BUYERS' GUIDE TO AMPLIFIERS: How much power do you need?
Julian Hirsch: Solving the problem of fine tuning in FM

EQUIPMENT TEST REPORTS: ADC Sound Shaper Three Equalizer
Beyer DT440 Headphones • Crown SL-1 Preamplifier and PL-1 Power Amplifier
JBL L 150 Speaker System • Realistic STA-2200 AM/FM Stereo Receiver

EARL HINES: A HALF CENTURY OF JAZZ PIANO ARTISTRY

IF ALL $200 TURNTABLES HAVE THE SAME SPECS, HOW COME THE PL-400 SOUNDS BETTER?
INTRODUCING THE NEW PIONEER PL-400.

Today, most turntables in the same price range look practically the same on paper. But they don't sound at all alike in your home.

Because equal specs don't necessarily mean equal sound. In fact, specs are just a measure of the distortion caused by your turntable itself. They tell nothing about how your machine prevents distortion caused by your environment.

Pioneer’s new PL-400 turntable was designed to also keep external interference from coming between you and great sound.

Much of the success of our new PL-400 turntable revolves around our all new “Stable Hanging Rotor.” The world’s thinnest direct drive motor.

Unlike more massive conventional motors, the motor in the PL-400 is so thin, it allows the center of gravity to be at the pivot point of the rotating mechanism. So instead of the platter wobbling like a top, the platter on the PL-400 acts like a gyroscope to stabilize itself.

Although this technology is very difficult to understand, the result of it is very easily appreciated. You no longer are bothered by distortion caused by stylus mistracking or speed deviations. So you get just what’s on your record. Nothing added to it. And nothing taken away.

But this super thin motor does more than eliminate distortion. It also eliminates any space wasting elements used in conventional motors. And because it’s so much thinner than any other motor, the cabinet around the PL-400 is also a lot thinner. This 20% reduction in cabinet size means the PL-400 is 20% less likely to suffer from acoustic distortion.

Many turntables in this price range are direct drive. Some of them offer DC motors. Some of them have servo motors aimed at eliminating drift caused by changes in temperature. But even the best of them just seem to reduce drift instead of eliminate it.

The Pioneer PL-400, on the other hand, has a Quartz PLL servo system that keeps rotational speed at a constant. And keeps the PL-400 unaffected by temperature changes, voltage fluctuations and other powerline anomalies.

These features work to keep the PL-400 sounding like a much more expensive turntable. But without our specially designed Coaxial Suspension system, they wouldn’t be nearly as effective.

This free floating suspension system isolates the platter and tonearm from the rest of the turntable. So even if the base vibrates, the platter and tonearm don’t.

This means you can shake, rattle and roll a lot more with a lot less worry that your turntable is doing the same thing.

Even the tonearm of the PL-400 is designed to give you better sound. Its new “Mass Concentrated” design improves crossmodulation distortion and tracking accuracy. So you get more sound clarity and better channel separation.

All these features on a turntable the price of the PL-400 is unheard of. But Pioneer didn’t stop there. The PL-400 also has full automatic controls. Including automatic lead-in, viscous damped cueing, automatic return, and automatic repeat. An easy to read one-stripe strobe that confirms platter speed accuracy. A quick start mechanism that starts the platter revolving as soon as the tonearm begins to move. And more.

So if you want to buy a $200 turntable and are just interested in great specs, there are any number you can buy. But if you’re interested in a $200 turntable that will give you great sound, there’s only one.

The Pioneer PL-400.
Empire's EDR.9
The Phono Cartridge Designed for
Today's Audiophile Recordings

Direct-to-Disc and digital recording
have added a fantastic new dimension
to the listening experience. Greater dy-
namic range, detail, stereo imaging,
lower distortion and increased signal-
to-noise ratio are just a few of the
phrases used to describe the advantages
of these new technologies.

In order to capture all the benefits
of these recordings, you should have a
phono cartridge specifically designed to
reproduce every bit of information with
utmost precision and clarity and the
least amount of record wear.

The Empire EDR.9 is that cartridge.
Although just recently introduced, it is
already being hailed as a breakthrough
by audiophiles, not only in the U.S., but
in such foreign markets as Japan,
Germany, England, France, Switzerland and
Sweden.

What makes the EDR.9 different?

1. Within the cantilever tube, we added
a mechanical equalizer. It serves two
purposes: (1) to cancel the natural re-
sonance of the cantilever tube, and (2) to
improve the overall transient response
of the cartridge. The end result is a
stylus assembly that has a mechanically
flat frequency response. The frequency
response extends from the 20Hz to 35kHz
with a deviation of no more than ± 1.75
dB. No other magnetic cartridge has
that kind of performance. We call this
stylus assembly an "Inertially Damped
Tuned Stylus," the refinement of which
took over 6 years.

2. Contact area of L.A.C. Diamond.

In order to reproduce a groove con-
taining extreme high frequency musical
overtones, the stylus tip must have
small enough dimensions to fit within
the high frequency portion of the groove.
Yet, the smaller the stylus tip, the greater
the pressure applied to the record sur-
face and the more severe the record
wear. In the EDR.9, we have responded
to these conflicting requirements by de-
veloping a stylus that has the proper
dimensions from side-to-side, a much
smaller dimension from front-to-back,
and a very large, low pressure degree
of contact between stylus and groove
top-to-bottom. The net result of this
large contact area, which engineers call
a "footprint," is that the stylus of the
EDR.9 can track musical signals to the
limits of audibility and beyond, yet has
the lowest record wear of any cartridge
presently available. The stylus shape of
the EDR.9 is called L.A.C. for "Large
Area of Contact."

3. Conventional cartridges exhibit rad-
cial changes in their frequency response
when connected to different preampli-
fiers. This is because the load condi-
tions—the amounts of capacitance and
resistance provided by the preamp—
vary tremendously from one preamp
to another, and from turntable to turn-
table. Consequently, most phono car-
tridges, even expensive ones, have their
frequency response determined essen-
tially by chance, depending on the sys-
tem they are connected to.

But the electrical elements of the
EDR.9 have been designed to remain
unaffected by any normal variations in
load capacitance or resistance. Thus,
the EDR.9 maintains its smooth fre-
quency response and accurate transient-
reproduction ability in any music system,
irrespective of loading conditions.

4. Then, as a final test of performance,
we listen to every EDR.9 to make cer-
tain it sounds as good as it tests. At
$200, the EDR.9 is expensive, but then
again, so are your records.

For more detailed information and
test reports, write to:

Empire Scientific Corp.
Garden City, NY 11530

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COVER: Caricature of Earl Hines by Al Hirshfeld (see page 10)
The Discwasher DiscKit™
Total record care.

The DiscKit™ includes the famous Discwasher D3 Record Cleaning System, the SC-1 Stylus Cleaner, the Zerostat Anti-Static Instrument and the Discorganizer walnut storage tray with dust cover.

These products are also available separately.

CIRCLE NO. 14 ON READER SERVICE CARD

1407 North Providence Road, Columbia MO 65201
• RCA's SELECTAVISION VIDEODISC SYSTEM will be introduced nationwide in the first quarter of 1981. The catalog of available discs will consist of about three hundred programs. Half will be feature-length movies, and the rest will be music, children's programs, ballet, sports, and so forth. The discs, which will have up to an hour of playing time per side, are expected to sell for $15 to $20. The SelectaVision player will cost about $500. Preposterously, RCA plans to introduce its videodiscs in mono only in a record market that went to stereo over twenty years ago and on the eve (pending FCC approval) of stereo TV. The MCA-Philips machines now being test-marketed by Magnavox are in stereo and provide jacks for connection to hi-fi electronics as well.

• THE THEME FROM STAR TREK—THE MOTION PICTURE has been recorded by Casablanca Records disco whiz Meco, who had the hit versions of the themes from Star Wars and Close Encounters. CBS, which is distributing the soundtrack album, also has cover singles of the main title by jazzmen Bob James and Maynard Ferguson ready to be beamed up.

• ROYALTIES FOR THE SONG BEAUTIFUL CHILD on Fleetwood Mac's album "Tusk" have been donated to the United Nations Children's Fund (UNICEF) as part of a program that was begun in 1979, the International Year of the Child. Stevie Nicks, who wrote Beautiful Child, said that it was "written as a lullaby and now belongs to all the children of the world." Income received from donated songs supports UNICEF's work for children in more than one hundred countries. Other artists who have participated in the Music for UNICEF copyright gift program include the Bee Gees, Rod Stewart, and Donna Summer.

• THE VIDEO SOURCE BOOK, just published by National Video Clearinghouse, Inc., lists more than 15,000 prerecorded video programs available on tape and disc. For each entry there is a brief program description, distributor's name and address, and format information. Price: $19.95 postpaid from National Video Clearinghouse, P.O. Box 3, Syosset, N.Y. 11791. (N.Y. residents add sales tax.)

• AN APPEAL TO HALT OFF-THE-AIR TAPING of new records has been made to radio stations by a group of twenty-five record-company executives. They request that stations stop the commercial-free broadcasting of new releases to attract listeners who promptly tape off the air instead of buying the records. The executives claim that this invitation to home tapers saps the lifeblood of the recording industry and erodes the income of vocalists and other musicians.

• ARABESQUE, A NEW CLASSICAL LABEL, has been launched by Caedmon, long known for spoken-word recordings. List price for the Arabesque line is $6.98 per disc or cassette, with a $1 surcharge for an opera libretto. In addition to standard orchestral and operatic repertoire, the company will feature reissues of great recordings of the past. By the end of the year the Arabesque catalog will include about eighty titles.

• GARRARD, BRITISH TURNTABLE DESIGNER and manufacturer for fifty-two years, has been bought by Gradiente Electronica Ltd., an international company which has its headquarters in Sao Paulo, Brazil. Advance Design Group turntables from Garrard will now be marketed in North America by Garrard U.S.A., which plans to introduce a line of hi-fi products of all kinds. Gradiente manufactures components in seven factories in three countries.

• VIDEO SOFTWARE NEWS: WCI Home Video, a division of Warner Communications, has issued twenty major motion pictures on videocassettes. Prices range from $50 (Woodstock I) to $65 (Superman). The massive Fotomat Corporation has come into the home video field with what it calls "Drive-Thru Movies," a catalog of 130 feature films, concerts, and other programs available on cassette in VHS or Beta format. All orders are placed by calling a toll-free number, and the tapes are delivered through Fotomat's 3,700 retail outlets. Cassettes can be rented or bought. Rental for five days, from $7.95 to $13.95; purchase, from $39.95 to $69.95. For free catalog write Fotomat Corporation, Video Operations, 64 Danbury Road, Wilton, Conn. 06897.

February 1980
MISSING INGREDIENTS

As with everything else, there are surely exceptions, but few experienced audiophiles would argue with the proposition that there are ineffable aspects of live musical performance that do not yet lend themselves to the recording medium. The amount as well as the nature of the "something missing" varies, of course, with the kind of music concerned. Symphonic music, big-band programs, chamber works, and solo piano recitals seem to suffer very little in the transfer from concert hall (or recording studio) to listening room. A great deal is lost, however, in opera, musical comedy, and ballet, each of which has a large visual component, and even more is sacrificed in the intimate art of the vocal recital and (particularly) in cabaret.

The life of the cabaret artist is not without its satisfactions, but it is far from being a bed of roses. Whether singers, piano players, or both, these entertainers are often caught in an unattractive bind. They are smothered, on the one hand, by cultists who fawn and commiserate by turns—but only so long as popular success eludes the living proofs of their superior taste. And, on the other hand, they are drowned out as mercilessly as any junk box by rowdy drunks who (by their own admission) make it through the night, or by snarling egoists who take the first soft piano chord as a signal to start talking (which of the Fate's sees it that the biggest mouths are always seated closest to the piano?)

In between, however, is the audience that Makes It All Worthwhile, the people who come to the cabaret to share their happiness or their misery, those who want to be reassured that though their deep feelings are far from unique, they can at least be the raw material for art. At its best, cabaret is a rather special kind of musical communion, one heavily dependent for its success not only on performing excellence but on an "atmosphere"—late, dark, warm (or cool, given the season), and sympathetic. These ineffables obviously add up to an assignment that is beyond the capability of any mere audio disc—but very likely not of the new video ones to come. I find myself rather looking forward, therefore, to Tubeside Cabaret, a selection of my favorite entertainers at hand on video disc, the lights down low, the clink of ice in the glass... in other words, short of the real thing, Paradise now.

Until then, however, cabaret artists must try to overcome the limitations of the somewhat unsympathetic audio medium. One of them, Ronny Whyte, currently has two albums out that are the inspirations for these musings: "New York State of Mind" (Monyouth/Evergreen MES/7088) and "I Love a Piano" (Audiophile AP 127). If I prefer the latter, it is not because of any fault in the performances of the former but because it is very difficult to respond to New York (or its state of mind) these days, and because I am surfeited with the protest-too-much blitz of "I Love New York" television ads, "Piano" is remarkable for its unusual blend of old and new songs. Works by Duke Ellington (Satin Doll), Henry Mancini (Charade), Hoagy Carmichael (New Orleans), and Irving Berlin (I Love a Piano) stand comfortably alongside others by such youngsters as Tom Paisley (Jazz Man), Leon Russell (This Masquerade), Billy Joel (Piano Man, naturally). Best of them all is a classy demonstration of just how far above Melancholy Baby the cabaret art can rise: No Moon at All has a melody by Dave Mann, lyrics by Redd Evans—and a quodlibet accompaniment by Ludwig van Beethoven (Moonlight Sonata). It is a great, big, unqualified success, and it inspires me to hope that someone is going to try to overcome the limitations of the something missing.
State of the ARt.

