since the differential in tape-to-head pressure provided by a dual-capstan drive (while effective in reducing wow and flutter) is negligible in comparison with pressure-pad force. I checked one of the top dual-capstan decks for a difference in output at 15 kHz with the second pinch-roller alternately on and off, and the difference was approximately 0.2 db.

Mr. Hodges has a stronger case concerning the low-frequency MOL (maximum "undistorted" output level). As Fred Sischka of Memorex tells me, if you measure a tape's sensitivity at various frequencies using a low-level signal (−20 db), no two-head/three-head differences in low-frequency performance show up. But if you use a very high-level signal (calculated to produce 3 per cent distortion at 333 Hz, the traditional MOL point), a thick-coated tape will yield a somewhat higher MOL figure when tested with a wide-gap recording head (a three-head machine) than when checked with the narrow-gap dual-function head used in conventional decks. But the relative rank ordering of tapes all tested with one or the other type of head would remain the same, and such relative ordering is the essence of what consumer tape tests are intended to produce.

I don't mean to minimize the difficulties involved in tape testing. Far from it! Since I spend much of my working life involved with just such difficulties, I know that skilled interpretation of graphs and "raw" numbers is required if readers are not to be misled. I only argue that reasonably "recorder-neutral" comparison of tape types is possible, and the tape manufacturers themselves make them. Indeed, Julian Hirsch's searches for the "right" tape to test a given deck show up the very sort of relative differences I am talking about.

A point on which my colleague and I are strongly in agreement, however, concerns the need for better international standardization of products ostensibly designed to use the same bias/equalization switch positions. A proposed IEC Standard is in the works, and, at the manufacturing level, this may bring the bias requirements of the tapes available to us into closer conformity. A common bias-point would not eliminate differences between tapes, but it would surely be a boon to audiophiles—and tape testers—alike.
For years, SAE has been producing “state-of-the-art” separate components that offer value, quality and performance. That experience has now been applied to a line of integrated amplifiers. But what’s the hole for? The answer is, ultimate performance!

Unlike others, our integrateds are identical to our separates with the same designs and component parts already proven in SAE preamps and amps. But that’s not all - in each of our integrateds the preamp and amp section is entirely separated (even the power supply!). The preamp section, which is identical to our 2900 (or 3000, depending on the model) has its inputs and outputs near the front (hence the need for the hole), while the amp section (2200 or 3100) is at the rear. The only common parts are the chassis and the power switch. This unusual “U” shape design provides isolation of low and high level circuits, while retaining easy access to inputs and outputs (now only 3.5” behind the front panel).

These new units are so unique we don’t consider them integrateds. Instead, we call them preamp/amps. They meet all the goals of an ideal integrated; (1) Convenience of an integrated design; (2) Excellent value due to reduced packaging costs; (3) The performance of separate components.

No matter which of SAE’s preamp/amps you choose - the 2922 with parametric EQ and 100 watts* per channel, 3022 with tone controls and 100 watts* per channel or the 3031 with tone controls and 50 watts* per channel, you are assured of SAE performance, quality and value. The preamp/amps are truly integrated separates. And that’s the whole story.

*Per FTC Rating @ 8 ohms

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Technical Talk
By Julian D. Hirsch

Tuner testing is a complex and time-consuming procedure requiring far more equipment than is needed for testing other audio components. Photo shows the test bench at Hirsch-Houck Labs with the Tandberg TR 2075 MkII receiver set up for tests (see report on page 56) which will involve most, though not all, of the instruments shown.

Testing FM Tuners

In contrast to the loosely defined test conditions for making tape-recorder, phonocartridge, and turntable measurements, FM-tuner tests are thoroughly defined by the current IHF standard (IHF-T-200, 1975, also issued by the Institute of Electrical and Electronic Engineers as IEEE Std. 185-1975). Although not all tuner manufacturers adhere to this standard when establishing their published performance ratings, a growing number do, and so do most independent testing laboratories in this country.

The thirty-five-page standard details the measurement procedures for some twenty-five tuner-performance parameters, not all of which are required to be a part of a manufacturer's rating. In our tests, we adhere closely to the IHF conditions, though we do not find it necessary to make the full series of tests.

Our signal generator (a Sound Technology 1000A) is connected through a suitable coupling transformer to the 300-ohm antenna inputs of the tuner. Ideally, the tests should be made in a screened room so as to exclude r.f. noise and other signals. Lacking such a room, we use one of the few "holes" in the crowded FM band (around 101.5 MHz in our area) for our measurements. Unless otherwise specified, the signal generator is always modulated 100 per cent (75-kHz deviation) by a 1,000-Hz audio signal.

Beginning with a very weak signal, we measure the total harmonic distortion and noise (THD + N) in the tuner's output at several signal levels. Formerly, these signal levels were expressed in microvolts (µV). However, the new standard is based on a signal-power measurement, expressed in decibels relative to the almost unimaginably low power of 1 femtowatt (10^-15 watt), referred to as “dBf.” In our tests these levels range from 5 dBf (1 µV) to 95 dBf (30,000 µV).

A graph of the THD + N versus signal power provides some clues to the reception quality that can be expected at any given signal level. The -30-dB THD + N point (corresponding to 3.2 per cent distortion as read on a null-type distortion analyzer such as our Radford unit) is defined as the IHF usable sensitivity (sometimes abbreviated to either IHF or usable sensitivity). Since this measurement includes noise as well as distortion, it cannot be made with a spectrum analyzer. The null-type meter cancels out the 1,000-Hz signal component in the tuner's output, and what is left (noise and distortion) shows as a percentage of the total signal output. Incidentally, the tuner must be adjusted carefully for minimum distortion at each signal level (and this tuning point may differ somewhat from the "correct" tuning as shown on the tuner's own meters). This procedure is allowed by the IHF standard, which is one reason the consumer should not place undue emphasis on very low distortion ratings or measurements, since he is not likely to achieve the same condition in actual use (unless the tuner is of the frequency-synthesizing type or has other means of ensuring that it can be tuned accurately for minimum distortion).

Depending on the characteristics of the tuner, the usable-sensitivity condition may correspond either to a low-noise signal with about 3 per cent distortion (probably quite listenable) or to a very low-distortion signal with a -30-dB noise level (much too noisy to listen to). Most tuners fall between these limits, but in any case the THD + N measurement alone is not a very good indicator of how effective a tuner will be for weak-signal reception.

For that, this test must be combined with another. Instead of measuring the THD + N with the signal generator fully modulated, the modulation is shut off and the tuner's noise output alone is measured and plotted as a decibels below 100 per cent modulation as a function of signal strength. This quieting curve is plotted on the same chart as the first curve, so that the two taken together give a fairly complete picture of the tuner's overall distortion and noise-quieting performance. The signal input that reduces the noise by 50 dB is the 50-dB quieting sensitivity, which is probably the most important single specification of an FM tuner (although, as we shall see, many more measurements are needed to really define its total performance).

We also measure the audio-output level of the tuner as a function of input-signal level (using a 100 per cent modulated signal). Although it is plotted on the same graph co-ordinates as the other two sets of data, this is a matter of convenience. It could be expressed with equal validity as a single number, since the audio level is constant once the input signal exceeds the IHF sensitivity rating. We use it as an indicator of the tuner's audio-output voltage (expressed in decibels relative to 1 volt). Note that it is not directly related to the other measurements; the distance in decibels between it and the noise and THD + N curves is of no significance.

The IHF standard states that the tuner's distortion and ultimate signal-to-noise ratio (S/N) are to be measured at an input of 65 dBf (1,000 µV). These figures can be read directly from the graphs that have been plotted; usually we express distortion as a percentage rather than as the equivalent number of decibels below the audio-output voltage (-40 dB = 1 per cent, -60 dB = -0.1 per cent, etc).

All the preceding measurements must be made twice, in both mono and stereo modes. Normally, for the same S/N about 20-dB more signal is required in stereo than in mono. Stereo distortion is usually, but not always, higher than mono distortion. The stereo usable sensitivity is often set by the tuner's automatic stereo/mono switching threshold rather than by distortion or noise. As a rule, stereo distortion or noise measurements cannot be made as simply as in mono, since there will always be some residual 19-kHz pilot-carrier signal in the audio outputs and it may possibly overshadow the actual noise and distortion components. For distortion, this problem can be resolved by using a spectrum analyzer to measure the significant harmonics (usually only the second and third) separately and
The approach that we use is to remove pilot-

frequencies. The approach that we use is to remove pilot-
channel selectivity ratings of 80 dB or more, which would correspond to 1 volt of off-channel signal. Few signal generators can deliver that level, and none can provide the 10 volts or so that would be required to test the very finest tuners. Thus, we use an unmodulated signal-generator output level that is low enough for the 200,000 µV available from our second generator to create the necessary measurable interference.

Stereo frequency-response and channel-

separation measurements are made with one generator (the Sound Technology 1000A). Modulation is applied from an external source (a Radford low-distortion audio generator).

The output voltage from the tuner is read on a Ballantine 303 voltmeter, and it is simultaneously examined on the spectrum analyzer. Frequency response is measured with the meter point by point, rather than with the analyzer. A sweep would take much less time, but reading accuracy and resolution are better with the meter, and the results are easier to show in graph form.

First, the signal generator, at 65-dBF output, is modulated 100 per cent at 400 Hz on the left channel only. This is the reference level for all subsequent measurements. Switching to the right-channel output, we note the difference in the amplitude of the audio output shown on the spectrum analyzer. This difference is the channel separation, or crosstalk, from left to right at that frequency. Then the modulation is applied to the right channel only, and the process is repeated to get the right-channel frequency response and the right-left channel separation.

This measurement is made at a number of modulating frequencies from 30 to 15,000 Hz, using 100 per cent modulation at all times (see Figure 3). Above 1,000 Hz, the audio-output level drops with frequency due to the tuner de-emphasis. We average the two frequency-

selectivity is measured in a somewhat similar manner. With both signal generators set on the same frequency, the output of the modulated signal generator is increased until the audio output is 30 dB less than it would normally be from a single signal modulated 100 per cent. After the output setting of the generator is noted, it is tuned exactly 400 kHz off the channel frequency (using a frequency counter or equivalent means to insure correct frequency shift), and the output level is increased until the same audio output of –30 dB is measured (a spectrum analyzer is used for this in order to exclude the effects of noise and spurious signals). This is done at 400 kHz both above and below the channel frequency, and in each case the ratio of the signal levels needed to produce –30-dB reference outputs

Figure 3 shows the output of one channel and crosstalk on the other.

Photo above shows the spectrum analyzer displaying a 1-kHz signal and its harmonic-distortion products. Fig. 1 is a scope trace of the tuner output from a 100 per cent modulated input (far left) and the residual 19-kHz pilot (far right). Fig. 2 shows a demodulated 1-kHz FM signal (far right) and the greatly reduced level of a 400-Hz AM component (center). Other blips are hum components. Fig. 3 shows the output of one channel and crosstalk on the other.
response readings and the two crosstalk readings, and we correct the response against a theoretically perfect response characteristic for a 75-microsecond de-emphasis network. The two are then plotted on the same graph (the crosstalk curve is shown relative to the 0-dB calibration line of the chart, not to the frequency-response curve, since that may not be perfectly flat itself).

The only measurement we make of the turner's ability to reject out-of-band (FM band, that is) interference is of its image-rejection ratio. This is done with a Boonton generator, which can tune to the image-response frequency range from 109 to 129 MHz. First, the generator is tuned to a clear frequency in the FM band and its unmodulated signal level is set to the previously measured usable-sensitivity level. The noise output from the tuner is measured. Then, the generator frequency is changed to the image of the chosen frequency (that is, 21.4 MHz higher, which is twice the 10.7-MHz intermediate frequency) and its level increased until the same reference noise level is measured. The ratio between the signal-generator outputs at the two frequencies, in decibels, is the tuner's image-rejection ratio. Somewhat similar measurements are defined for in-band spurious responses and the i.f.-response ratio. We do not consider these to be significant and therefore do not make these measurements.

Although it is not a part of any formal test procedure, we augment our measurements with controlled listening tests. Combined with its companion unit, the Sound Technology Signal Conditioner Model 1100A, the 1000A signal generator becomes a very high-quality—if low power—FM broadcast transmitter. Connected to a dipole antenna and with programs supplied from high-quality tapes or records, it transmits within the room a signal free of limiting, multipath distortion, or commercial announcements to turners whose sound qualities can then be judged and compared under nearly ideal conditions. The complete measurement of FM-tuner performance, as may be imagined, takes considerably longer to perform than to describe. Also, things never seem to work out as nicely in practice as they are supposed to, and considerable familiarity with the measurement process and test-equipment idiosyncrasies is needed before one can make the tests in a reasonable time with some assurance of accuracy. One of the most important contributions of the latest IHF standard is its use of the dBf as a measure of sensitivity. Bear in mind that acoustic-level changes of 1 dB are difficult for a human being to detect and that a 3-dB change, while it represents a 2:1 power difference, is about the smallest that has any real audible significance. When reading FM-tuner sensitivity ratings, the same perspective is helpful. Two turners whose sensitivity ratings differ by only 1 dB can, for all practical purposes, be considered identical in that respect. Concern over sensitivity differences of a decibel or so are as completely unwarranted as worry over whether a tuner sensitivity of 1.7 µV is that much better than one of 2 µV. It isn't!

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### Equipment Test Reports

By Hirsch-Houck Laboratories

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**AKG P8ES Phono Cartridge**

A1. AKG stereo cartridges feature a novel single-point cantilever pivot, a sort of rubber grommet fitted to a tiny hole in a thin metal plate through which the stylus-cantilever tube passes. Just behind the pivot—whose symmetry lets the stylus respond with equal freedom of movement to all conditions of groove modulation while restraining it axially—is a small iron armature. The stylus motion varies the position of the armature in a fixed magnetic field, thus generating a signal voltage in the appropriate coil or coils surrounding the magnetic structure. This design is referred to as "variable-reluctance" or "moving-iron" type.

The P8ES, which heads the AKG line, is distinguished from the others by having the highest static compliance and the lowest effective stylus mass. The rated values of these parameters are respectively 35 × 10^-6 centimeter per dyne and 0.42 milligram. The range of rated tracking force for the 0.2-× 0.7-mil elliptical diamond stylus is from 0.75 to 1.25 grams, and the output voltage at a 5-cen-
tometer-per-second (cm/sec) velocity is rated at 3.75 millivolts. Like the other AKG cartridges, the P8ES is designed to be terminated at 3.75 millivolts, and the vertical angle of the cartridge output at a 3.54-cm/sec velocity was about 2 milivolts; the channel load capacitance is 470 picofarads (pF).

The P8ES has a clear-plastic molded body with a distinctive tapered shape. The hinged stylus guard is an integral part of the removable stylus assembly. The shape of the cartridge makes it imperative that its bottom be parallel to the record surface to avoid mechanical interference between the two. A mounting wedge is supplied to tilt the cartridge when it is installed in a record-changer arm so as to avoid interference when playing the upper records of a stack. Price: $135.

- **Laboratory Measurements.** We tested the AKG P8ES in the tone arm of a Technics SL-1500 MKII record player. The cartridge load was 47,000 ohms in parallel with 460 pF, and other values of capacitance were also used. The frequency response with the CBS STR 100 test record was flat to about 7,000 Hz and rose smoothly to a maximum of about +4 dB at 16,000 Hz before falling to the mid-range level at 20,000 Hz. The overall response was within ±2 dB from 40 to 20,000 Hz. Channel separation was 20 to 30 dB in the mid-range and 15 to 20 dB at 15,000 Hz. The effect of varying the load capacitance from 190 to 560 pF was not serious. One of the most important contributions of the latest IHF standard is its use of the dBf as a measure of sensitivity. Bear in mind that acoustic-level changes of 1 dB are difficult for a human being to detect and that a 3-dB change, while it represents a 2:1 power difference, is about the smallest that has any real audible significance. When reading FM-tuner sensitivity ratings, the same perspective is helpful. Two turners whose sensitivity ratings differ by only 1 dB can, for all practical purposes, be considered identical in that respect. Concern over sensitivity differences of a decibel or so are as completely unwarranted as worry over whether a tuner sensitivity of 1.7 µV is that much better than one of 2 µV. It isn't!

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(Continued on page 48)
The first car speaker system that you can feel right at home with.

Up until now, there have been car speakers and there have been home speakers, but quite frankly, they've been in two different leagues.

We decided to change that. We designed the LS70, a 6" x 9" speaker, to meet the same high standards we set for our much acclaimed EPI 70 loudspeaker.

The result is a car speaker that performs like no car speaker ever performed. You get remarkably clear, accurate, "Linear Sound" as well as dispersion that other speaker manufacturers can only dream about.

What other car speakers do wrong.

In the interest of saving space, most all car speaker manufacturers do something you'd never do with a home speaker—they use an oval woofer.

The problem is that an oval woofer inherently distorts, so right off the bat they're in trouble.

Another problem arises from the traditional co-axial or tri-axial automobile speakers. In order to conserve space, manufacturers of these speakers literally stack the tweeters and mid-ranges in front of the woofer. Unfortunately, this blocks and colors sound, causes distortion and impairs dispersion.

What we do right.

First off, we use a low-mass, 6" round woofer so you don't get the distortion you'd get with an oval.

Secondly, it sits right next to our famous 1" air-spring tweeter, just the way it does in a home system; nothing comes between you and the sound.

Finally, we build LS70's to handle up to 60 watts RMS per channel. Other car speakers blow up at considerably less than this.

A problem that arises from the traditional co-axial or tri-axial automobile speakers; even if you never get another car— they'll still sound awfully nice in your den.

EPI is a product series of Epicure Products, Inc., Newburyport, Mass. 01950.

CIRCLE NO. 69 ON READER SERVICE CARD
Hafler DH-101 Stereo Preamplifier

More than two decades ago David Hafler founded Dynaco, and during the years when he was responsible for the direction of that company his goal was always to provide maximum performance at minimum cost by avoiding unnecessary circuits and "gadgetry" in favor of straightforward, efficient design. Some years ago he severed his relationship with Dynaco, but he recently re-entered the high-fidelity manufacturing field with his new David Hafler Company. Judging from that company's first product, the DH-101 stereo preamplifier, the Hafler "philosophy" of product design is fundamentally unchanged, although technological advances have made possible a level of performance that was unimaginable only a few years ago.

third less distortion. The 10.8-kHz tone bursts of the Shure TTR-103 record, a test of high-frequency tracking ability, showed a clear advantage at the higher force, and we used 1.25 grams for listening tests. The Shure "Audio Obstacle Course-Era III" (TTR-110) record was played at 1.25 grams, and we were pleasantly surprised to find that the P8ES has the ability to play some of the highest recorded velocities to be found on modern music records without significant mistracking. Few cartridges at or below its price can do as well, let alone surpass it in that respect.

Comment. We used the AKG P8ES in the tone arm of a good record changer as well as in the test tone arm. Results were good in both cases. The P8ES clearly ranks among the best of today's cartridges. To be sure, it did not sound very different from any other fine cartridge (the high-frequency rise might add a bit of crispness to the sound of some records, but it was not audible as either coloration or high-frequency emphasis). We were pleased to discover that the P8ES has the ability to play some of the highest recorded velocities to be found on modern music records without significant mistracking. Few cartridges at or below its price can do as well, let alone surpass it in that respect.

Subject only to the requirement that the tilt of the cartridge be set so that its body does not contact the record, the cartridge was easy to install, and it should give no problems in any good modern record player, whether manual or automatic. Although the output level of the P8ES is quite low, it is compatible with the input sensitivity of any high-quality amplifier.

Circle 105 on reader service card

The DH-101 is offered in either kit or factory-wired form, but even the kit version is supplied with its circuit boards fully wired and tested. The unadorned black front panel contains concentric volume and balance controls, bass and treble tone controls (each of which affects both channels), and two rows of five latching pushbutton switches. In their out (off) settings, the buttons appear in black. When one is pressed to engage its function, the face of the button changes to white. (This highly visible indication, entirely mechanical in nature, uses no lights or additional switching contacts and is a typical example of the Hafler approach to functional simplicity.) A small red LED in the center of the panel serves as a power pilot light.

Eight of the buttons are program selectors and tape-monitoring switches. The DH-101 can accept two magnetic phono sources, two high-level sources (Tuner and Aux), and two tape decks. A DUB switch cross-connects the tape decks for dubbing from either one to the other. Individual TAPE MONITOR buttons enable the playback from either machine to be heard. The MONO button converts the preamplifier output to mono by summing the two channels; TONE engages the tone-control circuitry.

(Continued on page 50)
IT TOOK THE BEST HEADS IN THE INDUSTRY TO MAKE AKAI'S NEWEST PROFESSIONAL DECK.

For years, AKAI's patented glass and crystal (GX) heads have been making recorded history. Not only for unsurpassed sound quality, but for unequalled wearability as well. Guaranteed, in fact, for 150,000 hours; the equivalent of playing 24 hours a day for almost 17½ years.

Now AKAI puts its heads together in one dynamite machine: the PRO-1000. The four head, 2-track mastering machine that's as much at home on location as it is in the studio.

See the PRO-1000 at your AKAI dealer or write us for information.

But do it soon. Because it's already turning the heads of a lot of people.

Features:
- 3 Motors
- 3 Speeds
- 4 Heads (1/2 Track Record/Play and 1/4 Track Play)
- 10 1/2" Reel Capacity
- Large Illuminated 40 dB meters: read Peak, VU, and Bias
- Four In/Two Out Mixer, built-in Panpots
- 20 dB Microphone input attenuators
- Variable EQ and Bias controls
- Special inputs for outboard noise reduction units, i.e. "DOLBY," "DBX,"
- Double Capstan, Closed Loop Drive System
- Remote Control operation (optional RC-17 and RC-18)
- Feather touch, full logic solenoid control system
- NAB playback standards
- Fade-in and fade-out controls
- Separate sections for tape transport and tape amplifier with heavy duty carrying handles on both sections
- Pre-set clutches on all input level controls.

Specifications:
- Wow and Flutter 15 IPS: 0.025% WRMS, 7 1/2 IPS: 0.04% WRMS, 3 3/4 IPS: 0.08% WRMS
- Frequency Response 15 IPS @ 0 VU: 50-20 KHr ± 1 dB, 7 1/2 IPS @ 0 VU: 40-24 KHr ± 3 dB, 3 3/4 IPS @ 0 VU: 60-12 KHr ± 3 dB
- Overall Distortion Not more than 1% @ 1 KHr @ 0 VU for all speeds
- Signal to Noise Ratio 62 dB
- Heads (4), 1/2 Track GX Record, 1/2 Track GX Playback, 1/4 Track GX Playback, Full Track Erase
- Motors (3), (1) AC Servo Capstan Drive Motor, oil circulating, center pole generated (CPG)
- (2) Eddy Current Motors, for fast forward and rewind, oil circulating
- Inputs Microphone (4), Line (4)
- Outputs Line (4), Mixer (2), Headphone (1)

*TM of Dolby Labs., Inc.

AKAI America, Ltd., 2139 E. Del Amo Blvd., P.O. Box 6010, Compton, CA 90224

JUNE 1978
circuits when pressed, and in the out position the controls are bypassed. The power switch turns on the preamplifier and energizes two of the four ac convenience sockets on its rear apron (the others are always on).

In addition to the signal inputs and outputs already mentioned and the preamplifier-output jacks, the rear apron of the DH-101 has two pairs of phono jacks, marked EXT PATCH, that are normally joined by jumper plugs. These are for inserting a signal-processing accessory, such as an equalizer, noise reducer, or dynamic-range expander, into the signal path ahead of the preamplifier's active circuits but after the input selector (and phono-preamplifier) stages.

As in some of David Hafler's earliest vacuum-tube amplifiers, the circuits in the DH-101 are almost startlingly simple. The preamplifier's basic circuits, including the tone controls, consist of two differential pairs of transistors and a fully complementary-symmetry "single-ended push-pull" output pair that is not very different, except for its power ratings, from a typical power-amplifier output stage. The tone controls are in the negative-feedback loop running from the preamplifier output internally connected to one of the two phono inputs. All the active circuits in the preamplifier use discrete components (no IC's), although the ±18-volt power supply has two IC regulators.

The specifications of the DH-101 are extensive. They can best be described as "state-of-the-art"—and then some! The rated output is 3 volts between 10 and 100,000 Hz (through a source impedance of about 500 ohms), and the maximum output is 7 volts from 20 to 20,000 Hz. The total harmonic distortion (THD) is less than 0.001 per cent from 20 to 20,000 Hz at the rated 3-volt output. The "A"-weighted hum and noise level is 90 dB below a 1-volt output. The rated rise time is 2 microseconds and the slew rate is 12 volts per microsecond.

Phono overload is rated at 180 millivolts at 1,000 Hz, and phono hum and noise are 86 dB below a 10-millivolt signal input at 1,000 Hz ("A" weighted). The phono preamplifier interacts with a cartridge at 20,000 Hz is stated to be unmeasurable. The DH-101 uses a modified RIAA phono-equalization characteristic similar to the IEC playback curve. The essential difference is that the IEC curve has a low-frequency rolloff that in effect provides an infrasonic filter at all times in the phono mode. The equalization of the Hafler DH-101 has been trimmed slightly to fall within 0.3 dB of the existing RIAA curve down to 30 Hz (its lowest defined frequency) while retaining the rolloff at the lower frequencies, as is called for by the IEC (it comes within a decibel or two of the IEC curve at all frequencies).

The Hafler DH-101 is 13/4 inches wide, 31/4 inches high, and 1/2 inch deep, with a 1-inch protrusion of the front-panel knobs. It weighs 8 pounds. Kit price: about $200. The factory-assembled unit is about $300.

**Laboratory Measurements.** We tested a kit-built unit for this review. Our test report reports that the DH-101 is an easy project—so easy, in fact, that an eleven-year-old did most of the job. The excellent manual was obviously prepared by someone with considerable experience in the art of writing for beginners, and the illustrations were exceptionally clear and helpful.

All the critical circuitry is on four printed-circuit boards, which come complete and factory-tested. The home constructor simply has to solder wires to a few eyelets on the boards, to the switch terminals, and to the jacks at the rear of the unit. The rest is merely a matter of nuts and bolts assembly. The kit was completed in two rather enjoyable evenings, and the assembled unit worked perfectly from the first time it was turned on.

Hafler's statement that the measured distortion of the DH-101 would be essentially that of the test equipment proved to be quite correct. With our Radford equipment, the THD in the amplifier output measured between 0.002 and 0.0032 per cent from less than 1 volt to about 10 volts output. The IM distortion, measured with the Crown IM analyser, was between 0.001 and 0.003 per cent for outputs from 1 to 7 volts and reached 0.005 per cent at 10 volts. Clearly, whatever conventional non-linear distortion may be present in the output of the DH-101 is not measurable with today's standard laboratory test equipment.

The square-wave rise time was 3 microseconds through the AUX inputs, and the slew rate could be taken as anything from 7 to 12 volts per microsecond, depending on one's measurement technique. At maximum gain, a 0.1-volt input at the AUX terminals gave a 1-volt output (this is 20 dB gain, exactly the rating of the unit), and the unweighted signal-to-noise ratio (S/N) was better than 80 dB for this output level. The 100-microvolt minimum indication of our meter prevents measuring noise levels lower than −80 dB relative to 1 volt, and there would be no point in attempting a weighted measurement on this unit; it would make the readings even lower.

The phono sensitivity was 1.7 millivolts (mV) for a 1-volt output, with a 68 dB S/N (wide-band measurement). The phono preamplifier overloaded at the rated 180 mV. The equalization curve followed Hafler's specification as closely as our measurements could verify. The deviation from an RIAA curve was less than ±0.25 dB from 50 to 20,000 Hz and −2 dB at 30 Hz. The RIAA standard allows ±1 dB from 30 to 15,000 Hz.

A measurement of phono-cartridge interaction with the preamplifier at first showed a ±1 dB variation over the frequency range of 2,000 to 20,000 Hz. This is far from satisfactory, and with most amplifiers we would have ignored it. However, Hafler assured us that even that much of an effect was not typical of the DH-101 and reminded us about the 220-pF capacitors across the phono inputs. When these were removed, a retest showed abso

(Continued on page 54)
Speaker Systems: Then And Now

Until now, speaker systems have been a compromise.

But you have to give hi-fi engineers credit. They’ve been doing their best under difficult circumstances.

You see, optimum bass reproduction requires a large enclosure for the bass driver. But then, the mid and high frequency drivers are added to this large enclosure. The result is often two bulky, and sometimes unsightly cabinets which are difficult to place for maximum stereo sound reproduction and tasteful interior decoration.

Adding to this dilemma is the knowledge that furniture, carpets, and walls are factors which can cause the bass to sound weak, dull, or false.

Yet, moving the speakers to improve bass response destroys the stereo imaging. So you end up doing what hi-fi engineers have been doing. You compromise.

You needn’t. Because now, Visonik has a solution. It’s called the SUB-1/DAVID loudspeaker system. Designed to give you uncompromised sound, with uncommon placement flexibility.

The theory behind the SUB-1/DAVID loudspeaker system is based on the acoustic fact that the human ear cannot detect directionality in low tones, those below approximately 200Hz.

In other words, there’s no stereo imaging in the low bass. So why have two bass drivers?

Visonik’s three-way SUB-1/DAVID system utilizes two DAVID 502 or 602 speakers to reproduce the mid and high range and impart the proper stereo imaging, with a single sub-woofer to radiate the low bass throughout the room.

The DAVIDS reproduce sound with absolute faithfulness and sparkling clarity right up to the highest highs. And their dispersion characteristics are nothing short of remarkable.

Yet, they are so ultra-compact that integrating the DAVIDS into your room will be a cinch.

The single sub-woofer brings bass reproduction down to a new low. As low as the lowest lows, but still with a crisp knock-out punch you could only get at a concert.

And the sub-woofer can even be hidden in the room. This produces the astounding effect that the full, rich bass sound seems to come from the DAVIDS.

With a minimum recommended amplifier power of 50 watts per channel and a maximum of 300 watts per channel, the SUB-1/DAVID system works well with an unusually large range of amps or receivers.

Visonik’s SUB-1/DAVID system. The one designed for those who won’t compromise. Is that you?

Write or call this toll-free number for the name of your nearest Visonik dealer. (1) 800 423-2355, ext. 606. In California, call (1) 800 232-2175, ext. 606.

**Visonik® HIFI**

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Presents Two Extravagant Bargains

**Extravagant** because of the way they appear, perform, and "feel" to sensory perception.

**Bargains** because all Denon turntables have an AC speed control system that is not confused by the drag of tracking cartridges.

**Bargains** because Denon turntables maintain their specifications after literally thousands of hours of playing (try that with the most popular brands).

---

**DP 2500**
- Quartz-locked speed control.
- Wow and flutter—.015 W rms
- Starts/stops in less than one second
- $525 with a dynamically-damped arm developed by laser technology ($475 without arm).
- Simulated walnut or ash.

**DP 1200**
- Automatic lift/shut-off at end of record.
- Tonearm that you would expect to cost $300.
- Wow and flutter—.018 W rms
- $375 in simulated mahogany or ash.

DENON, exclusively from American Audioport dealers.

American Audioport, Inc., 1407 N. Providence Rd., Columbia, MO 65201
olutely no detectable interaction between the cartridge inductance and the phono-preamplifier input over the 1,000- to 20,000-Hz range of our measurement.

The tone controls had conventional characteristics, with a sliding bass-turnover frequency from below 100 to about 300 Hz and treble curves hinged at about 1,000 to 2,000 Hz.

- **Comment.** Not only does the Hafler DH-101 perform electrically in an ideal manner, but it has the precise, smooth mechanical "feel" that we usually associate with the most expensive audio products. The pushbutton switches introduce no electrical transients, so one need have no fears of a sudden click or pop damaging a speaker, to say nothing of one's tender sensibilities. We listened to the DH-101 at some length, not only in a search for "bugs" or any unwanted sounds (there were none) but to detect, if possible, any special quality in its sound. Attempts to make A-B comparisons with other preamplifiers failed because of the difficulty of completely eliminating stray hum and other noises produced by the switching setup. We did make some fairly rapid changes between the units (less than 30 seconds), but it was not fast enough for a true A-B comparison.

We heard nothing unusual from the DH-101, just a total absence of hiss, hum, or any other form of distortion or noise. In truth, it would have been surprising to find any special positive quality in the sound of a product such as this, although that had been suggested to us as a characteristic of the DH-101. This is not to say that such qualities would not be heard with certain combinations of phono cartridges, record players, speakers, room acoustics, and specific records. Lacking an infinite amount of time to make such an investigation, we had to content ourselves with just listening to the preamplifier "doing its thing," which it did very well indeed (we have certainly never heard anything better).

Our conclusion is that if one is looking for a preamplifier with perfect electrical performance, enough input and control flexibility for almost anyone, and a minimum of gimmickry—and selling, at least in kit form, for a truly "bargain basement" price—the Hafler DH-101 fills the bill admirably. It looks to us as though the Hafler touch has, if anything, become even more refined with the passage of time.

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**Circle 106 on reader service card**

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**Garrard MRM 101 Music Recovery Module**

**Recently**, there has been considerable interest in the elimination of record ticks and pops resulting from dirt, scratches, and other blemishes. Although a severely scratched record may be so damaged that the stylus will repeat a groove, most such are still playable, the only penalty being a loud "click" with every revolution.

In order to eliminate such "impulse" noise, it is first necessary to distinguish between it and the program, whatever that might be. It might seem that a click or pop has little in common with music, but if one considers the wide range of musical sounds, it is apparent that some—certain percussive sounds in particular—have much in common with the effects of record scratches.

In the Garrard MRM 101 "Music Recovery Module," several criteria for discriminating between impulse noise and music are applied. First (and this appears to be basic to all tick-and-pop suppressors), the phase relationship between the right and left channels of the input signal is examined. A scratch almost always produces a vertical stylus displacement, which appears in the cartridge outputs as out-of-phase voltages. Ordinary stereo program material may also have out-of-phase content, but it is usually well below the level of the other signal components. Second, the attack time of the transient is checked—a scratch produces a much faster transient than most musical sounds. Third, the transient decay is similarly analyzed, since the decay of a scratch is as rapid as its rise, while music is unlikely to have equal rise and fall characteristics. Finally, the duration of the transient is measured. Since scratches produce noises less than 1 millisecond in duration and music rarely does, this also serves to distinguish one from the other.

Although certain musical sounds may satisfy one or more of the above criteria, none will meet all of them. Therefore, if the phono-cartridge signal outputs are out of phase, are less than 1 millisecond in duration, and have very fast attack and decay times, they are assumed to be the result of a scratch.

But once a noise transient is identified, how do we eliminate it? Simply turning off the sound for the duration of the transient is somewhat like throwing the baby out with the bath water, since a "hole" in the sound is as much of a discontinuity as a "spike." The solution developed by Dr. Ian Buckner of Gar-Brad Laboratory Measurements. The only significant measurements that could be made on the Garrard MRM 101 were of its basic performance as a phono-preamplifier. The impulse-noise-suppression qualities of the device were evaluated subjectively. The nominal output of the MRM 101 is 300 millivolts, and an input of about 4.5 millivolts at 1,000 Hz was needed to produce this output level. It

(Continued on page 56)
Give Dad a distinguished name.  
After all, he gave you one.

Seagram's V.O.
Bottled in Canada. Preferred throughout the world.

CANADIAN WHISKY. A BLEND OF CANADA'S FINEST WHISKIES. 8 YEARS OLD. 86.8 PROOF. SEAGRAM DISTILLERS CO., N.Y.C.
overloaded at an input of only 47 millivolts with the suppressor on and 135 millivolts with it off (the former figure is near the lower limit of acceptability for a high-quality preamplifier). The maximum output before clipping at 1,000 Hz was 2.8 volts with the suppressor on and 8.8 volts with it off. Non-impulse noise was slightly affected by the suppressor, with output readings (unweighted, wide band) of 0.3 millivolt (60 dB below nominal output) with suppression on and 0.15 millivolt (-66 dB) with it off. With the suppressor off, the 1,000-Hz harmonic distortion was barely measurable: 0.0025 per cent at 1 volt output and 0.0045 per cent at 3 volts. With the suppressor on, the distortion increased to 0.1 per cent at 1 volt and 1 per cent at 3 volts (about the clipping level).