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CIRCLE NO. 3 ON READER SERVICE CARD
LETTERS TO THE EDITOR

Bix and Goldkette

- In his admirable December review of the Time-Life Bix Beiderbecke album, James Goodfriend expresses regret that the Jean Goldkette Orchestra "...with few exceptions, recorded nothing but sweet 'n' low." He should have explained whose fault that was. By ignoring the band's best charts—created by the great pioneering arranger Bill Challis—the Victor Record Company deprived jazz buffs not only of a wealth of Bixian improvisation but also of aural evidence that the Jean Goldkette Greystone Ballroom Orchestra was one of the most brilliant of the big bands. (Some of their incandescence still comes through, after more than fifty years, on My Pretty Girl in the Bix album.)

Bill Challis has rescued some sixteen arrangements, representing the cream of the Goldkette book, with Bix's solos written for the entire trumpet section. Thus, the opportunity now exists to re-create this legendary band with all the advantages of modern recording techniques.

NORMAN P. GENTIEU

Fleetwood Mac

- I bought a copy of Fleetwood Mac's "Tusk." I was all hyped up for it, having read the ads about the "two years in the making," "super-clean recording," double-disc album, etc. I was raped. After I played the first side I found it hard to believe that a major release like this could have such unclear sound. The Kinks' "Low Budget" reaffirmed that my ears and speakers were not blown. After the second side, Marshall Chapman's "Marshall" again convinced me that "Tusk" was the problem. Side three followed "Repeat When Necessary" and side four followed "Eat to the Beat." I was proof that "Tusk" was the most fuzzy-sounding record in my collection. One very old K-Tel album is the only other that even comes close to being this muddy. Most of my records, both new (as above) and old, are like a breath of fresh air after the sonic smog of "Tusk."

Critics can debate about the performance and material on this album, but it seems a waste of time when the sound is so bad. I was fortunate, because a friend who thinks the Mac walk on water bought my copy for half price. Others may not be that lucky.

RUSSELL D. RAWLINGS
Mattoon, Ill.

Noel Coppage, who reviewed "Tusk" in January STEREO REVIEW, replies: I don't agree with several of the mixing decisions on "Tusk". I'd like the melodic elements louder and the rhythm section softer. But my copy is not generally fuzzy. Some of the tracks apparently recorded at Lindsey Buckingham's house seem haphazardly engineered—boomy and with compressed dynamics—but the engineering on some others, the mix aside, is cleaner than average. However, reviewers sometimes (not always) get better copies than real people do, since ours may come off the beginning of a press run before the stamper has stamped itself to a frazzle. This is not the first (or second or third) time I've heard a fuzziness complaint that seems to be based on some pressing problem.

Antique Speaker

- I am a retired radio and TV engineer and once owned an extensive collection of antique radios. The unidentified loudspeaker on the cover of the November STEREO REVIEW is an RCA Model 103—but it has been modified by the similar (octagonal) shape of the 103 and the speaker label as for our review photo by Fred Petras. Aside from technical differences, Petras' Brand X speaker measures 13 5/8 inches across, compared with 13 5/16 inches for the RCA 103. From its construction, I suspect that Mr. Petras' model was a high-end loudspeaker costing at least several times the $4.70 discount price ($22.50 list price!) quoted in the Radio Trading Company ad for the RCA unit.

Critical Stoicism

- I think STEREO REVIEW readers deserve a response to Editor William Anderson's blast against critics for not applauding at concerts (December "Speaking of Music...".) Neither "disdainful ego" nor "rudeness" is the reason, nor is it "to signal...pure, objective integrity..." Though the doctrine of purely objective criticism is still taught in some colleges, most working critics and intelligent observers of the field know that criticism never can be, nor should it be, wholly objective, for that would cancel out the human factor, which is as necessary in criticism as it is in art. And so critics try to find objective reasons for their subjective reactions.

We don't applaud (except sometimes, when we do indeed get that stirred up and can't contain it) because of the critic watchers. If we applaud on one occasion, it is reported backstage and elsewhere instantly. This is not a problem in itself, but if at the next concert or play opening or whatever we do not applaud, then that also is repeated backstage, and with dire expectations.

If all work in the performing arts were either wonderful or terrible, the yes-no, good-bad inference from our applauding or not applauding wouldn't matter so much. But applause alone cannot deal with the infinite range of quality between the extremes, and, as Mr. Anderson and STEREO REVIEW's own critics know, that is where most of critical and performance lies. Let's say that a critic applauds because he likes a singer's technique though he has some reservations about interpretation. His printed review will go into all this. The critic watchers will then not only be offended, having taken his applause as total approval, but will write letters to the editor claiming that the critic is two-faced. After a while a critic gets a bit tired of this. He also prefers to have his opinion taken from his written review, in which he can be detailed and specific, rather than from his applauding or not applauding. We sit quietly and figure we'll get our chance in print.

This doesn't happen only in New York. I ran into the critic-watching problem both

(Continued on page 10)
Introducing the Bose® 550 Receiver.

The new, moderately priced Bose® Model 550 AM/FM Stereo Receiver brings you Bose® technology and research wrapped up in an affordable, innovative package. It includes a direct-coupled amplifier that delivers a solid 40 watts of RMS power per channel—enough to drive almost any loudspeaker. It has an excellent AM/FM tuner section for clear, clean reception. And exclusive Bose® Source and Room Compensation Controls let you adjust for recording characteristics and for room acoustics. These controls make it easy for you to remove mid-range boominess without losing your deep bass. Try that with a conventional receiver!

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when I was drama critic for the New York World-Telegram and Sun and when I reviewed music and theater for the Columbus, Ohio, Citizen-Journal years ago. It's less of a problem for me now, because the 700-old papers I write for are out of town, and people don't watch me as they do Walter Kerr or Harold Schonberg. So sometimes I do indeed applaud.

NORMAN NADEL
Cultural Affairs Writer
Scripps-Howard Newspapers
New York, N.Y.

The Editor replies: An interesting point of view, and I do not question the sad experience that lies behind it, but I'm sure that Mr. Nadel knows as well as I do that there are very few members of the audience indeed who indulge in "critic watching," very few who would be able to identify them even if they were belled like the cat. It therefore seems to me that a critic ought to be permitted to consider himself a human being like any other, one with the right to express approval or disapproval in or out of print without looking around to see who is watching. If he likes what he hears, let him applaud; if he has minor reservations, let him list them later in print and let performers (or those who are placed to watch critics) resolve any apparent inconsistency for themselves.

One other point I did not have room for has to do with the fragility of audience response: many (perhaps most) people, particularly in groups, are all too easily shaken in their aesthetic opinions (particularly those who know no more of music than what they like!), and it must surely give them a nasty pause (and probably an unnecessary one at that) when they find themselves caught between a Wild Enthusiast on the one hand and a Silent Sam on the other. What it finally comes down to is that theatrical presentations and music concerts are social exercises for the celebration of art in which performers and audiences play important roles. Do critics really want to be excepted from that community?

That said, I would remind Mr. Nadel that what I was addressing was not the reason(s) for not applauding, but how such non-participation is perceived by others. If it looks like ego or rudeness, then it might as well be.

Frederica von Stade

The December STEREO REVIEW contained reviews of a spate of sumptuous recordings, on three different labels, featuring mezzo-soprano Frederica von Stade. The operatic world has and will continue to be enriched by her presence. She has proved that operatic superstars do not have to be sopranos.

GERALDINE SEGAL
Randallstown, Md.

Hooking It Up

- Between screws, clips, RCA and banana plugs, etc., an audiophile is hard pressed to get all of his system together with any kind of interface integrity or convenience. You should see me attempting to put Fulton speaker wire into the clips on my McIntosh 4100 or XR-6 loudspeakers! It is inconvenient and inefficient to have the diversity of connector devices that now prevails within the audio industry. I hope some concerted effort will be made toward standardization.

J. A. VAN SANT
St. Louis, Mo.

Davis vs. Gardelli

- George Jellinek's unfavorable review in November of Colin Davis' conducting on the new Philips recording of Verdi's Un Ballo in Maschere seems to me just. In the music of Berlioz and Mozart Mr. Davis conducts as one to the manner born, but in Verdi he completely lacks the urgency, sweep, and rhythmic vitality of Lamberto Gardelli. To many listeners, Maestro Gardelli is the finest Verdi conductor since Toscanini, surpassing even the excellent efforts of James Levine and Claudio Abbado. Compared with Gardelli's spontaneity and warmth, Levine sometimes seems a trifle hectic, while Abbado appears somewhat detached and calculating. I hope we will hear more of Gardelli's work, not less, in works of Verdi's middle and late periods. A recording of Otello with Bergonzi, Te Kanawa, Manuguerra, and Gardelli would compensate nicely for Davis' Ballo!

THOMAS R. WILSON
Downtown Grove, Ill.

FM Ratings Game

- I noted with interest Robert Orban's statement in his November article on FM broadcast quality that "the amount of money that can be made by an FM station depends on what is known as the 'book'—the station's ratings ... ." Well, there's an entire radio format where what matters is who listens, not how many. I'm referring to the numerous classical music radio stations around the country, most of which don't even subscribe to Arbitron, the most widely used rating service. And yes, thank you, most of us make a handsome profit, for a very simple reason. What percentage of the population takes trips to Paris, buys Oriental rugs, or reads hard-bound books? It's a very small percentage, but survey after survey shows that classical music listeners are more likely to use such products and services, and they have higher incomes to match.

Many media buyers for national advertisers in this country must now, after reading Mr. Orban's article, think that they are "unsophisticated" for buying by format. It just isn't so.

PHILLIP R. STEWART
Regional Sales Manager, KLEF-FM
Houston, Texas

Lady Macbeth

- I enjoyed Eric Salzman's October review of Angel's recording of the Shostakovich opera, Lady Macbeth of Mtsensk, in which he entertained the possibility of an American stage production. The opera has, in fact, been produced in the U.S. The slightly revised version, called Katerina Ismailova, had its U.S. première, in English translation, at the San Francisco Opera in 1964. The production was bad, and those performances, I think, killed any chances for a revival after all the critical pans were hung up in the kitchen. To this day I can sing the opera's little ditty, "People often die eating mushrooms at night," which alludes too naively to Kat-erina's killing her father-in-law with poisonous mushrooms for dinner. Titters ran through the audience.

How about a production in Russian, orchestrated by Moussorgsky?

PAUL HERTLENDY
Berkeley, Calif.

Monster Cable

- In Ivan Berger's December article on Audio Accessories, Monster Cable was inadvertently grouped with cables whose high capacitance may cause amplifiers to react violently. Monster Cable has low capacitance and is safe with all amplifiers.

JOE ABRAMS
Monster Cable
San Francisco, Calif.

Technical Director Larry Klein replies: We regret any confusion that may have been caused by the wording in that section of Ivan Berger's article. It was indicated that some premium speaker cables are claimed to have low capacitance (this should have read "low inductance") but that "a few" have extra capacitance, and it was suggested that consumers ask the manufacturers of their amplifiers which kind is acceptable. We did not mean to imply that Monster Cable was among that potentially risky few, since we know it is not.
The dawn of a new recording era

Auto Azimuth Alignment

Undoubtedly the most advanced and sophisticated innovation in cassette-recorder technology, Auto Azimuth Alignment launches a new era in high-fidelity recording. For the first time, you can be assured of perfect record-head azimuth alignment—on any cassette—at the flip of a switch. And, with that perfection comes an unprecedented frequency response—22 kHz at standard speed, 15 kHz at half speed!

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Nakamichi

680ZX Auto Azimuth Alignment

The premier Model 680ZX—half-speed response that rivals that of other decks at full speed! And, at standard speed, a full 22-kHz! High-resolution, wide-range FL level indicators and 18 program RAMM. Choose your speed, choose your program. The 680ZX does it all!

670ZX Auto Azimuth Alignment


660ZX Auto Azimuth Alignment

Performance identical to the 670ZX. Every feature except off-tape monitoring. Exclusive Nakamichi Auto Azimuth Alignment and Discrete 3-Head design. Master record-level fader too. An extraordinary value! 

*Dolby is the trademark of Dolby Laboratories.

For more information, write to Nakamichi U.S.A. Corp., 1101 Colorado Avenue, Santa Monica, CA 90401
Introducing TDK's Optimum Dynamic.

Normal bias tape taken to the optimum.

TDK's answer to the need for a normal bias reference standard.

Optimum Dynamic is the outcome of the same, sophisticated technology which set the high bias reference standard with TDK's SA cassette. Its tape formulation consists of Optima Ferric particles. A needle-shaped, pure iron oxide that has been ultra refined to cover the tape surface evenly and densely. The result is a cassette with a sensitivity and MOL audibly superior to any normal bias cassette available in the market today.

Well balanced sound.