The RIAA equalization (extended) of the MRM 101 was accurate within ±0.5 dB from 30 to 20,000 Hz with the suppressor off. Turning it on had a peculiar effect on the frequency response, rolling off the highs above 10,000 Hz to nearly -6 dB at 20,000 Hz. It also introduced a broad rise in the response of the sound in the 2.5- to 4-millivolt range, and there were no signs of overload distortion at any time. We would have preferred it if the MRM 101 were designed to operate in the high-level portion of an amplifier—such as in a tape-monitoring loop—so that it could be used to remove transients from other program sources.

Garrard’s justification for their design approach is that the impulse-sensing circuits operate best with the low-level signals coming from a phono cartridge, provisions for high-level operation of the unit would have required additional level adjustments and presumably some form of overload protection or indication, all of which would have increased the cost of the product and perhaps made it possible to operate it incorrectly (as it is, we can imagine no way to set its front-panel controls for improper operation). However, the MRM 101 does give one an additional magnet-phono input in lieu of being usable with other program sources.

Summing up, the Garrard MRM 101 does what is claimed for it, and it does it very well, with no significant side effects that we could hear. If you have badly scratched records, this unit would quite probably restore them to fully listenable status. A sizable record collection might well warrant the $200 expenditure.

Circle 108 on reader service card

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**Comment.** Judged solely as an impulse-noise suppressor, the Garrard MRM 101 does as good a job as could be desired. As Garrard’s literature points out, most of the time when it is operating only the flashing LED gives any hint that a scratch is present. Even then, it is difficult to believe it until one switches the suppressor off!

We could not hear any undesired effects from the phono-preamplifier portion of the unit, although its measured characteristics with the suppressor on are not quite ideal. In particular, the drop in output above 10,000 Hz was barely detectable when the suppressor was turned on and off, and we would never have suspected it without that comparison. All the cartridges we used with the MRM 101 were high-quality moving-magnet types with outputs in the 2.5- to 4-millivolt range, and there were no signs of overload distortion at any time.

We would have preferred it if the MRM 101 were designed to operate in the high-level portion of an amplifier—such as in a tape-monitoring loop—so that it could be used to remove transients from other program sources.

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Tandberg TR 2075 MkII AM/FM Stereo Receiver

Exposed chassis of the MRM 101 shows the extensive use of integrated circuits and plug-socket arrangements for attaching leads to the printed-circuit boards.

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The TR 2075 MKII, which heads Tandberg’s current line of stereo receivers, is an improved version of the TR 2075. Externally the two units are alike, but the ratings of the MKII reflect the engineering-design effort that has gone into it.

The distinctively Scandinavian styling of the TR 2075 MKII sets it apart from any other receivers (except other Tandberg models) that one is likely to find in a dealer’s showroom. The rosewood-veneer cabinet frames a silver and black front panel with the dial scales and meters (signal-strength and FM channel-center tuning) illuminated in blue. The tip of the dial pointer glows bright red when one of the tuner inputs has been selected.

A group of large, square pushbuttons selects the input source (FM, AM, PHONO 1, PHONO 2, TAPE 1 MON, TAPE 2 MON) and switches the power on or off. Only a light touch is required on the input selectors, which are d-c... (Continued on page 60)
Now, a true state-of-the-art speaker system from Jensen.

The Jensen Separates. We think you'll agree that they're the most technologically advanced car stereo speakers available.

Jensen has finally closed the gap between "home" and car stereo reproduction. The speakers and crossover networks were optimized to provide the best sound obtainable not only from today's finest car stereo equipment...but also from tomorrow's bi-amplified electronics.

The principle. Acoustically, the interior of a car is nothing like a living room. So for optimum sound reproduction in a car all sound should not emanate from the same location.

The woofer needs the large volume of the trunk to provide solid, deep bass. While the midrange and tweeter should be located in the front area to deliver all of their very directional frequencies.

Bi-amplification. The Jensen Separates offer this advanced capability. That is, sending the low and high frequencies to separate amplifiers for each channel. One amp drives the woofer, another the tweeter and midrange. The result is more "punch" and lower distortion.

The control unit. Lets you adjust your music to suit your car and your musical taste...just like the controls found on sophisticated home speaker systems. Offering two controls for each channel, one for midrange and one for the tweeter, it permits optimum balance of sound. A feature you'd hardly expect to find in a car high fidelity system. Yet an integral part of the Jensen Separates.

The Jensen Separates. Now you know why we call them state of the art.

The Jensen Separates. We think you'll agree that they're the most technologically advanced car stereo speakers available.

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The Jensen Separates. Now you know why we call them state of the art.

Two 2" Cone Tweeters
True hi-fi componentry. These sensitive tweeters offer wide dispersion. Position them high in the front doors to get the full benefit of all the clean, crisp highs.

Two 3½" Midranges
Extraordinarily accurate in reproducing the all important vocal range between lows and highs. Mount them below each tweeter in the door.

Control Box
Mounts under the dash with separate controls for each tweeter and midrange: Enables adjustment for acoustical characteristics and musical preferences.

Two 6" x 9" Woofers
Featuring 20 oz. magnets for extra power handling and greater linearly. Flexair foam cone suspension for lower distortion. Mount in rear deck for tight, well-defined bass.
JBL's NEW L50:
PERFECT GETS CLOSER.

JBL's newest three-way bookshelf loudspeaker is a happy blend of the ideal and the attainable. Here's how they met:

We built a superb system called the L212. It's an absolutely no-trade-off, state of the art, $1,700 system that has redefined the upper limits of high performance sound.

Wouldn't it be great if we could build a loudspeaker that would sound as expensive but wouldn't be?

The answer's the L50. You can take a pair home for $550. But before you do that, turn them on.

The sound is everywhere. No matter which way you turn you're in the center of the music.

Here's what's happening to you:
You're learning the new geometry of sound. The third dimension: Bass guitar, left front. Saxophone behind. Drums deep in the middle. Lead guitar, front right. Flute behind. And the sound is never altered, colored nor caricatured.
High and mid-frequency level controls

1.4-inch tweeter
5-inch midrange
10-inch low frequency driver

Ducted port

The precise vertical alignment of the transducers insures near perfect stereo imaging.

The silent hero of the L50's smooth, seamless sound is the best crossover network you can buy—the same kind we put into our studio monitors.

If you like engineering reports, write us and we'll send you one on the L50. But specs aren't music. You owe it to your soul to hear the L50's. And be sure to ask for them by their first name: JBL. That guarantees you'll get the same craftsmanship, the same components, the same sound heard in leading recording studios and concert halls around the world.

Come hear the L50's. Come see what it's like to get close to perfect.

Rod Stewart's 1977 world tour sounded like this. The people who put this awesome system together are called TFA Electrosound. And, as with most top concerts today, the loudspeakers are called JBL.

operated noiseless diode switches. Not only is the switching click-free and mechanically silent, but it actually performs as a fade-in over a period of about 1 second. Although the usual high-level AUX input is missing, one of the tape-monitor inputs can serve that purpose if desired.

Besides the tuning knob, there are six conventional knob controls: VOLUME, BALANCE, three tone controls (BASS, MID-RANGE, and TREBLE), and a SPEAKERS Switch that can select up to three sets of speakers either individually or in pairs. Small pushbuttons along the bottom edge of the panel control most of the receiver's other functions. Two of them cross-connect two tape decks for copying tapes from either machine to the other and a pair, one marked POWER READING. This last control is always possible to tell at a glance which have been activated, since a red LED drops the audio level by 20 dB, it can be used as an audio muting control as well. Since this button also converts the signal-strength meter to an output one marked PHONO VOL METER, it is always possible to tell at a glance which have been activated, since a red LED drops the audio level by 20 dB, it can be used as an audio muting control as well. Since this button also converts the signal-strength meter to an output

- Laboratory Measurements. After it was fully warmed up by the FTC-mandated pre-conditioning period (during which the top of the receiver became only moderately warm), the outputs of the Tandberg TR 2075 MkII clipped at 89 watts per channel into 8 ohms at 1,000 Hz. The 4- and 16-ohm clipping levels were 122 and 56 watts, respectively. The harmonic distortion at 1,000 Hz was 0.008 per cent at 0.1 watt; it decreased to 0.0018 per cent (the residual level of our test instrument) at 10 watts and increased to 0.0093 per cent at the rated 75 watts, 0.0115 per cent at 85 watts, and 0.085 per cent at 90 watts, just at the onset of clipping. The 1M distortion was 0.007 per cent at 0.1 watt, increasing smoothly to 0.023 per cent at 75 watts, 0.027 per cent at 85 watts, and 0.08 per cent at 90 watts. Even at the minute audio output of about 2 milliwatts the 1M was only 0.034 per cent, attesting to the effective elimination of cross-over distortion.

The receiver has a 12-dB-per-octave low-frequency (infrasonic) filter and two separate high-frequency filters with slightly different cut-off frequencies and slopes of 6 and 12 dB per octave. Separate pushbuttons channel either the left or right input to both audio outputs, allowing the receiver to function as a stereo or mono unit in any combination. There are TONE DEFEAT and LOUDNESS buttons and one marked FEEDBACK. This last control converts the signal-strength meter to an output voltmeter, monitoring both channels and always indicating the stronger of the two. The peak-response time is 24 milliseconds, which have been calibrated in volts. There is a pair of stereo-headphone jacks at the bottom-left end of the panel. At the upper right, near the tuning knob, are four smaller buttons for FM MONO, FM MUTING, FM 25-µsec de-emphasis, and dial-light dimming. In spite of the large number of front-panel controls, it is always possible to tell at a glance which have been activated, since a red LED above each pushbutton (except the last four mentioned) glows when it has been pressed. Another desirable feature of the TR 2075 MkII is adjustable sensitivity for one phono input and both tape inputs. The controls for these adjustments are near the input jacks in the rear of the receiver.

Mechanically, the construction of the Tandberg TR 2075 MkII is as unusual as its styling and circuit layout. Each of its components—the tuner, preamplifier, and power amplifier—is built as a self-contained module. The FM tuner is tuned by varactor diodes (voltage-controlled capacitors) instead of the usual mechanical capacitor. The tuning control rotates a potentiometer to vary the voltage on the diodes that set the local oscillator frequency and track the front-end tuned circuits. The usual weaknesses of varactor-tuned systems, such as drift and poor interference rejection, have evidently been decisively overcome in the TR 2075 MkII.

Tandberg's specifications give a power-output rating of 75 watts per channel into 8-ohm loads from 20 to 20,000 Hz, with no more than 0.05 per cent total harmonic distortion (improved from 0.15 per cent for the previous model). These have also been improvements in noise suppression, overload characteristics, and major FM specifications. A new rating has been added for "dynamic intermodulation distortion." This has been proposed as a measure of the ability of an amplifier to handle high-level, high-frequency signals without introducing interference. Such signals, with lower frequencies, but so far it has had only limited acceptance by the audio industry.

The Tandberg TR 2075 MkII has a very clearly laid out rear apron; the various signal connectors are grouped by function and plainly marked with their impedance and range of operation. There are also large, pivoted, ferrite-rod AM antenna, and one of the three a.c. outlets is switched. The TR 2075 MkII is about 204 inches wide, 6 inches high, and 14 inches deep (plus another inch for the front-panel knobs), and it weighs 27.2 pounds. Price: $1,200.

The rear panel of the TR 2075 Mk II shows its capacity for switching three pairs of speakers. There are preamp-out/power-amp-in jacks in the upper left corner. The Phono 1 input has a sensitivity control, and all inputs can also accept DIN plugs.
The Magnificent E's by Wharfedale.

Unusually Efficient. Exceptionally Clean.

For years, Wharfedale speakers have been noted for their exceptionally clean and faithful music reproduction. Recently, however, American music lovers have also demanded high speaker efficiency. So we at Wharfedale created a new loudspeaker series — computer optimized, with new driving elements and extremely sophisticated crossovers — that simultaneously achieves unusually high efficiency and extremely flat, wide-range response.

How well we met our design goals is attested by expert evaluation.

“In the E-70, the Wharfedale engineers have achieved their goal of very flat, wide-range, low-distortion performance in a speaker having unusually high efficiency. Our live-room measurement gave slightly higher efficiency reading than Wharfedale's already exceptional anechoic rating, and the 98-dB SPL we measured...represents the highest speaker efficiency we have measured to date...The overall frequency response...is exceptionally flat...”

“The Model E-50 is exceptionally clean and easy-to-listen-to...The woofer's response, from 50 to 300Hz, was exceptionally flat...The high efficiency...was dramatically illustrated by the Model E-50's ability to deliver a 95-dB SPL at 1 meter when driven by 1 watt of random noise in the octave centered at 1000Hz....It can produce prodigious levels of very clean sound...”

Write to us for the name of your nearest Wharfedale dealer and ask for full product and technical literature on the E-70's and E-50's. Then listen to the dynamic new sound of Wharfedale.

Excerpted from Julian Hirsch's (Hirsch-Houck Labs) test reports on the E-70 in Stereo Review, May '78* and on the E-50 in Popular Electronics, April '78** © Ziff-Davis Publishing Co.

matched walnut veneer enclosures.

RANK HI Fi Inc., 20 Bushes Lane, Elmwood Park, New Jersey 07407 (201) 791-7888
The frequency response of the FM tuner was accurate within ±0.5 dB from 27 to 20,000 Hz. There was negligible effect from the inductance of a phono cartridge (less than 0.5 dB change at any frequency up to 20,000 Hz). The FM tuner had a sensitivity of 12.8 dBf (2.3 microvolts, or µV) in mono. The stereo sensitivity was set by the stereo switching amplifiers and receivers. The Low filter response was down 3 dB at 40 Hz, with a 12-dB-per-octave slope below that. The two HIGH filters were down 3 dB at 7,000 and 8,000 Hz, with respective slopes of 12 and 6 dB per octave. When both HIGH filter buttons were pressed, the -3 dB frequency was 5,500 Hz, and the ultimate cut-off slope was 18 dB per octave.

The extended RIAA phono equalization was accurate within ±0.5 dB from 27 to 20,000 Hz. There was negligible effect from the inductance of a phono cartridge (less than 0.5 dB change at any frequency up to 20,000 Hz). The FM tuner had a sensitivity of 12.8 dBf (2.3 microvolts, or µV) in mono. The stereo sensitivity was set by the stereo switching threshold at 29 dBf (15 µV). The more important 50-dB quieting sensitivity was 14.5 dBf (2.9 µV) in mono and 36 dBf (33 µV) in stereo. The distortion was 0.13 per cent in mono and 0.15 per cent in stereo at a 65-dBf (1,000 µV) input. The respective signal-to-noise ratio (S/N) measurements at that signal level were 74.5 and 66.5 dB. (The latter figure appeared to be set by internal noise in the modulating circuits of our Sound Technology signal generator.)

The frequency response of the FM tuner was within ±0.4 to -0.6 dB from 30 to 15,000 Hz. In spite of this very flat high-frequency response, the 19-kHz pilot carrier was suppressed to a very low —80 dB, indicating highly effective filters in the multiplex section of the tuner. The channel-separation characteristics were rather unusual, reaching a maximum of 67 dB (!) at 1,000 Hz and falling linearly to 26.5 dB at 30 Hz and 41 dB at 15,000 Hz. Even at the extremes, this is far more separation than is likely to be found in any program material.

Other tuner characteristics included a capture ratio of 1.9 dB and AM rejection of 70 dB at 65 dBf input, image rejection of 96 dB, alternate-channel selectivity of 80 dB, and adjacent-channel selectivity of about 8 dB. The muting threshold was in the range of 17.3 to 22 dBf (4 to 7 µV) because of the desirable hysteresis that prevents the tuner from jumping in and out of muting on a weak signal. The stereo threshold had a similar hysteresis, covering 14.8 to 29 dBf (3 to 15 µV). The tuner section had a hum level of —67 dB, including components at 60, 120, and 180 Hz. The AM frequency response was very restricted, being down 6 dB at 100 and 2,500 Hz.

Comment. The actual performance of the Tandberg TR 2075 MkII really does not require much comment. It ranges from excellent to superb throughout. Probably the only respect in which some other receivers definitively outrank the TR 2075 MkII is in sheer power. Nevertheless, few listeners will really require more than the 80 or 90 very clean watts that this receiver can deliver across most of the audio spectrum.

Similarly, the tuner sensitivity, if not the numerical equal of a few others we have seen, is easily the functional equal of any of them (the 50-dB quieting sensitivity is the key rating to examine). If one is concerned that the tuner's distortion can be measured (though just barely) with the best currently available signal generators, remember that it is still far lower than that of any broadcast program material.

With specifications out of the way, we can give serious consideration to the really important qualities of the TR 2075 MkII. It has a superbly silent interstation-noise muting system with enough operating lag that a light spin of the tuning knob will send the pointer skimming from one end of the dial to the other without a sound emerging from the speakers. After a station has been carefully tuned in (and the accurate dial calibration makes this a real possibility, without the usual guesswork), the sound emerges smoothly from a silent background.

In addition to the control flexibility we have already described, especially in the area of tape recording (hardly surprising in view of Tandberg's place in that field), we noted that the TR 2075 MkII's tone controls can be adjusted separately for the two channels. This is not important to us, since we rarely use tone controls at all, but for some it could be a definite "plus."

We must admit to being disappointed in the limited AM frequency response. Tandberg's explanation is that in Europe, which is their major market, good AM selectivity—which implies narrow bandwidth—is more important than wide frequency response, if one is to obtain useful AM reception. It seems a trifle paradoxical that this receiver, which by virtue of the care that went into its basic design and construction is probably (Continued on page 64)
Lee Rider jeans and jackets look great. They come in sizes to fit just about everybody. In the true indigo blue that fades just right. And they've got Lee Set®, the Sanfor-Set® process that makes 100% cotton denims start softer, stay smoother, keep their All-American fit. The Lee Company, 640 5th Avenue, New York, N.Y. 10019. (212) 765-4215.
less likely than most to require service, has also been designed to be more accessible for repair than any other we have seen. The paradox is only apparent, however—both qualities are part of the overall design excellence that is the strong point of the TR 2075 MkII.

That excellence, plus the styling (for those who want something different from the more or less "look-alike" appearance of most receivers), must be the justification for investing $1,200 in this modestly powered receiver. However, there are intangibles when one is shopping for a stereo component—or an automobile—that determine the true value of a product for each individual.

Smoothness is perhaps the salient characteristic of the Tandberg receiver, and that is true even in a market in which operating smoothness has found its way into the lowest-price units. This receiver appears to have been designed by engineers who, in addition to their technical qualifications, actually took the trouble to live with and listen to their creation. As a result, there are no unpleasant sonic or mechanical surprises in store for the user of the Tandberg TR 2057 MkII. I expect that anyone who buys it will be as satisfied with the product as its designers are.

Circle 107 on reader service card

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In the Allison:Four, the same principles have been applied to a speaker whose size and weight made it eminently suitable for bookshelf mounting—subject only to the limitation that there must be at least 10 to 12 inches of clear space above the top of the cabinet. The reason for this is that the (nominal) 8-inch woofer of the Allison:Four, which operates in a fully sealed, acoustic-suspension enclosure, radiates directly upward and is placed so as to be as close as possible to the adjacent wall (that is, the one behind the speaker cabinet). The 8-ohm, two-way system has a crossover at 2,000 Hz to a pair of convex-diaphragm Allison tweeters placed at opposite ends of the cabinet and angled outward by 45 degrees for lateral dispersion. The Allison:Four is designed to be placed at least 10 inches from a room corner; mid-wall mounting a couple of feet from a corner is fine. Like most acoustic-suspension systems, this one is relatively inefficient. Allison recommends a minimum amplifier rating of 30 watts per channel for satisfactory listening levels in most home environments.

The Allison:Four cabinet is finished in oiled walnut veneer. It is 19 1/2 inches wide, 11 inches high, and 10 inches deep; weight is 23 1/2 pounds. Like all Allison systems, the Four is covered by a five-year warranty. Price: $185.

- Laboratory Measurements. Allison speakers, perhaps more than most, are peculiarly suited to our live-room measurement technique. In fact, anechoic measurements would fail to reveal their unique properties, which depend on their relationship to room boundaries. Recalling the excellent performance of the Allison:One in our tests (STEREO REVIEW, November 1975), we should not have been too surprised at our measurements. Nevertheless, we were. Within its frequency range, the Allison:Four produced one of the flattest, smoothest frequency responses we have ever measured from a loudspeaker. This applied to the close-miked woofer measurement (as it had when we tested the Allison:One) as well as to the reverberant-field measurement from the rear of our listening room. Unlike the case...
with many speakers, there was no ambiguity or uncertainty in "splicing" the low- and high-frequency curves, which overlapped for several octaves without serious discrepancies.

The overall frequency response was within ±2 dB from 45 to 15,000 Hz (the latter being the upper limit of our microphone calibration). Especially noteworthy was the flatness in the extreme highs—less than 0.5 dB total variation from 5,000 to 15,000 Hz. The woofer response had a slight peak (about 2 dB) at 65 Hz and fell off by about 12 dB per octave below 50 Hz. There was virtually no difference between the high-frequency response curves measured from the two speakers in a normal stereo configuration with the microphone on the axis of one and almost 45 degrees off the axis of the other (in other words, horizontal dispersion was excellent). These measurements were made with the contour switch in its FLAT setting. The mid setting rolled off the response above 3,000 or 4,000 Hz, with a maximum drop of 2.5 dB as claimed. The most extreme setting began its rolloff at 600 Hz, but its maximum effect appeared to be 2.5 dB instead of the rated 5 dB.

As expected, the Allison:Four is a low-efficiency speaker. Driven by 1 watt (2.8 volts) of random noise in the 1,000-Hz octave, it produced a sound-pressure level of 83 dB 1 meter from the front of the cabinet. This is typical of low-efficiency acoustic-suspension designs. The bass distortion was very low: under 2 per cent down to less than 30 Hz. At 10 watts (8.9 volts) the distortion remained low (under 3 per cent) down to 40 Hz. It climbed to 5 per cent at 34 Hz and 7 per cent at 20 Hz. It must be remembered that low-frequency output drops off rapidly in the extreme bass range, so a low distortion measurement at 20 Hz does not necessarily mean that a speaker will fill a room with clean 20-Hz fundamental sounds. It does mean, however, that such a speaker will not buzz or emit harmonics that give a sense of false bass. The Allison:Four is not a miracle worker, just a very good execution of the acoustic-suspension woofer-design principle.

The impedance curve of the Allison:Four was almost as flat as its frequency response. The lowest impedance (8 ohms) was measured at 20 Hz, and it remained in the 10- to 12-ohm range over much of the audio spectrum. At the bass resonance of 52 Hz it rose to 22 ohms, and there was a broad rise to about 25 ohms in the 1,500- to 3,000-Hz range.

The tone-burst response at low frequencies (100 Hz) and high frequencies (8,000 Hz) was very good. However, in the mid-range we were unable to pick up a reasonably good tone burst in front of the speaker. This does not represent a flaw in the speaker, but results from its unique design. In the mid-range, all three drivers are radiating, with inevitable interference effects because of their placement and the reflection of the woofer output from ceiling and wall.

Comment. As always, we preceded our tests of the Allison:Four with an extended listening period, including A-B comparison with other speakers on hand (all of them much larger than the Four). Our listening room is somewhat "dead," and we found the flat contour setting to be perfect, although the effects of the other switch positions are audibly fairly subtle.

The sound of this diminutive speaker is nothing less than astonishing. Not only does it not sound "small," but its bass is as powerful and solid as that of any of the speakers with which we compared it. Overall, it sounded less "buzzy" than most other speakers, because it has virtually none of the mid-bass coloration that usually mars loudspeaker sound. Well in advance of measurements, our ears told us that this was a remarkably flat speaker, and it was reassuring to note the correlation between measurements and hearing.

We also amused ourselves by trying to detect audible clues to which of the four pairs on our "speaker wall" was playing at any one moment. Nothing in the spatial properties or tonal balance gave away the Allison: Fours. Without looking at the settings of the low-frequency comparator switches, there was no way we could tell from several feet away whether we were hearing these or some other fine speakers several times the size and price. It is worth noting also that most of the differences our comparisons revealed were in favor of the Allison: Four because of its nearly total lack of low-frequency coloration.

To us, the special nature of this speaker is implicit in Allison's design goals. We suspect that it will deliver true, flat response at the listener's ear in a real room irrespective of room dimensions, speaker placement, or listener location, so long as the basic installation instructions are followed. By contrast, many speakers whose anechoic-response curves are impressively flat prove disappointing when heard in a real room. I am impressed that a box that will fit on any ordinary bookshelf without straining either the shelf or the person who installs it (and that costs only $185) can sound so fantastically good. Listen to the Four if you possibly can. It is worth hearing—even if you are not shopping for a speaker—just for a demonstration of how good a small box can sound!

The response of the Allison:Four system to tone-burst test signals at 100 Hz (top) and 8,000 Hz (bottom). Upper trace is the input test signal.
THE AMERICAN CARTRIDGE THAT'S A STAR ABROAD

When we introduced the Sonus Blue cartridge, we were amazed at the speed with which discriminating audiophiles responded to its astounding ability to improve the quality of record reproduction. And we must admit that we've gotten some pretty good reviews in America.

But what really surprised us were the enthusiastic reviews of European audiophile publications.

**Hi-Fi Choice** (England): "A best buy... must be the Sonus Blue... overall balance of sound quality and laboratory performance is first rate... On listening tests, the Blue ranked number one."  
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**The Pop Beat**

**By Paulette Weiss**

**NOTHING SUCEDES LIKE A MARKET STUDY**

T he days when record companies tossed new pop recordings onto the market like so many paper airplanes into the wind are over. Although the companies still want to sell as many records as they can, they now tend to make careful studies of changing public tastes before issuing new releases. In the late Seventies, this musical "product push" has developed a kind of pseudo-scientific underpinning that is credited with an increase in the number of albums that achieve multi-million-dollar sales in a matter of months or weeks. Fleetwood Mac, the Bee Gees, Foreigner, and the Eagles, among others, have gone quickly to the top of the charts and stayed there—or near there—for a long time, dropping two, three, or even four hit singles from just one album. This is a phenomenal departure from the old procedure whereby an artist or group first had to make a hit single, which would then be included in a hit album, before they could go on to record an album of all new material.

In late February, Atlantic Records released a debut album by a quintet called Fotomaker which may prove to be a Concord among the Boeings competing for a spot in the Top Ten. Every move the group has made has been calculated to bring them commercial success quickly, and their first album, "Fotomaker" (Atlantic SD 19165), certainly appears to have everything going for it.

The band was formed by bassist Gene Cornish and drummer Dino Danelli. Since both are former members of the Rascals, those golden lads of the mid- and late Sixties, they bring to Fotomaker a cult following as well as the pop chops that give them an authority not usually found in newly formed groups.

Danelli has the reputation of being one of the flashiest, most dynamic drummers in rock, and although he can improvise with the ghosts of the Beatles making occasional guest appearances in a bit of vocal harmony or a guitar run. The melodies are sweet, the arrangements meticulous, the lyrics banal—and every song is a potential hit single. It all rather resembles the Raspberries with backbone.

In forming the band, Cornish and Danelli screened musicians carefully. They found lead singer Lex Marchesi, a newcomer, on a demo of what was to become Fotomaker's first single, "Where Have You Been All My Life," and Lex brought along a fellow Long Islander, Frankie Vinci, for keyboards and flute. Lex also proved to be a prolific song-writer (he wrote, or contributed to, all but two selections on the album). The last man added was another experienced rocker, guitarist Wally Bryson. A member of the Raspberries until they disbanded, Bryson still retains something of that group's aromatic style in his playing.
Fotomaker’s first recording venture was unusual in a couple of ways. They hadn’t played much together and had never performed before an audience when they went into the studio. And what they taped there was not just a demo to hook a recording contract, but a polished ten-song album. The boys were banking on their reputations and their talent, and their faith in themselves was justified. Atlantic picked up the finished package, and all systems were go for Fotomaker’s maiden flight.

It is widely accepted gospel in the music business that radio play is the key to public acceptance of a new recording. With this in mind, record companies have devised numerous schemes to get the attention of program directors and disc jockeys. Most favor the up-front approach—wine them, dine them, and (somewhere along the line) inform them. Some publicists will, in the wooing, put lampshades on their heads or drop their trousers—metaphorically speaking, of course.

MCA Records recently got attention for Melanie’s “Phonogenic: Not Just Another Pretty Face” (Midsong International MCA 3033) by deploying a platoon of messengers on motorcycles to hand-deliver pressings to influential radio people. Accompanying each disc was a pair of headphones and a printed invitation to block out the world and tune in on Melanie. Last year Atlantic ran a contest to encourage its public-relations representatives to think of “creative” ways to promote the second Foreigner single, Cold As Ice. Wouldn’t you know that several tons of ice-sculptured, containing frozen records, colored or flavored in various ways—turned up at radio stations throughout the country.

Atlantic’s strategy to get radio exposure for Fotomaker also involved a contest, this one held on radio station WMMS-FM in Cleveland. Record companies have discovered that for some reason it is relatively easy to “break” new acts on the air in Cleveland, and they can use the results to get attention in harder-to-penetrate cities such as New York. The prizes in the Fotomaker contest were (surprise!) tickets to the group’s much-publicized first concert at the newly renovated Agora in Cleveland. The pop press, local record-store owners, and TV camera crews mingled at a party held before the concert (the wine-them, dine-them system in action), and coverage was guaranteed.

In the long run, it will hardly matter that Fotomaker’s live performance was not the stuff meteoric careers are made of. On stage they chose to adopt a much harder rock sound, with an emphasis on instrumental solos and increased volume that obscured their strengths, those appealing melodic lines and tight harmonies. The one-two punch of the studio versions of their songs was softened when the arrangements were opened up and lengthened for the concert.

Part of the concert’s failure can be chalked up to the band’s debut nerves, part to insufficient time spent playing together. If they work up a tighter stage act (which is almost a certainty, since three of the men are experienced pros), this one night won’t slow down the progress of their career. The album is already climbing the charts, Atlantic is in full control on the ground, and Fotomaker is secure in the cockpit. The sky may be their limit.

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The celebration of the anniversary of a great man's death has always struck me as distasteful. We celebrate the birthday of someone long dead because it is the anniversary of the day that some enormous potential was brought into being, and, with our hindsight, we know how the potential developed and what it contributed to mankind. But whatever it is that great men do or have done, death puts an end to it. To find a cause for celebration in that implies a feeling of surfeit, and if there is one thing the world has never had a surfeit of, it is the great deeds of great men. It is possible to disagree violently about the greatness or lack of it of many men, but no one, I think, will dispute that Franz Schubert was a great man. This November 19 marks the one hundred and fiftieth anniversary of Schubert's death. It is nothing I want to celebrate, but it is worth talking about.

No one has ever purported to find any resemblances between Schubert and me, and yet I have always taken the fact of Schubert's death as a personal, almost a familial loss. He is, even in his death, the one of all composers to whom I feel closest. This has nothing to do with critical judgment, but rather with an intense personal liking, nay, love for his personality as it comes through both his music and what I know of his life. Though he had few doubts of his genius and accomplishments, he was a man who could not quite cope with his world and did not always want to make the effort, as I cannot quite cope with my world and frequently do not want to make the effort either. As I grow older, I see that as less and less of a flaw in myself, and I admire Schubert for (among many other things) deciding at an early age that it was no flaw in him.

The most tragic thing about Schubert's death is that it occurred so soon after his birth: thirty-one years and some months. The second most tragic thing about it is not that the music he would have composed is forever lost to us (that is our tragedy, not his), but that he died in pain and discomfort, there being no money to buy him the small luxuries of warmth, cleanliness, and care that make the process of dying a little easier for those who can afford them. Money could not have saved him, though. The disease that he died of (typhus or typhoid, authorities disagree) and the other one that he suffered from (syphilis) could almost certainly have been cured today, but Viennese medicine of 1828 had no more idea how to deal with them than we do with brain cancer.

Schubert could have had a more comfortable death and, perhaps, a more comfortable life had he been a careful and prudent manager of his own finances (he did make a certain amount of money in the last dozen years of his life), but that was one of the things with which he would not cope. He certainly would have been more comfortable had he possessed one-tenth the penchant for self-promotion of, say, the average pianist today, but such a thing also was not within either his

Schubert, at the piano, accompanies the baritone Vogl. Drawing by Moritz von Schwind.
Perhaps that is enough to consider on the anniversary of his death. Schubert was not exactly unknown in Vienna, but he was not looked after as a national treasure either. And yet Vienna has always been among the most musical of cities, so why the neglect? The Viennese, of course, had other musical interests: Beethoven, Salieri, Paganini, and Rossini. But a large part of the neglect stemmed from the music Schubert didn’t write or, if he did, that the Viennese, at any rate, didn’t get to hear. Opera had a big following, but Schubert never wrote a successful opera, or even one that had a chance—with the best singers, director, staging, whatever—of being successful. That kind of theatrical drama was not exactly beyond his abilities, but on a tangent from them, and, in any case, the librettos he worked from were hopeless. The Viennese understood symphonies (to a point), but apparently only three of Schubert’s were performed in his lifetime, one in his school when he was sixteen, two others at private gatherings, never one at a public concert where a curious audience might drop in to hear it. What a preposterous situation! Schubert wrote his “Great” C Major Symphony with the Philharmonic Society in mind, but they turned it down as being too difficult to play. There simply was no one who had the receptive genius complementary to his to understand just what was at stake.

The Viennese also understood instrumental virtuosity and, by extension, therefore, concertos—but Schubert never wrote one. True, he was not a virtuoso performer himself (though he couldn’t have been all that bad, seeing how difficult his music sometimes is even for virtuosos), but he must have known one or two. Did no one ever ask him for a concerto work, or was it merely another one of those things he didn’t want to do?

He might have been lazy by temperament, but he had a strong sense of obligation to himself and his gift and he composed like fury. Even if we discard all the juvenilia, the sheer quantity of masterpieces, both great and small, perfect and flawed, complete and incomplete, is almost overwhelming. Brahms was in awe of Schubert (as well as of Beethoven), and Brahms was a pretty clear-eyed skeptic. It’s taken the rest of the world very nearly a hundred and fifty years to get into seeing how difficult his music sometimes is for virtuosos, but he must have known one or two. Did no one ever ask him for a concerto work, or was it merely another one of those things he didn’t want to do?

I suppose that what the thought of Schubert’s death does to me—apart from putting a lump in my throat and making me irrationally angry—is to startle me once again into the realization that once he was alive, that all that wonderful music did not grow on trees but was created by a man. The thought that such a man was born and lived on the same earth as I both inspires kinship and adds value to life. Perhaps that is enough to consider on the anniversary of his death.
The Great American Automobile's tendency to become a living room (or a bedroom) on wheels has long been noted by both its critics and its supporters, so it should not be surprising that quality stereo, already a fixture in so many homes, should become one in our cars as well. New makers and models of autosound equipment have lately been appearing even faster than those for home listening. In addition, the quality and the features of car-stereo components are rapidly approaching those of home components, with a few extra wrinkles added for easier operation by a driver whose eyes and thoughts are (one hopes) at least partially occupied elsewhere. The only real barrier standing in the way of good—even great—sound on the road is the car itself: despite Detroit's best efforts, it is still not really a living room.

But that's not all bad. The car as a listening environment may have its problems, but it also has several advantages over the home. For example, because listeners often sit more or less between the speakers in a car, the stereo effect is far more obvious (if somewhat less natural) than it is at home. Overall, the results are about halfway between what you'd get from headphone and regular speaker listening at home. Unlike headphones, however, the car's flanking speakers don't restrict listener movement and they don't "rotate" the music when the listener moves his head.

**Autosound Speakers**

The quality of the bass heard in a car is surprisingly good, especially when the small size of the speakers is considered. I've heard varying explanations for this. Tim Holl, director of engineering at Acoustic Research, is inclined to attribute it to several factors, including the listener's proximity to the speakers (well within one wavelength at the lowest audio frequencies), the predictable absorption by the car's interior at higher frequencies, the change in radiation angle with frequency, and simply the special nature of the automobile environment. Most car interiors are much more thoroughly padded than most homes. The noise covers a fairly broad bandwidth, but it is strongest in the bass (better sound insulation in many modern cars helps, but it cannot cure this problem). The power available from most car-stereo units (2 to 3 watts per channel) is barely adequate to cope with this, even with efficient speakers—which is the reason why "booster amplifiers" are widely available.

But the biggest limitation on good autosound is the lack of freedom in speaker placement. At home, you put a speaker where you think it will sound best. If you are a critical listener, you may try several positions before you find the most effective one. In a car, the number of possible speaker locations is limited, and moving a speaker usually means cutting yet another hole in the vehicle's upholstered interior. Because the available locations affect both the size and shape of speaker you can use, and these in turn limit the number of models you can choose from, location should be your first consideration.

**How and Where to Install.** The standard living-room speaker placement (in front of the listener, at or a bit below ear level) would correspond in the car to a pair of speakers mounted in the lower corners of the windshield. That's hardly ideal from any viewpoint but the sonic one.

Among the serious alternatives, putting the speakers in the dashboard corresponds most closely to home-listening practice. But dashboard space is limited, which means that any speakers that can fit there must be small and somewhat bass-shy, even by car-stereo standards (typical in-dash speakers are about 3½ inches in diameter, while most car speakers range from 5¼ inches round to 6 x 9-inch ovals). And since dashboards are usually open at the bottom, they make poor speaker baffles, ensuring that almost no dashboard speaker of any size can produce good bass. But dash-mounted speakers can exhibit excellent sonic clarity—they make the words of song lyrics and news announcements (and, yes, commercials too) more understandable. Whether you consider that a virtue may depend on your opinion of song lyrics and the news, but from the standpoint of fidelity it definitely is.

The best sonic compromise that can be achieved in most cars is to have the speakers mounted in the doors or in the "kick panels" below the dash. These locations usually provide reasonable baffling and are near enough to the front-seat occupants to minimize treble losses—if the speakers have an unobstructed path to the listener's ear. Too often, though, the exigencies of avoiding window-winding mechanisms, door handles, structural members, and other booby-traps within the door force the
installer to mount the speakers too low or too far to the rear, where the treble frequencies pour into the listener's socks or shoulder. (In my own car, for example, the only practicable door location aims the sound at my armpit.)

One solution to this problem is to use surface-mount speakers with their own small, wedge-shape enclosures. These keep the speakers well out of the mechanical jungle that lurks behind most door panels, and they even permit some rudimentary speaker aiming.

But this solution brings with it two more problems. First, the enclosures are tiny compared with the larger cavities within the doors or trunk, so bass is diminished. This obstacle, at least, is surmountable: just cut a hole in the door where the enclosure mounts so that the speaker's back wave can find its way inside the door without the speaker's magnet structure having to intrude there. The protrusions of the speaker-housing wedges may be a bigger problem within the compact confines of the car. Somehow, almost any sonically agreeable location puts them where you hit your knuckles as you operate the window-crank or door-handles, where you bark your shins on them when going in and out, or where they eliminate that comfortable space where you rest your outboard knee on long drives.

Pioneer, K.L.H., and Fujitsu Ten offer a partial solution to this problem. and Jensen offers a more thorough one. Pioneer's TS-M1, K.L.H.'s Headline III, and Fujitsu's SSBB6 are ultra-compact surface-mounting speakers designed to cover just the upper frequencies for systems whose main lower-end speakers operate into areas acoustically inappropriate for high-frequency propagation. Built-in level controls simplify matching to the rest of the system. Mount these tweeters on your dash or door (K.L.H. recommends the car's "ceiling" or headliner—hence the name) and they take up no room to speak of, yet give the upper frequencies a clear shot at your ears. Jensen's new Triax system consists of separate 51/4-inch woofers meant for in-door mounting, plus surface-mounting mid-range/tweeter units small enough to offer flexibility in location.

Jensen and several others also offer systems with mid-range/tweeter units that mount in the doors and woofers that mount in the parcel shelf or rear deck behind the back seat. Mounting the woofers so that the large volume of the trunk is their enclosure (rather than the small volume available within the doors) keeps the system resonance low and therefore gives deeper bass. Jensen's "Separates" system, for example, is a three-piece system with separate 2-inch tweeters, 31/2-inch midranges, and 6 x 9-inch woofers, plus a control box with separate tweeter and mid-range level controls. Two-piece systems are available from Audomobile (they originated the idea, and they offer a choice of 61/2- or 10-inch woofers), Audovox, Fosgate, Gul, Hart, Ishophon (a three-piece version is also available), Metro Sound, and Automatic Radio. And Laser Acoustics offers separate 8- and 10-inch self-amplified "sub-woofers."

There are, however, some cautions to observe in multiple-speaker installations. The farther apart the various drivers are, and the higher the frequency at which the sound crosses over from the woofer to the mid-range/tweeter, the more likely you are to hear two separate sources for what ought to be one sound image. And the crossover frequencies are usually fairly high.

Installing full-range systems (rather than just woofers) in the rear deck generally works out pretty well. The rear deck is also the easiest place to mount a speaker in most cars. The trunk is the only cavity that is readily accessible without removing panels (just open it to get at the inside), and for years most American cars have come with pre-cut 6 x 9-inch openings in their rear-deck frames.

Nor do you lose much of the highs, despite the tweeters' firing up instead of forward at the listeners. The slanting rear glass makes an excellent reflector. However, at those frequencies where the wavelength is equal to about twice the difference between the direct and the glass-reflected paths, the direct and reflected waves are out of phase and cancel. This results in a broad dip in the system's frequency response between about 499 and 1,200 Hz, centering at about 700 Hz, depending on the car. Some of the many equalizers now on the car-stereo market can alleviate this problem. And Advent's new EQ-1, a 6 x 9-inch speaker with its own amplifier, has been equalized specifically for rear-deck mounting.

Wedge-mount speakers that aim the sound directly forward will also avoid this problem (Clarion even has custom-upholstered versions to match some sports-car interiors), but they won't gain the advantage of the trunk's low resonance unless the surface-mount enclosure and the trunk are open to each other. And the more upright the speaker, the more likely it is to obscure the driver's rearward vision.

That's also true of the many mini-speaker systems (in enclosures) now sold for car (and home) use by such firms as ADS, Braun, Canton, Ishophon, Setton, and Visonik. Most of these have good sound—some, in fact, are superb—and all sound better in the...
autosound

car's sympathetic-to-bass environment. In most cases, the only difference between the car and home versions is the mounting bracket supplied for use in the car. Two notable exceptions to this are the ADS 2001 and 2002 mobile systems, which come with their own d.c.-powered biamplification systems (built into the speaker boxes themselves in the 2002). Adapters for home installation are available for both, though the 2001 adapter is a bit harder to use. (The 2002 is designed for use with Nakamichi portable/mobile tape decks, though adapters are available for use with other sound sources.)

- **Speaker Sizes and Shapes.** Note that you have enough information to make at least a preliminary decision about where to put your speakers (although an installer's look inside your door or other chosen mounting spot might dictate a change of mind), it's time to start deciding just **which** speakers you should place there.

First, consider the purely physical aspects of your choice. If you're using box or surface-mount speakers, the shape and size of the enclosure should be your first consideration. If you're flush-mounting speakers in holes that were built into your car at the factory, then the driver size has already been chosen for you. (AFS offers some for the odd-size 3½-inch, 4 x 6, and 5 x 7 holes, and Jensen has a 4 x 10). In the case of a rear-deck speaker, it's usually a 6 x 9-inch unit; in other locations, the speaker you choose should probably be a round one, since round holes are easiest to cut. A simple rotary hole-saw attachment on an electric drill can do the job in seconds.

And you can use round speakers even when your car has oval holes. Quite a few manufacturers make oval baffles with round speakers in them. Several even take advantage of the surrounding space. Epicure's LS70 uses that space to mount the woofer and tweeter from their EP-170 home unit. Craig, in the R770, uses the extra space for a ducted port. Clarion's SK-99 is a stylish rectangular panel holding a round woofer, mid-range, and tweeter, all to fit a 6 x 9-inch oval hole. Sparkomatic's SK-6900 is similar, but it has a horn tweeter. And Motorola even offers a two-way system that looks like it should take an oval hole but doesn't: the model M4-6C has a round, flush-mount woofer attached to a surface-mount tweeter.

You needn't fear that just because oval drivers are rarely seen in home high-fidelity systems, they're incapable of good fidelity. The engineering consensus seems to be that there's nothing wrong with oval woofers per se. True, there is slightly less inherent rigidity in an oval cone shape, but some of the break-up modes of round cones are absent in oval ones. For space reasons, most of the three-way systems now sold for automotive flush-mount use are oval speakers. Marantz even has four-way and five-way systems in the 6 x 9-inch size, though its round-cone systems go up only to three-way. With separate woofers, tweeters, and perhaps even more, it's a natural idea to biamplify these systems, using separate amplifiers to drive the woofers and tweeters. Sanyo's "Audio Spec" radio/cassette models have biampl capabilities, as do its speakers and those in Utah's Trusonic line. AFS speaker amps are also biamplified, of course.

To be sure, not all systems have separate woofers and tweeters. There are still plenty of single-cone, "one-way" systems with a stiffer, protruding "whizzer" cone to extend and disperse high-frequency response. Craig's "Trans-Rib" construction serves a similar purpose.

Magnet size has a significant effect on a car speaker's sound. Increasing the magnet weight has three effects. First, it damps the speaker-cone's bass resonance so that output does not increase as much at that frequency as it would with a lighter magnet. In addition, a larger magnet makes the speaker's response roll off more sharply below resonance. Above resonance, however, it increases sensitivity—you get more sound output from the same amplifier power. These are not unmixed blessings, for while a larger magnet gives a tauter bass, a smaller magnet, with its gentler slope below resonance, actually provides slightly more output at lower frequencies, and the resonant hump may sound just right, especially with the low-frequency ambient noise of most cars masking some of it. Also, larger magnets' greater physical size and weight may create installation problems.

Magnet-weight comparisons hold true only within a given manufacturer's line, where magnet and voice-coil design remain constant. What really matters is not magnet weight, but the magnetic flux density within the voice-coil gap, and this does not usually appear on spec sheets. It is important to realize that one maker's 10-ounce magnet might be more or less effective than another's.

Difficult as it is to predict a bookshelf speaker's response in the home, predicting a flush-mount speaker's response in the car is even more difficult, for in such an installation not only the "room" but the size and shape of the "enclosure" are unknown until the time of installation. One can probably expect, for instance, deeper bass from a speaker installed in the door of a two-door Cadillac than from the same speaker installed in a four-door Volkswagen because the cavity inside the Caddy door is larger and enclosure volume affects the shape and range of the bass-response curve.

Of course, such systems as the ADS and others mentioned above that have their own custom-designed enclosures eliminate this variable. (And should you have difficulty with protruding boxes, ADS makes a mount that allows you to set their boxes flush into your rear deck.) AFS and Laser Acoustics get around it another way, with self-enclosed speakers that can be used as surface-mounts but are actually intended to be let into the rear shelf; the speaker/grille panel and enclosure box are separable, so that one can be mounted above and one beneath a 6 x 9-inch hole, requiring no further drilling or cutting. (The AFS enclosure is also available separately.)

Since sound performance is such a variable, audition any speakers you're considering in a demonstration car, if possible, and not just on a showroom demonstration panel (the more like your own car it is, the better). There seems to be a bigger difference between the way automobile speakers sound in a showroom and in a car than there is between the way home speakers sound in a store and in a living room. Listen for overall sound balance, and move your head around to check high-frequency dispersion. The less the sound changes when you move, the better.
units are now available with fairly hefty power ratings, and some (such as Audiovox’s “power booster” models, Craig’s “Power Play” units, the J.L. “Power Pumps,” and Motorola’s “Pow*R*Boost” models) offer switch-selectable high or low power. And if the unit that best suits you otherwise is a little weak in that department, you can always add a booster amplifier downstream from it.

First, then, comes the question of what major source of sound you want and where you want to put it. Car stereos that mount beneath the dash are usually the easiest to install. But those that mount in the dashboard, where the factory intended a radio to fit, look neatest, are usually most convenient to reach, take up no otherwise useful room, and—an important point—are much harder to steal. (If you can’t decide, Radio Shack, among others, has models that can mount either way.) The emphasis these days is on in-dash units, and you can get them with almost any combination of sources you care to name: AM/FM stereo radio, cassette or eight-track tape, and even CB, plus occasional units that let you hear the sound of VHF TV channels 2 through 13 (Audiovox), the National Weather Service’s constant forecasts (Audiovox, Craig, and Kraco), or even short wave (Becker and Blaupunkt).

If there’s already a radio in your dashboard that you don’t feel like replacing, you can get under-dash units with cassette or eight-track tape or tape plus FM. If you don’t want a combination, you can go to the opposite extreme and assemble an array of separate under-dash components such as those made by Panasonic or Fujitsu Ten. (Pioneer also sells such systems in Japan, and they could show up here if the market warrants.) To illustrate how elaborate such a system can get, Fujitsu offers the following: a choice of two component cassette decks, including one with Dolby noise reduction (Panasonic offers a non-Dolby cassette and an eight-track deck); an AM/FM tuner with motor-driven auto-search; a control amplifier with bass and treble controls, six selectable inputs, and mike mixing; plus a choice of two power amplifiers. And lest its component array prove too tempting to a thief, Panasonic offers a housing that permits the whole system to be removed and hidden in one piece.

Space limitations in the car dictate some kind of all-in-one combination stereo for most of us, and this poses the question of just which sound sources we should combine. The more there are in one box, the less complex
the installation and the more convenient the controls (up to the point where the controls become so close together that you can’t simultaneously operate the set and keep your eyes on the road). But the more they pack in, the greater the chance that something will be omitted that would otherwise contribute to performance, convenience, or reliability.

I hope I’m not stepping on some Good Buddy’s foot when I say that CB/stereo combinations are probably the easiest to scratch off your list. Useful as CB is in the car, its squawks and crackles have no business coming through your hi-fi speakers. A separate CB feeding its own limited-bandwidth CB speaker is usually a better choice. About the only virtue in combining the stereo and the CB is that most such combinations come with “standby” switches that automatically cut the stereo sound off when you receive or transmit a CB signal. However, accessories are available to add standby to systems where the stereo and CB are separate. As a compromise, Clarion and Sparkomatic offer stereo units to which optional CB can be added.

Tape and FM, though, make a natural combination. Both offer reasonably high fidelity plus stereo. Such a combination makes most sense if you play your tape deck often or if you lack space for two units. But if you listen mostly to your radio and use the tape deck only on occasional long trips, you might consider a separate, compact tape deck such as Superscope’s on a quick-detach slide mount beneath the dash (included with some Craig and Sanyo models). Having the units separate means that you can still play one should the other need repair. It also means—if you’re careful to remove and hide the tape deck in your trunk when leaving your car for any length of time—that your tape deck is less likely to be stolen. In-dash stereos are hard, but not impossible, to steal. And a thief who does remove one is likely to cause costly damage to your dashboard in the process. Nobody, though, ever seems to break into a dash for a mere radio.

One complication arising from this two-piece approach is channeling the correct signals to the speakers. A few mobile amplifiers or preamp/control centers (from Fosgate, Laser Acoustics, and Linear Power as well as the Fujitsu Ten component preamp) have switching to solve this problem, and some Blaupunkt radios have tape-recorder jacks as well. But, with most other equipment, the owner or installer will have to build his own switching system—and the instructions that come with under-dash units don’t always tell you why or how to do this.

**Cartridge or Cassette?** There are two tape formats available for the car: the cassette and the eight-track cartridge. (As its technology improves, you can expect to see the tiny new micro-cassette in cars, too. But that’s probably at least several years away.) Today, most of the advantages are on the cassette’s side. Cassette are far more compact than eight-track cartridges, so you can carry more of them without cluttering your car. The tape is less likely to jam, and it is not quite as impossible to fix if it does. And it’s far easier to make your own tapes at home (a clumsy process with eight-track). The wide availability of portable cassette recorders also makes it easy to record notes, lectures, and other material for review in the car, and prerecorded classical music is easier to find in cassette form. Finally, cassette players have been refined to the point where they offer better fidelity even though tape speed is half that of eight-track.

But there are some advantages to eight-track, too. Since the tapes are endless loops, even the simplest machine will repeat them over and over without attention (with cassettes that would require an auto-reverse model). And you can get true quadraphonic tapes (though they won’t be easy to find, and not really worth it unless you spend the extra price for one of the now-rare quadraphonic cartridge players). And though classical cartridges are very hard to find, pop tapes are most plentiful in this format.

There’s a musical reason why cassette players have been refined more than cartridge decks: if you’re serious about sound, you’re probably serious about music, too—serious enough, at least, to want to hear each piece from its beginning. With the cassette, that’s just a matter of rewinding for a moment. Backtracking just enough to re-hear a song or even a musical moment of special appeal is even quicker. Cassette has a clear beginning, middle, and end, and most cassette machines offer fast-forward or rewind (usually both) to get you to whatever section of the tape you want to hear. (Car stereos don’t have digital counters, however: too little panel space for them, and you’d have to squint to read them while driving. Perhaps one of the new digital radio/cassette units will harness its display to this purpose someday.)

Cartridge tapes, on the other hand, literally go around in circles. And while many cartridge players can now be set to stop the tape once it’s played through, comparatively few offer “fast” forward (actually only about double normal playing speed), and none offer rewind. So if you stop in the middle of Beethoven’s Ninth, you generally must start it from the middle next time you play it. The alternative is to wind forward slowly till the end of the track, then quickly tap the track-change button until the first track is in play again.

Eight-track makes sense of a sort if you already have a lot of eight-track tapes left over from some other player. But before you invest in a new cartridge deck, ask yourself how many of those old tapes you’ll really want to keep on playing—and how much longer they are likely to last (eight-track cartridges are far from immortal).

Cassette also opens up two hardware options not available in eight-track. If

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**LIST OF MANUFACTURERS**

A listing of names and addresses of autosound manufacturers, as complete as we have been able to make it, is available free upon request. Send a stamped, self-addressed, long envelope to STEREO REVIEW, Dept. AS, One Park Ave., New York, N.Y. 10016. Any requests for further information on these products should be addressed directly to the manufacturers.
**Features and Specs.** By now you should have a pretty clear idea about what general type of stereo unit you want. But features and specifications are important, too, and their order of importance is not always the same in the car as in the living room.

**Tuners:** Don’t look for the free-spinning flywheel knobs found in home receivers. They’re impractical in a bouncing car. But do look for dials that are not too difficult to read. If you can remember station frequencies, then digital-dial radios (available from Boman, Bristol, Craig, Delco, Fujitsu, JIL, Midland, Muntz, and Sanyo) will be easiest. If you tend to remember stations by being “about halfway up the dial,” conventional dials with clearly visible pointers will be best (but they won’t tell time, as some digitals do).

Pushbutton tuning of preselected stations is highly desirable when driving. You can’t always fiddle with the tuning knob in traffic. But note that while five buttons are the norm, the choice of stations you can tune with those five buttons varies. Some sets limit you to either three AM and two FM stations or vice versa. Others let you preset up to five stations on either band (such buttons are an optional attachment to one Royal Sound model). Still others have dual-duty pushbuttons that switch to a different set of stations when you change from one radio band to the other, giving you a choice of ten in all. Sanyo’s forthcoming FT-490 has touch sensors instead of buttons; Fujitsu’s digital unit has its ten stations on a five-position rotary switch, which seems about as convenient as buttons; and Panasonic’s forthcoming CQ-8520 has six dual-station pushbuttons. (A few units have what appear to be conventional station pushbuttons but are actually function or mode switches.)

“Scan” or “search” tuning electronically seeks out stations you have not preset; this is handier than buttons if you drive frequently into new territory or have no local favorites. As you drive out of range of one station, a touch of the button finds and tunes in another. Some sets scan the dial in only one direction, others scan both ways. The latter is handier, as it lets you get back quickly to a station you’ve just scanned past.

The best of all possible worlds, of course, is a set with both preset and auto-scan tuning. Several combination units (all with cassette) have this: Blaupunkt’s Berlin (which also records cassettes and has its controls mounted on a flexible “cobra” stalk), Fujitsu’s ETX-41A, JIL’s 634E, Midland’s 67-440, and Panasonic’s CQ-8520. (JIL also has an eight-track equivalent of its 634E, the 874E, and Midland makes a unit without cassette, the 67-250.)

**Cassette:** Most of the features in cassette units concern tape motion. Automatic reverse, though it adds cost and complexity, does give you both continuous music when you want it and the ability to insert cassettes without looking down to see which side is up. Automatic stop is a must to prevent strain on tape and mechanism if the tape comes to an end when you’re too busy driving to eject it. Some units automatically eject the tape when it’s through. Panasonic, Pioneer, and Craig also make units that do not reverse the tape, but do automatically repeat it.

Fast-forward and rewind are basic features, even though some car stereos lack one or the other and a very few lack both. The ideal convenience is a fast-wind control that can be actuated momentarily with a light touch (to move the tape short distances) but can also be locked down when you press harder for complete rewinding. Not all fast-wind controls do both. Of the ones that don’t, the locking type is more convenient. Sharp and Motorola also have autosearch systems—called “APSS” and AutoCue, respectively—that let you zip ahead to the beginning of the next piece on the tape.

Make sure that the tape slot is easy to load without looking. One with an outer lip will probably give you more help with this than one which is more sleekly flush with the front panel. A lip
that tapers inward would be better still.

Dolby noise reduction is a nice addition, but it is less vital in the car (where you’re not usually making tapes and where the ambient noise will often drown out the extra noise that Dolby gets rid of). But if your car system doesn’t have Dolby circuits, you may want one with separate treble and bass controls so you can cut back on the treble should Dolbyized tapes sound shrill to you. Audiomobile, Fujitsu, Nakamichi, Pioneer, and Sanyo make Dolby-equipped mobile sound gear.

Eight-track: You should expect automatic switching from one track pair or “program” to the next, and a manual track-shift button (almost as common) helps you skip ahead to the next track. Automatic stop at the end of the final track is a necessity if you’re a serious music listener; with a manual track-change button and fast forward you can get back to the tape’s beginning with only a moderate delay. A few models also let you repeat the track you’re playing if you prefer, rather than jumping on to the next.

**Power Output:** Car-stereo units rated at up to 20 or 30 watts per channel are available to fit your dash. And if that’s not enough power, you can add on amplifiers with up to 100 watts or more per channel. No one has published any research on actual power requirements in the car, and they’re hard to guess at. The volume of a car interior is only about one-eighth to one-tenth that of the average living room, which should mean the same sound volume at less than one tenth the power. But ambient noise levels in the car are about 25 to 35 dB louder than those in the home, and this would increase power requirements during quiet passages. (Since 110 dB SPL is about as loud as most people care to listen to, power requirements on loud passages are not increased by the car’s noise level.)

This would seem to call for compression (as in ADS’s speaker/amplifier systems) more than extra amplifier power, but amplifier power is easier to find. And it does make a difference. While the 2 to 4 watts found in the average car-stereo unit do a surprisingly good job, 15 or 20 watts per channel will provide substantially more solid bass (from the same speakers) and greater clarity in the highs.

However much power you decide you need, read the fine print to see if you’re actually getting it. Power ratings mean very little without distortion specifications. And the advertised power output of most car-stereo units (and some mobile amplifiers) is rated at 10 per cent distortion—if distortion is specified at all. An amplifier section advertised as “25 watts per channel” at 10 per cent distortion may turn out to deliver only 10 watts or so at a more listenable 1 per cent distortion—and you can’t tell from some spec sheets whether the products described ever go below 10 per cent distortion at any power level (though most can). Power bandwidth and amplifier frequency-response figures are useful, too. Don’t pay too much mind to response above 15,000 Hz (your program sources are FM and cassette, neither of which goes much above that), but do pay attention to the bass cut-off; low frequencies are where the power is most needed.

**FM Tuner:** Tuner specifications are less likely to be quoted at all (though that’s changing rapidly), but they are more likely to adhere to home-component standards if they are. Bear in mind, though, that sensitivity ratings in microvolts are based on the standard car-antenna impedance of 75 ohms. You have to double the figure (for example, 1.9 microvolts becomes 3.8) to get the equivalent of a home tuner’s 300-ohm input. (Figures in dBf units are independent of impedance, so they’ll be comparable for home and auto equipment.)

Of all the possible sensitivity ratings, the stereo sensitivity for 50-dB quieting is the most significant—and, as with home receivers, the least likely to be listed. Capture ratio is probably more
important in a car than in a home system; you may find yourself driving for miles down the wavery dividing line between one station's signal and another's, and you can't move the antenna around to favor one of the two stations. The lower a tuner's capture ratio (in decibels), the more likely that it will, at worst, switch cleanly from one station to the other rather than trying to give you both at once. Since you can't control multipath reception by aiming the antenna either, good AM rejection (in this case, the higher the better) is more important in the car, too.

Equalizers: The better car-stereo models have separate bass and treble controls, though many have only a single "tone" knob. Judging from the number of equalizers coming onto the mobile-stereo market, many drivers seem to feel that's not enough. As in home systems, equalizers offer you more precise control over your system's frequency balance by dividing the frequency spectrum into several independently controllable bands (usually four to six bands for the car, with five most common). The more bands offered, the more precise the control—and the more complex its operation. My own measurements show that equalizers can do a lot to iron out the rear-speaker frequency dip, the treble-into-the-upholstery muffle, and other problems. But it strikes me as just too much to play with on the road. So the equalizer/booster amp I'm building into my system will be adjusted once, then hidden away behind the dashboard (it's less likely to be stolen that way, too). Laser Acoustics seems to agree with me; the company makes several amplifiers with built-in equalizers which require a screwdriver to adjust. Once set, the controls are out of sight, out of mind, and out of reach of knob-twiddling passengers. Audiovox, though, has a model whose controls are on a compact housing that can be passed to any twiddle-happy passenger, including those in the back seat. And the latest autosound enhancer to appear is a rear-speaker, true-electronic (rather than spring) time-delay unit with built-in power amplifiers. It is manufactured by Sound Concepts, a company known for the high quality of its home time-delay units. The price will be about $300. Can you wait?

---Larry Klein

A NOTE ON SPECIFICATIONS

In a quick survey of top-of-the-line automotive AM/FM/cassette players we came across very few products whose list of specifications could be considered anywhere near complete by audiophile standards. One exception was Pioneer, whose Model KPH-9000, for example, has sixteen AM/FM tuner specifications, seven for the amplifier (including a rating of 0.06 per cent distortion for 1.5 watts output at 1 kHz) and eight for the cassette player. This is in sharp contrast to those manufacturers who grudgingly confide to the prospective purchaser that the tuner in their player has an 88- to 108-MHz range—and that's about it.

Oddly enough, however, it is not safe to assume that if a manufacturer's product had reasonable technical performance he would be pleased to let the world know about it. There seems to be a number of units in the marketplace whose caliber of performance is worth talking about despite the fact that the instruction-manual spec writers don't. I don't know why this state of affairs exists, but I wish the autosound manufacturers as a group would become interested in a specifications race in areas other than speaker-magnet weight. They don't have to invent either the specifications or the techniques for measuring them—the Institute of High Fidelity (IHF) and several other organizations have standards that can be used to describe almost every relevant technical detail. All we have to do is get the autosound manufacturers to use them.

---Larry Klein

Audiomobile's equalizer/control-unit works with remote power amplifier.

Sanyo's auto-reversing cassette player is bi-amplified.

A versatile bracket holds Panasonic's car components.

The Uher CFI 210 cassette recorder slides out for portable use.

A remote-control adaptor for Royal Sound's mobile systems.
RON CARTER
By Chris Albertson
S
oon after a market was discovered for it some sixty years ago, jazz became one of the recording industry's most important staples. According to two remarkably comprehensive discographies of early jazz, blues, and gospel releases—Brian Rust's *Jazz Records 1897-1942* and J. Godrich and R. M. W. Dixon's *Blues and Gospel Records 1902-1942* (both published by Storyville, London, in 1969)—some sixty thousand jazz, blues, and gospel discs existed by the end of 1942. If one adds to that the approximately 132,000 recordings listed in *Jazz Records*, Gunnet Jepsen's eleven-volume discography of jazz recordings made during the course of the next twenty to twenty-five years (the set was published by Karl Emil Knudsen, Copenhagen, between 1965 and 1970), one has to wonder why, with all this historical evidence of commercial viability, the average jazz musician still barely manages to make a living. For the sad fact is that only a handful of musicians are able to live comfortably on an income derived solely from playing jazz—real jazz in its various legitimate forms, not the watered-down, semi-pop kind.

Ron Carter is one musician who has managed to keep his integrity while making a decent living doing what he does best: playing jazz bass. Sure, he has recorded with such non-jazz acts as Geoff Muldaur and Phoebe Snow, and he has participated in the unsavory fare that Grover Washington, Jr., and Flora Purim dish out, but, in the main, Ron Carter has been true to his art. At forty-one he can look back on an impressive career, but the comforts of life he now enjoys have not erased his bitterness against an industry that all but turns its back on a music so important to its development.

If the doors had been more open to blacks, Carter might well have chosen classical music as his field. "They still aren't quite ready to accept us," he says, "and they were even less prepared to see blacks play classical music in 1956, when I came to the Eastman School of Music. In terms of general practice habits and the instruction I received, the bulk of my interest was certainly aimed in the direction of classical music, whether it was orchestra or small ensemble, but I used to see Charlie Parker, Bud Powell, and Max Roach on local TV shows, and I found in jazz a means of making money—my scholarship covered only room, board, and tuition.

"I think quite a few jazz players would have gone into classical music if circumstances had been different. Now they have jazz curriculums at schools and many cities have jazz players who teach privately, but that wasn't the case twenty years ago; the only place a young player could learn his instrument was in a conservatory or the local school, where he was encouraged to think classical. There was no mention of how to score for movies, how to run a band, and so on. If the interest and the opportunities had been more balanced in terms of at least being able to try out for an orchestra and having a fair shot at making it, there's no question that a number of players who today are playing jazz would not be doing so. And nothing has changed. Twenty, thirty years go by and the discrimination still continues."

Carter discovered the recording industry's strangely narrow attitude toward jazz in 1959, shortly after his graduation from Eastman. "I had joined Chico Hamilton's quintet, which then was a fine group that included Eric Dolphy and cellist Nate Gershman. We made an album for Warner Brothers, my first jazz recording [he had previously recorded with the Eastman Philharmonia under Howard Hanson], and they never released it, because—or so we heard—the date was a bit more adventurous than any music Warner Brothers had heard Chico do up to that point."

When Hamilton, possibly discouraged by his label's shortsightedness, disbanded the quintet eight months later, Ron Carter went to work on his master's degree at the Manhattan School of Music and began freelancing around New York. In 1963, having earned his master's degree, toured Europe with Cannonball Adderley, and worked with the Gil Evans band, Bobby Timmons, Herbie Mann, Betty Carter, Art Farmer, and Thelonious Monk, Carter was asked to join the Miles Davis Quintet. It was a most prestigious invitation, but, to Carter, by no means the so-called "big break."

"I don't want it to seem as if I wasn't excited about going with Miles," he says, "but I had already been so active, it wasn't as if I'd just been picked out of the blue. I was pleased, but it wasn't what I would consider my first major job. Being a member of Chico Hamilton's group was exciting. That was a real break. It gave me a chance to learn to play without a piano and to work with such good players as Eric Dolphy. Another highlight of my career was playing with Thelonious Monk. I had all those Monk records at home, man, and here I was on stage with Monk and Specs Wright and Charlie Rouse—man, it still amazes me that it was happening. Specs was one of the all-time drummers, fantastic. It was a lesson just to watch him solo, let alone to play along with him. That probably accounts for how black Miles said he was looking for a bass player when Miles said he was looking for a bass player when I said, 'Well, everybody is,' because that's how I felt. I wasn't awed by him asking me to join his band.'"

For the next five years, up until 1968, the Miles Davis rhythm section—with Carter, pianist Herbie Hancock, and drummer Tony Williams—set a new standard. Not since the heyday of the Count Basie band, when Basie, Freddie Green, Walter Page, and Jo Jones swung the light fantastic, had there been such a celebrated rhythm unit. If the invitation to join Miles didn't overly impress Ron Carter, the music that came out of that union did. A dozen fine Columbia albums, including "Sorcerer," "Nefertiti," and "Filles de Kilimアン ters," were made with this rhythm combination, but Carter feels that some of the best moments occurred outside the studio. "It was an extremely exciting rhythm section, and I have some tapes I made during our nightclub gigs that still chill me. It's just amazing that no one got lost in the tunes, that the rhythms sustained themselves through the course of the night, not just through a chorus, but through a whole evening. You hear them develop with each tune, you know—it's great!"

It was during his time with Miles Davis that Ron Carter developed a deep interest in Spanish music. "We were in Barcelona in 1964," he explains, "and Miles had to return to New York, but we were on excursion tickets, so we had the choice of either leaving with Miles and paying an additional fare, or staying in Spain for five days. We opted to stay. So Wayne Shorter, Herbie, Tony, and I did a quartet concert, then just looked around and got an earful of all that music. I was very impressed and very much amazed to find out how much sheer music one guitar player can produce—they knock on their instruments, they use harmonics, they strum, and they pick. One player does all that to the accompaniment of the dancers' shoes and castanets. To me, that's a whole orchestra, and just to see an orchestra in the form of one player, four dancers, and percussion is amazing. And that's notwithstanding the music..."
“My objective is to re-investigate acoustic sounds and to give the public a viable listening option not at their command recently.”

cannot boast the popularity or income of his former colleagues in the Miles Davis Quintet, who all have captured a wider, younger market through conversion to electronic jazz-pop music. Speaking of his all-acoustic quartet, formed almost ten years ago, he has said, “My objective is to re-investigate acoustic sounds and to give the public a viable listening option not at their command recently.”

Does he believe Herbie Hancock guilty of forsaking his art for financial gain? “Not really,” he says. “Having done the V.S.O.P. tour with Herbie, and having had this subject frequently brought up for discussion, I sense—and I hope I’m interpreting him correctly, otherwise I’m treading on thin ice—that it isn’t necessarily the money that’s important as much as it is gaining wider acceptance. People often say, ‘Well, you did it for the money,’ but I don’t believe that myself, not totally. However, I do understand that, as a spinoff of the popularity, you do get more money. Acceptance by great numbers of people leads to wide exposure and enables you more or less to choose where you want to play, to pick quality jobs where the kind of people who come to hear you will also go out and buy your records. Unfortunately, the jazz community, for all its outspoken enthusiasm and encouragement, is not a record-buying audience. The jazz fan says ‘Yeah man, it’s hip, we’ll check it out,’ but most of them leave it at that, so it’s not the jazz community that promotion should be geared to. It’s that record-buying public, the youths who haven’t developed an interest in jazz because they haven’t been exposed to it.”

Carter, who is obviously not about to take the electronic route in any foreseeable future, speaks with understandable pride of his current quartet, which consists of himself on an instrument called piccolo bass, Kenny Barron on piano, Buster Williams on acoustic bass, and Ben Riley on drums. “The piccolo bass,” he explains, “was made by a friend of mine about six or seven years ago. It’s approximately half the size of a regular bass, and it’s tuned a fourth higher than the other bass I play, so it has no E string. The strings are tuned from bottom string A to D, G, and top string C, and it has a thirty-six-inch string length. I learn more and more each time I play it.” An excellent example of the quartet’s work can be heard on a double album called “Piccolo” (Milestone M-SS004, a “Best of the Month” selection in the January issue of STEREO REVIEW), recorded during performances at Sweet Basil’s, in New York’s Greenwich Village, last year. It is an exciting group with a unique sound and a refreshing approach to the art Ron Carter so commendably remains faithful to. Carter’s new album—recorded, but not released, at the time of this writing—is called “Peg Leg” and features the quartet with guitarist Jay Berliner and woodwinds added. But, leader though he is, Ron Carter will also continue to record as a sideman, because, as he puts it, “Once you have driven a Mercedes Benz, you don’t want to drive an Edsel. I try to say this with a minimum amount of arrogance and an equal minimum amount of self-effacement, but I think of myself as the Mercedes Benz of bass players.” One is hard put to argue.
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ROCK GOES TO THE MOVIES

"MORE AND MORE IT IS MUSIC THAT HAS SOLD, SAVED, OR OTHERWISE BEEN RESPONSIBLE FOR THE SUCCESS OF THE MOVIE FODDER WE Gobble UP."