Optimum Dynamic has all the sound characteristics you've been looking for. Super flat frequency response and sensitivity with a wide dynamic range. Lower noise and higher output at critical levels. For example, you'll now be able to capture the full dynamic complexity of a classical performance as well as the sustained higher output characteristic of contemporary music. In every way, Optimum Dynamic will deliver a well balanced, reference quality normal bias performance. And you'll hear it, unfailingly, for years to come.

Optimum Dynamic has the same Super Precision Mechanism as the SA cassette, protected by TDK's full lifetime warranty.*

The test of success.

We believe we've been highly successful in fulfilling the need for a normal bias reference standard. But there's a simple test. Listen to an Optimum Dynamic just once. Compare it to anything else you've been using. From then on, you may want to use it as a reference.

© 1980 TDK Electronics Corp., Garden City, New York 11530

Supplier to the U.S. Olympic Team

*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.
Pickering Cartridge Has Low-mass Stylus Tip

Pickering's XSV/4000 cartridge incorporates a Stereohedron stylus tip that has an expanded groove-contact area. The stated frequency response of the unit is 10 to 36,000 Hz with an output level of 0.7 millivolt per centimeter per second of groove velocity. Optimum tracking force is 1 gram ± 1/4 gram. The recommended load resistance and capacitance are 47,000 ohms and 275 picofarads, respectively. Accessory styli are available for monophonic LPs and 78-rpm discs. Price: $140.

Circle 120 on reader service card

AKG Headphones Use Electret and Dynamic Diaphragms

AKG's K-340 stereo headphones use a fixed-charge electrostatic (electret) transducer for frequencies above 4,000 Hz and a dynamic transducer for the lower frequencies. In addition, several passive diaphragms in each earpiece control the acoustical properties of the headphones. At low frequencies the passive diaphragms are designed to seal the primary chamber to produce an extended bass output down to 16 Hz. Around 200 Hz, the passive diaphragms become acoustically transparent and increase the volume of the earpiece chamber. This is said to smooth the upper-bass response. The acoustic resistance of the chambers behind the passive diaphragms creates a subtle comb-filter effect that is said to simulate a natural "free-field" listening experience.

The K-340 comes with a 9 1/4-foot coiled cord with a 1/4-inch headphone-jack plug. The nominal impedance of the unit is 400 ohms per channel. The HIF sensitivity rating is 5 volts for a 112-dB sound-pressure level; for a more normal 94-dB SPL, the headphones require 0.063 volt. The ear pads surround the ear and press inward on the head with a force of 10 1/2 ounces; the phones themselves weigh 13 1/2 ounces, less cable. Price: $189.

Circle 121 on reader service card

Phase-aligned Drivers in Thiel Loudspeaker

The sloping baffle of the Thiel Model 04 loudspeaker provides proper driver offset to correct for signal-delay effects while also minimizing diffraction phenomena. The deep-bass frequencies are produced by an 8-inch passive radiator. The other drivers are a 6 1/2-inch woofer/midrange unit and a 1-inch soft-dome tweeter. The overall frequency response is rated at 37 to 20,000 Hz ±2 dB. The system's recommended amplifier-power range is from 20 to 140 watts; a 1-watt input produces an 88-dB sound-pressure level at a 1-meter distance. The speaker measures 10 x 10 x 36 inches and weighs 34 pounds. Price: $500 per pair. Thiel Audio Products Company, Dept. SR, 4158 Georgetown Road, Lexington, Ky. 40505.

Circle 122 on reader service card

Yamaha Cassette Deck Has Echo Facilities

Yamaha's Model TC-720 three-head cassette deck can act as an echo generator by feeding a portion of the just-recorded signal picked up by the play head back to the record head. The 3.4-millimeter gap between the two heads results in a delay of 70 milliseconds. All three heads are of hard-surface.

Circle 123 on reader service card

Servo-control Turntable from Mitsubishi

Mitsubishi's DP-EC20 turntable features a magnesium-alloy head shell that reduces the tone arm's effective mass. Frontally mounted start, stop, repeat, and cue controls allow operation with the dust cover closed or when the unit is mounted in a cabinet or rack. Photo-optical detectors automatically select the proper speeds for 33 1/2-rpm/12-inch and 45-rpm/7-inch records. The DP-EC20 can be connected directly to Mitsubishi's DT-30 cassette deck for remote-control disc dubbing. When the deck's record/play and pause controls are engaged, it will start recording as soon as the tone arm touches the disc surface. When the arm leaves the disc, the deck returns to the pause mode. The DP-EC20 has a wow-and-flutter rating of 0.025 per cent and a rated signal-to-noise ratio of 80 dB. It measures 18 1/2 x 15 1/2 x 5 7/8 inches and weighs about 30 3/4 pounds. Price: $520.

Circle 124 on reader service card
fact:
this small record collection represents a $1,000 investment

It's true—the largest investment in almost any hi-fi system is frequently the cost of the records played on it . . . and it is equally true that a badly worn phonograph stylus tip may ruin a valuable (or irreplaceable) record in a single playing!

With the rising cost of new phonograph records—and the difficulty of replacing treasured, older favorites—it's the worst kind of false economy to risk damaging them with a worn stylus.

Check your stylus (needle) at least once a year
Always insist on a Genuine Shure replacement stylus. Substitutes will not restore the Shure cartridge to its original performance standards.

Look for the name "Shure" on the stylus grip.

Genuine SHURE

Shure Brothers Inc., 232 Hartrey Ave., Evanston, IL 60204
In Canada A C. Simmonds and Sons Limited
Outside the U.S. or Canada, write to Shure Brothers, Inc. Attn: Dept. J6 for information on your local Shure distributor.

Manufacturers of high fidelity components, microphones, sound systems and related circuitry.

CIRCLE NO. 46 ON READER SERVICE CARD

Hand-held Audio Spectrum Analyzer From Gold Line

The battery-powered Model ASA-10 is a ten-band octave spectrum analyzer with band-center frequencies from 31 to 16,000 Hz. Ten bandpass filters in the unit receive an equalized microphone signal and display it as a frequency-response graph using a LED array. The unit's accuracy is rated at + 1 dB; the display's vertical divisions represent 2.5 dB. A continuously adjustable gain control matches the analyzer's 35-dB dynamic range with the sound levels being measured and adjusts the gain of the external line input. There are two display-decay speeds, plus a hold mode that freezes the readings. An averaging switch converts the analyzer into a sound-level meter, and a clipping indicator warns of instrument overload. The instrument requires eight AA cells. Available accessories include a pink-noise generator and a 45-rpm pink- and white-noise recording. Price: $199.95. Gold Line Connector, Inc., P.O. Box 115, West Redding, Conn. 06896.

Circle 125 on reader service card

Threshold Preamp Has Moving-coil Cartridge Input

The Threshold Model SL10 preamplifier has both moving-coil and moving-magnet cartridge inputs with switchable input capacitance and resistance characteristics. The A-weighted signal-to-noise ratio of the moving-coil preamp is 80 dB, for the moving-magnet/RIAA stage, 90 dB. The preamp stages, like all sections of the SL10, use cascode Class-A direct-coupled circuits.

(Continued on page 16)
Next time you’re in an audio store, or browsing through the hi-fi ads in the paper, take a look at how many BSR turntables are connected to the best stereo components around. Because in order to put together a quality system, you need a quality turntable.

And BSR's full range of single- and multi-play turntables offers the advanced features you look for. Like belt-drive, electronic speed and pitch control and bi-directional viscous cueing. Plus the kind of specs you’d expect to find in our finest turntables: less than 0.06% (rms) and rumble better than -65dB (CIR 3).

After all, we’re the world’s leading producer of turntables, so it's no wonder so much quality is linked to us.

BSR (USA) Ltd., Skaneateles, NY 13152  BSR (Canada) Ltd., Toronto, Ont.

YOU’LL BE IMPRESSED WITH OUR CONNECTIONS.

BSR

CIRCLE NO. 51 ON READER SERVICE CARD
Low-price Yamaha AM/FM Receivers

Yamaha’s CR-240 and CR-440 receivers have identical specifications except for those related to output power. The CR-240 (shown) has 20 watts output power per channel from 20 to 20,000 Hz with 0.02 per cent total harmonic distortion (THD); the CR-440 puts out 30 watts per channel with the same distortion specifications. Dynamic headroom for the CR-240 is 1.1 dB; the CR-440 has a 1.5-dB rating. Both have IHF phono signal-to-noise ratios (S/N) of 78 dB and high-level ratios of 85 dB. Bass and treble tone controls provide ±10 dB adjustment at 350 and 3,500 Hz, respectively.

The receivers’ tuner sections have usable IHF sensitivities of 10.3 dB and 50-dB quieting sensitivities of 37.2 dB in stereo. Their IHF S/N in stereo is 76 dB. AM suppression is 55 dB, capture ratio is 1.5 dB, and IHF alternate-channel selectivity is 65 dB. Harmonic distortion is 0.2 per cent and separation 45 dB in stereo at 1,000 Hz.

The CR-440 has signal-strength and center-zero tuning meters. A Record-Out selector switch allows recording from any source while listening to any other. The CR-440 also has an FM-muting defeat switch and two headphone jacks. The CR-240 comes with one headphone output and LED tuning aids instead of meters. Both receivers have monitor connections for one tape recorder, stereo/mono switching, and connections and switching for two pairs of loudspeakers. The CR-440, 17¾ x 6½ x 12¾ inches, weighs about 20 pounds; the CR-240, 17½ x 5½ x 1½ inches, about 16 pounds. Prices: CR-440, $320; CR-240, $250.

Circle 128 on reader service card

New Products
latest audio equipment and accessories

The frequency response for the high-level gain stage extends from c. c. to 0.5 MHz with a phase shift of less than 10 degrees at 1 MHz. Total harmonic distortion is 0.006 per cent or less from 20 to 20,000 Hz at a 5-volt output level. The SL10 can put out 12 volts of signal before clipping. The unit has a separate power supply connected by cable to the preamplifier box. In addition to the two phone inputs, there are inputs for a tuner and two auxiliary sources plus monitor connections for one tape recorder. The rack-mountable SL10 has a faceplate measuring 19 x 2½ inches; the chassis dimensions are 17 x 2½ x 8 inches, and the power supply is 8 x 3½ x 5 inches. Price: $943.

Circle 127 on reader service card

Low-diffraction Loudspeaker from Belles Research

The Belles 1 loudspeaker is claimed to have virtually eliminated diffraction problems by use of a chamfered-edge baffle board for the 8-inch woofer. A 10-inch damped passive radiator mounted on the rear panel tunes the enclosure for flattest low-frequency response. The system’s tweeter is suspended several inches above the woofer enclosure to eliminate high-frequency diffraction and resonances. The tweeter diaphragm is also aligned with the woofer to maintain the proper phase relationships between the drivers. The 2,700-Hz crossover network is positioned on the woofer cabinet behind the tweeter. The system’s frequency response is from 30 to 20,000 Hz, and it is best suited for use with amplifiers rated from 40 to 200 watts rms per channel (a 2.5-ampere fuse protects the speaker). Dimensions, including the integral stand, are 33¾ x 15 x 17¼ inches; weight is about 60 pounds. The finish is walnut veneer with black-foam grill covers. Price: $445. Belles Research Corp., Dept. SR, A-1 Country Club Road, P.O. Box 65, East Rochester, N.Y. 14445.

Circle 129 on reader service card

(Continued on page 18)
It's your choice. Think about the kind of music you like. You don't want to think about cassettes jamming, loss of high frequency response or tape hiss.

DAK manufactures a cassette that you can really forget about. Great sound, high frequency response or tape hiss. Never hear the difference.

No apology. We feel that we have equaled or exceeded the mechanical reliability of virtually all cassettes and offer one of the best frequency responses in the industry. Maxell UDXL is truly the Rolls Royce of the industry, and DAK is comparable to the 100% US made Cadillac or Corvette!

Price. DAK manufactures the tape we sell. You avoid paying the wholesaler and retailer profits. While Maxell UDXL 90s may sell for $3.50 to $4.50 each at retail, DAK ML90s sell factory direct to you for only $2.19 each complete with deluxe boxes and index inserts.

DAK TAKES A RISK

Obviously giving away quality credit card calculators is not going to make DAK rich. We are betting that you will buy our cassettes again, and we are putting our money where our mouth is!

Customers like you are very valuable in the form of free advertising. We anticipate receiving over 6000 orders and 4500 repeat customers from the ad to add to our list of over 62,000 actives.

TRY DAK ML90 CASSETTES FREE

Try these high energy cassettes on your own recorder without obligation for 30 days. If you aren't 100% satisfied for any reason, simply return the tapes and calculator to DAK for a full refund.

To order your 10 DAK ML 90 minute high energy cassettes just send your check for $21.90 plus $5 for the credit card, simply call the toll free number below, or send your check for $21.90 plus $5 for the calculator and $3 for postage and handling for each group of 10 cassettes and calculator to DAK.

(If Calif. residents add 6% sales tax.)

DAK unconditionally guarantees all DAK cassettes for one year against any defects in material or workmanship.

Why not order an extra group of 10 DAK ML90 cassettes for yourself or a friend? We will add one free ML90 cassette to each extra 10 you buy and of course you can buy one $59 value calculator for $5 with each group you buy.

INCREDIBLE CASSETTE OFFER!
Interface:C Series II

It sounds like music.

Interface:C Series II is the fulfillment of our six-year association with optimally vented speakers based on the theories of A.N. Thiele—speaker designs first introduced by Electro-Voice in 1973. The Interface:C offers you a unique combination of high efficiency and high power capacity—the only way to accurately reproduce the 120-dB peak sound pressure levels found in some types of live music.

The SuperDome™ tweeter, an E-V exclusive, and the VM™ vented midrange driver, the first to apply optimally vented design to mid frequencies, ensure your music is reproduced without the coloration normally found in other high-efficiency drivers. An honest 30 Hz low end totally eliminates the need for expensive subwoofer assemblies.

When you spend $1,000 for a speaker system, get your money's worth. Audition the Interface:C Series II at your nearest Interface dealer. If you want a speaker that sounds like music, the Interface:C Series II is the one you'll buy.

Alpine's AM/FM Receiver With Cassette Player

□ The in-dash Model 7308 receiver from Alpine Electronics of America has an AM/FM stereo tuner with frequency-synthesized tuning, digital station readout, five station presets, and automatic station scanning. The unit's cassette player has a permalloy head, Dolby playback circuits, automatic program location, a metal/chrome playback-equalization position, and locking fast-forward and rewind with cassette ejection at the end of fast-forward and automatic replay at the end of rewind. The amplifier delivers 6 watts continuous into each of four channels/speakers and has separate bass and treble controls, a front/rear fader, a balance control, and an overall volume control. The Model 7308 measures 2 x 7 x 6 1/4 inches. Price: $699.95.

Sparkomatic Car Power Amplifier and Graphic Equalizer

□ Sparkomatic's GE-1000 stereo power-ampl/equalizer for automotive use can deliver 50 watts rms per channel with 0.01 per cent total harmonic distortion from 20 to 20,000 Hz. The equalizer section has seven control bands spanning frequencies from 60 Hz to 15,000 Hz and offers ± 12-dB frequency-response adjustments. Each channel is monitored by a three-color LED display. The unit also has a relay circuit to protect speakers from turn-on transients, a fader control for front/rear level adjustments, and an equalizer-bypass switch. Dimensions are 7 1/2 x 2 1/2 x 9 1/4 inches. Price: $189.95.

Car-stereo Catalog From Crutchfield

□ A new mail-order catalog covering a wide variety of automobile stereo gear from a number of manufacturers has been issued by Crutchfield, a specialist distributor. In addition to the product listings, the company has included charts said to ease comparison of competitive equipment. There is also instructional material of interest to the car-stereo audiophile. Crutchfield, Dept. SR, 1 Crutchfield Park, P.O. Caller 1, Charlottesville, Va. 22906.

Car Woofer and Tweeter from Pioneer

□ Pioneer's new TS-W203 rear deck 8-inch woofer (shown) and matching TS-T3 3 1/2-inch cone tweeter are intended to produce wide-range sound throughout an automobile. The tweeter has a frequency response of 250 to 20,000 Hz and should be installed in the front of the car. The woofer's range is 28 to 10,000 Hz, and it is designed to fit a 6 x 9-inch rear-deck opening. The TS-T3 tweeter employs a 6 1/2-ounce strontium magnet and has a built-in crossover network; the TS-W203 woofer features a 20-ounce magnet. Maximum rated input power is 60 watts for both units, and both have a nominal 4-ohm impedance. Prices (including mesh grilles with metal-finish frames): TS-W203 woofer, $189.95; TS-T3 tweeter, $69.95.

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

Domestic inflation and fluctuations in the value of the dollar overseas affect the price of merchandise imported into this country. Therefore, please be aware that the prices quoted in this issue are subject to change.

CIRCLE NO. 16 ON READER SERVICE CARD
The 731Q is the finest turntable Dual has ever made.

There is always a special attitude at Dual about the turntable that is to represent the most advanced thinking and accomplishments of Dual's designers and engineers.

The materials, the care in manufacturing, assembly and quality control must exemplify all that has made Dual precision and reliability so highly regarded throughout the world.

And in every measure of performance, this model must set the standard by which other fine turntables are judged. Even more, it must make a significant contribution to the art of record playback.

This year, the quartz PLL direct drive 731Q, with its ultra-low-mass (ULM) tonearm and cartridge system, expresses our attitude perfectly.

If your other components and your record collection warrant consideration of such a turntable, we invite you to visit your franchised Dual dealer. And if you have a record that is warped to marginal playability, but too valuable to discard, bring it with you.

That's all you will need to share our attitude and sense of pride about the Dual 731Q.

For the complete ULM story, please write directly to United Audio, 120 So. Columbus Ave., Dept. Q, Mt. Vernon, New York 10553.
Stop Listening To Paper.

And start listening to music as you've never heard it before. Completely free of the spurious vibrations caused by conventional paper cone speakers.

Mitsubishi has eliminated those vibrations by eliminating the paper.

Instead, we build our woof- er cones with an aluminum honeycomb core in a sandwich of glass fiber.

Unlike paper cones, the honeycomb structure is rigid enough to maintain its shape, yet light enough to be exceptionally responsive. So it can put out sound without adding to it.

And since the glass fiber is non-porous, it gives our air sus- pension speakers a perfect seal, and a lower resonance fre- quency for better bass response.

We’ve also added a flux normalizing ring that reduces distortion by 20dB. And automatic overload protection.

The end result is a speaker capable of a level of perfor- mance literally unheard of until now.

If our honeycomb speakers sound too good to be true, test listen to them and judge for yourself.

It’s what you won’t hear that will impress you.

\[ Mitsubishi\ Audio\ Systems \]

Mitsubishi's Honeycomb Speakers. MS-10 10” 2-Way Bookshelf. MS-20 12” 2-Way Bookshelf. MS-30 12” 3-Way Bookshelf.

For the name of your nearest dealer, please call (800) 621-5199 (in Illinois, (800) 972-5855). For more information write Melco Sales, Inc., Dept. 52.

3010 East Victoria Street, Compton, California 90221. In Canada, contact: Melco Sales Canada, Ontario.

CIRCLE NO. 30 ON READER SERVICE CARD.
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Loudspeaker

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TRADE SHOWS always exhibit an industry in

love with itself. The full series of audio

expositions in Korea, Taiwan, and several in

Japan confirmed for me what an intense

world unto itself audio is and how seriously it

is taken in that part of the globe which

dominates the industry worldwide.

Of the four Far Eastern trade shows I saw,

the Tokyo affair, as expected, had the most

interesting exhibits. While Korea has a

rapidly burgeoning audio-manufacturing in-

dustry, it is still technologically subordinate

to that of Japan. The show in Taipei (the

capital of Taiwan) gave some evidence of a

slight advance in that country's technology,

but the product range is still relatively

limited, and very little of what was shown will

make its way to our shores. Osaka is the

major manufacturing center for Japan's

giants of audio and other consumer electron-

ics categories, but the exposition there

emphasized parts and subassemblies rather

than finished components. And so it was the

Tokyo Audio Fair—the last and biggest of

these shows—that provided the only real

preview of audio products for the coming

model year.

- Cassette Decks: This was one of the two

most popular product categories, the other being

turntables. Manufacturers seem to be posi-

tively enraptured by the sales potential of

decks—at every price and feature level—

throughout the world. What else would

explain the proliferation of new products in a

category that is already so well established?

It was not uncommon for a company to show

at least six new models, and one well-known

manufacturer displayed eighteen decks!

Piano-key controls are regarded as defi-

nitely passé, for the new decks solenoid or

mechanical soft-touch mechanisms are "in."

Fujiyia Audio Co., Ltd. will shortly be

producing a single-motor mechanical soft-

touch transport that will provide a high-end

feel to low-end product. At least one other

supplier is making a similar transport.

Metering continues to be diverse, with

fluorescent formats winning in competition

with LED strips—including some using a

"sweep-needle" meter format. Another major

trend is toward microprocessor applications.

This technology continues to percolate down-

ward in cassette decks, expanding both

convenience and precision features.

- Turntables: Action in turntables was

heavy, with several manufacturers introduc-

ing lateral-tracking models and almost all

following similar design trends with their

conventional models. The lateral-tracking

tone arm appears to be an idea whose

(marking) time has come. Audiophile

theory has long accepted the principle that

the best way to play back a record is the way

in which it is cut—radially. Over the years,

there have been numerous attempts to

market this idea. Most have foundered on

problems of pricing, reliability (mainly of the

tone-arm transport), ease of cartridge mount-

ing, and adaptability to different cartridges

(both brand and type).

In Tokyo, an impressive array of major

manufacturers displayed radial-tracking

turntables. Technics, Pioneer, Yamaha, and

Lux each offered one or more models. The

Technics table, which has already been

previewed by media in the U.S., is in many

ways the most impressive in how it addresses

itself to the aforementioned problems. Shal-

low and compact (the size and depth of only

twenty stacked record albums), it has a

rugged direct-drive mechanism. The car-

tride—any cartridge—is easily installed.

Pending the turntable's acceptance in the

U.S., Technics is ready to market a full line.

Prices were not available for Pioneer's two

radial-tracking models. Although bulkier

than Technics', they will probably be more

than price-competitive, as befits Pioneer's

reputation in the marketplace. Even Ya-

maha, which in Japan as in the U.S. tends

toward higher-price components, is evolving

downward price-wise with its radial-tracking

design. Its already introduced $2,100 model

(give or take a few thousand yen) has been

followed by an $800 turntable! Incidentally, a

couple of these turntables can be operated in

a vertical position—meaning you can hang

them on a wall.

What does this mean for the U.S.

consumer? There should be quite a few

radial-tracking turntables at the Summer

Consumer Electronics Show, and they should

reach market by next Christmas. More

significantly, it means that competition

among the biggest names in audio will

produce unprecedented prices and perform-

ance in this previously specialized category.

In conventional-tracking turntables, design

trends follow less startling paths. Straight

tone arms continue to overwhelm the former-

ly popular J- and S-shape configurations.

Front-mounted controls are increasingly obli-

gatory. This permits turntable functions to be

controlled with the dust cover down. Direct-

drive models are becoming more and more

economical. (The change, by the way, never

produced a single model with entirely new

particulars.) There are few changes in the

milestones, but it is evident that the

Japanese manufacturers are beginning to

return to the marketplace with turntables

that will be successful in the U.S.
a significant factor in Japan, had no partisans at the Audio Fair.)

**Cartridges:** New moving-coil and moving-magnet cartridges were seen everywhere. In Japan, one can get a lot of fancy specifications at not too unseemly a price. No particular new technology caught the eye, but one could assume it was present.

**Electronics:** Separate components, as might be expected, completely overshadowed any receiver displays. As anyone involved in the international marketing of audio can attest, there is only one major market for receivers—the U.S. Therefore, one must wait for the domestic Consumer Electronics Shows to see the latest in this important category. Insofar as amplifiers and tuners are concerned, the parameters of neither performance nor design were significantly advanced in products shown in Tokyo. Separates are a strong but static market in the Orient, but they have yet to make equal impact in the U.S. In tuners, there was abundant use of digital technology—readouts, frequency synthesizing, and signal tuning. Features available only on the most esoteric equipment three years ago are now commonplace in popular-price tuners. Result: U.S. consumers will be increasingly blessed with superior FM tuners—even as they are cursed with inferior FM signals.

**Look and Feel:** Cosmetic trends are pronounced and advancing homogeneously across all brand and component categories. The "white" look, or variations thereof, is secure. Tuning dials, when not digital, strive to be slimmer yet more legible. Metering systems are still groping toward this kind of simplicity. There is a definite emphasis on the horizontal and flat in all of the major escutcheon elements, regardless of product type. This is producing what might be termed an "International Style" that is acceptable worldwide. It also relates to how the components are meant to be displayed and used. Though they are employing ever more complex technology, they are looking less intimidating (which is as it should be), easier to use, (which is even more as it should be), and simpler to place in the listening room, either as an attention-getting focal point or in a visually unobtrusive manner.

There is some slight illusion in the apparent simplification of the new components. While they appear to have fewer knobs and switches, upon close examination they actually have just as many as formerly. Presumably this cosmetic discretion exists to involve the novice audiophile quicker without putting off the experienced hobbyist who appreciates maximum flexibility.

**Question:** We are moving into an era of audiovisual technology that is blurring the distinction between the audio and the visual with respect to consumers, media, and manufacturers. There were many products displayed, such as stereo TV sound tuners, mono-to-simulated-stereo signal processors, etc. that are already in use throughout Japan. This prompts a question: When will the FCC give the go-ahead to American networks for TV stereo-sound transmission, already a well-accepted fact of life in Japan?

-Al Copland
MOSFETS

Q. Advertisers in your magazine are touting the virtues of MOSFETs in their equipment. Exactly what do the initials stand for and what is it that the device accomplishes?

A. The once-over-lightly discussion that follows will no doubt provoke some disagreement among a few engineering-level readers, but here goes:

A MOSFET (metal-oxide semiconductor field-effect transistor) is a type of amplifying device that differs both in construction and operation from the more common bipolar transistor. MOSFETs have properties that make them especially suitable for two audio areas: radio-frequency amplification and power amplification. Most high-quality FM tuners use a MOSFET as the input transistor because a MOSFET has both low noise and resistance to overload, two qualities vital to the “front end” of any tuner.