By Steve Simels

ADVERTISING. Mel Brooks once observed, is stronger than Life, as a wry little philosophical truism that may account for such enrichments of the language as "It's Better in the Bahamas." Be that as it may, Madison Avenue is not the only place in this country where dopey slogans are concocted. No, the Hollywood Hills are alive with the sound of studio copywriters typing them out as well, and down through the years there have been some beauts. "Gable's Back and Garson's Got Him," for some reason I can't explain, springs immediately to mind, but for the ultimate in unintentional surrealism we must return to those thrilling days of yesteryear when television began its encroachment on the film world's domination of the American psyche and the word went out on theater marquees across the country: "Get More Out of Life—Go to a Movie."

Another of those propagandistic gems that once had wide currency was "You've Read the Book, Now See the Picture," but you don't hear it much these days. And if you did, it would have to be amended slightly. Since the record industry is now the legitimate heir (both with its star system and its financial clout) to the glamour and prestige of Hollywood in the heyday of Irving Thalberg and David O. Selznick, it's surprising that no one has yet (to my knowledge) announced "You've Seen the Movie, Now Hear the Soundtrack." But that's exactly what has been happening of late. More and more it is music that has sold, saved, or been otherwise responsible for the success of the movie fodder we gobble up, and this has resulted in something almost unprecedented—a series of chart-topping soundtrack albums. Even more surprising, most of them are rock-oriented in some way or another.

Soundtrack LP's in themselves are nothing new, of course. Prior to Carole King's "Tapestry," in fact, the biggest-selling album of all time had been the aural document of the film version of The Sound of Music (or The Sound of Mucous, as its co-star Christopher Plummer was fond of calling it in a classic example of biting the hand that feeds). Neither are films with rock as the subject a particular novelty—Elvis alone was responsible for almost forty. Similarly, individual songs have often been utilized to beef up the box-office appeal of particular films, and some have become standards far outlasting in the public memory the cinematic efforts from which they were derived. Examples include the theme from A Summer Place, The Shadow of Your Smile (from The Sandpiper), and even Somewhere My Love (quick: name the movie that one's from; if you remember Julie Christie's—and the audi-
ence's—snowbound ennui in Dr. Zhivago, consider yourself a Ph.D. in the History of Pop Culture). Such songs are part of an old and honorable tradition that goes back at least to the days when the Marx Brothers had to sit around looking bored while Allan Jones crooned *Alone* to Kitty Carlisle. Still, with the rise of the rock album in the late Sixties, soundtracks more and more became specialty items that were reissued by tiny independent labels specializing in obscure Max Steiner scores or Judy Garland out-takes, the kind of records you hunted for in dusty little shops in New York's West Village. And, at the same time, the film musical as a genre, with the exception of recreations of proved Broadway smashes like *Cabaret*, had also become something of a cultural back number.

But suddenly all this has changed. *You Light Up My Life*, a pedestrian Elton John-ish tune from an equally pedestrian little musical film of the same name, was the biggest-selling single of 1977. It made a star out of cosmic muffin Debby Boone and brought her a platinum album and a couple of Grammies. The soundtrack album for *Saturday Night Fever*, a flick that proves that disco music is the real punk rock, has knocked Fleetwood Mac out of the Number One spot on all major record-industry charts, and three of its Bee Gees songs made it to the Top Ten simultaneously, a feat that hasn’t been accomplished by any artist since the Beatles.

John Williams’ clever musical backdrops for *Star Wars* and *Close Encounters of the Third Kind* have both gone platinum, have spawned disco hit singles and countless cover versions by everyone from Grove Holmes to Zubin Mehta (see page 122), and have coped Record World’s “Most Promising New Instrumental Group” award for the London Symphony Orchestra. *E.T.*, the big tune from Barbra Streisand’s ersatz “rock” remake of *A Star Is Born*, earned a platinum record, a Grammy, and finally an Oscar. Carly Simon followed Paul McCartney’s lead and recorded the love theme from a James Bond movie and had her biggest hit ever with *Nobody Does It Better* from *The Spy Who Loved Me*. The late Bernard Herrmann’s moody scores for *Taxi Driver* and *Obsession* were reviewed in Rolling Stone, and many of his early scores were rerecorded in RCA’s Classic Film Scores series.

*American Hot Wax*, a fictionalized account of the rise and fall of pioneer rock deejay Alan Freed, and before the year is out we’ll be inundated with *I Wanna Hold Your Hand*, a day in the life of some teenagers on the eve of the Beatles’ first appearance on the Ed Sullivan Show; *FM*, about some contemporary radio types, with music by Steely Dan and Linda Ronstadt; *The Buddy Holly Story*, a loving pseudo-documentary on that rock great’s meteoric career; multi-million-dollar adaptations of *Grease* and *The Last Waltz*, Martin (Taxi Driver) Scorsese’s big-budget *cinema verité* version of the Band’s recent “farewell” concert; and two seemingly unfilmable Sixties relics—a star-studded, all-singing, all-dancing rehash of the Beatles’ “Sgt. Pepper” album with Peter Frampton and Steve Martin and, with direction by Milos Forman, a version of the ultimate hippie wet dream, the ever-excruciable *Hair*. Something odd is going on here. The movie musical with a rock beat and a soundtrack album is now very, very big business. The logical question at this point, it seems to me, is this: How come?

Well, the answer is fairly simple. In fact, the writing was on the wall years ago when *Star*, a twenty-four-million-dollar Julie Andrews musical based on the life of Gertrude Lawrence, bombed while Simon and Garfunkel’s song *Mrs. Robinson* clinched the commercial success of Mike Nichols’ movie *The Graduate* while Richard Strauss was becoming a pop star as his *Theme from 2001* (also known as *Also Sprach Zarathustra*) turned into the unlikely rock standard of them all.

Later, after Ken Russell’s assault on
“With any pop art, half the impact is in the marketing, and Saturday Night Fever’s campaign was particularly canny.”

As a result of this marriage, Fred Astaire and Ginger Rogers are reborn in Brooklyn as John Travolta and Karen Gorney. And, unsurprisingly, the resulting films tend to deal in several varieties of nostalgia—other places, other times, and even other movies. Grease, The Buddy Holly Story, and American Hot Wax evoke the Fifties and the birth of rock. Star Wars pays homage to such 1930’s serials as Flash Gordon. The forthcoming Sgt. Pepper, Hair, and I Wanna Hold Your Hand are Sixties nostalgia pieces, part of a newer genre that includes nonmusical efforts like the TV version of Loose Change and Jane Fonda’s Vietnam meditation Coming Home, which featured a score littered with actual rock records by the Stones, the Airplane, and others of the wartime period.

Even Saturday Night Fever, for all its trendy contemporary trappings and its view of discos as the home of the new rock culture, is at heart nostalgia, a recreation of the kind of tenement romanticism popularized by works as widely separated as Dead End and On the Waterfront. If the Seventies have yet to become anything more than the Thirties, Forties, and Fifties in rerun, and the undeniable excellence of its rock-and-roll soundtrack. The movie wasn’t nostalgia. It wasn’t even entertainment per se, but psychodrama. And besides, musicals are not supposed to depress you.

What then could more accurately reflect the spirit of our time than such escapist updatings of the lushesi products of Hollywood’s so-called Golden Age?

And this phenomenon of escapism, by the way, really explains why Bob Dylan’s recent four-hour advertisement for himself, the interminable Rnaldo and Clara, has been such a colossal failure despite its star’s appeal...
of the picture and promoted for all they were worth. Thus, by the time theater audiences were being treated to the spectacle of Travolta preening in front of his mirror with his radio on, those songs actually were hits, in fact damn near ubiquitous on everybody's radio.

A clever commercial ploy had thus added aesthetic resonance to those scenes, which is a perfect example of the way good pop culture operates.

The gimmicks behind the selling of some of the forthcoming entries are less spectacular, but they will no doubt do their jobs with equal effectiveness. The Wiz is relying on old-fashioned Star Quality—it's a Diana Ross vehicle as much as A Star Is Born was a Streisand vehicle. Sgt. Pepper's hook is the audience's almost total familiarity with every note of the score before they even go in. And The Buddy Holly Story will have as its novelty the fact that the actor/musicians portraying Buddy and the Crickets will not be lip-synching, but actually performing their numbers live, which, barring concert documentaries like Woodstock, is a real first for the movie musical.

Whether this new genre can sustain itself for any significant length of time is, of course, moot. The vagaries of popular taste being what they are, prediction of any sort is usually pretty futile. Still, it seems clear that, if only because of the amounts of money being invested, it should be with us for quite some time to come, especially considering the failure of the punk movement's attack on the record business.

This being the case, some critical judgments seem to be appropriate at this stage. For starters, it seems unlikely that any of these films are going to achieve a truly seamless integration of music and story, a goal which has been the Holy Grail of many Broadway composers, particularly Leonard Bernstein, Stephen Sondheim, and John Kander and Fred Ebb. Further, the kind of nonthink optimism of even the best of them is already becoming annoying enough to make one long for a rock movie that refuses to play it safe.

What wouldn't one give for, say, a fictionalized account of the Velvet Underground, something with the grit and decadence of The Threepenny Opera rather than the Rodgers and Hammerstein-ish good humor of most of the current crop. American Hot Wax, for example, is a marvelous film, faithfully evoking the vigor and excitement of the street-corner spirit of the best early rock, but ultimately it cops out. There are a number of incredible historical distortions, the most ludicrous being the scene in which the I.R.S. seizes the gate receipts for the rock show that forms the climax of the picture. None of the performers can be paid, but Chuck Berry looks out at the hordes of rock-crazed kids chanting for him and says (with a perfectly straight face), "Rock-and-roll's been pretty good to me. I'll do the show for rock-and-roll." Apart from the fact that everybody knows Berry has (quite sensibly) never gone on stage at any time in his career without the cash in his back pocket, that's a cliche straight out of Warner Baxter's admonitions to Ruby Keeler in 42nd Street. It's perfectly charming as a dramatic moment, and God knows we'd all like to think that rock really was born out of impulses so altruistic, but it ain't so. The real movie about early rock would be about greed, racism, and drugs. Frankie Lymon, one of whose songs is duplicated in the film by the fictitious group called the Chestersfields, died penniless of an overdose at the age of twenty-six. Seeing American Hot Wax, you have to figure he's currently making millions in Vegas.

But, then again, we're talking about entertainment, which is not always as simple as it looks. The best pop artists, from Raymond Chandler to the Beatles, have always found ways to turn seemingly frivolous genres to their own uses, and there are already hopeful signs. Given the starring presence of everybody's favorite wisenass Martin Mull, FM promises to be both entertaining and thought-provokingly cynical (sort of a rock equivalent of what Paddy Chayevsky did to television in Network), and the Who's forthcoming The Kids Are Alright may well wind up as the rock Remembrance of Things Past that Pete Townshend intends it to be.

In any event, be they good, bad, or indifferent, the very presence of these new rock musicals is heartening to someone who grew up with rock-and-roll and the Hollywood film as the backdrop of his life or someone who believes, as I do, that they are the most vital and original of all American contributions to the popular arts. If you don't, and if you think that Danny and the Juniors' 1958 prediction that "Rock-and-roll is here to stay" was wide of the mark, well, you just haven't been going to the movies, at least not this year.
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CIRCLE NO. 65 ON READER SERVICE CARD
Unusual Delights from The Impressionist Repertoire for Harp and Chamber Ensemble

Some of the most luscious musical fruits ever to drop from the tree of French musical impressionism can be savored on a lovely Erato disc featuring harpist Lily Laskine and the Via Nova Quartet. It is the sound of the harp that binds the program together, and if the impressionists knew how to coax heart-stopping beauty out of any instrument, it was certainly the harp. Lily Laskine finds fresh enchantment in the seductive pages of Ravel’s not overly familiar Introduction and Allegro (composed in 1905-1906), and her sensitive understanding of the idiom enhances the delicate colors of Ibert’s serene and songful Trio, one of that composer’s few works for strings. The harpist is also the heroine in the subtle Variations written in 1932 by Gabriel Pierné, a pupil of César Franck, whose influence is reflected in these late pages as they are in earlier ones.

The most interesting piece on the program, however, is the Conte Fantastique by André Caplet. It is based on Poe’s Masque of the Red Death, that eerie allegory in which the specter of disease and death, to escape from whom a group of aristocratic revelers have locked themselves in a remote castle, pursues and fastens upon his victims by entering their midst at a masquerade, a creature empty inside his cerements—anticipating by almost a century the key plot element in Archibald MacLeish’s Thirties radio play...
Ralph MacDonald Unites African, Caribbean, and American Jazz Sounds in A Brilliant New Album

It has been more than a year since Alex Haley, in his all but interminable quest for his "roots," turned the whole country on to genealogy, now a great American pastime. While some have sought to piece together fragments of their familial and ethnic past by rummaging through attics, closets, and the National Archives; percussionist Ralph MacDonald has attempted to create an aural account of his musical "roots" by dipping into the wondrous rhythms and refrains that contributed to his aesthetic development. 

The Path, an eighteen-minute-long composition sequentially encompassing African, Caribbean, and American musical styles, cannot justly be compared with Haley's 688-page opus. Yet MacDonald's somewhat modest effort conveys a charm and immediacy that drive his message home with rare assurance. The Path occupies the whole first side of his new album, and it is based on a simple melodic statement chanted by a chorus of notables, including Miriam Makeba and Hugh Masekela, whose African credentials are impeccable. The chant emerges from a collage of rhythms established by an opening passage in which MacDonald employs drumheads hooked up to a synthesizer that enables the artist to overlay rhythms with melody. An insistent complementary pulse is further provided by Idris Muhammad on log drums.

After the pattern of ancient Nigerian rhythms has been set, it is gradually overwhelmed by successive layers of music that are decidedly Caribbean in flavor, with the log drums giving way to variations set forth by steel drums. Seamless, the African antecedents are supplanted by the sounds of Trinidad, complete with a slightly wheezing clarinet solo. As the West Indian strains begin to peak, traces of American jazz and popular music emerge, though the basic rhythms and melody persist unchanged. Thus the music duplicates MacDonald's own genealogical background, from Nigeria to Trinidad to New York's Harlem, where he was born. As details of the tonal picture are fleshed out, the listener is driven to dance along the winding curves of this amazing musical path (the title, incidentally, was taken from an African proverb that is included in the liner notes).

The second side of the album is a pastiche of purely American popular music, the fruit of the cultural fusion depicted in The Path. The most outstanding moments here stem from "Toots" Thielemans' rapturously expressive harmonic solo on the ballad Smoke Rings and Wine. No less compelling is the salsoulful It Feels So Good, in which a close interplay is established among Eric Gale on guitar, Dave Friedman on vibes, and Nicky Marrero on timbales. All compositions were written by MacDonald in collaboration with William Salter and William Eaton.

A special homespun intimacy prevails here, for the cover features four portraits of MacDonald's family, including one of a four-year-old Ralph standing on a funky old funeral-parlor folding chair next to his grandmother. This photographic theme is repeated on the back cover, where the grown-up MacDonald poses with his grandmother as she is today, thirty years later. The album is dedicated to her. It is a tribute that would make any grandmother proud.

—Phyl Garland

RALPH MACDONALD: The Path. Ralph MacDonald (syndrum, percussion); Idris Muhammad (log drums); Jimi Solanke (speaker); Bob James (synthesizer); Mike Brecker, Grover Washington Jr. (tenor sax-
Philips' New I Due Foscari: Not Likely To Be Bettered for A Long, Long Time

I Due Foscari was written in 1844, between Ernani and Giovanna d'Arco. It was a miraculously productive year for Verdi, one in which he was at the height of his preoccupation with the Romantic historical works of Hugo, Byron, and Schiller. Of the three operas that resulted, Ernani (based on a play by Victor Hugo) stands out for its wealth of memorable music, but it is dramatically diffuse in comparison to the other two.

Giovanna D'Arco (Schiller) and I Due Foscari (Byron) have their weaknesses, but they are also tighter in construction and more successful in terms of characterization and realization of atmosphere. The Rome Opera's beautiful production of I Due Foscari made a deep impression on me when that company visited New York ten years ago, and I have eagerly awaited the opera's appearance on records ever since.

The story is essentially a family tragedy, like that of Simon Boccanegra, which it foreshadows in many telling details. And, like that later work, it too is etched in somber colors: dire events fall like unrelenting hammer blows on the noble Venetian house of Foscari, humilitating and eventually destroying father and son. Watching their unrelieved suffering and the indignities they must bear while hopelessly protesting their innocence places a heavy emotional burden on the sympathetic listener, a burden that is hardly lightened by the heartrending music with which Verdi shows his own compassion for the characters. This is an opera without a moment of lightness; even the love scenes (between husband and wife) take place in the shadow of tragedy and are filled with despair.

Let us, then, face the fact that I Due Foscari was not designed to be a "box-office" opera. But it is a deeply moving one, and for me one of the strongest in the pre-Rigoletto group. All three principals have memorable arias, and there are ensembles that show Verdi's mastery at a near-Rigoletto level; the final scene is surely the best of them all. His use of the orchestra, too, is most imaginative, and there is a notable association of characters with orchestral passages in a leitmotif style: Lucrezia's appearances invariably occur to the accompaniment of an agitated orchestral figure, young Jacopo Foscari's utterances are introduced or accompanied by a melancholy clarinet melody, and the shadowy activities of Venice's dread Council of Ten are surrounded by ominous Sparafucile-like measures in the orchestra.

While I must admit that hearing the opera on records is no match for seeing the effect it creates in the theater (especially if one recalls Pier Luigi Pizzi's magnificent sets and costumes for the Rome production), it is illustriously served by Philips' just-released premiere recording. Conductor Lamberto Gardelli, that seasoned and dedicated Verdiologist, projects the darkness of the score without making it oppressive, leading a performance that moves at just tempos and in an exemplary balance between honest passion and somewhat extravagant rhetoric. In the role of the long-suffering old Doge, Piero Cappuccilli projects true nobility of character and a well-schooled musical artistry. A distinctively individual profile is lacking in this eminent baritone's work, but his gift for the true Verdiian phrase and expression is adequate compensation.

Ideally, the roles of Jacopo and Lucrezia should be taken by voices more dramatic than those of José Carreras and Katia Ricciarelli, but within the limitations imposed by nature both artists acquit themselves well. In its combination of dramatic bite and florid writing, Lucrezia's music calls for a Rosa Ponselle. Though there are some signs of effort and tightness on the top notes, Katia Ricciarelli copes with it laudably, and her tone is fresh and beautiful. José Carreras brings passion and an innate elegance to Jacopo Foscari's very effective scenes.

Jacopo Loredano is an Iago-like villain, and it is one of the opera's weaknesses that Verdi restricted this important character to a few brief utterances and ensemble participations. These, however, Samuel Ramey carries out with distinction. The Austrian Radio Chorus and Orchestra make strong contributions. All in all, it is not rea
sonable to expect a better performance of *I Due Foscari* for a long, long, time.

—George Jellinek

**VERDI: I Due Foscari.** Piero Cappuccilli (baritone), Francesco Foscari; José Carreras (tenor), Jacopo Foscari; Katia Ricciarelli (soprano), Lucrezia Contarini Foscari; Samuel Ramey (bass), Jacopo Lorenzo; Vincenzo Bello (tenor), Barbarigo; others. ORF Chorus and Symphony Orchestra (Vienna), Lamberto Gardelli cond. PHILIPS 6700 105 two discs $17.96, © 7699 057 $17.96.

**Byron Berline and Sundance: Building Something New in Bluegrass Country**

BYRON BERLINE may be facing the same direction as when he started, but he's turned around 360 degrees to do it. He and his group Sundance are back into bluegrass in their new Takoma album, "Live at McCabe's," after having dabbled in other things, and both they and bluegrass seem the better for it. As for Berline's prowess as a fiddler, the first cut will make a believer of you. Subsequent cuts will pretty quickly put across the idea that the instrumentals are superb. They use two flat-top, flat-picking guitarists, both very impressive (although at least one, plus the bass, never seems mixed loud enough), and otherwise standard bluegrass instrumentation, and everything is beautifully played. But the album goes beyond the usual limited game-plan of the genre; it stretches bluegrass, enlarges it.

Part of it is the low number of conventional runs and turns and bluegrass clichés in the playing, part of it is the un-bluegrass quality and structure of some of the songs, and part of it is the unbottled nature of the Sundance spirit. It becomes accepted in bluegrass, as it does in any musical province, that a certain attitude goes with the territory—and now here are these worldly young fellows posing the question that always shakes up provinces: Why? But they've done their homework on how to play bluegrass so well (and some of them have *naturally* nasal voices, and it's impossible to read a putdown in one of those) that they're going to get an influential portion of the province to listen and probably be affected by what they've done. The attitude I'm talking about is hard to describe, but you might think of it as something like a bluegrass *throat* one consciously prepares, a bluegrass way of *inhaling* to go for those high, lonesome, wailing notes. Sundance gets the high notes in, the breakneck speed of the picking in, and even such standards as Bill Monroe's horse-race tune *Molly and Tenbrooks* in, and yet they sound different. Fresh. And refreshing.

—Noel Coppage

**Pierre Boulez Directs**

**A Totally Convincing Duet Version of Berlioz's Nuits d'Été**

ALTHOUGH all six songs of Berlioz's *Nuits d'Été* are usually sung by a soprano or mezzo, they were originally published (with piano accompaniment) in a version for mezzo or tenor, and when Berlioz got around to orchestrating the cycle he decided on distribution among as many as four male and female voices. The only recording so far to use more than a single voice has been the one conducted by Colin Davis, who went all the way with four singers on Philips 6500 009; there are no really great voices among them, and the venture seemed to be more in the nature of an interesting bit of musico-logical research than a successful artistic performance.

Columbia has now issued a recording in which Pierre Boulez has effected a more than attractive compromise in this cycle by using two singers—mezzo Yvonne Minton and tenor Stuart Burrows—who do have great voices and who show both intelligence and great intuitive feeling in their use of them. With Boulez himself at a peak of inspiration not heretofore evident in his recorded Berlioz and the BBC Symphony Orchestra responding with a flexibility and finesse one cannot take for granted with any ensemble, this is no mere novelty but a most distinguished realization of a fascinating work; the coupling, in which the same high level prevails, is the most imaginative and appropriate yet devised for this work, Berlioz's less familiar "lyric scene" *La Mort de Cléopâtre*.

Frank Patterson's singing of the opening *Villanelle* in the Philips *Nuits d'Été* persuaded me that the piece must be a mistake for a male singer to at
BERLYZ: Les Nuits d'Eté, Op. 7; La Mort de Cléopâtre, Op. 5; Yvonne Minton (mezzo-soprano); Stuart Burrows (tenor, in Op. 7); BBC Symphony Orchestra, Pierre Boulez cond. Columbia M 34563 $7.98.

BARRY MANILOW: Even Now. Barry Manilow (vocals, piano); vocal and instrumental accompaniment. Even Now; I Was a Fool (To Let You Go); Losing Touch; I Just Want To Be The One In Your Life; Starting Again; Sunrise; Copacabana; Somewhere in the Night; A Linda Song; Can't Smile Without You; Leavin' in the Morning; Where Do I Go from Here. Arista AB 4164 $6.98, ATB 4164 $7.98; © ATC-4164 $7.98.

Barry Manilow:
Enthusiasm and
Professionalism for "Urban C- & - W"

E ver have the feeling that some people are getting more fun out of life than you are? No, this isn't an advertisement for dance lessons. It's just that the thought occurs to me every time I hear Barry Manilow's work—and what with his swarm of TV commercials and his frequent hits dominating the airwaves, that is starting to seem like about every ten minutes or so. Take, for instance, his newest Arista album, "Even Now." It is one of those productions in which the entertainer is so attuned to his audience that he seems almost to be a part of it—and to be enjoying himself more than anybody else as well. And you just have to be impressed when the enthusiasm persists through such soap-opera stuff as Copacabana (At the Copa), a turgid tale of two lovers in the Good Old Days at that always rather seedy pleasure dome. Tony the bartender is killed in a brawl over Lola, the flashy showgirl, and thirty years later she's still hanging around, "Faded feathers in her hair," mournfully sloshed "At the Copa/Copacabana/Music and passion were always the fashion..." Wouldja believe? I mean, wouldja believe that Manilow or anybody else could get you to sit still, much less enjoy such trashy, tabloid carrying-ons? Well, he can, and in my case he certainly did, primarily because he treats the song as the urban c- & - w it actually is. Rhythm-and-blues has for so long been the voice of city life in pop music that we forget the non-r- & - b gaspers that used to steam them up in the old days, such views of life's seamier side as Ten Cents a Dance, Boulevard of Broken Dreams, or Love for Sale. Complete entertainer that he is, Manilow dips into the genre with verve and assurance, and he comes up not with stale dreariness but a tasty, exciting piece of melodrama.

There are several other very nice things here, for which he's written the music with a variety of lyricists, including the bitter-sweet Starting Again, the softly dappled reverie Sunrise, and the remorseful, angry I Was a Fool (To Let You Go). But in everything that Manilow performs he has a tough, city grace about him—like Cagney hoofing it in the old flicks, or George Burns doing a monologue about yesterdays on the Lower East Side. Like them, he's also very proud of his profession and how well he's done it in it. He has every reason to be.

—Peter Reilly
RECORDING OF SPECIAL MERIT

ABBA: The Album. Abba (vocals and instrumentals); instrumental accompaniment. Eagle: Take a Chance on Me; One Man. One Woman: The Name of the Game; Move On; and four others. ATLANTIC SD 19164 $6.98, © TP 19164 $7.97, © CS 19164 $7.97.

Performance: Excellent
Recording: Excellent

Abba is not only Sweden's biggest export industry (according to John Rockwell of the New York Times), it is the biggest thing in international rock groups in the world today. The quartet's four-year streak of hit singles, beginning with Waterloo, is an unparalleled success story, and their mastery of English-speaking pop is undisputed. They seem to be able to isolate and synthesize every element of disparate Brit-Yankee pop hits of the last twenty years—a vocal trill here, a modulation there—always at the right moment. They don't sound particularly original, but boy, have they done their homework!

The release of "The Album" is the first half of a campaign to reinforce the group's popularity throughout the world. Abba—The Movie, a concert-tour-with-plot spectacular, is to be released here some time this summer. As do most Abba albums, this one contains a few songs whose brilliant writing, performance, and production make them real standouts:

The Name of the Game, with a trumpet fill reminiscent of that on the Beatles' Penny Lane; One Man. One Woman, a mood rewrite of My Love, My Life from an earlier album, "Arrival"; and Take a Chance on Me, a variation on the plot of When I Kissed the Teacher, also from "Arrival." Throughout, Abba combines sophistication with componsense, and, since they depend for inspiration on pop hits in England and the United States between 1950 and 1970, hearing "The Album" is like entering a time warp. Here are delightful echoes of everyone from the Beatles to Dusty Springfield, Phil Spector, Dionne Warwick, Petula Clark, the Shirelles, and on and on. True, Abba's work is based on some kind of mirror trick, and there is little genuine feeling in anything they do. But it's also true that it is a wonderful mirror trick, and I can't help but admire these charming conjurors.

JAN AKKERMAN. Jan Akkerman (guitar); instrumental accompaniment. Crackers; Angel Watch; Pavana; Streetwalker; and three others. ATLANTIC SD 19159 $6.98, © TP 19159 $7.97, © CS 19159 $7.97.

Performance: Proficient
Recording: Very good

Jan Akkerman used to be the lead guitarist for Focus, the Dutch group featuring the keyboard work and yodeling of Thijs van Leer, but he has also recorded two solo albums besides this one. Though he is a remarkably fluent musician able to play in several styles, his performances seem more like mere demonstrations of skill than deeply felt expressions; one admires his technique while wondering what he believes. The best musicians usually signal what demons or angels guide them, but Akkerman's versatile and antiseptic playing gives us no clue. Perhaps the difficulty is that he sticks to his own compositions, which are in a style based on American jazz of the 1960's; he might feel freer interpreting other people's material. But there probably isn't a guitarist living who hasn't composed for the instrument, which seems to seduce its player into trying. The fruit of Akkerman's seduction is a well played but dull disc.

HERB ALPERT/HUGH MASAKELA. Herb Alpert (trumpet, flugelhorn); Hugh Masakela (trumpet, flugelhorn); instrumental accompaniment. Skokiaan; Moonza; Ring Bell; Happy Hanna; and three others. A&M/HORIZON SP-728 $6.98, © SP-728 $6.98, © CS-728 $6.98.

Performance: Fair
Recording: Busy

Herb Alpert and Hugh Masakela are pop trumpeters, but what is a pop trumpet? Most of us are familiar with the tone, attack, phrasing, and intent of jazz or symphonic trumpeters, but the pop horn fits neither category. While a pop trumpet may have been formally trained or might borrow a few stylistic ideas from jazz, the instrument seems to fall in a bland middle ground where neither imagination nor execution is at a premium. The function of the pop trumpet is generally to please without really stirring the blood or causing offense, and his role is as an occasional voice among many instruments in an arrangement. When he plays a full-length chorus, he does so under strict rules: he may titillate but must not excite; he must be charming but dispassionate; he must play at, not on.

Alpert struck it big in the 1960's with the Tijuana Brass and its "Mariachi sound," an amalgam of Mexican rhythms and American cutie-poo pop tunes. Masakela's biggest hit was Grazin' in the Grass in 1969. What they share is an almost total dependence on the arrangement of a tune. This teaming of two skilful, facile musicians reveals that their styles are so close as to be indistinguishable; both are entirely at the mercy of the discordant arrangements of non-tunes. Even hoary old Skokiaan lurches and blathers here. Alpert and Masakela play not so much in phrases as in four-bar fills. When all the clutter is done, one is still left with the question of what a pop trumpet is. There seems to be no musically satisfying answer.

BYRON BERLINE AND SUNDANCE: Live at McCabe's (see Best of the Month, page 90)

BLONDIE: Plastic Letters. Blondie (vocals and instrumentals). Fan Mail; Denis; Better

Explanation of symbols:

- reel-to-reel stereo tape
- eight-track stereo cartridge
- stereo cassette
- quadraphonic disc
- reel-to-reel quadraphonic tape
- eight-track quadraphonic tape

Monophonic recordings are indicated by the symbol ©

The first listing is the one reviewed; other formats, if available, follow it.
This second album by Blondie, a quartet that has been one of the more visible bands on the "punk" or "new wave" circuit, is a great improvement over the first; the group has gained much in sophistication and has better arrangements. Especially interesting are the quick breaks and changes by drummer Clement Burke. Deborah Harry's vocals are at first a little hard to take, but they can be gotten used to. She poses as a non-performing performer in a mental-sulk, though every once in a while she relaxes enough to sound like a contented syringe. Now and then the group displays some bitter humor, which would be more satisfying if the lyrics more regularly made it through the bottom-heavy sound mix. It's unfortunate that the album doesn't contain a lyric sheet—unusual these days—because many of the songs seem interesting and might be more enjoyable if one knew what Harry was saying.

The response to "Plastic Letters" will be important not only for Blondie but for the whole new wave movement. Despite all the media attention given to the genre, it has yet to be demonstrated that anyone is buying the product in quantities commensurate with the hoopla. Blondie's first album got a major nationwide promotion, publicity, merchandising, and marketing campaign, yet sales were negligible. This second album, however, has had more careful attention in the studio and will, I assume, be backed up by live appearances. Though I disliked its predecessor, I like "Plastic Letters" quite a lot. If this be punk, then make the most of it.

**Secondhand Beatles**

I have before me two remarkable recorded artifacts, originally conceived for media other than the LP, that suggest Lester Bangs was right on the money when he observed in these pages...it's time to let go of the Beatles once and for all. Some of us aging Sixties types have stubbornly resisted that suggestion even against our own better judgment, but it's time to face it squarely. Fact is, most of the musical and technological grammar the Beatles created has been appropriated whole by those who have achieved mass-market success in the Seventies, from Barry Manilow to Fleetwood Mac. As a result, if anyone is to blame for the Mushi Rock that dominates today's airwaves, it is our erstwhile heroes. While that's hardly their fault, it does, or should, force a reassessment of sorts. What's particularly curious about these two new albums—the original-cast recording of the Broadway hit Beatlemania and the souvenir of Eric Idle and Neil Innes' March NBC TV "Rutles" special All You Need Is Cash—is that they vindicate Bangs in totally different ways.

What Beatlemania proves, depressingly enough, is that there are people who are so desperate for what the Fab Four symbolized that they have lost touch with the realities of contemporary life. Either that or there is still a sucker being born every minute, people who will pay outrageous prices to see a Broadway show that reduces their most cherished memories to the level of a drag queen doing Judy Garland impressions. Clearly, those who have made the show the box-office hit it is feel that the myth of the Beatles hasn't dated, but I find that to be ostrich-ism of the first order. Their music hasn't, perhaps, but the attitudes and styles that surrounded its creation have, and it is an imitation of those attitudes and styles that, at heart, the show is selling, a kind of reassuring retreat into the great rock-and-roll womb that is my generation's equivalent of Beatlemania. It is long gone. A Sucker being born every minute, people who will pay outrageous prices to see a Broadway show that reduces their most cherished memories to the level of a drag queen doing Judy Garland impressions. Clearly, those who have made the show the box-office hit it is feel that the myth of the Beatles hasn't dated, but I find that to be ostrich-ism of the first order. Their music hasn't, perhaps, but the attitudes and styles that surrounded its creation have, and it is an imitation of those attitudes and styles that, at heart, the show is selling, a kind of reassuring retreat into the great rock-and-roll womb that is my generation's equivalent of Beatlemania. It is long gone.
Most of the people I grew up with who still listen to rock-and-roll—the ones who have not switched their allegiances to Chick Corea on the one hand or Fripp and Eno on the other—are usually willing to grant me most of my current manias despite our divergent tastes. As long as I don’t leave the room or make rude remarks when their Eagles or Kansas records are on, they’ll put up with me and my obsessions. Graham Parker is kosher; so are Warren Zevon, Mink DeVille, and even Elvis Costello and the rest of the Stiffs. (I am resigned, in fact, to the idea that my girl friend is planning to leave me for Nick Lowe as soon as she can wangle a meeting with him.) But, almost without exception, these same people draw the line at even the mention of Patti Smith.

Frankly, I can understand that. For all the similarities between Patti and the artists my peers do find accessible, from the Ronettes to Bruce Springsteen, even a rabid fan like me has problems with everything about her, be it her attitude, her poetry, or her records. I suspect that our collective objections could be summed up in a paraphrase of Freud’s classic plaint: What does this woman want? The answer, of course, is everything (or, to paraphrase one of her heroes, Jim Morrison, she wants the world and she wants it now). Not surprisingly, this tends to make listeners uncomfortable in varying degrees, especially when you consider that both of her earlier albums had real production problems, both exhibited a certain amount of, shall we say, excess and self-indulgence in the songwriting, and that her live shows are maddeningly inconsistent (but, then again, who expects consistency from a poet?).

But with the release of “Easter,” her newest, Patti has come a lot closer to achieving her goals than one would have thought possible. Granted, she’s self-taught, a primitive, but she’s also a quick study. The experience she’s gained in the years since she became an above-ground star has not been wasted on her, and she seems to have realized that, yes, she can stay true to herself and still make a record to please the folks who have not connected with her apocalyptic vision of rock-and-roll in the past—in other words, some kind of mass public. Certainly, “Easter” gives the impression that a conscious effort has been expended in that direction. While I’m not suggesting that she’s done a Fleetwood Mac, I think by and large the effort has succeeded; the album, overall, is very fine indeed, the first of her recorded works to induce the gooseflesh of her most moving concert appearances.