The output stages of power amplifiers use MOSFETs for different reasons. A power MOSFET, unlike a power bipolar transistor, will not tend to burn out when overloaded. Transistorized power-amplifier circuits have traditionally used extensive protection circuitry to guard against transistor overload, but with MOSFETs these protective circuits (and any sonic aberrations they may cause) can be eliminated or vastly simplified.

While power MOSFETs have superior high-frequency response and greater inherent linearity than power bipolar transistors, they are also a great deal more expensive (perhaps a ten-to-one difference on the manufacturer’s level) and apparently more difficult to design into a circuit than they should be. These two problems will be worked out as the semiconductor industry gains experience with power-MOSFET design, which at present is a fairly new technology.

Associated Equipment

Q. It would be extremely helpful in your equipment reviews if you were to list the other components in the systems used in the listening portions. Isn’t it rather unfair to describe the sound of a phonograph cartridge without naming the preamplifier, power amplifier, and loudspeakers it was heard through? And wouldn’t it also be useful to know what equipment the record reviewers use—in order to judge the validity of their comments on sound quality?

A. In any rigorous scientific experimental procedure, test equipment is always carefully specified. The purpose is to make it possible for anyone wishing to test the validity of the results to replicate the experiment using the same instrumentation and procedures. However, given the inherent subjectivity of any normal listening test, equipment listing is meaningless except to reassure a few doubters that the associated equipment is good enough not to obscure possible deficiencies in the equipment under test. In my view, it’s not that difficult to find adequate associated equipment, but I’m sure there are those who disagree with me, taking the position that the special virtues of particular components are revealed only by prolonged listening and then only when played through—or with—other components of equal virtue.

Reader Nittel, like many others (properly) concerned about nuances of reproduction, ignores the critical effects of speaker placement and room acoustics on the sound reaching the listener’s ears. These two factors alone can introduce more differences in the sound quality of a fine system than the specific components used. And, unfortunately, without proper test equipment these acoustic effects cannot be specified precisely enough to be duplicated.

As far as record reviews are concerned, I doubt that Mr. Nittel’s suggestion would achieve his desired end there either. We do ensure that our reviewers have good equipment, but experience has shown that musicians or reviewers are not necessarily the best judges of the quality of reproduced sound. (Possibly because, even when it’s wrong, they hear it right in their mind’s ear: as performers they hear music from a special physical perspective that biases their notions of proper balance, or as critics they are concentrating first on the music and only secondarily on the sound. This is analogous to the big problem...
with proofreading: the eye tends to correct
typos in order that the mind may extract the
sense.) In addition, there is always the prob-
lem of whether the record reviewer and the
reader are getting equally good pressings;
they may, for example, come from the same
press run, but not the same stamper.

The best approach for those concerned
with the sonic tastes of reviewers is to find
one whose evaluations seem to agree with
theirs in general and apply a heavier positive
weighting to his or her opinions on sound
quality than those of other reviewers of un-
known tastes.

Finally, we do, of course, mention asso-
ciated equipment—when it is significant,
such as the tone arm we test a cartridge in.

But, as far as the electronics or speakers are
concerned, we want to avoid putting what
may look like some special seal of approval on
a particular set of components when we know
that there are dozens of other combinations
available that will serve as well and sound as
good as the particular ones used.

Diamond-stylus Addendum

In your reply to the "Diamond in the
Buff" question in the October 1979 issue,
you provided a most instructive answer
about the various types of diamond tips.
Although the information is accurate, I am
afraid it is incomplete.

In addition to the types referred to in your
column, there is the bushed-type diamond
stylus that Shure Brothers has been using for
years in many cartridge models. We have

avoided the bonded type because of the
possibility that the brazed diamond chip
may break off during usage. Our design
(shown above) consists of a diamond rod
installed in a metal bushing and securely
fastened by both mechanical means and
baked epoxy cement. For most applications,
the material used for the bushing is alumi-
num. Steel is used by many cartridge manu-
facturers for their lower-cost models. It is
worth mentioning that we produce extremely
small, lightweight versions of aluminum-
bushed tips that weigh no more than the
0.008- to 0.01-inch-diameter nude-diamond
tips of many manufacturers. The use of
nude-diamond tips does not in itself guaran-
tee a stylus with a lower effective mass.

BERNHARD W. JAKOBS
Vice President, Engineering
Shure Brothers
Evanston, Ill.

A. Thanks, Mr. Jakobs, for enabling us to
see that a diamond in the buff is not
necessarily worth two in the bush(ing).
Audio Basics

By Robert Greene

VOLUME CONTROL

One of the most sadly misunderstood elements in the whole audio system is the lowly but essential volume control, and perhaps the saddest part is that many of those who don't understand it don't understand that they don't understand. If you have ever been heard to utter anything resembling the following statements, then this column is for you:

- Boy, listen to how loud this amplifier (or receiver) gets when I just crack the control. That's power!
- My amplifier plays louder at a given volume-control setting than yours, so it must be more powerful.

If you harbor either of these notions (or others like them), there's a good chance you're not too clear about how the volume control actually does its job, so let me dispel some of the fog.

First, let's consider just what it is that's behind the volume knob on the front panel of your amplifier or receiver. (For convenience, incidentally, I'll be referring throughout to the conventional rotary control, the straight-line slider type being different only in its mechanical action, not in how it works in the circuit.) Most volume controls (technically called "potentiometers," or "pots") look like a circuit.) Most volume controls (technically called "potentiometers," or "pots"). The shaft protruding from the center and three solder lugs (where the electrical connections are made) flanging out on the edge. The shaft goes through a hole in the chassis, it is bolted in place by a single nut, and the turning knob is fastened to it by a set screw or by spring pressure. Inside the pillow is a ring of resistance material, such as carbon, around which runs a spring-metal contact that rotates with the shaft. In stereo equipment, there is a pair of these pillowboxes; when they are attached together and operated by a single shaft they are known as "ganged" controls.

The volume control, whether it's operating in a receiver, an integrated amplifier, or a separate preamplifier, is connected at some point between the input and output so that it can control the amount of signal flowing through the circuit. To help visualize this, think of the volume control as a valve mounted on a water pipe. When the valve is fully open, it has effectively been removed and the water passes that point in the pipe unimpeded. As the valve is progressively closed, however, less and less water is permitted to pass until the valve is shut completely and all water flow has been stopped. It is obvious that the valve cannot increase the flow beyond that being fed to it; it can only decrease it, appearances to the contrary notwithstanding. Most people probably understand the relationship between the water and the valve, but the relationship between a volume control and audio signal strength is not so clear. It is, however, basically the same: the volume control cannot enlarge the signal going through its part of the circuit; it can only reduce it. Its action, then, despite appearances, is not up but down. When the volume control is turned fully up, it is effectively not there at all—like the fully open water valve.

There's another way in which the volume control's action can be deceptive. It would seem reasonable to assume that a control is passing 25 per cent of the available signal when it has gone through 25 per cent of its rotation, 50 per cent at the halfway point, and so on. It may be doing so, but there's a good chance that it is not, depending on the graduation, or "taper," of the particular control chosen by the design engineer. One control with a given electrical value might pass a high percentage of the signal when the knob has barely been moved, while another of the same electrical value might be graduated to provide a smooth and even increase as the knob is turned. The former might provide seemingly impressive results, but the latter could prove more useful.

It should also be realized that the amplifier is not necessarily producing its full power output just because the volume control is all the way up, for this too depends not on the control but on the signal being presented to it. Not all sources (tuner, tape, etc.) produce the same signal-voltage level, and since the control can only decrease but not increase, the amount of output available at full clockwise rotation (when the control is effectively out of the circuit, remember) will vary with the input.

Volume controls appear in a variety of places under different names. On a tuner the designation may be "level" or "output-level" control. This is the same kind of "volume control" device, but in this application it is intended to adjust the signal strength going to whatever preamp or amplifier follows. And some sophisticated preamplifiers will have level controls for each input. These are meant to be used for balancing different sources with varying signal strengths in order to avoid sudden changes of volume when switching from one to another.

As a rule of thumb, and if the manufacturer's instructions are lacking, such subsidiary volume controls should be set so that you get a reasonable volume level with the master volume control at about a twelve- or one-o'clock setting, with a very loud signal at perhaps three o'clock. The volume (or "gain") control on a power amplifier is usually set full up unless this results in hiss (from the stages in the preamp after its volume control) or too much volume with too little rotation of the preamplifier's volume control. In such a case, it should be eased back until a comfortable relationship is established. Achieving the proper interrelations in the settings of the level controls in a system is not just a matter of convenience; it will also help prevent overloading of inputs (which results in distortion) or having to operate an amplifier with its gain turned up so high that its inherent noise becomes audible.
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CIRCLE NO. 12 ON READER SERVICE CARD
Metal Wear?

Q. My dealer recently told me I should avoid using the new metal-particle tapes because they would wear out the heads even faster than chrome does. Is this true, and, if so, why do they sell the stuff?

A. While competition between audio products is generally carried out at an ethical level, even the audio industry has its share of unprincipled rascals, along with a predictable number of people who get duped by them and spread malicious rumors without knowing any better. Whether your dealer is a charlatan or a fool I don’t know, but he must be one or the other.

The original “wear scare” began—so far as I have been able to trace it—as an innocent question: “Since chromium is a harder material than iron, won’t it tend to wear heads faster?” At the time the question was raised (shortly after CrO₂ tapes were first introduced about a decade ago) almost all tape heads were made of a “soft” permalloy material, and everyone’s principal experience was with open-reel tape decks. At 7½ inches per second, the primary tape speed at the time, head wear from regular ferric-oxide tapes was (and, to some degree, still is with open-reel tapes) a problem, and intuitively at least it seemed as if the harder CrO₂ might possibly cause trouble in this area.

Without waiting for scientific test results, some individuals planted the false accusation that the then-new chromium-dioxide cassettes might indeed have a better high-frequency capability than ferric oxides (this they couldn’t deny), but that they were excessively abrasive. It wasn’t true then, and it certainly isn’t true now.

Now, of course, we come to metal-alloy tapes, and once again the old theme comes up. “Pure metal” seems as if it must be harder even than CrO₂, so “naturally” tape heads must be expected to melt like butter under a hot knife if you use it. Balderdash! This time, knowing the power (and possibility) of malicious rumors, tests were made; they demonstrated no difference in head wear. Moreover, though for reasons entirely unconnected with head wear, the head materials—Sendust and ferrite—used by virtually all the manufacturers who produce “metal-ready” cassette decks are many times harder than the old “soft” permalloy.

To sum it up, all tapes are abrasive to some degree, but neither metal-particle nor chrome cassettes are more abrasive than their conventional ferric-oxide counterparts. And while all tape heads can be worn down by any tape given a high tape-to-head speed and enough time, at the cassette speed (1/2 ips) you are far more likely to wear out the motor bearings on your deck than you are to wear out the heads.

MPX Defense System

Q. What is an MPX filter, and why should it be switchable? It sounds like an anti-ballistic-missile system to me!

A. Multiplexing (MPX) refers to any process by which multiple channels of information (in this case the two channels of stereo sound) are combined for transmission through a single channel (in this case an FM-radio signal). A low-level 19-kHz “pilot” signal broadcast along with the audio signal is used by a receiver to synchronize its multiplex decoder with the transmitter’s multiplex encoder. It is this 19-kHz multiplex pilot signal that has to be filtered out.

Ideally, the tuner should eliminate all traces of the 19-kHz “pilot” signal from the FM outputs, since it is merely a “control” signal and not meant to be heard. In practice, however, tuners differ with respect to their ability to suppress the MPX pilot. Every tuner manufacturer wants to keep his FM frequency response as “flat” as possible to 15 kHz (the upper limit of the FM transmission band). But filters that will eliminate all residual 19-kHz signal without affecting the audio information at 15 kHz tend to be complex. Thus, in many tuners and receivers some amount of the 19-kHz signal leaks through and appears at the tuner’s output along with the desired audio signal.

Since the Dolby system in a tape deck achieves its noise reduction by working on the very low-level high-frequency signals, it can be “fooled” into improperly encoding and decoding the tape by the presence of any significant amount of 19-kHz signal. To prevent this possibility, “MPX filters” are incorporated on many cassette decks to make up for the deficiencies of less-than-ideal tuners or tuner sections. The reason the MPX filter is made switchable at the cassette deck end is so you don’t have to use it.

Dubbing Encoded Tapes

Q. I’ve made a number of dbx-encoded open-reel tapes that I want to copy onto cassettes. Can I dub them directly, or is it the proper procedure to play them through a dbx decoder and then re-code them as they go into the cassette?

A. According to dbx, you should copy the dbx-encoded tapes in their originally encoded form so that the only decoding operation is when you play back your cassette copy. (This is, incidentally, the opposite of the recommended procedure for dubbing a Dolby-B encoded tape. In the case of Dolby, you should decode from tape and re-record the audio on the machine and re-code the copy on the machine recording it. The reason for the different procedures is that Dolby encoding and decoding are level sensitive, while dbx processing is not. If you have calibrated level tones on a Dolbyized tape you can copy it directly too, but lacking these it’s better to decode and then re-encode when using the Dolby system.)

There is a possible price to be paid, however, for the dbx system is sensitive to frequency-response variations; if your cassette deck has poor high-frequency response, for example, dbx processing will make it worse. This does not affect the copying procedure, which as I have described, but it could be relevant to whether the dbx noise-reduction system is appropriate for use with your particular cassette machine. As to that, try it out and see; you risk nothing but a little time and effort.
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The measure of the receiver you invite into your home should feature unusually intelligent versatility. Ample power. Inaudible distortion. And an attractive design that speaks with a quality “finish.”

Of course, we'd like to recommend our STR-V55 because we synthesized our newest technology to give you the incredible accuracy of frequency synthesized tuning, a versatile microcomputer and silent, uninterrupted power. The tuner section is so sophisticated that a highly stable quartz-crystal oscillator locks in AM and FM signals for brilliantly faithful reproduction of broadcast programming. And the microcomputer gives you tuning options that simply don't exist anywhere else.

Memory scan is our latest exclusive tuning advance to span the bands automatically. Press a button and preset stations are automatically tuned in sequence for approximately 3.5 seconds each. Hands-off tuning lets you automatically monitor your favorite stations and simply pressing the appropriate station button tunes in your selection for continuous listening.

Choose auto tuning to capture stations with frequencies that you don't know for certain. A touch of a button precisely finds the next station encountered up and down the frequency band.

Manual tuning lets you approach known frequencies at high speed and then obtains the exact frequency in precise, discrete steps.

And preset tuning instantly recalls any of the eight stations that are stored in our new MNOS (metal nitride oxide semiconductor) memory that can't be accidentally erased.

Our beauty is not only designed for easy viewing, it's coordinated to be proudly displayed. Bright electrofluorescent digits display frequencies. Bright green LEDs in a five-step array show signal strength. And red LEDs pinpoint your favorite stations at a glance.

Consider the power of 55 watts per channel that propels the intimacy of the original performance through Sony's advanced DC amp technology. And a high-gain low-noise phono...
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tuner, a DC power amp and Pulse Power Supply.

And highly responsive Hi-fi power transistors artfully reproduce complex wave forms even at high frequencies and full output power. Sound is so clear that quiet intervals are quiet even at the highest listening levels.

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STR-V55

amp in the preamp section enables you to even use an MC cartridge with your turntable to capture the subtleness of the softest, most delicate music.

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Sansui is breaking up a very successful relationship. The TU-717 has a new mate: The AU-719.

Sansui has just introduced an exciting new integrated amplifier, the AU-719. It represents the very latest developments in audio and electronics technology. It is so good, in fact, that it has replaced its rave-reviewed, best-selling predecessor as the partner of the TU-717 tuner.

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We expect the tuner’s new mate to receive a tremendous reception and set industry amplifier standards for a long time to come. Here’s why.

INTRODUCING DD/DC

What particularly distinguishes the new AU-719 amp is Sansui’s patent-pending DD/DC (Diamond Differential/DC) circuitry that provides the extremely high drive current needed to reduce THD by adding large amounts of negative feedback without compromising slew rate or adding TIM.

Slew rate refers to an amplifier’s ability to respond to rapidly changing musical signals. The slew rate of the AU-719 is an astounding 170V/µ Sec.

MAGNIFICENT MUSIC

Many modern amplifiers have extremely low total harmonic distortion specs. And that’s important. But THD is measured with steady test signals and is not really representative of an amp’s ability to deal with music. Sansui alone, with its DD/DC technology, is able to provide both low THD and lowest TIM simultaneously. Instead of the harsh metallic sound you sometimes get on a conventional amp when the musical signals are complex, with the AU-719 you hear only magnificent music.

THD is less than 0.015% at full rated power of 90w/channel, min. RMS, both channels into 8 ohms from 10 - 20,000 Hz. Overall frequency response is awesome: DC - 400,000 Hz, +0, -3dB. Hum and noise are a super-silent -100dB on aux and -88dB on phono. The phono equalizer, which adheres to the standard RIAA curve within ±0.2dB from 20 - 20,000 Hz, also uses our unique DD/DC circuit for record reproduction that’s second-to-none.

CONTROL YOURSELF

The unit is equipped with a full complement of versatile controls and connections to create the system and sound that’s right for you, including two phono and two tape inputs, defeatable tone controls with switchable center frequencies, deck-to-deck tape dubbing and a very convenient 20 dB muting switch.

Audition the new AU-719 and matching TU-717 at your authorized Sansui dealer. We think it will be the start of a very successful relationship.

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Sansui Integrated Amplifier AU-719
Tune for minimum distortion, and that "tuners" here, the FM section of a receiver or rather large frequency shifts in the tuner's spacing of capacitor plates could produce tuner, changing their physical dimensions. Gradually warmed up the components in the considerable heat given off by vacuum tubes their similar effect on the sound quality from ing) arose from unrelated causes, in spite of tuning touch-up as part of the price one paid for low noise and wide frequency range.

These two effects (drift and critical tuning) arose from unrelated causes, in spite of their similar effect on the sound quality from the tuner. Drift was thermal in nature; the considerable heat given off by vacuum tubes gradually warmed up the components in the tuner, changing their physical dimensions. Minute changes in coil diameter or in the spacing of capacitor plates could produce rather large frequency shifts in the tuner's local oscillator (although I will be referring to "tuners" here, the FM section of a receiver or radio can be included in this category). The problem of critical tuning resulted from the narrow discriminator bandwidths common in those days. It was usually possible to tune in a signal at three closely spaced frequencies, but only the center one had acceptable noise and distortion levels.

Both problems were curable in those early days by the liberal application of good engineering. It was (and is) possible to compensate for temperature-caused frequency drift in a tunable oscillator, but it is costly both in development time and in production. In the mid-1950s, wideband discriminators and ratio detectors that alleviated most tuning problems made their appearance, notably in the H. H. Scott tuners. When detector bandwidth far exceeds a tuner's i.f. bandwidth, the signal can then be picked up at only one point on the dial. The distortion levels and the need for precise tuning were also considerably reduced by the use of the recently developed wideband-detector circuits.

There was a "cheap and dirty" way to solve both problems at negligible cost and at the same time make accurate FM tuning easy to achieve. That way was automatic frequency control (AFC), which used the d.c. output of the discriminator to adjust the frequency of the internal oscillator for accurate tuning. Depending on the circuit design, the AFC could be made so mild that the user was hardly aware of its presence, or so powerful that the tuning would snap from one station to the next with no dead space between them. However, a powerful AFC system could also prevent the tuner from receiving a weak station that was close in frequency to a much stronger one. The strong station tended to "pull" the tuning to itself. For that reason, on most tuners the AFC could be disabled by a front-panel switch.

A more elegant solution was the automatic AFC switching system used in some sets more than a decade ago. The tuning knob, from the chassis ground, was the sensing element of a switching circuit that would respond to power-line hum picked up from one's hand when it was touched. The switching circuit disabled the AFC so that a signal could be tuned in by hand without interference from a stronger signal. When the knob was released, the AFC was automatically restored.

The replacement of vacuum tubes by transistors eliminated much of the actual need for AFC. Cooler-operating tuners and receivers were much less susceptible to drift, and for some years hardly any of them featured AFC (it was sometimes present, but that fact was rarely mentioned in the product specifications). Then, a few years ago, AFC reappeared under a space-age nom de plume. Variousy described as "quartz-lock" or "servo-lock" and usually controlled by the touch of the user's hand on the tuning knob, this was really nothing else but our old friend automatic frequency control, albeit with greater locking power and circuit sophistication than in the past.

In a "quartz-lock" system, the reference for controlling the local-oscillator frequency is a quartz crystal oscillating usually (but not always) at the 10.7-MHz intermediate frequency. A "servo-lock" system is generally the familiar AFC, sometimes amplified and with logic systems that eliminate the common weaknesses of that feature while retaining a strong locking action.

Concurrently with these developments, a few tuners began to feature "frequency synthesizers" instead of the usual free-running local oscillator. A synthesizer is a system that can generate any of a number of discrete frequencies whose accuracy is determined solely by that of a reference quartz-crystal oscillator. Although there are several systems of frequency synthesis, most of those in current use are based on the ubiquitous phase-locked loop, or PLL, which is available in inexpensive integrated-circuit form (they are used by the millions in low-cost CB radios).

Most synthesized tuners establish their kinship with the digital world by replacing the familiar analog dial scale and tuning knob with a three- or four-digit numerical display of the tuned frequency. Tuning is usually by means of pushbuttons rather than by a knob, with many tuners offering an auto-
mantic scan either upward or downward in frequency until a station is acquired, or, if desired, a discrete jump of 100 or 200 kHz each time a button is touched. The tuning technique for such a tuner is a bit different from the usual FM tuning process, but it certainly is not hard to master.

It is easy to become lulled by the comforting presence and prominent visibility of an accurate four-digit frequency display into thinking that this is a guarantee of precisely accurate tuning. Well, it is not, although it is usually close enough to satisfy any practical need. All that a quartz-synthesized tuning system, or a quartz-locked tuning system, or any of the related tuning techniques can guarantee is that the local oscillator of the tuner is set very close to the frequency that will convert a broadcast signal on the desired channel to the tuner's i.f. frequency (normally 10.7 MHz). Unfortunately, the accuracy and symmetry of the i.f. passband frequency, as well as the tuning of the discriminator, are rarely exact enough to warrant total confidence in the implied accuracy of the digital frequency readout. If the i.f. amplifier has ideal response characteristics and its center frequency is exactly 10.7 MHz, and if the detector or discriminator has similar ideal properties, then we would indeed have an optimally tuned FM signal. Since these conditions are not usually met, in general we do not.

The effect of any mistuning is usually an increase in distortion, particularly at high modulation percentages. This problem is tacitly recognized in the IHF standard on tuner measurements, which calls for the tuner to be adjusted for minimum distortion in its audio outputs when connected to a standard FM signal generator. Rarely, if ever, are the tuner's own meters or other tuning aids good enough to ensure this result, so the tuning must be done with the aid of a distortion analyzer connected to the tuner output. Most tuner measurements are made with the AFC (when available) disabled. It has been our experience that most AFC or "locking" systems do not produce the same minimum distortion that can be obtained by critical manual tuning. On the other hand, most of them will give a lower distortion than can be achieved by depending on a centered tuning-meter pointer or LED display.

Incidentally, the presence of a digital frequency display on a tuner's panel (sometimes in conjunction with a conventional analog dial scale) does not always mean that the tuner contains a synthesizer of any sort. Such a readout is nothing more than a substitute for a highly accurate dial readout. It is a nicety, but it is not a feature that will necessarily result in more accurate tuning.

One manufacturer has taken the FM bull by the horns, so to speak, and designed a tuning system that automatically adjusts the tuner for minimum distortion on any received signal. Kenwood's DDL ("distortion detection loop") is featured in their KT-917 tuner, and it does indeed tune the set accurately and invariably to the minimum distortion setting. It is highly ingenious, as well as complex and costly. Unfortunately, given the state of FM broadcasting in the U.S., even this engineering tour de force is not likely to produce an audible improvement over other, but conventional, tuners. This is because an FM tuner's inherent distortion is in most cases not a significant part of the total distortion at the tuner's output.

That is the "bottom line" in the tuner-accuracy accounting. The FM distortions that are most annoying are likely to result from multipath reception, which is treatable only by a proper antenna properly oriented (with some help from a good capture ratio and AM rejection in the tuner). Ordinary tuner nonlinearities contribute a minuscule part of the total distortion that emerges from the loudspeakers even when the tuning is done the old-fashioned way by tuning to center the pointer on a tuning meter.

These tuning systems (especially the synthesizers) are conveniences, and often very useful ones. Tuning becomes a matter of touching a button or setting a dial to an approximate frequency, letting the tuner circuits do the critical part of the job. They might be likened to an automatic transmission in an automobile as compared with a manually shifted transmission. The automotives only real advantage is convenience, but that is sufficient to make it the almost universal choice of the buying public.

The "pushbutton" tuning ease of a synthesized tuner (now appearing in a relatively moderate price range) is, to me, very attractive. It might not be worthwhile to spend hundreds of extra dollars for that convenience, but in modern tuners it comes along almost "free." Many synthesized tuners also have six or more memories for preset station frequencies, so that one does not even have to look at the digital frequency display to select a station!
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and complexity make them unsuitable for home use.

ADC has struck a nice balance between standard graphic and parametric systems. The SS-3, for all practical purposes, has the frequency flexibility (though not the adjustable bandwidth) of a parametric equalizer, since its center frequencies have been chosen to fall within 10 per cent of any frequency between 26 and 21,500 Hz. Few, if any, equalization requirements call for a more precise frequency-setting ability.

The gain of each filter channel can be varied over a ±12-dB range with a light detent at the center (flat) position of each slider. Depending on the settings of the sliders, the effective signal gain of each channel of the SS-3 can be altered considerably from its original value (with the controls set flat, the SS-3 is nominally a unity-gain device). The front panel of the SS-3 has two vertical rows of red LEDs that register the output signal level over a ±12-dB range at 2-DB intervals. Next to them are two red arrow-shaped indicators for each channel, each of them associated with a vertical-slider control. If the overall gain of a channel has been altered significantly from unity, either the upper or the lower signal-gain light will glow (indicating equalizer gain greater or less than one). The associated slider is set so that both lights glow equally on the equalized program material, corresponding to an overall gain of 1 through the SS-3. This assures that bypassing the equalizer, for any reason, will not result in any large signal-level change.