If you doubt me, then listen to Because the Night, the album’s major surprise (co-written with Bruce Springsteen!), which, if there is a God of Vinyl in heaven, will be an AM radio hit by the time you read these words. Patti gives this adult revamping of the Phil Spector teen-romance tradition everything she’s got vocally (she sounds—no kidding—like a streetcorner Stevie Nicks), and her band, which has often been rather hit or miss, backs her to the hilt, crashing drums and all. The effect is incredibly sexy—not the mature, womanly sensuality of Christine McVie or the winsome vulnerability of Linda Ronstadt, but
sheer unadulterated lust. It's the most commercial-sounding thing she's ever done, and, not coincidentally, the horniest; fevered sexuality has always been her long suit.

There are, of course, a few cuts I doubt I'll play again. Ghost Dance is a tiresome acoustic number that gives Patti a chance to indulge her Moroccan chant fetish, and her revival of the theme from Privilege, one of the Sixties' most kitsch Mod films, is a real mistake; the song sounded like ersatz rock at the time it was written (1968). It still does—and it still doesn't work.

But almost everything else does, and wonderfully well. Till Victory, the opener, is precisely the sort of surging attention grabber the Rolling Stones are so good at, tinged with a bit of Patti's trademark brand of martial rock fervor; Space Monkey is an evocative sketch of the jarringly alienated burnt-out cases that inhabit our urban cesspools, framed by a stinging riff; Easter is a haunting, beautifully sung excursion into Procol Harum musical territory that effectively deals with the flip side of the spiritual issues inherent in Privilege; and, best of all, Rock n Roll Nigger (the album's original title) manages to validate one of Patti's most persistently troubling and naive preoccupations—her idea that the Artist-as-Outsider concept enables her truly to identify with such real Third World outsiders as Jamaica's Rastafarians—in the most direct and forceful way possible: quite simply, it rocks like mad. Lenny Kaye, Patti's collaborator and stage foil (her Keith Richard, if you will), gets a verse of his own on this one, and he does his mentor proud. He should, in fact, sing more often—this is the Patti Smith Group, remember. At any rate, Nigger should be devastating as the centerpiece of her stage act.

IN March of 1976, after seeing Patti give a particularly depressing performance, one in which it seemed to me that she was in danger either of degenerating into self-parody or, worse, of being totally devoured as an artist by her audience's impossible demands, I wrote in these pages: "Six months ago I would have staked my life on her. Now, let's just say that the odds have changed." Well, Patti, bless her heart, had her own ideas about that, and, if nothing else, "Easter" makes it clear that her strength as an artist and as a woman is considerably greater than I gave her credit for. She won't pander to her audience, but she will meet them halfway, and, as knowingly as she comes on, for all her over-reaching, she really is an innocent and open spirit. With this album, she is on the verge of a real breakthrough, and more and more it seems reasonable to talk about her in the same terms as the rock heroes that have meant so much to both us and her. That being the case, I find I can hardly wait for the next installment.

—Steve Simels

PATTI SMITH GROUP: Easter, Patti Smith Group (vocals and instrumentals). Till Victory; Space Monkey; Because the Night; Ghost Dance; Babelogue; Rock n Roll Nigger; Privilege (Set Me Free); We Three; 25th Floor; High on Rebellion; Easter. ARISTA AB 4171 $7.98, © ATB-4171 $7.98, © ATC-4171 $7.98.

MCA-3042

"A work of intriguing originality"
SOUNDS
"As a rule, I don't like people playing around with the classics but this isn't the case here."
RECORD MIRROR
"He has produced a stunning set of Variations"
SUNDAY TIMES
"Colorful, clever and imaginative. Lloyd Webber's score has got a lot."
EVENING STANDARD

Album: includes a free 7" single "Theme and Variations"

Composed and Produced by Andrew Lloyd Webber

MCA RECORDS

CIRCLE NO. 35 ON READER SERVICE CARD
cally. When he was at his peak, Sly could tease the listener into frenzied submission with similar material, but he usually also gave us something more solid to chew on, which Bootsy tends not to do. Something may be going on here that cannot be conveyed through sound alone—that flushing toilet, for instance, really aroused my curiosity.

**RECORDING OF SPECIAL MERIT**

**JIMMY BUFFETT: Son of a Son of a Sailor.** Jimmy Buffett (vocals); instrumental accompaniment. Fool Button; African Friend; Cowboy in the Jungle; The Last Line; Coast of Marseilles; and four others. ABC AA-1046 $7.98, @ 8020-1046 (H) $7.95, © 5020-1046 (H) $7.95. Performance: Excellent Recording: Good

There’s something terribly wrong with Jimmy Buffett's view of life, thank God. His new album is another misguided tour through Buffettland, featuring the gallery of cheerfully bizarre types who inhabit his version of the tropics. They include such characters as the Cowboy in the Jungle, a burnt-out case Buffett-style; the heroine of Manana, a demimonde hussy from Buffalo who refuses to return there because “It's so goddamn cold it's gonna/Snow until June” and who is busy plotting ways to island hop with the first available guy with his own boat she can find; and the protagonist of the title cut, presumably some guy with his own boat she can find; and the protagonist of the title cut, presumably some version of Buffett himself. The song is an odd little paean to the sea that ends with the immortal line, “I’m just glad I don’t live in a trailer.” Then, too, there are such vignettes of everyday Buffett life as Cheeseburger in Paradise, a gory fantasy about a cheeseburger and its siren lure to anyone who is dieting. “Son of a Son of a Sailor” is another quirky, intelligent, and slyly funny album by Jimmy Buffett, someone whose cult following is at last swelling into the wider popularity he so well deserves. 

**PERRY COMO: Where You're Concerned.** Perry Como (vocals); orchestra. Feelings; There’s a Kind of Hush; When I Need You; Greensleeves; We’ll Meet Again; and five others. RCA AFL-1-2641 $6.98. © AFS1-2641 $7.98. © APK-1-2641 $7.98. Performance: Urbane Recording: Cozy

As un hurried and as urbane as ever, Perry Como lazest through a collection of such new and old material as You Light Up My Life and Greensleeves with all the familiar warmth and soft sell geniality that has made him a star for all these years. He’s particularly good on the old Herman’s Hermits hit There’s a Kind of Hush, and he’s spectacularly bad only once here. That’s in a hambock swinging performance of Someday I’ll Find You, in which he gives the definite impression that he doesn’t give a good damn whether or not he ever does, and in which his reluctance to enunciate final d’s gives Noel Coward’s lyric an entirely new meaning: “I’ll find you/Moonlight behind you.” Oh well, Cary Grant wasn’t the world’s most precise line-reader either. Most of this album was recorded in London, and it has the cozy, sweet-tooth charm of those little boxes of Opera Cremes that they sell in the theaters there. 

**JIMMY BUFFETT: Son of a Son of a Sailor.**

**Lion; Black Soul; Man in the Hills; and three others. ISLAND ILPS 9513 $6.98. Performance: Bailable and aggressive Recording: Good

Burning Spear, one of the more aggressive reggae groups, is caught here in a live performance from the Rainbow Theatre in London. Winston Rodney, the lead vocalist, has a baleful way with a lyric, and the group seems intent on nailing you down to the mat while they shout angrily at you. It’s all well and good, I suppose, if you’re into that sort of thing, but since I’m not convinced that all reggae is a soul cry or that such things as Slavery Days and Throw Down Your Arms are much more than yet another restatement of already registered grievances, I am able to pass this album by without the slightest twinge of guilt. P.R.

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**CRACK THE SKY: Safety in Numbers.** Crack the Sky (vocals and instrumentals). Nuclear Apathy; Long Nights; Flashlight; Prelude to Safety in Numbers; Lighten Up McGraw; and three others. LIFESONG JZ 35041 $7.98, © JZA 35041 $7.98, © JZT 35041 $7.98. Performance: Excellent Recording: Very good

Crack the Sky is a band from the Ohio River Valley which writes and plays in what I would call a Lennonesque style—that is, their music is reminiscent of those late-Sixties songs that explored individual and mass neuroses and psychoses. Up until now, the group had relied on member John Palumbo to provide their material, but he’s gone solo. His songs fill side one, and while the group’s performance of them is thorough, the material is somewhat ho-hum Dadaism.

But side two is another story entirely. The material here was written by the band, their producer Rob Stevens, and a young lady named Deborah Kucan. The side opens with Lighten Up McGraw, which contains the wonderful lines “My lady does yoga/My lady does me/And I do my lady/Whenever I’m free.” Give Myself to You has an interesting construction, but it doesn’t have the visceral shock that the other selections do. The big number, closing out the album, is the title tune, and it is something of a small wonder; the chorus is hypnotic, the lyrics describe a battle for self-perception, the performance is emotional but disciplined, and the excellent production contributes much to the mood. It’s definitive as a one-sided album, but oh, man, that second side! J.V.

**THE DAISY DILLMAN BAND.** Daisy Dillman Band (vocals and instrumentals). Turn My Head; Hoedown; Darlin’ Companion; Flyin’ Solo; Mexican Nights; and four others. UNITED ARTISTS UA-LAS38-G $6.98. Performance: Good Recording: Good

The thing about this is how authoritative it is, coming from a band I never heard of and brush enough to tackle several different styles of song. The band sounds like an all-star team of take-charge guys, and it does all the technical things, starting with singing, pretty well. On the other hand, it is without a motif of its own. You might hear honey-sweet guitar one minute, in some kind of rock-jazzy figure, and then the next song will be dominated by a gritty steel guitar. The band sounds like first one band and then another. Even so, if you’re going to do it, do it with authority: some nice stuff is salvaged here. And the songs, including some originals, are more interesting than the average, and considerably more tuneful. I don’t play it as an album any more, I just play the one or two tracks I’m in the mood for. It works pretty well that way. N.C.

**LEE DORSEY: Night People.** Lee Dorsey (vocals); instrumental accompaniment. Say It Again; God Must Have Blessed America; Soul Mine: Keep On Doing It to Me; Thank You; and four others. ABC AA-1048 $7.98, © 8020-1048(H) $7.95, © 5020-1048(H) $7.95. Performance: Good, but ... Recording: Very good

When oh, when, is whoever owns the tapes of Lee Dorsey’s original hits going to release a

(Continued on page 98)
“All work and no Mustang sounds like a pretty dull lifestyle.”

Lose yourself in the sporty spirit of the ’78 Ford Mustang II... base sticker priced less than last year. Let this wide-open T-top convertible take you away from an ordinary day. Or maybe you'd prefer the elegant Ghia or the 3-door Hatchback. And you can opt for a Rallye Package, oversize tires, choose from 5 different kinds of wheels, 7 different interiors and 14 great exterior colors. So visit your Ford Dealer and go Mustang. It could make your life a lot more fun.

FORD MUSTANG II
FORD DIVISION
75° ANNIVERSARY
"Best of" album? There are valid commercial and historical reasons for doing so. Ya Ya, Workin' in the Coal Mine, Everything I Do Gon' Be Funky, Ride Your Pony, Get Out of My Life, Woman, and others are not only examples of infectious humor—a rare commodity in rock—but also sterling examples of the early and middle period of the brilliant Allen Toussaint. Dorsey's career is inseparable from Toussaint's, who wrote and produced Dorsey's hits before he himself became famous. Their collaborations—no, a better word would be syntheses—are also examples of the unique New Orleans brand of rock that flourished on a local, regional, and sometimes national level between, roughly, 1950 and 1970.

Toussaint, to his credit, has remained loyal to Dorsey the artist, but I find the same lack in "Night People" that I did in Dorsey's "Yes I Can". L.P issued on Polydor in the early Seventies: there is little or no humor. By "humor" I don't mean belly-laughs or deliberately sooky-boffo one-liners but the wry and dry comments on people and life that made Dorsey's Sixties hits especially endearing.

Not that Dorsey can't be ingratiating with the straightforward black pop numbers written by Toussaint for this outing. But except for one item, God Must Have Blessed America—which is, believe it or not, a patriotic song—the tunes could have been sung just as well by any capable soul vocalist. Why doesn't Toussaint let his and Dorsey's natural good humor come through? The problem may be that since Toussaint has become so deservedly well known he doesn't feel as freewheeling as before the spotlight hit him. He should loosen up and let Dorsey do what he does best, which is to charm, tease, cajole, tickle, and embrace the listener with music that could come only from the glorious city of New Orleans.

J.V.

JOE ELY: Honky Tonk Masquerade. Joe Ely (vocals, guitar); instrumental accompaniment. Cornbread Moon; Because of the Wind; Boxers; Jericho; I'll Be Your Fool; West Texas Waltz; and four others. MCA MCA-2333 $6.98, ® MCAT-2333 $7.98, ® MCAC-2333 $7.98.

Performance: Better
Recording: Good

This album is considerably more impressive than Ely's last one, and I think the difference is taste. This one has some. Ely still seems to be trying to have two or more styles of singing at once, but his voice has potential. There are stretches here of hardnosed honky-tonk sound (if the beat doesn't get on your nerves you can be an honorary redneck), and then there's some other stuff with an accordion in there, rather impressive on Cornbread Moon and West Texas Waltz. Sometimes the songs are boring, though, and sometimes the instrumentals are too. But it's progress. Ely has the makings of a singer with one foot in honky tonk and the other turning up some decent turf elsewhere.

N.C.

ERUPTION. Eruption (vocals); instrumental accompaniment. I Can't Stand the Rain; Movin'; Computer Love; The Way We Were; Do You Know What It Feels Like; and four others. ARIOLA AMERICA SW 50033 $7.98.

Performance: Spirited
Recording: Good

Image has become so important in this visual age that a group or artist can be demolished by tacky presentation. It would be too bad if that happened with this album, which features a promising new singer called "Precious Wilson." Not only is the cover art abrasively ugly, but the poorly reproduced back-cover photo of Wilson and her four male colleagues shows them attired in costumes that must have been left over from a Halloween parade. Yet Wilson sings with spirited abandon, biting into the Ann Peebles hit I Can't Stand the Rain with gutsy relish. She rejuvenates the old Staples Singers standard I'll Take You There and gives Gladys Knight a run for her money on The Way We Were. Unfortunately, the album sinks to the lower levels of mediocrity when she relinquishes center stage to her male buddies, who do not sing nearly so well.

Precious Wilson has a talent that could benefit from careful polishing, but first she must break out of the third-rate setting into which she has been cast. Otherwise, she'll be ground to dust on the floors of the discos.

P.G.

GOOD RATS: From Rats to Riches. Good Rats (vocals and instrumentals). Taking It to Detroit; Just Found Me a Lady; Mr. Mechanical; Dear Sir; Let Me; Victory in Space; and The truth is clearly seen in every Scotch Master Cassette, thanks to our see-through cassette shell. You can see the unique roller guides that reduce friction by moving the tape evenly across the head. And the two radially creased shims that insure a smoother wind, improved mechanical reliability and reduced wow and flutter. Even the recorder head penetration.

The sexy, see-through Master Cassette shell makes it kind of like getting the naked truth.
There are few bands that demonstrate a will to survive equaling that of the Good Rats. For nearly ten years they have been sloughed off and mistreated by various labels, club owners, booking agents, and sundry other music-biz types. Occasionally they have recorded excellent albums, but in all cases lack of interest or competence on the part of the label has caused Good Rats LP's to die prematurely.

Founder and lead singer Peppi Marchello is understandably frustrated; he is one of the few rock vocalists in the high-decibel category who genuinely sing from anger. Having taken such an undeserved battering from the world, it’s not surprising that Marchello and the Rats seek revenge on those rare occasions when they do record: Just Found Me a Lady is a send-up of the commercial single they should supposedly record to make it big; Dear Sir is a to-hell-with-you salute to all the people and institutions that are rich, smug, and fat via compromise; Local Zero is a unique, long-overdue attack on the corruption of musicians' unions; Don’t Hate the Ones Who Bring You Rock & Roll is an amusing and affectionate yet tough anthem to their loyal fans.

Most hard-rock bands play for volume’s sake; the Rats play hard and loud as a way of maintaining and celebrating their survival. In some ways they resemble the messianic decremented newscaster in the film Network, who advises his audience to open their windows and scream: “I’m mad as hell and I’m not going to take it any more!” Madder than hell the Rats are—but they can take it: that’s their glory.

ROBERT GORDON AND LINK WRAY: Fresh Fish Special. Robert Gordon (vocals); Link Wray (guitar); instrumental and vocal accompaniment. The Way I Walk; Red Cadillac, and a Black Moustache; If This Is Wrong; Five Days, Five Days; Fire; and five others. PRIVATE STOCK PS 7008 $7.98.

Performance: Fair
Recording: Variable

Robert Gordon had something of a chart hit in 1977 with a single called Red Hot. On "Fresh Fish Special" he is teamed for the second time with veteran guitarist Link Wray, whose instrumental Rumble was one of the big hits of the 1950’s. Wray is a past master of first-generation rock guitar, but Gordon comes across here as little more than an Elvis Presley imitator. What the album purports to recall is not Presley’s vocals but the musical style he represented in the 1950’s, when “rockabilly” or white rhythm-and-blues was as much a social force as a musical one. But the intentions behind the album are moot now that Presley’s death has spawned a host of imitators doing “tributes.” While Gordon is not a morbid emulator, fate and history have compromised him and ghoulish showbiz has made his act seem to be just one more in an already overcrowded field.

J.V.

DEN HILL: Longer Fuse. Dan Hill (vocals, guitar). Don Potter (guitar); Bob Boucher (bass); Larrie Londin (drums); other musicians. Sometimes When We Touch; 14 Today; In the Name of Love; Crazy; Jean; and five others. 20TH CENTURY T-547 $6.98.

Performance: Promising
Recording: Variable

Dan Hill goes against the grain of Johnny-come-latelies to the Hit Parade (and if they
aren't calling it that again yet, stand by). He makes genuinely emotional music that seems to get a listen from Young America (that one back yet?), which certain market analysts thought was into jingles turned out by Barry Manilow and other robots. Well, at least Sometimes When We Touch got a listen. Hill's album comes to us from Toronto, and it sounds like a throwback to the early Seventies—the troubadour and the personal song and all that. Do you suppose they've still got some hippies up there in the big C? Might be worth checking out. Hill has a young-sounding voice, which may have helped him make his commercial splash, although I suspect it was an odd combination of things, for his writing in general is not what I'd call commercial. He has a nice, pliant voice, backed here by jangly-to-slick (but not crowded) arrangements, and his album suggests that we could do worse, nostalgia-wise, than the early Seventies.

Eddie Kendricks: Vintage '78. Eddie Kendricks (vocals); vocal and instrumental accompaniment. How's Your Love Life Baby: The Best of Strangers Now; Don't Underestimate the Power of Love: Whip; and six others. ARISTA AB 4170 $7.98.

Performance: Unremarkable
Recording: Good

There can be no doubt that Eddie Kendricks, who was one of the original Temptations, is one of the best r & b singers around. His high but distinctly masculine voice cannot easily be mistaken for anybody else's, and he knows what to do with it. But that's about it. "Vintage '78" indicates. He desperately needs some better material to display his talents. The songs here sounded familiar the first moment I heard them—and I got tired of every one before it ended. The album sounds like a lot of the "original" music I've been hearing over the past several years: the same beats, the same tired song lyrics, the same utter lack of musical content or imagination. But I'll wager that Whip, at least, will be pumped up into a hit, as there are any number of undiscriminating souls out there gobbling up records these days. Perhaps they are getting what they want—and deserve. But Kendricks does have something to offer. He would have been better off had he chosen some songs that, even though not "original" with him, at least had a minimum of musical merit.

P.G.

RECORDING OF SPECIAL MERIT

LAVENDER HILL Mob: Street of Dreams. Lavender Hill Mob (vocals and instruments). Dream Away; The Ballad of Molly McGuire; Make Up Your Mind; Good Livin'; Roll 'n Ride; and four others. UNITED ARTISTS UA-LA818-G $6.98, CA818-H $7.98.

Performance: Solid rock
Recording: Good

Well, the Lavender Hill Mob out of Canada reminds you of the Beatles. The early Beatles of the naive, hand-hold lyrics, you understand. Light, airy vocals that aren't as versatile as the Beatles', perhaps, but showing a definite propensity for using voices, for seeing harmony as something beyond everybody singing at the same time. The instrumental part is tight, a throwback to the rock bands that flourished ten years ago, and the Lavender Hill Mob has an affinity for melody. The lyrics here are almost all puff, though, and not even an orgy of inventiveness (and there almost is one here) can bail out one more tired rock-and-roll song on the subject of rock-and-roll. which is what Rock 'n Roll Holiday is. But invention is put to good use elsewhere, especially in Make Up Your Mind, and isn't it nice to see an inventive rock group come along in 1978? After you get over the shock, I mean.

N.C.

RECORDING OF SPECIAL MERIT

Nick Lowe: Pure Pop for Now People. Nick Lowe (vocals, bass, guitar); instrumental accompaniment. So It Goes; (I Love the Sound of) Breaking Glass; Tonight; Marie Provost; Heart of the City; Rollers Show; They Called It Rock; and five others. COLUMBIA 35329 $4.98.

Performance: Slightly dazzling
Recording: Excellent

Nick Lowe has done something both remarkable and long overdue on "Pure Pop for Now People." He's called the bluff of nearly all the purveyors of revivalist pop fluff now working and exposed them for the preening poseurs they actually are. Unlike, say, Elton John, who claims that "pop music should be disposable" and then proceeds to dispense ponder-
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ertsly "significant" piffle that would be embarrassing coming from anybody dressed in normal clothes. Lowe absolutely refuses to write for Posterity. Instead, he has concocted a group of songs that are exquisitely, even commercially tuneful, comprising a mini-encyclopedia of the pop styles of the last two decades, and then deliberately rendered them meaningless. He's done this in a variety of ways, my favorite being the purposeful mismatching of words and music, as in his Marie Prevost, a gorgeous Beatles pastiche (Eric Carmen must be gnashing his teeth in envy) whose lyrics recount the tender true story of a faded silent-movie queen who was eaten by her pet dachshund. A sample inspirational verse: "She was a winner/Who became a doggie's dinner."

Lowe can afford to be such a wizeass for the simple reason that his grasp of his craft is so sure. Tonight, for example, is a McCartney sendup that is both empty-headed and more melodically memorable than anything that McCartney (who possesses perhaps the purest pop sensibility in the Western World) has done since the Beatles went down the tubes. I have no doubt that, given sufficient financial inducement, Lowe could with equal success write for Posterity. Instead, he has concocted a group of songs that are exquisitely, even commercially tuneful, comprising a mini-encyclopedia of the pop styles of the last two decades, and then deliberately rendered them meaningless. He's done this in a variety of ways, my favorite being the purposeful mismatching of words and music, as in his Marie Prevost, a gorgeous Beatles pastiche (Eric Carmen must be gnashing his teeth in envy) whose lyrics recount the tender true story of a faded silent-movie queen who was eaten by her pet dachshund. A sample inspirational verse: "She was a winner/Who became a doggie's dinner."

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**MANHATTAN TRANSFER: Pastiche.** Manhattan Transfer (vocals); orchestra. *Four Brothers: In a Mellow Tone: Walk in Love* and eight others. ATLANTIC SD 19163 $6.98.

**Performance:** Camp chic

**Recording:** Deliberately dated

The Faustian deal that Manhattan Transfer made early in their career (they'd rather drip with nostalgic camp chic and win immediate acceptance from a fashionable clique that doesn't care much about music anyhow than get out there and perform as themselves in the Seventies) is still paying off. They run through everything on "Pastiche," including the great Porter Love for Sale, with all the dreariness of a Forties radio group, a re-creation they seem to find endlessly amusing. And they still give me gas pains. When they attempt to perform the French song Je Vous Aime in a style approximating what's been going on in the last thirty years or so, they fall flatter than a punctured soufflé. The arrangements by Ira Newborn, which seem to be a fast reshuffling of old Ray Noble and Ted Strayer charts, fall even flatter than that. P.R.

**MANHATTANS: There's No Good in Goodbye.** Manhattans (vocals); instrumental accompaniment. *There's No Good in Goodbye; Then You Can Tell Me Goodbye; Tomorrow; Share My Life; Am I Losing You;* and five others. COLUMBIA JC 35252 $7.98, @ JCA 35252 $7.98. @ JCT 35252 $7.98.

**Performance:** Mellifluous

**Recording:** Very good

There is an abundance of good, old-fashioned group singing to be heard here. This quartet favors relaxed, medium-tempo ballads with romantic lyrics, which they sing most convincingly, especially on Tomorrow, from the Broadway musical Annie, which sounds like no child's fare here, and You're My Life. Rather than trying to arouse the listener by snorting, shouting, and screaming, they sort of curl up behind the ear and stroke it into sweet contentment with their mellifluous voices. Thanks to the Manhattans, the male vocal group may no longer be an endangered species.

**BARRY MANILOW: Even Now** (see Best of the Month, page 91)

**RECORDING OF SPECIAL MERIT**

**PETER NERO: Now.** Peter Nero (piano); Richard Nanista (bass), Andy Zoob (drums). I'm Beginning to See the Light; Satin Doll; Take the "A" Train; Don't Get Around Much Any More; I Let a Song Go Out of My Heart; and three others. CONCORD JAZZ CJ-48 $7.98.

**Performance:** Witty and stylish

**Recording:** Excellent

Freed from big-company dreams of replacing Roger Williams at the cash register and given a good Duke Ellington repertoire, Peter Nero turns out to be every bit as good a pianist as his original mood-music hype claimed he was. He roars through the Ellingtoniana here with wit, an abundant jazz style, and a jaunty rakishness that truly becomes him. It's all a welcome far cry from his former glossy, tinseled

*(Continued on page 104)*

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CR4025

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The Pirates: metallic, fast, and flashy

quite overwhelming. Robbie Robertson of the Band must have played like this during his scuffling days with Ronnie Hawkins, and the latter-day Dr. Feelgood (who were instrumental in arranging the Pirates' return) owe them an enormous debt. Side one was recorded live, and the sleazy club atmosphere is faithfully caught; side two, recorded at Dave Edmunds' Rockfield Studio, is just as aggressive and similarly dank. The tunes are short and to the point; nothing innovative, of course, but the basics, when done this authoritatively, are more exciting than even I would have believed possible. Terrific stuff. Now all that remains is for these guys to wipe out the Ramones in a high-school Battle of the Bands.

S.S.

CHARLIE PRIDE: Someone Loves You Honey. Charley Pride (vocals); instrumental accompaniment. Someone Loves You Honey; Georgia Keeps Pulling on My Ring; I Live You; Play, Guitar, Play; More to Me; Days of Our Lives; and five others. RCA APL1-2478 $6.98, ® APS1-2478 $7.95, ® APK1-2478 $7.95.

Performance: Above the material
Recording: Very good

If I seem to be writing the same Charley Pride review over and over it's because Charley Pride keeps recording the same Charley Pride album after album over and over again. Most of the songs are of no consequence. Several have mediocre hooks—"I don't love you, I live you" doesn't quite make it—which I take to be a consequence of the shallow, rose-colored outlook they take. Now and then, of course, there's something like Days of Our Lives, derivative but engaging and smartly paced. Other country singers find semi-outrageous words to sing regularly, and I wish Charley would once in awhile. He's got too good a voice for this piffle. Something about him, though, wants to hide in bland lyrics and tired chord progressions. Oh, there's an occasional song he'll come out for—say, if you could get into listening to the regular mush he could teach you a thing or two about singing—but mostly, again, it's such a noncommittal record it's committal by default.

N.C.

SHARON REDD/ULA HEDWIG/CHARLOTTE CROSSLEY: Formerly of the Harlettes. Sharon Redd, Ula Hedwig, Charlotte Crossley (vocals); instrumental accompaniment. Ain't No Man Worth It; Cash In; Maiden Voyage; Put It Where You Want It; and four others. COLUMBIA JC 35250 $7.98, ® JCA 35250 $7.98, ® JCT 35250 $7.98.

Performance: Tame
Recording: Arch

This is an overproduced misfire by three singers who should, considering their past, be fun and funny but somehow aren't. Sharon Redd, Ula Hedwig, and Charlotte Crossley formerly were the Harlettes. Sharon Redd, Ula Hedwig, and Charlotte Crossley formerly were the Harlettes. Better Midler's back-up group; now on their own, they sadly miss the electric presence of the Hussy from Hawaii. Part of the problem here is that the production and the arrangements have no real wit, only an overbearing archness. In Put It Where You Want It, a really funny, bawdy song, they give us a tame sort of hip swinging where what's called for is the old sock-it-to-em kind of bump and grind that, say, a modern-day Nellie Lutcher or Dinah Washington could
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AIWA

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casually dispense. All through the album the three women seem to be having their punches pulled, and it's too bad, because in their days with Midler they seemed a truly amiable trio of dangers to society. Well, that's what you get for cleaning up your act in these enlightened times, I suppose.

KENNY ROGERS: Ten Years of Gold. Kenny Rogers (vocals, guitar); Jim Colvard (guitar); Tommy Allsup (bass); Pete Drake (steel); other musicians. Ruby Don't Take Your Love to Town; Reuben James; But You Know I Love You; Somethin' s Burning; Just Dropped In; Today I Started Loving You Again; and four others. United Artists UA-LA835-H $7.98. © EA835-H $7.98. © CA835-H $7.98.

Performance: Mumble, Memory! Recording: Good

By George, as aging troubadour Gordon Lightfoot likes to say in that macho-courtly way of his, you're getting close to middle age if you can remember some of these ditties without hearing a few bars. How Reuben James, for example, once clodhopped along the huckabacks of Kenny Rogers' mind, or anything about how Something's Burning goes. Now me, I remembered the very first First Edition hit from back in 1968, Just Dropped In ("to see what condition my condition was in, yeah, yeah oh yeah"), which Mickey Newbury wrote, and But You Know I Love You from about the same time, which Mike Settle wrote. I still don't remember associating Rogers with some of these. But anyway, He's done them all with Nashville studio musicians. Ruby Don't Take Your Love to Town; Reuben James; But You Know I Love You; Somethin' s Burning; Just Dropped In; Today I Started Loving You Again; and four others.

RUFUS: Street Player. Chaka Khan (vocals); Rufus (vocals and instrumental); other musicians. Change Your Ways; Turn; Blue Love; Best of Your Heart; Destiny; and five others.

RUFUS AND CHAKA KHAN: much credit to the lead singer.
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CIRCLE NO. 63 ON READER SERVICE CARD
ARE the womenfolk going soft again? Certainly the style has swung toward the old idea of what’s “feminine.” There’s the return of “pretty” clothes, the return of short and/or fussed-over hairstyles, the return of lipstick, the return of the bra. And there’s the return of brashness among those who have a commercial stake in these trappings—no small consideration in the late Seventies, whose one overwhelming motif we can all agree on is rampant hype.

Nobody expected bra-burning to continue into this era, of course—but what’s reappearing in its stead seems to approach the other extreme, especially in the area of hype. There is, for example, a Playtex television commercial for a push-up bra, and the voice-over invokes everything from before and-after exclamations to euphemistic language for how to snag a man. Such stuff is put together by people who like to think they know the mood of the country, and they interpret that mood to mean not only that they can get away with this sort of thing but that they can cash in on it as well.

WHAT got me onto this track was listening to new albums from two women singers whose careers sort of arched over the confrontation phase of women’s politics in the early Seventies—although not exactly as if it weren’t there. In fact, both Mary Travers’ “It’s in Everyone of Us” for Chrysalis and Dusty Springfield’s “It Begins Again” for United Artists contain one song each dealing more or less head-on with woman’s place and what to do about it. Travers sings Good News (For the Lady), a Melissa Manchester/Carol Bayer Sager song that doesn’t say there is any good news for the lady, but “let’s hear some.” “She’s coming up from far behind,” it says. Springfield’s counterpart is Sandra, co-written by Barry Manilow, ironically enough (speaking of hype and the later Seventies), which starts out, “She’s a great little housewife... (though sometimes she talks like a fool...).” By and by Sandra herself says, “I swear I love my husband, I love my kids. I wanted to be like my mother. But if I hadn’t done it as soon as I did, I might have had time to be me.”

Both albums have “pretty,” often volup-tuous instrumental arrangements, definitely on the soft side, and both are apparently aimed at a general, even amorphous, middle-of-the-road pop audience. But they aim at it in different ways. Mary, the old folkie, still prefers a straight-ahead song, so hers takes aim at the middle portion of the road; Dusty tries to make her average out to the middle by taking a number of shots to the left and right of it. Dusty is really a jazz singer, but she’s always dabbled in “straight” pop and has occasionally clicked with that market. Her singing is ornamented, but she makes that seem incident-ally; like Mary and other folkies, she gives priority to what the words say (even in a disco tune) and the emotions their message stirs.

Both have been around for some time, and both these albums have a modified “comeback” feel to them. Both singers were veteran businesswomen before the women’s movement made that a fashionable goal—indeed, before there was a women’s movement. Yet neither, if you take Peter and Paul out of Mary’s picture, has ever attracted as much attention as some of us thought they both would. Both are stylists, however, throw-backs to the pre-rock Fifties, and to the degree that the Seventies are the Fifties recycled, especially where the style of femininity is concerned, that characteristic may now turn up something.

Travers’ style is tawny—I think that’s the best word. She works the low notes better than the high ones, a fact she should have considered before including the Hollies’ The Air That I Breathe in this one, since its chorus needs to be at least a fifth higher than she pitches it to really zing (the way it did for the Hollies themselves). Dusty has a fairly im-pressive range when you think about it, but what she’s particularly good at is working the (fairly) high notes, making certain parts of a song shimmer, or giving a kind of breathy desper-action (where it’s appropriate) in the transition area between head voice and falsetto. Technically, she’s quite a singer, this Dusty, but still the thing about her is style; she has a distinctive sound of her own, and no matter where she is on the scale she always sounds like herself.

So we have here two old-fashioned song stylists in two albums that seem to embrace the latest softness in women’s styles—yet in neither case is the embrace a mindless grab toward Fascinating Womanhood or Phyllis Schlafly or anything else along those reactionary lines. The given behind these albums, like the given behind the styles of so many women who know the ropes nowadays (and any woman who’s been in the music biz longer than a decade knows some pretty mean ropes), is that the consciousness-raising part of it is a fait accompli. And now we go on to—what? Well, economics, for one thing; economics in the late Seventies seems to have everyone worried, even the Arabs. No sooner had women gotten the consciousness raised somewhat than we started running out of things. Survival itself popped back into our minds, and when that happens we tone down the rhetoric, whether it’s done its job or not (the reaction against the Equal Rights Amendment in many states leaves that debatable, to say the least). The old cliché about soft entertain-ment for hard times is tacitly invoked. The middle of the road becomes a more popular place. These albums probably illustrate more about that than they do about “whither wom-an” per se, yet both reflect that the conscious-ness-raising part has happened and is still happening in quieter, more private ways.

The only question that bothers my mind is whether the next generation, in an era of ram-pant hype, is getting the message in its new unhyped form. I’d like to think so; the idea that subtlety is not dead in 1978 is a hearten-ing one indeed.

—Noel Coppage

DUSTY SPRINGFIELD: It Begins Again... Dusty Springfield (vocals); instrumental accompaniment. Turn Me Around; Checkmate; I’d Rather Leave While I’m In Love; A Love Like Yours; Love Me by Name; Sandra; I Found Love with You; Hollywood Movie Girls; That’s the Kind of Love I’ve Got for You. UNITED ARTISTS UA-LA791-G $6.98, © UA-EA791-H $7.98, ® UA-UA791-H $7.98.

MARY TRAVERS: It’s in Everyone of Us. Mary Travers (vocals); instrumental accompaniment. Single Wing; The Eye of the Day; You Turn Me Around; The Air That I Breathe; Part of the Plan; Home Is Where the Hurt Is; It’s in Everyone of Us; Good News; Will We Ever Find Our Fathers. CHRYSLIS CHR 1168 $7.98. © 8CH 1168 $7.98. © CCH 1168 $7.98.
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STEREO REVIEW

Wha-Koo: an impressive combination of fun and spleen venting

Awake; Sweep, Chimney Sweep; The Wife of the Soldier; The Victory; and four others. Chrysalis CHR-1151 $7.98.

Performance: Disappointing
Recording: Excellent

This strained and dispirited album serves as a rather unsatisfying memento of a group that has now given up the ghost (for the usual ‘‘We still like each other personally but want to pursue our separate interests’’ reasons) and was already floundering in earlier releases. It’s especially disappointing since Martin Carthy, the highly respected grand old man of the English folk scene who had rejoined the band just prior to this recording, does not seem to have provided the musical focus the Span so desperately lacked. The version of Pirate Jenny here is a prime example of the group’s problem: Brecht/Weill’s chilling dementia is ill served by vocalist Maddy Prior’s eminently sane English approach. For the rest, there’s none of the visionary sixteenth-century heavy-metal synthesis the band perfected on ‘‘Parcel of Rogues’’ or ‘‘Commoner’s Crown.‘’ Just a lot of half-baked ethnic authenticity that’s about as yawn inducing as Judy Collins at her most numbingly ‘‘purist.‘’

S.S.

VALENTINE: Valentine (vocals and instruments); other musicians. I Just Don’t Know; Here I Am; Light of My Life; I’ve Got It; and eight others. RCA APL1-2372 $7.98. © ABC AB-1043 $7.98.

Performance: Very good
Recording: Excellent

“Berkshire” is a word used by Danny Douma, co-founder of Wha-Koo (formerly the Big Wha-Koo), to describe various insanities that city folk are prone to. Most of the songs on this group’s second album are portraits of people going or gone bonkers. The lyrics are often obscure—as with much contemporary literature, these have been written without concern for their being intelligible to outsiders—but the band has a wallowing energy that puts the songs over. Highly rhythmic arrangements, crisp playing, solid vocals, and a morose humor tie “Berkshire” together. Vocalist and co-founder David Palmer was a member of Steely Dan during its early days, and he is responsible, along with Douma, for most of the material. He also collaborated with William D. Smith, formerly of Motherlode, on the fine ballad Dreaming As One, which closes the album. Other outstanding cuts are the title track, in which the poets Dante, Rimbaud, and Baudelaire give free advice about madness, and the slightly mocking ballad Mother of Pearl. All in all, I will have to call this a most impressive combination of fun and spleen venting.

J.V.

BOB WEIR: Heaven Help the Fool. Bob Weir (vocals, guitar); Waddy Wachtel (guitar); Nigel Olsson (drums); Mike Porcaro (bass); David Foster (keyboards); other musicians. Easy to Slip; I’ll Be Doggone; Wrong Way; Heaven Help the Fool; and four others. Arista AR-1043 $7.98.

Performance: Middling
Recording: Very good

Bob Weir—isn’t he the boyish-looking one in the Grateful Dead? He sounds rather like a band singer in this one, which isn’t all bad, since the studio musicians he uses sound like a rock band that’s been together for years. He’s done a pretty good job of uncovering songs, a couple of clinkers excepted, of course, and he does a reasonably good job of singing, except he doesn’t let enough personality come through it. He’s singing back in...

(Continued on page 112)
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band on too many cuts, and on others he hides behind effects—almost seeming to be singing in an assumed voice a time or two. In my opinion, he'd be more interesting if he were more straightforward.

IKE WHITE: Changin' Times. Ike White (vocals, instrumental). Changin' Times; Comin' Home; Antoinette; and three others. L.A. International GGS 007 $6.98.

Performance: Good, but . . .

Recording: Good

If Ike White's "Changin' Times" were to be evaluated solely on its musical content, describing it would be relatively easy: it is more or less standard black soul/pop with all its clichés and claptrap, but it is performed with professional skill and attention to detail. White wrote or co-wrote all the material and plays nearly all the instruments, most prominently the guitar. As a guitarist he could easily pass for an experienced, talented studio musician. But it is unlikely that White's album will be judged solely on its musical content. On February 2, 1978, White was released from prison after serving fourteen years of a life sentence for first-degree murder. When he was seventeen, he and an accomplice held up a liquor store in Los Angeles. White shot the owner, and, though the wound was not fatal, the victim died of a heart attack.

During his years in prison White learned to play thirteen instruments, to notate music, and to arrange. A repentant and model prisoner, he attracted sponsors and well wishers. Among them were his manager, Steve Gold, who fought for years to have White released from prison (where this album was recorded, in a makeshift studio), and Stevie Wonder, whose endorsement appears on the back cover of "Changin' Times."

Black soul/pop both better and worse than White's has been commercially successful, but his music is not the real issue. The public will passionately embrace or reject the album because of the man who made it. Whether this is fair to the public, the music, or the man . . . well, see the problem?

J.V.

RECORDING OF SPECIAL MERIT

STEVE YOUNG: No Place to Fall. Steve Young (vocals, guitar); Mike Leech (bass); Karl Himmel (drums); Bobby Wood (keyboards); other musicians. No Place to Fall; Montgomery in the Rain; Dreamer; Always Loving You; Drift Away; Seven Bridges Road; and four others. RCA APL-2510 $7.98, © APOL-2510 $7.98, © APOL-2510 $7.98.

Performance: Make room, gang Recording: Good

The real people in music have another strong argument there. His singing is not exceptional technically in the subtler aspects—phrasing and so forth—but he has a good, strong, accurate voice. And he's very direct. So is the instrumentation in this one—and neither he nor it is exactly progressive country or exactly rock. What to call this album is easy enough, though; what you call it is a good album.

Colin Larkin

RECORDING OF SPECIAL MERIT

STIFFS LIVE. Elvis Costello and the Attractions, Nick Lowe's Last Chicken in the Shop, Wreckless Eric and the New Rockets, Larry Wallis' Psychedelic Rowdies, Ian Dury and the Blockheads (vocals and instrumental). I Knew the Bride; Let's Eat; Semaphore Signals; Reconnez Cherie; Police Car; and five others. STIFF STF 0001 $7.98.

Performance: Wonderfully berserk Recording: Good

Stiff Records, in case you've been living under a rock, is a wonderful little English label that specializes in marginally New Wave acts (marginal in the sense that they're unclassifiable as anything else). Elvis Costello, of course, is their most famous alumnus, at least in this country, but since Stiff's recent distribution deal with Arista all that may change. "Stiffs Live" is a souvenir of a 1977 package tour by their entire roster, and it is by and large a delight, ranging from the unexpected (Elvis crooning I Just Don't Know What to Do with Myself, an old Dionne Warwicke tune) to the revivalist (pop genius Nick Lowe and old mate Dave Edmunds tearing through some Seventies rockabilly) to the berserk (Semaphore Signals and Reconnez Cherie by Wreckless Eric, who comes across like a

(Continued on page 114)
The specifications of your cassette deck may look outstanding. But its actual performance — the quality of your music reproduction — can only be as good as the tape you use. To ensure optimum performance, all of the time, you need Fuji cassettes.

Consistency. Cassette tape performance can vary with each cassette tape. Consistent performance, however, can only be guaranteed by a company which produces all the elements that go into their tape. A company like Fuji. We make our own base film and our own binder material. We produce our own oxide and do our own coating. Stringent quality control, including factory testing of each cassette, further assures you of total reliability and highest fidelity, always.

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demented rock-and-roll counter boy at McDonald's. The closing number, with the whole crew joining in, sums up the general tone of the album: Sex & Drugs & Rock & Roll, a combination not to be sneezed at, at least not by me. In short, it's a bargain at twice the price and a marvelous corrective to almost everything on the radio at the moment. I wish I'd been there.

---

**RECORDING OF SPECIAL MERIT**

**CLAUDIA BARRY:** *Claudja.* Claudia Barry (vocals); the Syncophonic Orchestra (instruments). **CASABLANCA NBLP 7086 $6.98.**

*Performance:* High flying

*Recording:* Lush

This is solid disco—the lush, romantic kind—from the guy who brought us Love and Kisses. Forget the Romeo and Juliet theme; the music is arbitrarily seclined into "Acts" and some of Shakespeare's words are used (that's got to be a first for disco), but there is little real connection with the play and the words don't really matter. What matters is the dancing rhythm, and there Costandinos has his finger right on the pulse. The beat is hypnotic and the rich orchestration so interestingly varied that one fairly flies through the whole album.

—Edward Buxbaum

**THE FIFTH DIMENSION:** *Star Dancing.* The Fifth Dimension (vocals); orchestra. **Hold Me; Star Dancing; A Good Love; We Could Fly; Going Through the Motions; and four others. MOWTN M7-896R $7.98.**

*Performance:* A shot of adrenaline

*Recording:* Excellent

Despite the departure of Marilyn McCoo and Billy Davis, Jr., the Fifth Dimension hasn't changed much: they don't really need to. Their adrenaline-sparked style always did make me feel like dancin', and "Star Dancing," their newest disco-inflected album, only confirms that they are one of the sharpest, best rehearsed, best performing, and most carefully presented groups around. Everything they do, including such overripe mangles as You're My Lifetime Opera and You Are the Reason I Feel Like Dancing is, of course, as ephemeral as the effect of a slug of gin, but it sure is fun while it lasts. Recommended for all sorts of reasons—but mostly because of the fun.

—P.R.

**VICKI SUE ROBINSON:** *Half and Half.* Vicki Sue Robinson (vocals); vocal and instrumental accompaniment. **Trust in Me; Hold Tight; Freeway Song; Jealousy; and four others. RCA AFL1-2294 $6.98, ® AFS1-2294 $7.98, ® AFK1-2294 $7.98.**

*Performance:* Good

*Recording:* Good

This one's got an appropriate title, all right. Vicki Sue Robinson's album is half disco and half r.& b hard breathing, and, although it's obvious that she's an energetic performer, nothing ever quite comes together. At the moment, she just seems to be going around in circles hoping for a commercial breakthrough. The production and arrangements by Warren Schatz have the same please-like-me quality that makes you feel you'll offend someone if you don't listen. Well, after the first couple of bands I half did and I half didn't.

—P.R.

**JOE TEX:** *Rub Down.* Joe Tex (vocals); instrumental accompaniment. **Rub Down; You Can Be My Star; Get Back, Leroy; Be Kind to Old People; You Might Be Digging the Garden (But Somebody's Picking Your Plums); and five others. EPIC JE 35079 $7.98, ® JEA 35079 $7.98.**

*Performance:* Good, but . . .

*Recording:* Good

Joe Tex's warmhearted kidding of the disco-maniacs has brought him back to commercial success after a hiatus of some years. Ain't Gonna Bump (with No Big Fat Woman) was a hit single for him in 1977, and the album from which it was taken was a welcome return of the energetic entertainer. This follow-up album, though, pales after first hearing because the material is so repetitive despite Tex's undiminished humor and zip. It's a disc for dancing rather than listening.

—J.V.

**RECOMMENDED DISCO HITS**

- **LINDA CLIFFORD:** *If My Friends Could See Me Now.* **Custom K 5021 $7.98, ® M8U 5021 $7.98, ® MSU 5021 $7.98.**

- **KONGAS:** *Afroism.* **POLYDOR 16138 $7.98.**

- **VOYAGE:** *Marlin 2213 $7.98.*

(List compiled by David Mancuso, owner of the Loft, one of New York City's top discos.)

(Continued on page 116)
How to recognize the 5 most perplexing problems in high-fidelity speakers:

It is not the purchase price that gives value to an audiophile quality speaker but its ability to overcome the major problems inherent in reproducing sound. Recognize those problems, and the solution to determining a speaker's worth becomes readily apparent.

One. Coloration: Speakers should be seen and not heard. Speaker cabinets and components can "color"—add their own tones—to a musical piece.

Two. Sonic instability: Standard alignments of woofer, mid-range and tweeter can cause orchestral musicians to seem out of place. Piano and violin solos often seem to be played by two or more instruments.

Three. Vocal passivity: No instrument is more expressive than the human voice. And none is more difficult to reproduce.

Four. Volume distortion: If it cannot reproduce music faithfully with the volume adjusted either up or down, a speaker cannot offer audiophile responsiveness.

Five. Unnatural nature: The sounds of creation are also music to the ear. A warbling bird, babbling brook or clapping hands that do not express immediacy take the very life from nature.

How to eliminate the 5 most perplexing problems in high-fidelity speakers:

The solution is RTR's new D-Series speakers. From the Corinthian columned 300D and 600D to the curvilinear 100D bookshelf, every component is RTR designed, manufactured and assembled for problem-free performance.

True clarity and natural warmth so apparent in the D-Series starts with RTR's new 1.5 inch soft dome midrange. This break-through system offers optimal midrange response and broad dispersion while eliminating crossovers in the critical 1500-3000 Hz range. Nothing enhances, colors or subtracts from programmed material.

This same devotion to musical purity extends to the performance of the newly-stated RTR woofers and solid state super-tweeters. Throughout the system, reproduction is faithful to the human voice, musical instruments and natural sounds.

As a final triumph for the D-Series, RTR incorporates "resolved point source radiation field"—achieved by uniquely repositioning woofers, drivers and tweeters to create an almost unbelievably stable sonic image. Instruments and voices remain positioned as they were live.

Audition the 100D, 300D and 600D at your RTR dealer soon. And ask about our "Total Capability" program which means RTR not only designs and assembles all of its components but builds each as well.

That's the big difference between RTR and other manufacturers of audiophile-quality speakers. At RTR we don't just build speakers, we build solutions.

Listen... you'll be hearing more from RTR.
The Boys of the Lough, who bill themselves as "the only group to play music from the traditions of Ireland, Scotland and Shetland," are a lively group of musicians who have traveled far and wide, accumulating colleagues as they went. As a result, they have been able to say that soaks up all the aural glory of your system. Or say your room acoustics, poor speakers or poor program quality with the MXR Stereo Graphic Equalizer. Adjust for acoustics with 10 frequency controls plus level on each of two channels. Play with the lows, boost the mid-ranges, and soar with the highs. Make a small system sound big ... a big system sound mammoth. Hear it and the entire MXR line at fine audio stores. Or write MXR Innovations, Inc., 247 N. Goodman St., Rochester N.Y. 14607. Or call 716-442-5320. Also distributed in Canada by White Electronic Development Corporation, Ontario.

Everything but the effects of poor room acoustics, poor speakers or poor program quality with the MXR Stereo Graphic Equalizer.

Say you've got a room that's a lot like a sponge ... too soft and cushiony ... one that soaks up all the aural glory of your system. Or say your system's high fidelity just isn't high enough, whether the source is records, reels, waltzes, hornpipes, and jigs, some from as far away from their usual sources as French Canada. A high point of the program is Gaelic Mouth Music, nonsense phrases expertly projected by one Finlay MacNeill. Another kind of singing this group goes in for is "limping"—which sounds easier to do than it is. In all, this is an infectiously high-spirited concert of traditional music played by a lot of skilful performers who generate such a variety of sounds from their Uileann pipes, fiddles, flutes, whistles, bodhrans, and what have you that they never wear out their welcome.

**COLLECTION**


Performance: Poignant
Recording: Good restoration

"Jake"—a mixture of Jamaica ginger and alcohol—was a popular drink in the South and Midwest well before the Prohibition Amendment of 1920, and during Prohibition its use became widespread. Sold as a patent medicine, it had more punch than most legal mixed drinks; it was also cheap and readily available. In 1930 two Northern manufacturers adulterated a shipment of Jake with a chemical that caused permanent paralysis and impotence for some 50,000 drinkers. The uneven "Jake walk" became familiar, as did the "limber leg" of impotence.

This collection of contemporary and near-contemporary Jake songs is divided between white "hillbilly" and black blues treatments. The bluesmen were more prone to discuss the effects of the "limber leg" than their white counterparts. The white testaments to the effects of the mini-epidemic range from the grisly glee of fiddle tunes to the bluff and swagger of vocal items to Christian sympathy for stricken victims. The black songs are more passionate in their grief and descriptions of the terror that struck a man when he found himself a cripple.

Most of the Jake records were made between 1930 and 1931. To make the collection large enough to fill an album, some selections have been included that have little or nothing to do with the epidemic, although they contain references to "Jake," and some songs, if not performances, have been duplicated. There is also a bewildering mixture of different titles for variants of the same tune, and there are different songs that bear the same title. On the whole, though, the collection is powerful and disturbing, and the liner notes by John P. Morgan, M.D., are thorough and evocative of the times and social situation that led to the Jake disaster. This is a compelling piece of Americana.

**FOLK**

**THE BOYS OF THE LOUGH:** Good Friends—Good Music. Boys of the Lough (vocals and instrumentals). Breton Wedding/March/The Wild Irishman/The Scholar; Down the Broom/The Gatehouse Maid; Gaelic Mouth Music; Farewell to Gibraltar/Captain Horn/The High Road to Linton; Far from Home; Da Road to Houll; Hillswick Wedding/Robertson's Reel; Cadam Woods/The Bonnie Lass of Bon Accord; and eight others. PHILo PH 1051 $6.00.

Performance: Spirited
Recording: Very good

The Boys of the Lough, who bill themselves as "the only group to play music from the traditions of Ireland, Scotland and Shetland," are a lively group of musicians who have traveled far and wide, accumulating colleagues as they went. As a result, they have been able to call on a good many of these musical friends to come to their assistance in putting together this, their sixth album, an energetic farrago of marches, reels, waltzes, hornpipes, and jigs, some from as far away from their usual sources as French Canada. A high point of the program is Gaelic Mouth Music, nonsense phrases expertly projected by one Finlay MacNeill. Another kind of singing this group goes in for is "limping"—which sounds easier to do than it is. In all, this is an infectiously high-spirited concert of traditional music played by a lot of skilful performers who generate such a variety of sounds from their Uileann pipes, fiddles, flutes, whistles, bodhrans, and what have you that they never wear out their welcome.

**P. K.**
It's hard to find a $1,000 tape deck that doesn't use Maxell. Or a $100 tape deck that shouldn't.

If you spent $1000 on a tape deck, you'd be concerned with hearing every bit of sound it could produce.

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But if you're like most people, you don't own the best tape deck in the world and you're probably not using Maxell. And chances are, you're not hearing every bit of sound your tape deck is capable of producing.

Whatever you spent for your tape deck, it's a waste not to get the most out of it. So spend a little more and buy Maxell.

Maxell. You can think of us as expensive tape. Or the cheapest way in the world to get a better sounding system.

Performance: High-spirited
Recording: Very good

Back in the days of blessed memory, October 1941, a musical comedy about a college called Winsocki opened at the Ethel Barrymore Theatre and stayed there for 326 performances. The book was by John Cecil Holm, the music and lyrics by Hugh Martin and Ralph Blane, and the cast included, among others, Nancy Walker, June Allyson, and Rosemary Lane. The show was directed by George Abbott, and the musical numbers were staged by Gene Kelly. Two years later there was a movie version featuring, in addition to Walker and Allyson, such performers as Lucille Ball, William Gaxton, and Gloria de Haven. The plot of Best Foot Forward is the apotheosis of period inanity. Bud Hopper thinks it would be a good joke to invite the famous movie star Gale Joy as his date to the Winsocki prom. Her press agent tells her to accept this unlikely invitation for publicity purposes, and Bud's regular girl is smitten with jealousy. Souvenir-hunting classmates strip the visiting movie star to the buff at the prom, and there is nearly a scandal when the dean walks in. At the last moment, a fully dressed girl friend chalked up another 224 performances. The snatches of dialogue are inconsequential, but the sound of a mere two pianos, played by Buster Davis and William Goldenberg, comes as something of a relief to the ears after all those overblown orchestral accompaniments in other original-cast albums. This Best Foot Forward is foolish, but it's fun.

JEANETTE MACDONALD AND NELSON EDDY: Legendary Performers. Jeanette MacDonald, Nelson Eddy (vocals); instrumental accompaniment. Indian Love Call; Rose Marie; Italian Street Song; Ah! Sweet Mystery of Life; I'm Falling in Love with Someone; Sweetheart Waltz; Will You Remember? and eight others. RCA CPL1-2468(e) $6.98.

Performance: Dogged
Recording: Good, considering

She had big white pearly teeth, limpid, flirtatious eyes, and an elaborate coiffure of shiny red hair. His blond mane was wavy, his eyes a glazed-over dark brown, his expression as fatuous as a cocker spaniel's. Together they virtually cornered the market in movie-opera ballads. A visitor from another planet who heard them sing a love duet might well have thought they were one person (their fans, in fact, sometimes referred to them as "Eddy-Mac" or, as the liner notes here have it, "Nelson and Jeanette"). Most of the material on this "Legendary Performers" release from RCA appeared some time ago in a slightly different order on the same label, more imaginatively selected.

(Continued on page 122)

Suddenly there's a new name that eliminates the confusion (and ad-fusion):

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Two by Tony Bennett

There's no real point in reviewing new releases by Tony Bennett. His quavery baritone has been a part of the national pop consciousness for so long that everyone by now has his own opinion of his work. And how, without some kind of patronization, can one really review artistic growth? No, much better merely to note and celebrate the fact that for some time now Bennett has been releasing a series of small-scale, beautifully realized albums that are a distillation of what he has learned over the years about the art of pop singing.

His repertoire, as evidenced by his two newest albums—"Together Again," with Bill Evans at the piano, and "Tony Bennett Sings More Great Rodgers & Hart"—has narrowed down to the platinum perennials that are the true heart, soul, and guts of modern American songwriting. Bennett just doesn't seem to sing anything but the finest songs these days, and the results, as you can hear on these two albums, are singularly memorable.

Bennett's approach to (and background and training for) the works of popular art he performs is totally different from that of such other acknowledged interpretive masters as Bobby Short, Mabel Mercer, the late Teddi Ross, or Blossom Dearie. They have been the much-approached darlings of the cognoscenti from the very beginnings of their careers (it was the baby-grew-up-on-champagne-so-baby-never-orders-anything-else audience that claimed them immediately). Bennett, on the other hand, was a rough-and-tumble chart-urchin from his first public notice, all those years ago, when he zoomed from Rags to Riches (his famous, apparently uncontrollably sibilant "s" was often hilariously imitated by kids of that generation) straight on to several gold-record singles.

His material in those days never went much beyond the level of commercial-mediocre MOR. His most famous, probably most enduring hit, and the song with which he will always, happily or unhappily, be identified is I Left My Heart in San Francisco. It is an abysmally sentimental piece of claptrap, but—like Jolson with an even more glutinous horror called Sonny Boy or Nat "King" Cole with the glop-laden mysteries of Nature Boy—his performance of it struck some peculiar chord in the Great American Ear, and it lives on, attached to the Bennett image rather like a gilt albatross.

What has always come naturally to Bennett is his basic communicative powers: an out-front emotionalism and a do-or-die sincerity. In the early years they were all-pervading, and no matter what he sang he sounded like a pizza-parlor Camio. By about the time of San Francisco, however, they had been sharpened into effective tools of his trade, and today they are the unique dramatic apparatus that only he can bring to a song. His work in the Rodgers and Hart album, for instance, is as unique and as highly styled as Hart's lyrics. Bennett's style, in the Seventies, is of course light years away from Hart's lyric. Thirties' style. But, amazingly, it works—and beautifully. Whereas any or all of the aforementioned "class" singers attack Lorenz Hart's giddy, world-weary, amused, and more than slightly bitter words with the same brittle, who-gives-a-damn irony with which they were written (such offhand, art-deco immortals as Thos Swell, Mountain Greenery, You Took Advantage of Me, or I Wish I Were in Love Again), good old Tony croaks joyously through them like the happiest frog on the loveliest lily pad in the prettiest lake. Oh, he still slips and slides around the written note with all the carefree abandon of a nearsighted dart thrower, but then the music business has always been bulging with people who can hit all the notes. When he launches into the more wistful songs—and has anyone ever written more movingly wistful songs than Hart?—such as My Romance, This Funny World, or You're Nearer (this last on the album he shares with Bill Evans), he can be really superb. He checks the emotionalism and concentrates on the sincerity, producing readings that are affecting, sensitive, and probably different from any you've ever heard before. And the Ruby Braff/George Barnes Quartet is just as effective here as it was in its first Rodgers and Hart collaboration with Bennett, recorded about two years ago (Improv 7113).

It should be obvious by now that I think the Rodgers and Hart album has a slight edge over "Together Again," but that's because I'm a confirmed Rodgers and Hart freak—those lovely, sinuous melodies enveloping those acidic, melancholy lyrics. But that isn't to say that Bennett isn't equally fine on such things as Lucky to Be Me, Lonely Girl, or Make Someone Happy. He is, and Bill Evans' piano accompaniment is of the kind that most singers dream about.

Bennett's work in both these releases shows tremendous artistic growth and maturation; these aspects are unreviewable—they are just happily there. But I would like to make the point that these are two albums that belong on the shelf of anyone who loves and respects the work of our great popular songwriters, as Bennett himself so obviously does.

—Peter Reilly

TONY BENNETT AND BILL EVANS: Together Again. Tony Bennett (vocal); Bill Evans (piano). The Bad and the Beautiful; Lucky to Be Me; Make Someone Happy; You're Nearer; A Child Is Born; The Two Lonely People; You Don't Know What Love Is; Maybe September; Lonely Girl; You Must Believe in Spring. IMPROV 7117 $6.98.

TONY BENNETT: Tony Bennett Sings More Great Rodgers and Hart. Tony Bennett (vocals); the Ruby Braff/George Barnes Quartet. Thos Swell; The Most Beautiful Girl in the World; There's a Small Hotel; I've Got Five Dollars; You Took Advantage of Me; I Wish I Were in Love Again; This Funny World; My Heart Stood Still; My Romance; Mountain Greenery. IMPROV 7120 $6.98.
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(Continued on page 124)
Before you buy a DC integrated amp, find out how much DC you're getting.

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- Selectivity: Stereo 85 dB, Mono 915%. Stereo 0.3%. Capture Ratio: 1.0 dB.

RECORDING OF SPECIAL MERIT

NAT ADDERLEY: Don't Look Back. Nat Adderley (cornet); John Stubblefield (soprano and tenor saxophones); Ken McIntyre (bass clarinet, flute, oboe, alto saxophone); other musicians. Funny, Funny; Just a Quickie; Home; and three others. INNER CITY 2059 $6.98.

Performance: Inspired
Recording: Very good

Nat Adderley worked in the bands of Lionel Hampton, J. J. Johnson, and Woody Herman in the years before 1959, when he drew national attention as a member of his brother Cannonball's very popular quintet. Following Cannonball's sudden and untimely death in the summer of 1975, the group was dissolved, and Nat continued working in a similar mold with various groups of his own. This album, recorded the day after the first anniversary of Cannonball Adderley's death, was originally released on the Danish Steeplechase label. The septet here, whose members are mostly young, New York-based musicians, is more interesting by far than the celebrated Cannonball Adderley Quintet ever was. It swings more vigorously, without any deliberate effort to be funky, and its soloists exude youthful vitality. Adderley himself has rarely sounded better, reed men Ken McIntyre and John Stubblefield are equally inspired, and the rhythm section cooks marvelously through- out. The title, "Don't Look Back," is apt—Nat Adderley is definitely not on a nostalgia trip.

C.A.

GEORGE BENSON: Weekend in L.A. George Benson (vocals, guitar); instrumental accompaniment. The Greatest Love of All; Down Here on the Ground; Ode to a Kudu; We As Love; California P.M.; Lady Blue; and five others. WARNER BROS. 2WB 3139 two discs (Continued on page 126)

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Even if you're made out of money, you'd be hard pressed to buy more preamp.

The Phase 4000 Series Two goes way beyond the boundaries of conventional preamps. First, the 4000 processes and amplifies your music without introducing any significant noise or distortion. Then it actually compensates for losses in dynamic range and signal-to-noise ratios that occurred way back in the recording process!

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124 STEREO REVIEW
Record Ecology in DiscKit Form —you’ll save more than money

DiscKit is a milled walnut tray and dust cover that saves you 15% with the Discwasher products in the kit. ($46 versus $54 separately)

DiscKit includes: 1) The Discwasher System Record Cleaner with D3 Fluid, 2) the Zerostat anti-static pistol and test light, and 3) the SC-1 Stylus Cleaner.

But you’ll save more than money. You’ll save your records from imbedded micro-dust, your cartridge stylus from abrasion and your ears from a lot of static.

Record Ecology from Discwasher—a substantial bargain.

(Walnut tray and dust cover are available separately as the Discorganizer, $12.50.)

All from Discwasher, Inc., 1407 N. Providence Rd., Columbia, Missouri 65201.
Hancock, fellow traveler in electricland, is somewhere in there, too, but it might as well have been Joe Isitt. "The Mad Hatter" is what the recording industry likes to call a "concept album," but one gets the impression that Corea was more intrigued by the concept than inspired to realize it. The result is a strained, meandering, and no doubt costly trek toward no discernable terminus. The album may do well in the market place, for it will seem profound to disc jockeys and cub critics, who will predictably be awed by the smattering of "legit" sounds. If Corea does not kill Alice with his MXR digital delay, Oberhamer 8 Voice, ARP Odyssey, or various Moogs, she will surely gag on Gayle Moran's puerile lyrics.

C. A.

Not that Benson doesn't please—he does, continually—but, enjoyable though this album may be, nothing extraordinary takes place; it sounds as though its release was the result of a corporate marketing decision. J. V.

CHICK COREA: The Mad Hatter. Chick Corea (pianos, synthesizers, marimba, percussion); Herbie Hancock (electric piano); Gayle Moran (vocals); orchestra; The Woods; Treadle Dunn; Treadle Dee; Dear Alice; The Trial; and four others. POLYDOR PD-1-6130 $7.98. (Continued on page 128)

In 1923, drummer Dave Tough took Bud Freeman to hear the King Oliver band (with Louis Armstrong on second cornet) at Lincoln Gardens on Chicago's throbbing South Side. The experience set the seventeen-year-old Freeman on a course that has long since earned him a prominent place in the history of jazz. Before putting together his own band, the Summa Cum Laude Orchestra, in 1939, Freeman played in the big bands of Ray Norman, Tommy Dorsey, and Benny Goodman. But he has most often chosen to work with smaller groups, such as the two on this disc, which were assembled in Rudy Van Gelder's studio during the summer of 1955.

"The Test of Time" contains the results of two sessions, a quartet date with pianist Ken Kersey, bassist Al Hall, and drummer George Wettling (side two); and one featuring a quintet with Ruby Braff on trumpet and Dave

BUD FREEMAN: The Test of Time. Bud Freeman (tenor saxophone); Ruby Braff (trumpet; Joe Farrell (tenor); Eddie Gomez (bass); Monty Budwig (drums). At Sun Down; Let's Do It; Handid; Dave's Blues; But Not for Me; Exactly Like You; and five others. BETHLEHEM & BCP-6033 $6.98. Performance: No-frills mainstream. Recording: Crisp and clear mono.

Scott Hamilton's seasoned sound belies his age. Twenty-three years, he sounds like someone whose tenor should have caused feet to stomp at the Savoy and rattled the dust in the corners of some 52nd Street hangout back in the heyday of swing. His sonorous, breathy tone and delicate phrasing speak of a bygone era, not of a current one. But you might, as I listened to this album, but it's more a suggestion than a complaint, for there is nothing wrong here.

Trumpeter Bill Berry, a veteran of the Woody Herman, Maynard Ferguson, and Duke Ellington bands, opens up beautifully in the Hamilton company. Nat Pierce's Basie-ish piano fits in just fine, and Monty Budwig and Joe Farrell lay down an appropriately tasteful, subtle rhythmic foundation. If your taste runs to Coleman Hawkins and Ben Webster, you will love this album.

IRENE KRAL: Kral Space. Irene Kral (vocals); Alan Broadbent (piano); Fred Atwood (bass); Nick Ceroli (drums); Emil Richards (vibraphone, percussion). WHEELERS AND DEALERS: Stars Eyes; Experiment; Small Day Tomorrow; Some Time Ago; The Song Is You; and four others. CATALYST CAT 7625 $6.98. Performance: Splendid. Recording: Excellent.


As a jazz guitarist, George Benson has a fine technique and occasionally displays a refreshing, pixie-like sense of humor. After a decade as both sideman and lead on dozens of jazz albums, he recorded a lead vocal, This Masquerade, which was a huge commercial success and made him an instant star. He is one of the few jazz artists to have crossed over into the pop domain without sacrificing his jazz beliefs. His vocals sound strongly influenced by Stevie Wonder; his and Wonder's vocal styles are both "jazzy" in that the technique and occasionally displays a refreshing, pixie-like sense of humor. After a decade as both sideman and lead on dozens of jazz albums, he recorded a lead vocal, This Masquerade, which was a huge commercial success and made him an instant star. He is one of the few jazz artists to have crossed over into the pop domain without sacrificing his jazz beliefs. His vocals sound strongly influenced by Stevie Wonder; his and Wonder's vocal styles are both "jazzy" in that the voice is used as an improvising instrument. Still, with all Benson's charm and talent, four sides of a live album is a little too much.

IRENE KRAL: a diamond-cut throwback to the days of elegant pop-jazz singing.
The one alternative to separates:
The Yamaha CA-2010 Integrated Amplifier.

The Head Amplifier. Discerning music lovers all over the world are discovering the transparent highs and extended frequency response of the moving coil phono cartridge. While other manufacturers require the addition of an expensive preamp or step-up transformer to boost the low output signal, Yamaha included a special head amplifier in the CA-2010. It's available with the flip of a switch on the front panel. And to help you get the most out of moving magnet cartridges, there's a 3-position phono impedance selector.

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The twin power meters are fast-rise, peak delay—they can track even the briefest of transient bursts. Plus they can respond to levels from 1mW to 316W (into eight ohms).

Real Life Rated™ The specifications of the individual components of the CA-2010 are superior to many separates. Individual specifications alone, however, can't possibly reflect actual in-system performance. That's why Yamaha measures overall performance from phono in to speaker out, rather than at designated points along the signal path. Furthermore, we measure noise and distortion together over a broad output range, rather than individually at the optimum output.

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Superb tonality from a musical tradition of technical excellence. The tonal accuracy of our audio components is referenced to the same standards used to evaluate the tonal accuracy of our world-renowned musical instruments. The result is a rich, clear tonality that is unknown elsewhere. You really must hear it.

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inicient of Chris Connor in peak form). Kral glides effortlessly through such demanding repertoire as Cole Porter’s Experiment and Every Time We Say Goodbye, the Kern/Hammerstein The Song Is You, and the Gene de Paul/Don Raye Star Eyes with the lazy, almost insolent assurance of a Ferrari outflanking a Honda. The experiential and emotional mileage that she’s put on only make her seem all the more valuable and classic. Marvelous supporting work is provided by a quartet of musicians who obviously know just how rare a gem they are providing the setting for. P. R.

RALPH MACDONALD: The Path (see Best of the Month, page 88)

MICHAEL MANTLER: Movies. Michael Mantler (trumpet); Carla Bley (piano, synthesizer, tenor saxophone); Larry Coryell (guitar); Steve Swallow (bass guitar); Tony Williams (drums). Movie One; Movie Two; Movie Three; and five others. Watt 7 $6.98 (from New Music Distribution Service, 6 West 95th Street, New York, N.Y. 10025).

Performance: Very good
Recording: Very good

This is the seventh release on Watt, a label devoted exclusively to the music of Michael Mantler and Carla Bley (Mrs. Mantler). I don’t like everything the Mantlers have done, but top marks for originality are usually in order. Mantler plays the trumpet in a style not unlike post-“Bitches Brew” Miles Davis, but he is a far more interesting composer, a side of his talent splendidly demonstrated by this release. I don’t know if the eight three-to-six-minute pieces here—entitled Movie One, Movie Two, and so on through Movie Eight—are meant to be regarded as a whole, for there seems to be no common thread, but each easily stands on its own. These are eight easy pieces—easy on the ears, that is—superbly played by the Mantlers, Larry Coryell, Steve Swallow, and Tony Williams (whose sound at times evokes memories of Miles just before he crossed over into rockland). This is not by any means a Miles Davis imitation—it just has his feel to it, and there’s nothing wrong with that.