The two vertical SIGNAL-LEVEL LED indicator groups respond to these channel gain adjustments, and, depending on the actual signal voltages present, they may have to be readjusted to fit the program dynamics within the 24-dB display range. This is done by two knobs under the indicators, which adjust only the sensitivity of the metering circuit. The actual signal levels at the equalizer outputs are not affected by these controls, only by the SIGNAL GAIN sliders. It should be noted that the METER LEVEL adjustments operate in opposite directions. The reading of the right-channel display increases, as expected, with a clockwise rotation of its control. However, to increase the left-channel reading it is necessary for some reason (aesthetic symmetry?) to rotate the left knob counterclockwise.

At the right side of the panel is a vertical row of pushbutton switches. They include the power switch (with an adjacent red pilot light), a BYPASS/EQ switch to bypass the equalizer circuits, a meter-disabling switch (a red dot appears in the center of each “meter” scale when this is done), a LINE/RECORD switch that cooperate in the line outputs or in the tape-recording outputs, and a TAPE MONITOR switch that replaces the functions of the switch on the amplifier to which the SS-3 is connected (it normally goes in the amplifier’s tape-monitoring path).

A jack on the front panel, marked SLM, is for connection to an optional sound-level meter (SLM-300) available from ADC, together with a pink-noise test record and a 20-foot cable to connect the meter to the SS-3. This allows the right-channel level indicator of the SS-3 to read the output of the sound-level meter; the equalizer controls can thus be set to compensate for room acoustics and speaker response to give a “flat” response at the listening position.

On the rear apron of the SS-3 there are LINE IN and LINE OUT phono jacks and jacks for the recording and playback connections to a tape deck, as well as a single unswitched a.c. convenience outlet. The ADC SS-3 is finished in black, with a 19 x 6¼-inch panel fitted with bright nickel-plated plates and slotted for rack mounting. The SS-3 extends 12 inches behind the panel and weighs 17¾ pounds. The power consumption from a 120-volt, 50/60-Hz a.c. line is 25 watts. The suggested retail price of the ADC Sound Shaper Three is $500.

- **Laboratory Measurements.** With the SIGNAL GAIN lights indicating unity gain, the measured 1,000-Hz gain was 0.95 on the left channel and 0.99 on the right channel, using a standard IHF load of 10,000 ohms in parallel with 1,000 picofarads. The rated clipping output is 10 volts, and we measured the clipping level to be 10.2 volts at 1,000 Hz, 9.5 volts at 20 Hz, and 6 volts at 20,000 Hz.

The 1,000-Hz harmonic distortion (THD) was 0.003 per cent at a 0.1-volt output, rising to 0.006 per cent at 0.3 volt, 0.014 per cent at 1 volt, and 0.045 per cent at 3 volts. The 20-Hz distortion rose from 0.005 per cent at 0.1 volt to 0.011 per cent at 1 volt and 0.09 per cent at 3 volts. The distortion at 20,000 Hz was 0.035 per cent at 0.1 volt, reaching 0.047 per cent at 1 volt and 0.12 per cent at 3 volts. The nominal distortion rating at a 1-volt output is 0.018 per cent from 20 to 20,000 Hz; in our measurements, we came closest to these figures, ranging from a low of 0.011 per cent at 20 Hz to a high of 0.025 per cent at 20,000 Hz (the latter was a THD +N reading, since the third harmonic of 20,000 Hz, which was the largest distortion component, was beyond the frequency range of our spectrum analyzer).

The unweighted output noise, with an IHF input termination of 1,000 ohms, was a barely measurable 100 microvolts (80 dB below 1 volt), and with A-weighting it was too low to measure. The family of frequency-response curves we made were typical of the response of a good graphic equalizer, with a variation of ±1 dB in the maximum control ranges of the different filters. It is not possible to plot all the filter curves on a single chart, nor is it really necessary. In using the SS-3, the controls are normally adjusted for the desired sound, and the specific frequency curves produced by the circuits are of secondary importance.

The signal-level lights were triggered at intervals of 1.5 to 2 dB. They responded to a signal increase fairly rapidly (about as fast as standard meters) but decayed quite slowly over a period of seconds. Perhaps this ballistic response has been optimized for the pink-noise test record used with the sound-level meter (which we did not have), but it is also reasonably useful for ordinary program material.

- **Comment.** Using any graphic equalizer requires patience—and the more bands one has to work with, the more patience is required. The effect of moving any slider can vary from very obvious to extremely subtle, and one can profitably spend many hours experimenting with the controls.

(Continued on page 40)
DON'T BELIEVE EVERY DIGITAL READOUT YOU READ.

When you tune to 102.7, you want to stay tuned to 102.7.

Toshiba has solved the problem of mistuning by eliminating the need for a center channel tuning meter. Instead, digital frequency synthesis uses a carefully selected quartz crystal to produce a stable reference frequency. In plain English, this system constantly corrects tuning errors. The result is the lowest possible distortion and absolutely no drift.

Toshiba was the first to utilize this system in a receiver, and now we're using it again in our SA-850 receiver.

Digital frequency synthesis not only makes us accurate, it also makes us more convenient.

No unnecessary parts. We've eliminated the center channel tuning meter, FM/AM dial scale and tuning knob. So you can tune automatically or manually with the ease of pushbutton selection. You get LED digital readout and 5 LED signal strength indicators.

You'll thank us for the memory and scan. Actually, you'll thank digital frequency synthesis. Because only with this process can you store 6 FM and 6 AM stations for instant recall tuning at the touch of a memory button.

And in the automatic FM mode, digital frequency synthesis allows the tuner to scan until it stops at the next listenable station. FM stereo S/N ratio is 68 dB. FM selectivity is a high 80 dB. Frequency response is 20 to 15,000 Hz + 0.2 – 0.8 dB.

But there's more to this receiver than just a superb tuning system.

Power you'll respect. We're talking about 50 watts rms per channel into 8 ohms from 20-20,000 Hz.

This is provided by full complementary direct-coupled power amplifiers. And couple that with an ultra-low THD of 0.03%.

A preamp you'll appreciate. Along with provisions for attaching two tape decks, we give you full monitoring controls. Plus duplication switching between the decks.

Our special subsonic filter switch helps eliminate low-frequency warp distortion.

And our receiver looks as good as it sounds. With a sleek slide-away cover that conceals a full range of controls, including tone/defeat switch and a dual speaker selector.

The Toshiba SA-850 digital frequency-synthesized receiver. The next time you're looking at receivers, don't believe every digital readout you read. Except ours.

TOSHIBA Again, the first.

Toshiba America Inc. 280 Park Ave., New York, NY 10017

CIRCLE NO 52 ON READER SERVICE CARD
to modify the sound of one's system or listening room.

While it is really not possible to make a silk purse from a sow's ear, sonically speaking, with care it is possible to achieve a useful and often impressive enhancement of the total sound by means of equalization. Despite its formidable appearance, the ADC SS-3 is no more difficult to use than any other graphic equalizer. The added center-frequency settings can be considered as vernier adjustments, with the initial and major corrections being made at the nominal center-frequency settings. We found this process to be relatively straightforward, especially when compared with the adjustment of a true parametric equalizer.

Studying the schematic of the ADC SS-3 helped to explain the unit's cost: it employs twenty-five transistors, forty-nine diodes, thirty-one LEDs, and thirty-three integrated circuits. The SS-3 uses physical inductors instead of "gyrators" (electronically synthesized inductors), together with large numbers of close-tolerance capacitors and resistors, to form its grand total of seventy-two filters. That kind of capability does not come cheap, but ADC seems to have attained a practical maximum of control flexibility without undue difficulty of operation. In fact, the SS-3 is very nearly the equivalent of a one-third-octave equalizer, but with cost and operating complexity much closer to those of a much simpler one-octave equalizer.

Circle 140 on reader service card

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**Realistic STA-2200 AM/FM Receiver**

Radio Shack's latest stereo receiver, the STA-2200, features digitally synthesized, microprocessor-controlled tuning for both FM and AM, power MOSFET audio-output stages for wide bandwidth and cool operation, and a built-in Dolby decoder for reception of FM stations broadcasting with Dolby encoding. The STA-2200 is rated to deliver 60 watts per channel to 8-ohm loads from 20 to 20,000 Hz with no more than 0.02 per cent total harmonic distortion.

Viewed from the front, the STA-2200 does not look much like a typical stereo receiver. Instead of a dial or meters, it has a bright blue fluorescent alphanumeric display and groups of red LEDs that indicate relative r.f. signal strength and audio power output. With the receiver off (but still plugged in) the display window in the center of the panel shows the time in hours and minutes (with the colon symbol between them blinking to mark off the seconds) as well as the AM or PM time identification. The clock is controlled by the same quartz-crystal oscillator that synthesizes the tuner's internal oscillator frequency. The time is also displayed, after the receiver is turned on, if the aux or the phone input has been selected or if a CLOCK button behind a door on the front panel is pressed. A 9-volt battery installed in the rear of the receiver keeps the clock and the digital-memory sections "alive" even if the receiver is unplugged for a time.

The input-selector knob at the lower left of the panel has positions for AM, FM, DOLBY FM, PHONO, and AUX. The selected source is identified by letters on the alphanumeric display, and if either the AM or the FM tuner section is in use, the tuned frequency replaces the time on the display. The bass and treble tone controls each have eleven detented positions, and between them are two small buttons that change their turnover frequencies (150 or 300 Hz for the bass and 3 or 6 kHz for the treble).

At the lower-right corner of the panel are the concentric VOLUME and BALANCE knobs (the former with many lightly detented settings and the latter with a center detent) and a headphone jack. To the left of the knobs are eight small pushbuttons. One disables the FM muting (its off position is marked LOW, but it fully disables the muting). Other buttons change the display range of the power-output indicators, bypass the tone controls, blend the highs in stereo-FM reception to reduce noise on weak signals, and switch the receiver mode to mono regardless of the input source. The remaining buttons individually connect the two sets of speaker outputs and activate the loudness compensation.

In the lower center of the panel are two parallel rows of red LEDs that monitor the output voltage of each channel. They are roughly calibrated at 10, 40, and 100 watts. With the power-meter range button depressed, these correspond to 0.2, 0.8, and 2 watts (into 8-ohm loads). Just below the digital display are five red LEDs (numbered 1 through 5), that show relative signal strength for both FM and AM reception. Flanking them are a red memory light used when storing frequencies in the receiver's digital memory and a green DOLBY light that glows when the Dolby system is turned on.

In the lower center of the panel are two rocker switches to the right of the frequency/time display. The upper pair is marked AUTO and the lower pair MANUAL, with each group in turn being identified as either DOWN or UP (referring to the direction of frequency shift they produce). In FM reception, each touch of a MANUAL button shifts the tuner frequency 200 kHz (one FM-channel width) in the indicated direction. In AM reception, the tuning interval is 10 kHz.

When an AUTO button is pressed, the tuner scans rapidly in the selected direction until it encounters a signal stronger than its muting threshold, in which case it unmutes and the program is heard. If it reaches the end of the band without encountering a suitable signal, it starts over from the other end and continues scanning.

The STA-2200's frequency synthesizer has a digital memory that can store the frequencies of six FM and six AM stations, any of which can be recalled instantly at the touch of a button. The six memory buttons are below the frequency-readout window (their selection of either an FM or an AM station is determined by the input-selector switch). To store a frequency in the memory, a button marked MEMORY SET (behind a sliding door on the panel to the left of the digital display) is pressed, lighting the red MEMORY light. Touching one of the six MEMORY buttons stores the tuned-in frequency in that location (the MEMORY light goes out automatically in five seconds). At any future time, a touch on any of the buttons will instantly retune the receiver to its chosen frequency.

Another form of the memory mode can be initiated by touching the SCAN button, which causes the receiver to switch in sequence from Memory 1 through Memory 6, staying on each channel for five seconds. At any time, a touch on the nearby HOLD button halts the scanning action.

The remaining front-panel controls are the tape-recorder MONITOR and DUBBING (Continued on page 43)
Ohm's Law 9: It is possible to make a loudspeaker that gets loud and still sounds good.

Ohm introduces another new loudspeaker that defies the traditional laws of loudspeaker design. The new Ohm I.

It used to be, if you liked listening to music as loud as life in your home, you had a tough choice to make. You could buy high efficiency "monster" systems, and put up with the boom and shriek. If you wanted something smoother (with really deep bass), you could buy low efficiency systems, but then you'd need an amplifier big enough to power Toledo.

The Ohm I solves the problem. It can achieve concert hall levels in your home effortlessly, with no sacrifice in bandwidth, linearity, or imaging abilities. While the Ohm I gets amazingly loud with as little as 10 watts input, it can handle 1000 watts comfortably.

It's the world's first good and loud loudspeaker.

Inside the Ohm I, you'll find everything we've learned about multi-driver dynamic loudspeaker design. It uses a total of five drivers, including a 12-inch, optimally-vented subwoofer with an incredible 72 ounce magnet. Voice coils are cooled by magnetic fluid to increase power handling. The Ohm I's beautifully-finished, floor-standing enclosure is compact enough to fit gracefully into any home.