C.A.

RECORDING OF SPECIAL MERIT

PAUL MOTIAN TRIO: Dance. Paul Motian (drums, percussion); Charles Brackeen (so- prano and tenor saxophones); David Izenzon (bass). Waltz Song; Asia; Kalyptos; and three others. ECM ECM-1-1108 $7.98, ® RT-1-1108 $7.98.

Performance: One of a kind
Recording: Excellent

Paul Motian, Charles Brackeen, and David Izenzon seek to be on the same wavelength. That is always good when musicians play together. Of course, but it is absolutely vital when the music they play is as loosely structured as Motian’s six compositions for this album are. The result is something you are not likely to find on the larger labels until the year 2000, when they might wake up and purchase somebody’s old tapes: music reflecting a high degree of creative energy, originality, and technical skill. Motian is a remarkably talented man, and it’s good to see his artistry continue to grow.

C.A.

RECORDING OF SPECIAL MERIT

RED NORVO: Red in New York. Red Norvo (vibraphone); Scott Hamilton (tenor saxophone); Dave McKenna (piano); Richard Davis (bass); Connie Kay (drums). Hindustan; I Love You; On a Slow Boat to China; All of Me; and three others. FAMOUS DOOR HL 116 $8.00 (from Harry Lim Productions, 40-08 155th Street, Flushing, N.Y. 11354).

Performance: Impeccable
Recording: Excellent

Producer Harry Lim gave Red Norvo a free hand in selecting personnel and repertoire for this album—the result is one of the most delightful small-band swing dates I have heard in years. The only thing I can add to that is: check it out pronto.

C.A.

BETTY ROCHE: Take the “A” Train. Betty Roche (vocals); Conte Candoli (trumpet); Eddie Costa (vibraphone); Don Trenner (piano); other musicians. Time After Time; Go Away Blues; All Too Soon; Route 66; In a Mellow Tone; Something to Live For; and six others. BETHLEHEM ® BCP-6026 $6.98.

Performance: Vintage, but curiously fresh
Recording: Very good mono

Many of Duke Ellington’s vocalists were perplexingly mediocre, but he occasionally came up with a singer whose talent deserved an Ell- (Continued on page 130)
MEET ONKYO’S SECOND GENERATION QUARTZ-LOCKED RECEIVER.

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When the experts agree you’ve got one of the best tuning systems in the business, you think before you change. We thought...and made the Onkyo Quartz-Locked tuning system integrated circuitry. Cooling running, high performance, computer quality integrated circuitry, adding to the already phenomenal reliability and long life.

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Now you have TX-4500MKII, the second generation AM/FM Stereo receiver with two phono inputs and three tape inputs plus tape-to-tape dubbing. And the Quartz-Locked tuning system which independent labs have called almost impossible to mistune.

To match the internal improvements, we’ve changed the layout of the TX-4500MKII, slanting both meters. Tuning and Signal Strength...for easier reading. LED-indicated functions are more prominent and in full view at all times, protected by crystal-clear solid plate glass.

But most important of all, you still have the only Quartz-Locked tuning system available...Onkyo’s. Assuring you of pinpoint frequency control without drift or distortion, based on the system’s quartz crystal stabilized detector/corrector. Differential direct coupled amplifier circuitry delivers high power and exceptionally low distortion well beyond the range of audibility.

All of this unique performance and utmost audio quality costs no more than first generation equipment, and it’s available now. See your audio dealer for a test listen.

While you’re at it, look into Onkyo’s TX-2500MKII Servo-Locked receiver, a lower priced unit with almost equal tuning stability and performance, and featuring IC reliability and life. We’ve added power and additional features to the TX-2500MKII, so no matter which Onkyo receiver you choose, it’s the best in its class.

Try either or both and get set for a new standard of audio performance. That’s what keeps us ahead of state-of-the-art.

**TX-4500MKII** — 60 watts per channel, minimum RMS at 8 ohms, both channels driven, 20 Hz to 20 kHz with no more than 0.1% THD. 65 watts per channel minimum RMS at 8 ohms, both channels driven, 1 kHz, with no more than 0.1% THD. THD 0.08% at 1 watt output. IM distortion 0.3% at rated power; 0.1% at 1 watt output. Frequency response 15-30,000 Hz (+1 dB).

**TX-2500MKII** — 40 watts per channel, minimum RMS at 8 ohms, both channels driven, 20 Hz to 20 kHz with no more than 0.1% THD. THD 0.08% at 1 watt output. IM distortion 0.3% at rated power; 0.1% at 1 watt output. Frequency response 20-30,000 Hz (+1 dB).
Al Di Meola's "Casino" is where Al Di Meola makes his heaviest moves yet, in a wildly electric atmosphere. And he always pays off with the right combination of intriguing new sounds.

This album was recorded in 1956. These were Betty Roche's first recordings under her own name (except for one V-Disc side made around 1944). Her style had by then evolved into a pleasant cross between those of Sarah Vaughan and Nellie Lutcher, but neither this session nor the recordings she subsequently made for Prestige brought her any measurable success. That's sad, for even twenty-two years later these sides have a freshness about them. There are a couple of bad moments, such as the closing note of "Time After Time," but—as Stanley Dance points out in his excellent notes—Betty Roche deserved the fame that eluded her, and this particular album, which also features the sensitive work of the late Eddie Costa on vibraphone, deserves the attention of your 1978 ears.

SONNY ROLLINS: Easy Living. Sonny Rollins (soprano and tenor saxophones); Charles Icarus Johnson (guitar); George Duke (keyboards), Paul Jackson (electric bass); Tony Williams (drums). Isn't She Lovely; Down the Line; Arroz con Pollo; and three others. MILESTONE M-9080 $7.98.

Sonny Rollins can't be accused of overexposing himself. He disappears periodically, reappearing now and then only long enough to give us a taste of his artistry. Then, having whetted our appetite, he vanishes again to practice diligently for his next emergence. Where does he go? Well, they say he loves to play on the pedestrian walks of Manhattan, that he's back in his island-like apartment, that his playing is now so quiet that it can only be heard by his friends. And the fact is that his "After the Rain" album (ECM-1-1083) was appalling. For one thing, his wife does not sing on it; more important, the statements he makes are clear and concise. There are six compositions, all but one by Rypdal, and each one is a wonderful surprise. For one thing, Rypdal has worked with and undoubtedly also been influenced by George Russell—clearly models his playing after the Miles Davis style of recent years. But his one composition here, "Stenskoven (The Stone Forest)" is more reminiscent of Menotti than of Miles. The album makes much use of electronic instruments and attachments, which in the wrong hands can spell disaster, but it works splendidly here because cheap effects—the bane of far too many plugged-in groups—are avoided.

TERJE RYPDAL: Waves. Terje Rypdal (electric guitar, RMI keyboard computer, ARP synthesizer); Palle Mikkelborg (trumpet, flugelhorn, RMI tenor piano, ring modulator); other musicians. Per Ulv; The Dain Curse; Charisma; and three others. ECM EMM-1-1110 $7.98, ® 8T-1-1110 $7.98, ® CT-1-1110 $7.98.

Recordings: Excellent
Performance: Delicate

This album by Norwegian multi-instrumentalist/composer Terje Rypdal is as appealing as his "After the Rain" album (ECM-1-1083) was appalling. For one thing, his wife does not sing on it; more important, the statements it makes are clear and concise. There are six compositions, all but one by Rypdal, and each one is a wonderful surprise. For one thing, Rypdal has worked with and undoubtedly also been influenced by George Russell—clearly models his playing after the Miles Davis style of recent years. But his one composition here, "Stenskoven (The Stone Forest)" is more reminiscent of Menotti than of Miles. The album makes much use of electronic instruments and attachments, which in the wrong hands can spell disaster, but it works splendidly here because cheap effects—the bane of far too many plugged-in groups—are avoided.

RECORDING OF SPECIAL MERIT
SOPRANO SUMMIT: Crazy Rhythm. Bob Wilber (clarinet, soprano and alto saxophones); Kenny Davern (clarinet, soprano and C-melody saxophones); Marty Grosz (banjo, guitar); George Davier (bass); Bobby Rosengarten (drums). Prince of Wales; We Say, "Columbia," are trademarks of CBS Inc. 

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As beautiful to behold as to hear.

High Fidelity, April 1978

Like other manufacturers, we feel we know our products better than anyone. Yet given the opportunity, we prefer to let independent test labs and technical editors describe our products to the consumer. The following excerpts from reports on the Luxman R-1120 tuner/amplifier will tell you why.

First from High Fidelity:
"There is an effortless quality to the sound that just radiates class...the appearance of the product and its thoughtful constellation of features reinforce this impression. Here is a receiver—sorry, a tuner-amplifier—that the discerning listener will surely enjoy. "...the FM tuner is impressive, to say the least. Stereo quieting is pushed to 60 dB by only 45 1/2 dBf of input, which promises enjoyable listening in all but the deepest fringe areas."

And here's what Consumer Guide says about the R-1120's power amplifier: "...very conservatively rated. At mid frequencies...produced 137 watts. Even at 20 Hz and 20 kHz (it) pumped out 130 watts before reaching its rated harmonic distortion figure."

(Please note that the R-1120 is rated at "only" 120 watts per channel, 20-20,000 Hz, 8 ohms, with no more than 0.03 percent total harmonic distortion.)

Now for some words of our own. Glance at the photo and you'll see a feature unique to LUX tuner/amplifiers: an array of LED peak-power indicators—six per channel. They'll make sure you don't drive the amplifier into clipping and overload.

Also: negative feedback tone controls, switchable turnover frequencies, electrostatic speaker connections, tape-to-tape dubbing and optional Dolby.

Although LUX is known primarily for separate amplifiers and tuners, you can now appreciate why our new tuner/amplifiers have led many music lovers to simply upgrade their receivers.

A visit to one of the very select LUX dealers will help you decide what your next step up should be.

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Like every one of our Sound Guard products, Sound Guard record cleaner is sold in audio and record outlets.

Sound Guard keeps your good sounds sounding good.

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CIRCLE NO. 12 ON READER SERVICE CARD
When Toshiko and Lew Tabackin met in 1967 she had already fallen in love with his playing. A Philadelphian, he had been greatly influenced by John Coltrane at first, but, fearing he might become just one more white Coltrane imitator, he had begun seeking inspiration in the works of some of the great tenors of the Swing Era. "Tabackin," an album recorded in Tokyo during a 1974 tour with the Toshiko Akiyoshi Quartet, demonstrates just how deeply Lew Tabackin immersed himself in the pre-bop tenor style and how he succeeded in absorbing its flavor without resorting to mere imitation. That side of Tabackin's stylistically chameleonic talent comes to the fore on How Deep Is the Ocean and A Ghost of a Chance, a beautiful, unaccompanied tribute to the late Chu Berry, but the album also gives us other sides of this remarkable player: two stunningly lyrical pieces, Roland Hanna's Morning and Toshiko's Solidogy, demonstrate why he is not to be taken lightly as a flutist; and Come Rain or Come Shine, Bye Bye Blues, and Let the Tape Roll offer proof that Tabackin can also case comfortably and excitingly into a post-bop Rollinsesque bag.

Of course, if you have heard any of the albums by the outstanding Toshiko Akiyoshi/Lew Tabackin Big Band, you will already have discovered the enormous versatility of Tabackin's talent and heard what an impressive arranger/composer Toshiko has become. Of all the band's albums to date, "Insights" is the most breathtaking. Recorded for Japanese RCA two years ago and just now released here, its splendor has probably already been exceeded by the prolific, ever-growing Toshiko, but time will not fade the excitement of this music. Toshiko seems more and more drawn to her Far Eastern roots, and Minamata, an extended, three-part suite that takes up all of side two and represents her most ambitious work to date, is wonderful evidence of her ability to combine her Oriental heritage with the music that lured her to these shores. Of the three Toshiko compositions that complete this album, only Sumie, scored to highlight four flutes and a bass clarinet, has a Far Eastern flavor; the other two, Studio J and Transience, are more conventional—but only by Toshiko's standards.

CHRISS ALBERTSON
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COMPUTER-CONTROLLED CASSETTE DECK.

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First of all, the Auto Program Locate Device—another Sharp exclusive and just one function of the "brain"—can skip ahead, or backward, up to 19 songs on a tape. And automatically play just the one you want.

The Counter Memory can find a specific number on the tape counter and stop there or start playback automatically. The Memory Rewind can rewind to any pre-selected point on the tape automatically and play it back if desired.

You can even mark off a section of a song or speech and commit it to the machine's memory for immediate recall later by using the Direct Memory Function.

For pinpoint accuracy, it features Electronic Tape Counting as well as Second Counting. Which also can be used to determine how much time is left on the tape when recording.

A Liquid Crystal Display indicates what tape function is in operation, while the built-in quartz digital clock is tied into the timed-programming operations. For example, you can program the machine to turn itself on at a selected time, record a program from a radio or TV, then turn itself off.

We've even programmed the "brain" to switch to battery power in case of a power failure, thereby maintaining the correct time and keeping the memory intact.

Now if all that sounds impressive, you can be sure we didn't waste it on a machine that didn't have an impressive sound. So the RT-3388 also features:

- Dolby® Noise Reduction System.
- Bias and Equalization selectors for optimum performance from any kind of tape.
- Editor Function.
- Ultra-hard Permalloy Recording/Playback Head.
- Friction-Damped Cassette Holder.
- Output Level Control.
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The price for such an incomparable piece of equipment? Only $349.95. Which is about what you'd expect to pay for a deck of comparable quality without Sharp's exclusive features.

But you'll own something so advanced it'll be ahead of its time years from now.

See your Sharp Dealer for a mindboggling demonstration.

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COLUMBIA RECORDS has been circulating, semiprivately, a lavish book-and-record set, a fluent and delightful tribute to Goddard Lieberson, the president and godfather (godfyl?) supreme of that company for many years.

It is not that he was unapproachable or unkindly, but that at any moment might (or might not) turn into eyebrow-raising verbal expression no one was prepared for. A great deal is made in the album about the various meanings of Lieberson's various names. All quite true. He always struck me as something of an Edwardian figure: worldly, stylish, observing all the rules with perfectionist exactitude, but more than a bit amused by the rules themselves and by the people who clumsily attempted to ape those to whom he was emotionally close. There was in him both an ability to be mordantly funny and a strain of unabashed Victorian sentimentality. His smile often told everything—but just as often it told exactly nothing. Probably his greatest achievement as an executive was his ability to give complete freedom to those who worked for him; the best artists were particularly grateful to him for this. But total freedom is not for everyone; for the insecure or the untalented it is often a hard number, and every artist and record executive who reported to him with their litany of complaints took refuge under the rules. He recorded Gypsy, Camelot, Cabaret, Mame, and A Chorus Line. To watch him in action at a recording session was to watch a man who had a spectacular presence, knowing exactly what he wanted to hear and how to get it. He loved his work, and he wanted to communicate that love and understanding to people who might never be able to get to Broadway themselves.

Lieberson really enjoyed his work, and he was familiar with every aspect of record making. His particular pleasure was the CBS Legacy Collection, which comprised book-and-record sets with such titles as "The Union," "The Confederacy," and "John Fitzgerald Kennedy ... As We Remember Him." They set a standard for erudition, beauty of presentation, and the educational possibilities of the phonograph record as history-in-sound that has yet to be surpassed. And so this final Legacy-like private edition, "Goddard Lieberson with his wealth of photographs, its careful bibliography of his work, affinative scripturing by Mort Goode, and a brisk, amusing narration by Charles Kuralt is a fitting clu-
max to the series. It leads one to hope that Columbia is sending this album to libraries and schools so that at least it will be available there for anyone who wants to know about the man who made listening to records a respectable pastime for literate grown-ups.

His counterparts in other areas of the entertainment industry would probably be such men as Irving Thalberg at MGM, Bennett Cerf at Random House, and George Balanchine at the New York Ballet. Each was — and in Balanchine's case still is — a truly creative business man who could do, superbly, every task he might assign to another. (I myself learned more about the craft of publicity from Lieberson than from any other single source.) Lieberson was always unafraid of taking the risk if in his judgment the basic creativity of the artist was there. In company matters he was a politician of incredible infractive grace. He could have given lessons to Talleyrand in the silky management of the high and mighty. His presence in the particular duchy he ruled was totally pervasive; one small incident will illustrate it. On the day of the Kennedy assassination, when word sped through the building that the President had been shot, the column girl who worked for me, a heavy-lidded, deep-breathing beauty who generally seemed impervious to anything but telephone calls from her admirers, came skidding into my office, wild-eyed and flailing her arms. "Omgod!" she cried. "Who shot Goddard?"

As I look around the various parts of the entertainment industry today, I don't seem to see anyone quite like the Liebersons, the Cerfs, the Thalbergs. Part of it is a sociological change: the creative business man no longer chooses to work through the large companies; he uses them instead as banks so as to be free to do his own thing. But Lieberson worked within the system, beat it, upgraded it, and even shook it up regularly. When he entered the recording business in the late Thirties it was a moribund, grubby little cottage industry that at its upper (classical) end served a (mostly) precious few but had, at the middle and bottom, absolutely no focus and no lasting entertainment value. It had its momentary stars, but they were left pretty much to sink or swim on their own once they faced a mike.

By the time of Lieberson's much-too-early death in 1977, the tackiness, the dust, and the unimaginative thinking had disappeared and in their place was a giant industry, one that Lieberson had a great deal to do with building. The schlock merchants still abound, of course, and every once in a while they manage to score a little triumph and strike a brief, statesmanlike pose, but it can last no longer than it takes to compare such a figure to a real statesman such as Lieberson. He was a unique combination of unique talents, and he left his imprint not only on the industry but on everyone who had working contact with him. I, personally, owe him a great deal and I am ashamed to say that I never thanked him properly for what he taught me. So, thanks, Goddard.

—Peter Reilly

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CLASSICAL DISCS AND TAPES

Reviewed by RICHARD FREED • DAVID HALL • GEORGE JELLINEK • PAUL KRESH
STODDARD LINCOLN • ERIC SALZMAN

J. S. BACH: Magnificat (BWV 243). VIVALDI: Magnificat (RV 610). Felicity Palmer (soprano); Helen Watts (contralto); Robert Tear (tenor); Stephen Roberts (bass); Choir of King's College, Cambridge; Academy of St. Martin-in-the-Fields. Philip Ledger cond. ARGO ZRC 854 $7.98. © KZRC 854 $7.98.

Performance: Good
Recording: Excellent

The more interesting feature of this record is the Vivaldi Magnificat. Rhythmically strong and harmonically rich, the work makes a stunning impact here, demonstrating once again that Vivaldi's religious music is among his best and to be treasured by collectors. The reading here includes the four Christmas interpolations, which, although my ear, missing in this new version. R.F.

BALAKIREV: Russia (see BORODIN)

BARTÓK: Violin Concerto No. 2. Kyung-Wha Chung (violin); London Philharmonic Orchestra. Sir Georg Solti cond. LONDON CS 7023 $7.98. © 5 7023 $7.98.

Performance: Brilliant, but . . .
Recording: Wide open, but . . .

The playing here is as brilliant as one would expect from such a soloist and such an orchestra. The performance is well organized, finely detailed, and generally well served by a rather wide-open sonic frame, but I find it an experience I admire more than I enjoy, and this takes me into a somewhat subjective realm. Kyung-Wha Chung herself plays with her customary warmth as well as her customary tonal beauty, but the orchestral contribution, while always on the button, seems a good deal more remote. This is not just a question of attitude, for the soloist seems overly prominent a good deal of the time, but it is the mood that is more to the point here. It is not that the performance is poorly coordinated. Somehow, though, the coordination doesn't add up to a real unity of vision. I wonder if Chung and Solti had an opportunity to perform the concerto together before they recorded it. Yehudi Menuhin and Antal Dorati performed the work together on several occasions, and made no fewer than three joint recordings of it. To put on their latest (Angel 5-7024 $6.98), an attempt to capture the soloist's playing in Misha Dichter's performances: after serious recording and many hours of verifying comparisons, I have to say that neither of these well-beloved works has ever been recorded so much direct pleasure. Dichter doesn't intellectualize them, he doesn't sentimentalize, doesn't even dramatize, but simply becomes, as it were, the medium through which the music passes in order to be heard. The impression is rather like the one Solomon gave in his Beethoven—though these are by no means duplicates of that great musician's interpretations: the similarity lies in the feeling that everything extraneous has been cut away in such a way that the music bears a new look at the atmosphere that is, to my ear, missing in this new version. R.F.

RECORDING OF SPECIAL MERIT


Performance: Outstanding
Recording: Lifelike

The Moonlight and Pathétique sonatas are among the first classical works most of us hear, and they are of course among the most frequently recorded compositions in any form. They are remarkably fresh and compelling in Misha Dichter's performances: after serious recollection and many hours of verifying comparisons, I have to say that neither of these well-beloved works has ever been recorded so much direct pleasure. Dichter doesn't intellectualize them, he doesn't sentimentalize, doesn't even dramatize, but simply becomes, as it were, the medium through which the music passes in order to be heard. The impression is rather like the one Solomon gave in his Beethoven—though these are by no means duplicates of that great musician's interpretations: the similarity lies in the feeling that everything extraneous has been cut away in such a way that the music bears a new look at the atmosphere that is, to my ear, missing in this new version. R.F.

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Performance: Excellent
Recording: Excellent

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Explanation of symbols:

1 = reel-to-reel stereo tape
2 = eight-track stereo cartridge
3 = quadraphonic disc
4 = reel-to-reel quadraphonic tape
5 = eight-track quadraphonic tape

Monophonic recordings are indicated by the symbol ©.

The first listing is the one reviewed; other formats, if available, follow it.
101 could have been saved for another release. Even with the interruption, though, this belongs in the most select circle of Beethoven sonata records.

Virtually all of Ashkenazy's Beethoven discs so far are in that circle, and this latest one upholds his self-set standards nobly. The aristocratic sense of proportion so much admired in the Hammerklavier that began this series (CS 6563) and the splendid pairing of the two final sonatas (CS 6843) is very much in evidence here, and Ashkenazy's enlivening way with the final presto of Op. 10, No. 2, is quite a little marvel for bringing out so much sly wit at a pace at which one might expect the music to be overloaded or simply to run away with itself. Ivan Moravec's live recording of Op. 28 on Connoisseur Society CS-2021 still strikes me as uniquely compelling, but the very contrasts between that version and Ashkenazy's more expansive one—especially in the slow movement—add up to a strong argument for owning both.

Eunice Podis, who has taken part in some important premières in Cleveland over the years, has recorded some chamber music, but, as far as I know, this new Telarc disc is her first solo recording. It is a handsome one, too, even if Pollini's similar coupling (Deutsche Grammophon 2530 645) is ultimately more rewarding. Podis' view of the two sonatas has a good deal of clear-eyed integrity, and her fingers never betray her. The E Major in particular is given a well balanced, thoroughly satisfying account. In the opening and closing sections of the A-flat there are moments in which the listener is overwhelmed when simple exhilaration or lift would do, but some of this effect may be the fault of the recording, which is beautifully clear and live, but also very close-up, tending to make things seem a bit larger than life. The Dutch (Philips) pressings are immaculate, though the cutoff at the end of each side seems a little abrupt. Curiously, neither keys nor movement headings are given on the labels or the jacket, but there is an especially thoughtful set of notes by Robert Finn. R.F.

RECORDING OF SPECIAL MERIT

BERKELEY: Symphony No. 1; Concerto for Two Pianos and Orchestra. Garth Beckett, Boyd McDonald (pianos); London Philharmonic Orchestra. Norman Del Mar cond. HNH 4017 $7.98.

Performance: Authoritative
Recording: Excellent

My first acquaintance with the music of Sir Lennox Berkeley was with his elegant little string trio of 1944, which is on the second side of an old Westminster disc of the Dohnányi Serenade; it is the sort of thing that would whet anyone's appetite for more, but more has been slow in coming. The First Symphony, here recorded for the first time, is a splendid work and was greeted as such when it was first performed thirty-five years ago. While the symphony is thoroughly of its time in terms of coloring and the shapes of its themes, a Classical character is felt in the broadly expressive opening movement, the dancelike allegretto that takes the place of a scherzo, the impassioned slow movement, and the brilliant and boisterous rondo finale. The performance under Norman Del Mar, that diligent and dependable champion of English symphonies and contemporary works in general, rings with authority and conviction; one simply can't wait to hear it again.

The concerto, introduced five years later than the symphony, is an entirely different sort of work, though almost equally fascinating. There are only two movements. The first more or less corresponds to the old French overture in its slow-fast-slow format, and the second, three times as long, is in the form of a theme (of vaguely folklke character) and eleven variations, the seventh of which is a big, luscious waltz à la Ravel (whose influence Berkeley makes no effort to disguise throughout the work). This performance also is beautifully accomplished and must gladden the heart of the composer. Although each work runs about thirty-two minutes, the sound is excellent and unencumbered. R.F.

PAUL RUTMAN is an American pianist of Russian parentage who has had exceptional success in Russia. Mark Zeltser is a Russian whiz-kid who immigrated to this country. Both have made auspicious debut recordings on Columbia (in Rutman's case, Columbia/Odyssey) performing a major Prokofiev sonata as well as that epitome of pianistic foé-de-rol, Balakirev's Islamey. And both are superb representatives of that heroic Russian-(Jewish)-American style of keyboard grandeur.

Zeltser takes on the distinctly more difficult task, for Prokofiev's Eighth Sonata is a long, introspective, and unfamiliar work that comes close to the pianistic flash point only in the finale. But it is a much greater and more moving work than the overplayed Seventh Sonata (Rutman's choice), and it gives Zeltser a chance to show a deeper strain of feeling and musicality. The quirky Scarlattis—early, modernistic Prokofiev from 1916—is also an unusual choice, but it shows the pianist's expressive and technical range. His Islamey is simply fabulous, the finest piece of exotic pianistic hokum to come my way in a long time. But Rutman's Islamey is in no way inferior. This extravagant piece of music—intended and often conceded to be the most difficult piece of keyboard virtuosity ever composed—is actually a shade gentler and more lyric in Rutman's hands. And the space between the Prokofiev and the Balakirev is filled with late-Romantic Russinas obviously chosen to indicate that Rutman's musical powers are not restricted to musical weight-lifting. The point is made. Like his confrere, Rutman has fingers of steel but a Slavic soul.

—Eric Salzman


BERLIOZ: Les Nuits d'été, Op. 7; La Mort de Cléopâtre, Op. 5 (see Best of the Month, page 96)

RECORDING OF SPECIAL MERIT


Performance: Superb
Recording: Excellent

The Boccherini listing in Schwann is much smaller than it ought to be; at present there is only a handful of entries from among his ten dozen string quintets (Seraphim ought to reis-
**STEREO REVIEW**

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**RIMSKY-KORSAKOV:
**BORODIN:**
Prince Igor: Polovetsian Dances.

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Debussy: La Mer (with Prélude A L'Après-Midi D'Un Faune & Ravel: Boléro). Berlin Philharmonic; Karajan. 4XS-37438
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Op. 58, No. 2, the most impressive of the three and the only one in four movements instead of three. Stills, I would not think of doing without this record, and neither, I imagine, would anyone else who hears it. R.F.

**BORODIN:** Prince Igor: Polovetsian Dances.

Performance: Superb Russian Easter Overture. Mostly good


Performance: Real Stokowski Recording: Fake stereo

The prize performances in Barenboim's Russian potpourri are a thrillingly urgent reading because it contains the late maestro's only recordings of the Khovantchina Prelude and Persian Dance, as well as of Borodin's little gem, In the Steppes of Central Asia. Though Stokowski recorded the gorgeously somber Khovantchina Entr'acte as recently as 1975, the performance here is the only one that comes close to equaling his unforgettable 1927 Philadelphia recording. The orchestra for the 1953 session was an aggregation of crack New York free-lance musicians, including such top soloists as flutist Julius Baker and oboist Mitchell Miller (before he became "singing along" Mitch), and the playing is gorgeous throughout.

The Russian Easter Overture was always a Stokowski "vehicle," and Stokowski never able to resist tinkering with the score. Sometimes he merely truncated the ending, but in two recordings, including this one, he decided to substitute a bass voice in Rimsky's trombone recitative. As for A Night on Bald Mountain, despite what he says in his program annotations (they are reproduced on the Quintessence jacket from the RCA release), Stokowski did not go back to the Moussorgsky original. He simply took Rimsky's assemblage, shortened it a bit, and hopped up the instrumentation to horror-film proportions—as anybody who has seen the Disney! (Continued on page 142)
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Gustav Holst’s “Hymn of Jesus”

Gustav Holst’s The Hymn of Jesus has little connection with "sacred music" in any conventional sense and just as little with the English oratorio tradition. The driving spirit, as noted in the preface to the 1974 centennial edition of the score, is "Holst’s own intensely personal form of mysticism, which manifests itself with both solemnity and gaiety" in his various works. Imogen Holst has written elsewhere that her father "was unencumbered by routine piety, and his idea of Christ included the fierce unexpectedness of the Byzantine mosaics.

For this work of 1917-1919, dedicated to his friend Ralph Vaughan Williams, Holst took his text from the Apocryphal Acts of St. John; he learned Greek in order to read the original and make his own translation, and he introduced plainsong hymns into the work’s prelude. The Hymn proper is alive with that "fierce unexpectedness," with evocative color and highly original treatment of the choral parts (spoken and whispered passages such as turned up fifty years later in works of Penderecki). A precedent of a sort, as suggested in the same preface, may be found in Debussy’s music for Le Martyre de Saint Sébastien, also not a “sacred work,” but a work about religious ecstasy and exaltation in which, as Debussy himself wrote, “the worship of Adonis is mingled... with the worship of Christ.” There are passages in The Hymn of Jesus, in fact, that may strike the listener as Debussyan, but there are echoes of The Planets too, and, overall, this is music that could have come from no one but Gustav Holst.

One of the more distressing record deletions of the last dozen years was that of London CS 6324, on which Sir Adrian Boult conducted The Hymn of Jesus, the ballet music from Holst’s opera The Perfect Fool, and Holst’s tone poem Egdon Heath. It was especially regrettable that none of these titles was listed in Schwann when the composer’s centenary rolled around in 1974, and recordings of them that have appeared since then do not efface the memory of Boult’s. Nonetheless, Sir Charles Groves, in what seems far and away the finest work he has done on records, has now given us a very good performance of The Hymn of Jesus that benefits from generally smoother, more up-to-date sound. This side of the Boult disc was less spectacular sonically than the orchestral side, though the chorus had more gutsy presence than in the more distant focus favored by Angel on the Groves release. Occasionally in the older recording an individual voice in the chorus would make itself felt with electrifying urgency; these passages tend to be relatively homogenized on the Angel disc, but the choral work is certainly trim, the orchestra is quite vivid, and the performance as a whole is one of deep understanding and conviction.

Moreover, the new release includes three additional Holst choral works, none of which has appeared on records before, and two of these recommend the package even for those who have the Boult Hymn of Jesus. The Ode to Death, composed at the end of World War I, is an especially powerful, non-rhetorical setting of lines from Walt Whitman’s When Lilacs Last in the Dooryard Bloom’d. The second of Holst’s four groups of Choral Hymns from the Rig-Veda, composed ten years earlier, is for women’s voices and orchestra on texts translated by Holst himself from the Sanskrit: To Varuna (god of the waters), To Agni (god of fire), and Funeral Chant. In the Ode to Death, aptly enough, one hears a fragment from Saturn, and that section of The Planets seems “pre-echoed” in the Rig-Veda settings (whose Funeral Chant also recalls Debussy’s Strénes). Both of these works and the Short Festival Te Deum (an agreeable little make-weight, if nothing more) receive performances I cannot imagine being surpassed in terms of either conviction or brilliance of execution. These are the most worthwhile sort of discoveries, music to wake up tired ears and through them go straight to the heart.

—Richard Freed


BRAHMS: String Sextet No. 1, in E-flat Major, Op. 18. Roger Best (viola); Moray Welsh (cello); Alberni Quartet. SCHUBERT: Quartettsatz in C Minor (D. 703). Alberni Quartet. CRD 1034 $7.98 (from HNH Distributors, Ltd.; P.O. Box 222, Evanston, Ill. 60204).

Performance: Generally good

Recording: Less than ideal

Here is a generally enjoyable performance of an ingratiating early work of Brahms, the sort (Continued on page 144)

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of thing that would send an audience home happy from a live concert. The musicians seem to be enjoying themselves, and they have the judgment to avoid pushing the music into bigger dimensions than it calls for. As a recorded performance, however, there is less in it to invite the listener to return than in any of the three alternative versions listed in the current Schwann, among which the one by the Amadeus Quartet and its regular spare hands (Deutsche Grammophon 139 333) is especially satisfying. Alberni & Co. do include the first-movement repeat in the Brahms, and they alone offer a filler with the work, but the repeat really adds little to the music, and the Schubert bonus here is rather a disappointment—mainly because of an almost total lack of variety in dynamics: it is all rather loud and therefore extremely earthbound. Dynamic inflexibility afflicts the Brahms performance too, another factor causing it to impress this listener as a good job but in no way distinguished. The sonic focus is a further let-down, especially in the Brahms, with excessive prominence for the violins even though, according to the session photo on the jacket, they are the rearmost of the six instruments.

R. F.


Richard 

I use the word ‘personalized’ in connection with Eugen Jochum’s Brahms readings not to suggest that he takes undue liberties with the scores, but rather to indicate that the special emphasis he brings to bear—in terms of fluidity and lyrical underlines—are characteristic of his kind of music making. Whether one goes along with them is a matter of personal taste, but what we have here is neither the monumental classicism of a Klemperer nor the intensity of a Karajan or Toscanini. I played the two overtures first, and I was delighted with the expansive approach to the Academic Festival and found the sharp tempo contrasts in the Tragic adding up to a dramatically exciting realization. The symphonies, however, turned out to be a mixed bag.

The very opening of the First is marred, in my view, by a timpiani balance that makes one very aware of accent rather than of organic flow. However, Jochum excels in the agglomeration of passion and delicacy that he brings to the middle movements. The first-movement repeat taken in the Second is felicitous, though Jochum’s view of this D Major symphony seems more restless and darkly tragic through the first two movements than what is normally encountered. The finale of No. 2 verges on the frenetic. His view of the Third Symphony is strongly passionate, and in the finale the reading is again headlong, save for the sharp tempo contrast in the handling of the chorale tune. Free lyricism predominates throughout the Fourth Symphony. The opening is very low-key and unhurried, and one is more edged than propelled into the dramatic dialogues of the development.

Those are just some of the elements of these performances that caused me to prick up my ears with either pleasure or mild annoyance. But Jochum has been a distinguished conductor for a good while (this is not his first go-around with the Brahms symphonies on discs) and he is entitled to his particularities, whatever a reviewer’s reactions. Save for the timpiani problem already mentioned and some overbearing horns in the first-movement development of No. 2, the recording is full-bodied yet transparent in texture, and it definitely profits from four-channel playback. I especially like the sound in the Academic Festival Overture: the bass drum, cymbals, and triangle are clearly but unobtrusively distinct instead of being lost in the orchestral welter.

D. H.


Performance: Special Recording: Okay

John Cage’s string quartet, written in 1949-1950, is a continuous thread of sound that sometimes thins to a single note or thickens into a cluster but never breaks up into harmonic or contrapuntal parts—and never breaks out into true, directional melody until its odd, quotational finale. The guiding idea is a meditation on the seasons—preservation (summer), destruction (fall), peace (winter), creation (spring)—within the framework of a Buddhist quietism.

Witold Lutosławski’s quartet also avoids
the old Western polyphonic tradition in favor of something else, but that something else is more likely to be an interesting, if not quite so close to Cage's. It is a striking piece, and it is very well played—as is the Cage—by the La Salle ensemble, the doyen of new-music string quartets.

E.S.

CHOPIN: Piano Music (see Collections—Shura Cherkassky)

DONIZETTI: La Favorita, Luciano Pavarotti (tenor), Fernando; Fiorenza Cossotto (mezzo-soprano), Leonora di Gusman; Gabriel Bacquier (baritone), Alfonso XI; Nicolai Ghiaurov (bass), Baldassare; Ileana Cotrubas (soprano), Ines; Piero de Palma (tenor), Don Gasparo. Chorus and Orchestra of the Teatro Comunale, Bologna, Richard Bonynge cond. LONDON OSA 13113 three discs $23.94. © OSA 13113 $23.94.

Performance: Good, with reservations
Recording: Good to average

Some operas are weighted down by complicated librettos; in others, complications set in even earlier, involving problems of authorship, censorship, and other plagues that make post facto wonder how the work could have been written at all. Donizetti's La Favorita is such an opera, and you can read about its adventurous past in William Weaver's concise annotations for the new London version.

The opera was originally written to a French text, and the French version, as produced in Paris (1840), is generally regarded as superior to the later Italian one. A genuine opportunity was missed around 1960 when EMI/ Angel could have recorded it with Rita Gorr (or Maria Callas!), Nicolai Gedda, and Gabriél Bacquier in the principal roles. But La Favorita has fallen out of the standard French repertoire in recent years even as La Favorita has sustained itself in the Italian one, as evidenced by periodic revivals in the major Italian houses, in Chicago (1964), and, finally, at the Metropolitan. Therefore, London's decision to record the Italian version is justifiable. The problem is that the performance is not as impressive as one would expect from the illustrious cast assembled for it.

Things are best when Luciano Pavarotti is "on stage." His singing encompasses the melding lyricism and the wounded outrage of Fernando's part with equal conviction, and, if he sounds less than fully at ease in the earlier scenes, he meets the big challenges of the final act, including the aria "Spirito gentil," most impressively. Fiorenza Cossotto handles Donizetti's graceful ornamentation with convincing mastery. She produces some melting phrases in her duet with King Alfonso (Act II) and sings most of her demanding aria "O mio Fernando," commandingly. But she can no longer achieve effortless tone and clean intonation at the top of her range—a fact she unwisely ignores in attempting to sing two unwritten high C's, with rather unfortunate results. In the role of Alfonso, Gabriel Bacquier is effective only at soft dynamic levels. Actually, it is astonishing how his seasoned artistry allows him to conceal the limitations of his current vocal estate. But great baritones from Battistini to Bastianini have established a standard for Alfonso's music that is not being met here.

Nicolai Ghiaurov's voice is still a noble and powerful instrument that can deliver Baldassare's imprecations with resounding effect, but the smooth and effortless command of his high range is gone. And, while casting an artist of Ileana Cotrubas' stature in the small role of Ines may seem extravagantly generous, I cannot say that she does anything memorable with it. Finally, though the venerable Piero de Palma is certainly a competent Don Gasparo, he too is not what he was twenty years ago.

There are minor differences in the music and considerable departures in the text between the version performed here and the Ricordi score, but the annotations fail to clarify this point. In any case, the opera is given complete, including the lengthy and undistinguished ballet music that holds up the action in the second act. Conductor Richard Bonynge not only endorsed Cossotto's efforts to expose the deficiencies of her high range, he also allowed Pavarotti to overlook an ornamented phrase in the duet "Fia vero? lasciar-li" that Cossotto scrupulously observes in her parallel line. The orchestral and choral contributions are routine. In general, then, this recording falls short of making a really effective case for Donizetti's uneven but frequently inspired opera. Still, though this La Favorita is disappointing, it is the best available version.

RECORDINGS OF SPECIAL MERIT
DURUFLE: Requiem, Op. 9; Danse Lente, Op. 6, No. 2. Kiri Te Kanawa (soprano); Siegmund Nimsgern (baritone); Ambrosian Sing-

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JUNE 1978

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ERS: Desbrough School Choir; New Philharmonia Orchestra, Andrew Davis cond. COLUMBIA 3 M 34547 $7.98.

DURUFLE: Requiem, Op. 9. Helene Bouvier (soprano); Xavier Depraz (bass); Philippe Caillard and Stephanie Caillard Chorales; Orchestre de l'Association des Concerts Lamoureux, Maurice Durufle cond. ERATO STU 78010 $9.98 (from Euroclassic Record Distributors, Ltd., 155 Avenue of the Americas, New York, N.Y. 10013).

Performances: Beautiful Recordings: Both very fine

Like the Requiem of Gabriel Fauré, which obviously influenced it, Maurice Durufle's 1947 Requiem has deservedly become a classic of the liturgical repertoire. An amalgam of Gregorian chant, post-impressionist modalism, and a highly personal romanticism shaped by an unerring coloristic sense regarding both voices and instruments, it powerfully conveys reverence, tenderness, and drama.

The recording with the composer conducting—winner of the Grand Prix du Disque—was first issued in this country on Epic in 1963, only to disappear when that label's classical line was discontinued some years later. The Musical Heritage Society picked it up, and their pressing (MHS 1509) is still available, but now the European original is available as an import. It is a unique and treasurable document. However, the new Andrew Davis reading on Columbia is a performance of wholly comparable merit, with more sharply delineated work by the soloists and choruses and impressive recorded sound.

The Danse Lente, which serves as a kind of postlude to the Requiem on the Davis recording, strikes me as a melding of Debussy's Faune and one of Satie's Gymnopédies. It provides an eminently listenable experience that makes me regret the absence from the catalog of the other two pieces in Durufle's Op. 6, which dates from 1936. D.H.

GLIERE: Russian Sailors' Dance (see BORDIN)

GRIFFES: Three Tone Pictures, Op. 5; Three Preludes; Roman Sketches, Op. 7 (see MACDOWELL)

RECORDING OF SPECIAL MERIT


HAYDN: Symphony No. 48, in C Major ("Maria Theresia"); Symphony No. 85, in B-flat Major ("La Reine"). Academy of St. Martin-in-the-Fields, Neville Marriner cond. PHILIPS 9500 700 $8.98, © 7300 536 $8.98.

Performances: Splendid Recordings: Crisp and clear

In my enthusiastic review of Marriner's Haydn Symphonies Nos. 43 and 59 (Phils 9500 159) in the February issue, I noted that he had embarked on a series of recordings of pairs of these works with related sobriquets and suggested that if the rest of the series turned out as well as the initial installment there should be a good deal of ungrudging duplication on the part of happy discophiles. Here are three further installments, and if the overall impression they leave is marginally less spectacular, they are nonetheless sweepingly attractive—at least the equal of the best of the currently competing performances and with a fairly conspicuous edge in terms of sonics and surface quality—the former crisp and clear, the latter beautifully quiet.

The best of the lot, it seems to me, are the stunning realizations of The Schoolmaster, La Passione, and the Trauermphantom, each of which is invested in full measure with its own particular character. The tempos and instrumental balances are well nigh unimprovable, and the substantial musical values are never subverted for gratuitous emphasis of the programmatic content implied by the titles. Marriner has found the real life-pulse (paradoxical as that may seem) of the two "mourning" symphonies, and his Schoolmaster is not only the latest but clearly the most persuasive in the line that began with memorable recordings by Hermann Scherchen and Benjamin Britten. The Philosopher receives a handsome performance too, though in this case Antal Dorati and Max Goberman have provided stronger competition.

Historically Nos. 48 and 85 have a family relationship in that the former was performed (if not actually composed) for the Austrian empress whose name it now bears and the latter became such a favorite with her ill-fated daughter, Marie Antoinette, that it was pub-

Elgar's Symphony No. 1

SIR ADRIAN BOULT, now in his mid-eighties, has added yet another codicil to his Elgar legacy, a recorded realization of the A-flat Symphony (No. 1) that will stand beside his great achievement with No. 2, in E-flat, as a standard by which all other interpretations are to be measured. Even the composer's own 1930 reading is put in the shade here, in my opinion, very likely because Boult, unlike Elgar, was not forced into the strait jacket of having to modify his tempos to accommodate the breaks over eleven 78-rpm sides.

In this, his third go-around with the A-flat, Boult has taken the measure of the score every bit as surely as with his first and last recordings of the E-flat. As in his Angel issue of the latter, he summons up just the amount of urgency and turbulence inherent in the writing while allowing the phrasing and rhythms to breathe, and so imbues the entire work with the feel of a living organism. In the Elgar symphonies, as in Beethoven's, an unerring sense of rhythmic attack, breathing space, and dynamic weighting is all-important. Boult, with his London Philharmonic players, is magnificent in this department, giving us nothing facile on the one hand, nothing ponderous on the other.

The music itself is Elgarian Sturm and Drang, in the first movement most markedly. Once one gets this music under one's skin, the haunting effect of the "great beautiful tune" (Elgar's own phrase) of the opening and its disintegration and eventual triumph is never lost. A particular high point for me in this recording is Boult's handling of the scherzo, by turns a macabre quickstep and a nostalgic idyll. The pacing is exactly right here, and the placing of first and second violins left and right makes for a brilliant effect in stereo playback.

The two Christophers—Bishop and Parker, producer and engineer, respectively—have come up with recorded sound that is both dazzling and magnificently full-bodied. Sound buffs will get a real charge out of the soft percussion transients of bass drum and cymbal, not to speak of the full-blown climaxes. In four-channel playback, the ambiance is that much further enhanced. This is a great recorded performance of noble and touching music.

—David Hall


STEREO REVIEW
JUNE 1978

Hansel und Gretel, Engelbert Humperdinck performed the near-miracle of combining Wagnerian harmonic riches and techniques with the simple world of fairy tales. Königskinder, which followed shortly thereafter—first as a somewhat misconceived melodrama with music (1897) and later as a full-fledged opera (1910)—is further proof of Humperdinck's mastery of that amalgam. This opera, too, is replete with Wagnerian references (to Die Meistersinger, in particular), but their pageantry happily co-exists with simple, folk-flavored tunes and enchanting children's choruses. Königskinder is populated by fairy-tale characters and childrening, but it is not a "children's opera." It is an allegory about the ageless injustices of the world, the voices of purity and gentleness that are either unheard or stifled by the baser instincts that prevail. The music cannot quite match Hansel und Gretel in instant melodic appeal, but it comes close to it in its uninterrupted flow of gracious vocal writing supported by a rich tapestry of orchestral sound. The latter is generously enhanced by virtuosic passages for solo instruments (notably violin and French horn) in a manner pointing ahead to Richard Strauss. Indeed, this opera should exist with simple, folk-flavored tunes and enchanting children's choruses.

HUMPERDINCK: Königskinder.

In his hugely successful Hansel und Gretel, Engelbert Humperdinck performed the near-miracle of combining Wagnerian harmonic riches and techniques with the simple world of fairy tales. Königskinder, which followed shortly thereafter—first as a somewhat misconceived melodrama with music (1897) and later as a full-fledged opera (1910)—is further proof of Humperdinck's mastery of that amalgam. This opera, too, is replete with Wagnerian references (to Die Meistersinger, in particular), but their pageantry happily co-exists with simple, folk-flavored tunes and enchanting children's choruses. Königskinder is populated by fairy-tale characters and childrening, but it is not a "children's opera." It is an allegory about the ageless injustices of the world, the voices of purity and gentleness that are either unheard or stifled by the baser instincts that prevail. The music cannot quite match Hansel und Gretel in instant melodic appeal, but it comes close to it in its uninterrupted flow of gracious vocal writing supported by a rich tapestry of orchestral sound. The latter is generously enhanced by virtuosic passages for solo instruments (notably violin and French horn) in a manner pointing ahead to Die Frau ohne Schatten. Indeed, this opera should exist with simple, folk-flavored tunes and enchanting children's choruses.

Performing: Very good
Recording: Very good

In his hugely successful Hansel und Gretel, Engelbert Humperdinck performed the near-miracle of combining Wagnerian harmonic riches and techniques with the simple world of fairy tales. Königskinder, which followed shortly thereafter—first as a somewhat misconceived melodrama with music (1897) and later as a full-fledged opera (1910)—is further proof of Humperdinck's mastery of that amalgam. This opera, too, is replete with Wagnerian references (to Die Meistersinger, in particular), but their pageantry happily co-exists with simple, folk-flavored tunes and enchanting children's choruses. Königskinder is populated by fairy-tale characters and childrening, but it is not a "children's opera." It is an allegory about the ageless injustices of the world, the voices of purity and gentleness that are either unheard or stifled by the baser instincts that prevail. The music cannot quite match Hansel und Gretel in instant melodic appeal, but it comes close to it in its uninterrupted flow of gracious vocal writing supported by a rich tapestry of orchestral sound. The latter is generously enhanced by virtuosic passages for solo instruments (notably violin and French horn) in a manner pointing ahead to Die Frau ohne Schatten. Indeed, this opera should exist with simple, folk-flavored tunes and enchanting children's choruses.
fine indeed. Helen Donath stands out with her exquisite singing and touching portrayal of the Goose Girl. While Adolf Dallapozza's voice is a shade light for the task, he interprets his demanding role sensitively and effectively. The Minstrel ("Spielmann") has some of the most eloquent music in the score; Hermann Prey sings it with authority but floods his rich tone with too much vibrato-laden sentiment. The members of the Tolz Children's Choir contribute magical individual and ensemble sounds. All the singers deserve special praise for their clear pronunciation of the poetic text.

The technical production indulges in some artificial balances here and there, but the sound is rich and beautifully detailed and surfaces are flawless. Why can't the same be said of most domestic pressings? G.J.

Lutoslawski: String Quartet (see CAGE)

RECORDING OF SPECIAL MERIT


Performance: Elegant
Recording: Vibrant

It is a pleasure to have so much of the music of Griffes and MacDowell finding its way into—the catalog. I feared that after the Bicentennial celebration two years ago all of it, together with the rest of musical Americana, would get locked away in a closet for another hundred years. Of course, these two men were very dissimilar in their lives and in their music. MacDowell was wealthy and never did entirely emerge from the influence of German Romanticism; Griffes had to teach music in a prep school to make a living and early fell under the spell of French impressionism (though that White Peacock of his was actually inspired by a bird he saw at a youth as the Berlin Zoo). Both did die young—MacDowell at forty-seven, Griffes at thirty-six shortly after his first big success, the première performance of The Pleasure Dome of Kishia Khan by the Boston Symphony under Pierre Monteux.

The Twelve Virtuoso Studies of MacDowell alternate elfin charm with ponderous solemnity. The Griffes works here were written during the last four years of his life. The ravishing Roman Sketches are from 1915 and the Three Tone Pictures were composed a year earlier, as were the three brief preludes, which hint at a departure from impressionism to more austere if mystical realms. Veronica Jochum (the daughter of conductor Eugene Jochum) has far more opportunity to display her considerable virtuosity at the keyboard in the Griffes pieces than in the MacDowell ones, in which she maintains a light, aloof touch that does offset some of the heaviness. P.K.


Martirano is basically a from-the-heart, impulsive, even rather wild composer who is represented here by a rather untypically austere twelve-tone work. Donald Martirano, of the same generation and currently chairing the composition department at the New England Conservatory, is a rigorous twelve-toner represented here by one of his rare tonal works. These settings of religious poems by Robert Herrick apply twelve-tone techniques to tonal material—an intriguing if highly intellectual idea that is realized with modest musical success. For both works New World Records has provided its customarily elaborate notes and texts, which are much enlivened by the very baroque commentary of conductor Edwin London and the remarks of the composers themselves. E.S.
it difficult to arrive at any firm evaluation of his stature as a composer, but it certainly seems likely that his pre-Gershwin symphonic-jazz ballet score, La Création du Monde, will be one of the more lasting items in his vast legacy. This marvelous amalgam of Duke Ellington and Bach has continually fascinated me since I first heard it on Milhaud's own Columbia '58's back in the Thirties. Leonard Bernstein's new recording is most welcome, for it offers a zestful, un gimmicky, and beautifully calculated reading that balances the polyphonic and jazz elements of the score. The rowdy, music-hall-style Boeuf sur le Toit (Bull on the Roof) and the atmospheric dances from the Saudades do Brasil (Nostalgia for Brasil) collection are slighter fare, but they are thoroughly enjoyable and are done here with great flair. The sound throughout is first-rate: crisp and with a good sense of depth, body, and localization. Four-channel playback in La Création puts one almost in the middle of the chamber-jazz ensemble. Let's hope that this is only the first of a series of explorations into Milhaud's work by Bernstein. I'd like to hear him do the Présé symphonic suite, for instance. D.H.

MOUSSORGSKY: A Night on Bald Mountain. Khovantchina: Prelude; Dance of the Persian Maidens; Entr'acte (see BOROVIN)

RIMSKY-KORSAKOV: Capriccio Espagnol, Op. 24; Russian Easter Overture, Op. 36; Shazka, Op. 29 (see BOROVIN)


Performance: Hooray for our side Recording: Very good

Back in 1951, NBC turned to America's most popular composer of the day to supply music for the twenty-six episodes of the documentary series Victory at Sea that paid tribute to Allied naval operations in the Second World War. They had already screened some sixty million feet of film, put them together into a thirteen-hour sequence, and recorded Leonard Graves' narration. All that was missing was the score. Richard Rodgers looked at everything NBC had put together and started carrying around the shot-by-shot breakdowns prepared for him. He wrote most of the music during a Florida vacation and turned over all the other problems—timing, cutting, orchestrating, conducting—to his colleague Robert Russell Bennett. The result was a score of unusual musical interest for a TV documentary, and the three suites made from it have been usual musical interest for a TV documentary, and the three suites made from it have been

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The Pack Is Forming Behind the ADS 200C.
Carl Nielsen’s Maskarade, which he completed in the fall of 1906, is at the opposite pole from his masterly biblical opera of five years before, Saul and David (Unicorn RHS 343/5). It is very much a comic opera, based on a lightweight dramatic satire by Ludvig Holberg (1684-1754) on the craze for masquerade balls that swept Copenhagen in the early 1720’s. Maskarade is comparable in the brilliance of the musical writing and instrumentation, as well as its populist touches, to, say, Smetana’s The Bartered Bride, but in all is solved when it turns out that she is the same girl he has already met en masque and fallen in love with. There are various subplots and other diversions, but eventually every jack finds his Jill and all ends happily.

The depiction of the masquerade in the final act provides the opportunity for a great variety of music and action, including not only the relatively familiar Dance of the Cockerels but also some fine student choruses and a fascinating, almost diabolic waltz accompanying a mythological pantomime. The episodes leading up to the denouement are full of enchanting, comical, and sometimes touching inventions. Henrik’s amusing Act I aria describing the consequences if Leander backs out of the marriage arrangement; the captivating music as Magdelone (Leander’s mother) tells of her young dancing days; a fine “rage aria” for Jeronimus that subsides to his recollection of “the good old days”; Leander’s beautiful Act II apostrophe to his homeland; a luscious duet toward the end of Act II for Leander and his beloved, Leonora; and fascinating bits for the Night Watchman, a Mask Seller, and a Flower Seller that are based on old Copenhagen street cries.

Situation rather than character provides the framework for Maskarade, and perhaps that is one reason it has not taken hold on stages outside Denmark. With staging of extraordinary imagination and a translation more accurate and idiomatic than that accompanying the present Danish-language recording (the notes for which are otherwise very informative), Maskarade might well become exportable.

The work gets a first-rate musical performance in this recording, which features as a fine crop of post-World War II Danish singers as I ever hope to hear. Ib Hansen’s Jeronimus dominates, but the others are one and all vastly appealing in both vocal quality and innate musicality. The Danish Radio Symphony Orchestra and Chorus under John Frandsen’s direction do themselves proud, and the sound is full-bodied and crystal clear—though a bit more variety in stereo perspective, instead of predominantly front-and-center placement of the orchestra, might have been welcome. The album is another major step in the performance of Carl Nielsen’s whole output before a world public. Maskarade’s best pages—and there are many of them—are endowed with an invigorating quality of yeasaying, compassion, and inner strength that deserves to be shared far beyond the confines of Denmark. I am grateful for this excellent recording.

—David Hall

NIELSEN: Maskarade. Ib Hansen (baritone), Jeronimus; Gurli Plensér (contralto), Magdelone; Tony Landy (tenor), Leander; Mogens Schmidt Johansen (baritone), Henrik; Christian Sorensen (tenor), Arv; Gert Bastian (baritone), Leonard; Edith Brodersen (soprano), Leonora; Tove Hyldgaard (soprano), Pernille; Jørgen Klint (bass), Night Watchman; Ove Verner Hansen (baritone), Master of the Masquerade; others. Danish Radio Symphony Orchestra and Chorus, John Frandsen cond. UNICORN UN 35-7006 three discs $23.94 (from NHM Distributors, Ltd., P. O. Box 222, Evanston, Ill. 60204).

STEREO REVIEW
includes Kyllikki and the early Op. 12 sonata) or, for that matter, by Erwin Laszló or Izumi Taten (Nos. 1 and 2 only) on Finnish imports in my collection. The more romantic idiom of Kyllikki can better withstand Gould's slow pacing, which in this case remains well within reasonable bounds and does enhance the dramatic substance.

And, as if idiosyncratic interpretation were not enough, we are also captives here to what producer Andrew Kezdin chooses to call "acoustic orchestration" of the piano sound, which involves multifracture tracking of the instrument from various microphone placements to produce a final stereo composite. The first movement of Sonatine No. 1 and the ending of Sonatine No. 3 exhibit the most striking effects of this technique, and in the last movement of No. 1 and the first of No. 2 we also hear a bit of Mr. Gould's vocal obbligato. The combination is unsettling, to say the least.

D.H.


Performance: Fierce

Recording: Over-reverberant

This was one of the late Leopold Stokowski's last recordings, and it offers the Sibelius First

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Symphony in a fiercely urgent reading. The urgency is held within reasonable bounds for three quarters of the way, but in the finale things become just plain hectic, verging on hysterical. The Swan of Tuonela, on the other hand, with fine English-born solo work, emerges a thing of beauty, as Stokowski always made it. This performance is perhaps the closest in phrasing to the score as Sibelius wrote it of any of the several that Stokowski recorded.

While The Swan of Tuonela is heard to superb effect in the live and reverberant acoustics chosen for this recording and gains in atmospheric effect from four-channel playback, just the opposite is true for much of the symphony. There the acoustics make hash of the impact and articulation in the many climaxes and rapid rhythmic figurations. D.H.

STOCKHAUSEN: Three Songs for Alto Voice and Chamber Orchestra; Game (Play) for Orchestra. Sylvia Anderson (alto); Southwest Radio Symphony Orchestra, Baden-Baden, Karlheinz Stockhausen cond. 

Sonatine for Violin and Piano; Trio for Piano and Strings; The Percussive Trio (for piano and six timpani). Saschko Gawriloff (violin); Aloys Kontarsky (piano); Jean Batigne, Georges van Gucht (timpani). Deutsche Grammophon 2530 $27 $8.98.

Performance: Authentic Recording Excellent

It is hard to believe that Karlheinz Stockhausen will be fifty this year. Like some of the rest of us, he has mellowed recently, and one of the results of this has been the release of early works that were either never before performed or else withdrawn as unworthy of his maturity. The three songs here were written in 1950, to texts by Baudelaire and Stockhausen himself, in an almost traditional Central European modernist style. The gentle and warm Sonatine from the following year is a twelve-tone work, but really quite endearing. Spiel (Game or Play) for orchestra, written in 1952, is already in the fragmented or pointillistic style of the Fifties avant-garde. Finally, the Percussive Trio (for piano and six timpani, three per player), also from 1952, has all the conceptual complexity we would expect from Stockhausen, but the effect is rather simpleminded.

The performances, all directed or supervised by the composer, are quietly effective, and the recording is the usual Deutsche Grammophon side-packing triumph: more than an hour of music and not a single sign of strain. E.S.

STRAVINSKY: L'Histoire du Soldat. Madeleine Leinhart. Narrator; Jean Pierre Aumont, the Soldier; Martial Singh, the Devil; instrumental ensemble, Leopold Stokowski cond. 

Vanguard/Cardinal VCS 1012 $3.98.

Performance: Authentic in feeling Recording: Good

STRAVINSKY: The Soldier's Tale. Glenn Jackson, Narrator; Rudolf Nureyev, the Soldier; Michiel Mucliam, the Devil; instrumental ensemble, Gennady Zalkowitsch cond. Argo ZNF 15 $7.98.

Performance: Lacks something Recording: Actors too close

STRAVINSKY: L'Histoire du Soldat, Suite for Violin, Clarinet, and Piano; Septet; Pastorale (Continued on page 155)
for Violin and Piano; Three Pieces for Clarinet; Suite Italienne for Cello and Piano. Tashi. RCA ARL-1-2449 $7.98

Performance: Spirited
Recording: Excellent

L’Histoire du Soldat—The Soldier’s Tale or, better, The Story of a Soldier—was created by Stravinsky and the Swiss writer C. F. Ramuz during World War I as a practical project for a traveling theater. This odd little work, distantly based on Russian folklore and a rather amorphous concept of folk theater, has remained unique in Stravinsky’s output—and, indeed, in the music theater of the twentieth century. It fits no existing theatrical form or institution; it has no singing, only a little mime and dance, and not really a great deal of music (most of the action is simply narrated in flat rhyming couplets). Small wonder that the music is best known in the concert suite for seven instruments. Still, against all odds, it is a wonderful theater work. As one of the cornerstones of twentieth-century music theater, it has been revived again and again, often with great success, in various countries and languages; there are more than a half-dozen English translations alone. In recent years we have had not only a disc of the French original with Madeleine Milhaud as the narrator and a fine New York ensemble directed by Leonard Stokowski, but also a Boston Symphony Chamber Players recording with John Gielgud, Tom Courtenay, and Ron Moody reading an English text.

And now we have a new English version, with Glenda Jackson and—of all people—Rudolf Nureyev (as Narrator and Soldier, respectively), along with a welcome reissue of the Stokowski recording on Vanguard’s budget-priced label. The latter is probably the best available version, and it is certainly the best buy. In line with the character of the music itself, the actors and musicians achieve that sophisticated view of folklore that does not patronize or imitate but sincerely attempts to see the world in another way. Hearing the original French may, according to your point of view, either give you a better chance to savor the poetic qualities of the (not difficult) text or present a language barrier.

Both the English-language recordings use serviceable recent British translations. There the comparison ends. The idea of having Rudolf Nureyev play the Soldier must have come out of a stage performance; Nureyev’s awkward, Russian-accented English simply adds a few notes of confusion to this Russian-Swiss-French-English production, which has no clear line or overall point of view. Both versions feature good playing, but dramatic and musical vividness is the hallmark of the Stokowski recording on Vanguard’s budget-priced label. The latter is probably the best available version, and it is certainly the best buy. In line with the character of the music itself, the actors and musicians achieve that sophisticated view of folklore that does not patronize or imitate but sincerely attempts to see the world in another way. Hearing the original French may, according to your point of view, either give you a better chance to savor the poetic qualities of the (not difficult) text or present a language barrier.

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While the seven-instrument suite from L’Histoire is one of Stravinsky’s most familiar works, it is not so well known that he also arranged a suite of five of the movements for violin, clarinet, and piano. Despite the authenticity of this arrangement and the high spirit with which it is performed by members of Tashi on a new RCA release, I think most listeners will prefer the other suite, if not the original. However, this Tashi disc has other attractive points: the solo clarinet pieces (written shortly after and in a style related to L’Histoire), the early (1907) Pastoral that Stravinsky arranged for the violinist Samuel
With Renata Scotto in all the soprano leads and Lorin Maazel conducting, Columbia has now completed its London-based recording of Puccini's Il Trittico. I had some reservations about Suor Angelica (M 34505), but I consider both Gianni Schicchi (M 34534) and the new Il Tabarro (M 34570) outstanding achievements. The latter, a concise, realistic drama, combines raw action with a musical realization of sophisticated refinement. Maazel is unfazed by this seeming contradiction. He reveals the multicolored riches of Puccini's orchestral palette with a sure and sensitive hand, stressing clarity of all the dramatic richness of Puccini's orchestral palette with a refinement. Maazel is unfazed by this seeming weaknesses whatever; I regret only that the at theate love duet with Placido Domingo could be bettered. The tenor exhibits no calculated swiftness. He brings on the Grand Guignol ending with a finely calculated swiftness.

Much of Giorgetta's part lies in the soprano mid-range, where Renata Scotto's singing is particularly full and always expressive. Her only weak moment is the shaky high C at the end of her nostalgic aria, an optional note she need not have taken. In any case, her desperate love duet with Placido Domingo could hardly be bettered. The tenor exhibits no weaknesses whatever; I regret only that the ringing impact of his theatrical presence is so seldom realized on records, and this one is no exception. The character of Michele, a bitter, brooding man, is effectively captured by Ingvar Wixell's robust and wide-ranging baritone. The supporting singers are good and so is the engineering, though I would have welcomed even more along the lines of the atmospheric effects supplied to depict the sounds of the harbor.

This new Il Tabarro emerges as a strong rival to the earlier London 1151, which is conducted with less refinement but more elemental force by Lamberto Gardelli (with Renata Tebaldi, Mario del Monaco, and Robert Merrill in strong characteristic form as the principals). The towering Michele of Tito Gobbi, one of the all-time monumental voices of the art of the singing actor, is now available in a newly released set of the three works (Angel SCLX-3849) in electronic stereo.

-George Jellinek

Puccini's "Il Tabarro"

Duskin in 1933, the 1932 Suite Italienne made for cellist Gregor Patigorsky from the 1920 ballet Pulcinella ("neo-Classicized" by Stravinsky from music by or attributed to Pergolesi), and the late, austere Septet from 1952, a work on the borderline between neoclassicism and Stravinsky's late serial/twelve-tone style. All are performed with great gusto and musicality by Tashi players Peter Serkin, Ida Kavafian, Fred Sherry, and Richard Stoltzman, assisted and abetted by three guests (Bill Douglas, bassoon; Daniel Phillips, viola; Robert Roucht, horn) in the septet. Wonderful sound quality also.

Elly Ameling: German Romantic Songs.

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Performance: Excellent
Recording: Excellent

Basing my judgment on the many Vivaldi concertos I have had occasion to listen to during the last few months, I have come to the conclusion that the Venetian master's level of inspiration was particularly high when he was writing for the oboe. Many of the performances I have heard have been by Heinz Holliger, the quality of whose own work has always been extraordinarily high, characterized by technical perfection, rhythmic vitality, clear articulation, and imaginative ornamentation. This album is no exception, and it only adds to the reputation of this remarkable performing artist.

S.L.

ELLY AMELING: German Romantic Songs.

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| Channel | 87 | with |

Signal necessary for 50dB quieting in stereo:

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Performance: Strong
Recording: Stunning

This record is as American as apple pie and quite as delicious—i.e., of course, you like apple pie. And besides the pure listening enjoyment, it gives a fascinating historical survey of American organ music, from an eighteenth-century trumpet air through blustering Romantic variations to the lovely pieces by Samuel Barber. It is especially good to have here Aaron Copland's only work for solo organ and the fine Roger Sessions chorale. One comes away from this disc with the happy feeling that our country's contribution to organ literature is a fine one indeed.

The Southwark Cathedral organ is magnificent and Walter Hillsman uses it to the fullest extent, revealing one beautiful sound after another. The instrument has rarely been recorded because of the noise from a nearby railway, a problem that was overcome in this case by recording in the wee hours of the morning, when the trains are not running.

Hillsman's strong performances are characterized by a fine sense of rhythm and articulation and imaginative registration.

S.L.


Performance: Powerful
Recording: Good

Since most of these pieces are excerpts from larger works or collections, and some were not even composed for the piano, the disc will appeal mainly to fans of the pianist in the context indicated by the heading, "Encores." The performances are all attractive, those of the Rachmaninoff, Scriabin, and Khachaturian items especially so in their unvarnished, grand-scaled, yet supple way, and the sound (Columbia's own, recorded in London) is quite good. Finding one's way through the assortment is a little tricky because the liner listing does not agree with the labels: the labels are correct, the liner sequence shown above. (What is listed as Beethoven's "Minuet in G Major" is not the independent piece schoolchildren used to know, but a movement from a sonata.) Unmentioned on the jacket is a little bonus found inside it: a separate 45-rpm disc of recordings Berman made in Moscow forty-one years ago, and uninspired, but got at the age of seven—his own tiny Mazurka and Mozart's Fantasia in D Minor, K. 397. The Mozart is charming enough, the Mozart is taken at quite a lick (perhaps sped up in order to fit on a single 78-rpm side), and the faded sonics emphasize the souvenier nature of the offering. R.F.


L'OISEAU-LYRE DSLO 15 $7.98.

Performance: Genial
Recording: Good live takes

Shura Cherkassky is one of those old-world names that conjure up images of an old-style pianist. He has been very little in evidence in recent years—at least on this side of the Atlantic—but, judging from this recording of a 1975 London concert, he still has an extraordinary mastery of his instrument. The playing is exuberant, technically superb, colorful, and genial, but not very profound. My interest never flagged, but I was never moved.

R E C O R D I N G  O F  S P E C I A L  M E R I T


ANGEL S-37307 $7.98.

Performance: Top-drawer
Recording: Ditto

The last time I saw Igor Kipnis, he was glowing with enthusiasm about his latest recording project: a record of program music. And now here is the album, itself glowing with enthusiasm. It also glows with beautiful and at times quite moving music—despite the programmatic gimmick—and superb performance. Kipnis brings warmth and humor to the music and fills out the works with imaginative and tastefully executed ornaments and divisions. He deserves special credit for bringing off two of the pieces as real tours de force. Kuhnau's Biblical Sonatas, despite their extraneous and uninspired, but Kipnis has chanced the best of the set and managed to make it convincing. And then there is the Dussek, which was written for the piano and would seem impossible to render on the harpsichord. By means of ingenious registration and a bit of leggerdemain, Kipnis has transformed the piece so convincingly that one would never suspect that it was not conceived for his instrument. This is a neat trick, and, along with the rest of the album, it must be heard to be believed.

S.L.

LILLY LASKINE AND LE QUATUOR VIA NOVA: French Music for Harp, Winds, and Strings (see Best of the Month, page 87)
The Poulenc and Honegger sonatas might be said to be related, since both reflect a jazz influence and Poulenc dedicated his sonata (which also contains apparent echoes of Prokofiev’s “Romanza” from Romeo and Juliet) to the memory of Honegger. Both works, as well as those of Saint-Saëns (one of that composer’s very last works, composed the same year Honegger began his Clarinet Sonata), have a great deal of charm and are eminently easy to listen to. but none of this is music that commands attention for its own intrinsic value alone: it is for the most part showcase material. and this record is quite a showcase for some of the most gorgeous clarinet playing we are likely to hear, on records or otherwise. Irma Vallecillo’s collaboration is all one could ask, the recording is extremely realistic and well balanced, the German pressings clean as a whistle. One does become impatient to have a Stoltzman recording of the Brahms clarinet sonatas now. R.F.


Performance: Cornet corn Recording: Excellent

Gunther Schuller, who seems determined to record the music of just about every American composer who ever lived, takes us back this time to the turn of the century for a concert of music our parents or grandparents might have heard during a Sunday stroll in the park. The cornet was a favorite solo instrument of these outdoor band concerts—it couldn’t get soggy on a humid day like the strings of a violin, and it didn’t need to be amplified to be heard a long way off. For this instrument and the bands that accompanied it, such composers as Herbert L. Clarke, Walter M. Smith, and George Morrison wrote some perfectly appallling pieces, complete with exorcising virtuoso turns to torture the boculic tunes on which they were based. Apparently, though, our forebears loved every vulgar moment, and somehow Gerard Schwarz, Gunther Schuller, and the virtuoso Columbia Chamber Ensemble show that there is something to be said for the idiot after all.

It is hard to resist the Lullaby by black composer George Morrison, for example, and Herbert Clarke’s clonky polkas and duets for cornet and trombone get you to after a while despite the heavy helpings of musical cornpone. Scott Joplin’s Pleasant Moments is an unexpected delight—which J. B. Arban’s beloved Variations on Bellini’s “Norma” assuredly is not. But, by and large, this record is worth a listen. P.K.
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