The new Ohm I's are already earning rave reviews from stereo critics. After listening to them, The Complete Buyer's Guide to Stereo/Hifi Equipment says, "The volume level was approaching the threshold of pain, but the speakers were showing no sign of strain. The response, regardless of level, was smooth and free from annoying colorations...Too often a loud loudspeaker is deficient in many other areas. Fortunately, this is not the case with the Ohm I...."

According to Hifi Stereo Buyer's Guide (8/79), the new Ohm I has "...a combination of efficiency and power handling that, as far as we know, is unmatched." They continue: "(The Ohm I) is one of the finest speakers we've ever heard. There is nothing it couldn't do and do it superbly...it thundered out the lowest pipe-organ pedal notes in a way that made us feel we were in a great cathedral...When appropriate, the bass was discreet. It was all there, without saying 'Here I am'.... The treble filled the room with a spacious sweetness that seemed...downright seductive...[The Ohm I] will bring out the best from any program material and will also do justice to the coming glories of digital recording...this is a speaker with a future – for the future."

For a listening experience you've never enjoyed before except at a live performance, visit your local Ohm dealer. Ask to hear the world's first good and loud loudspeaker: the new Ohm I.

For 16 complete reviews, and full specifications, please write us at: Ohm Acoustics Corp., 241 Taaffe Place, Brooklyn, N.Y. 11205.

We make loudspeakers correctly.

CIRCLE NO. 33 ON READER SERVICE CARD
Satisfaction, Camel Filters style.

Some men taste it all: Rich warm flavor. Smooth even taste. Solid satisfaction.

Only from the Camel Filters blend of Turkish and domestic tobaccos.

The STA-2200 can control two tape decks, dubbing from either one to the other, and monitoring the playback from either recorder or the selected program source. Just to the right of these switches is the TIME AND MEMORY door panel mentioned previously. In addition to the memory controls, it conceals two buttons to set the clock and one to replace the tuner-frequency display with a clock readout even while a broadcast is on. A DIMMER button reduces the brightness of the blue fluorescent display, and the METERS OFF button disables the output-power and signal-strength readouts.

The rear of the Realistic STA-2200 appears conventional: it has two sets of insulated spring-loaded speaker connectors, antenna terminals for 75- and 300-ohm FM antennas and an AM wire antenna, as well as a hinged and pivoted AM ferrite-rod antenna and two A.C. outlets (one of them switched). There are separate PRE OUT and MAIN IN jacks, normally joined by jumper links, so that accessories such as ambiance synthesizers and electronic crossovers can be connected in the signal path. Each set of tape-recorder input and output jacks is duplicated in that accessories such as ambiance synthesizers and two A.C. outlets (one of them switched). Antennas and an AM wire antenna, as well as antenna terminals for 75- and 300-ohm FM insulated spring-loaded speaker connectors, are present.

The output waveform clipped at about 74 watts per channel when driving 8-ohm loads at 1,000 Hz. Into 4 ohms the clipping power was 97 watts per channel, and into 16 ohms it was about 65 watts. In accordance with our present practice, we also tested the amplifier with 2-ohm loads to simulate the very low load impedances that might be encountered with some speakers. Power at clipping was about 80 watts per channel.

The 1,000-Hz harmonic distortion (THD) with 8-ohm loads was 0.003 per cent or less at 1 watt, rising very gradually to 0.008 per cent at 60 watts. The 16-ohm distortion readings were very similar to those obtained with 8-ohm loads. The 4-ohm distortion was 0.006 per cent at 1 watt and 0.01 per cent from 40 watts until the clipping point was reached at just under 100 watts. The 2-ohm distortion was 0.01 per cent at low-power outputs and 0.02 per cent at 75 watts, just before clipping occurred. Relative to the 60-watt rated output, the 8-ohm IHF clipping headroom was 0.9 dB. The IHF dynamic headroom (8 ohms) was 1.8 dB, corresponding to a short-term clipping power output of 90.4 watts. The dynamic power into 4 ohms was 124 watts and into 2 ohms it was 130 watts.

The low distortion of the power MOSFET output stages was maintained across the audio-frequency range. At rated power, the THD was between 0.006 and 0.009 per cent from 20 to about 12,000 Hz, increasing to 0.013 per cent at 20,000 Hz. At lower power outputs, the distortion was slightly less. For a reference power of 1 watt, the STA-2200 required an aux input of 17.5 millivolts (mV) or a phono input of 0.24 mV. The corresponding A-weighted hum and noise levels were −77 and −74 dB. The phono input overdriven at 220 mV at 1,000 Hz (the 20- and 20,000-Hz overload limits, converted to equivalent 1,000-Hz values, were 295 and 126 mV, respectively). The phono-input resistance was 48,000 ohms, shunted by a low capacitance of 25 picofarads.

The amplifier rise time (measured through the aux inputs) was 4 microseconds and the slew rate 22 volts per microsecond. The IHF slew factor exceeded our measurement limit of 25. The power-indicator LEDs were reasonably accurate at the few calibrated points (typically within 20 per cent of the true power into 8-ohm loads); however, they did not respond quite fast enough to give a true indication on short tone bursts.

The tone controls were highly versatile, with the 150-Hz and 6-kHz turnover frequencies giving more than adequate control at the frequency extremes with no effect over most of the midrange. The effects with the other turnover frequencies were much like those of conventional amplifier tone controls. The loudness compensation boosted both low and high frequencies, though not excessively. The RIAA phono equalization was accurate within ±0.5 dB from 60 to 12,000 Hz, and it fell off at lower frequencies to −5 dB at 20 Hz. The high-frequency phono response was completely unaffected by the inductance of several typical phono cartridges.

(Continued overleaf)
The FM-tuner section had an IHF usable sensitivity of 10.3 dBf (1.8 microvolts, or µV), exactly as rated. The 50-dB quieting sensitivity was 12.8 dBf (2.4 µV), slightly better than rated. In stereo, the usable sensitivity was determined by the automatic-switching threshold of 19 dBf (5 µV), and the 50-dB quieting sensitivity was 37 dBf (39 µV). The distortion at 65 dBf (1,000 µV) input was 0.16 per cent in mono and 0.2 per cent in stereo, and the respective noise levels were —74 and —69 dB.

The stereo-FM frequency response was within ±1, —0.7 dB from 30 to 15,000 Hz, with the output rising slightly at the high end. In spite of this, the 19-kHz pilot carrier was suppressed to a good —56 dB. The stereo channel separation was nearly 45 dB in the midrange, more than 40 dB from 60 to 3,500 Hz, and 33 dB or more over the full 30- to 15,000-Hz range.

The capture ratio was excellent, ranging between 0.84 and 0.95 dB depending on the signal level. The AM rejection was 67 and 61 dB at inputs of 65 and 45 dBf, respectively, and the image rejection was 81 dB. Alternate-channel selectivity was 63.5 dB and adjacent-channel selectivity was 3 dB. Muting and stereo thresholds were identical at 19 dBf (5 µV). Tuner hum level was —66 dB.

We measured the signal-input levels required to light the various signal-strength lights on the front panel. The lowest one came on at 21 dBf (6 µV), which could give reasonably good mono reception but would be too noisy for listenable stereo. The second light came on at 42 dBf (70 µV), which is adequate for both stereo and mono listening. The next three lights indicated inputs of about 50, 61, and 70 dBf. The only measurement made on the AM tuner section was of its frequency response, which was down 6 dB at 28 and 3,600 Hz.

Comment. In practically every instance, our measurements matched or surpassed the manufacturer’s specs for the STA-2200. It is unquestionably a fine stereo receiver, both in its tuner and amplifier performance. However, the real distinction of the STA-2200 is its digital, microprocessor-controlled synthesized tuning. Similar features have been available in some other tuners selling for far higher prices than the STA-2200. In this receiver, the tuning system worked to perfection, and the tuner outputs are muted during all frequency shifts so that the sound of one station is replaced by the sound of another with no hint of switching noise.

The same smoothness has been built into its input selection. When the selector is changed from one source to another, the receiver outputs are muted until the new source is connected. We did not find any way to produce an unwanted noise from the STA-2200 by operating its front-panel controls (although interstation hiss can be heard, if desired, by using the MANUAL mode, turning the muting off, and tuning to an unoccupied channel).

The Dolby FM system was evaluated by listening to the few local stations that employ Dolby processing. So far as we could tell, it did its job correctly.

With the STA-2200, Radio Shack has made it perfectly clear that the technical sophistication responsible for the overwhelming success of their TRS-80 computer system has been applied very effectively to their high-fidelity products. The STA-2200 is a highly advanced receiver which sounds every bit as good as its specifications and our measurements suggest. It is also an impressive value for the money, containing (by our count) some twenty-one integrated circuits, eighty-six transistors (plus four power MOSFETs), and innumerable diodes, LEDs, and other parts. There are no signs of skimping in any area of its design or construction, and it is fully worthy of its place at the head of Realistic’s 1980 audio line.

Circle 141 on reader service card

The headphone was driven at a constant level of 3 volts. The output was essentially flat from 200 to 1,000 Hz, where the sound-pressure level (SPL) was 105 dB. At lower frequencies the output dropped smoothly at about 9 dB per octave, and at 20 Hz it was some 22 dB below the midrange level. At higher frequencies the response became slightly ragged (this is usual behavior for any headphone measured on a standard coupler). Nevertheless, the high-frequency response of the Beyer DT440 was both smoother and stronger than that of most headphones we have tested. The measured SPL remained above the midrange values (by 5 to 10 dB) up to about 17,000 Hz (which is beyond the calibrated range of our headphone-testing microphone).

The impedance of the DT440 was an almost constant 500 to 600 ohms from 20 to 20,000 Hz. The distortion in the acoustic output was measured at a constant 3-volt drive level as a function of frequency. The distortion was high at the lowest frequencies, reaching 25 per cent at 20 Hz, but it dropped steadily with increasing frequency to 3 per cent at 100 Hz, 1 per cent at 300 Hz, and only 0.16 per cent at 1,000 Hz. Distortion measurements at higher frequencies would not have been meaningful because of response irregularities in the harmonics.

Comment. Frequency response and distortion measurements on headphones are analogous in many ways to those made on loudspeakers, and they are even more difficult to interpret. While a skilled person can infer much about the general sound quality of a (Continued on page 46)
They're the Jensen Separates. An individual system of special high performance woofers, tweeters, and midrange drivers. And by separating them in your car, you'll come up with a very together sound.

Why separate them?
Because a car interior is acoustically very different from your living room. And in many cases a lot of the music may not even get to your ears.

Separating the drivers also opens up the chance to use bi-amplification. Which means better sound with better power level matching.

Divide and conquer.
We developed the Jensen Separates to deliver every last high, low and midrange signal your music contains. And to overcome any possible acoustic problem you may encounter.

Two individual 2" phenolic ring tweeter units are designed to be mounted high in the front doors. That way, every bit of their 4,000-20,000 Hz high frequency signals travel straight to your ears. With no stops in between.

Two 3½" midrange drivers also mount in the upper front doors. And what a difference they make.

In this position their subtle 1,000-4,000 Hz middle tones fill in the gaps between treble and bass. While Flexair foam cone suspension provides the extreme sensitivity needed for smoother sounding music.

For full, well-defined bass, a pair of 6"x9" woofers mount in your car's rear deck. There they can take advantage of the trunk's air space to create their magic.

New 20 oz. magnet structures give these woofers extra power handling capabilities and high efficiency. While the Flexair foam suspension affords low distortion from 35 to 1,000 Hz.

The control unit.
It contains two independent midrange and tweeter level controls for each channel.
So not only do the Jensen Separates deliver all of your music, they also give you the final control over it.

Ideal for bi-amplification.
The Separates are perfectly suited for a bi-amped car stereo system. The woofers would then receive only the bass signals from one amp. While the tweeters and midranges receive the high frequency signals from another amp. It gives the system much better power distribution for higher power levels, clearer music and less distortion.

Their time has come.
Experience the Jensen Separates. And discover how very together music in your car can be.

JENSEN SOUND LABORATORIES
AN ESMARK COMPANY
speaker from its measured curves, this is a very risky business with headphones because of test-coupler problems.

One would suspect from the shape of the curves we obtained that the sound would be rather thin, with a bright, edgy top end. If we were dealing with a speaker, that would be a reasonable conclusion, but these are headphones, and what we heard instead was an exceptionally pleasant overall balance, with a surprising sensation of bass and no trace of stridency or high-frequency peakiness. When the phones were played very loud, with strong bass material, a "mushy" quality was heard, but this did not appear on most program material or at reasonable levels. The bass output was down only 6 dB at 85 Hz compared with the midrange level. For most program material, this is apparently adequate; otherwise, automobile sound and minispeakers could hardly have attained their widespread popularity, since they certainly go down no lower than that.

We made some listening comparisons against other phones whose measured response was virtually flat to 20 Hz. The difference in apparent bass between them and the DT440 was surprisingly small, and we dare say most people would never miss the lowest two octaves. It is also possible that much of the sensation of very low frequencies is perceived through the body rather than through the ears, which further tends to reduce the subjective differences between phones that cut off at 20 Hz and those that cut off in the neighborhood of 80 Hz.

What must be balanced against a possible low-bass weakness in the DT440 is its superb wearing comfort. Non-isolating, supra-aural phones are in general more comfortable to wear for long periods than the circumaural variety, and we found the DT440 to be one of the most comfortable of its type. The lack of isolation against outside sound will be viewed by some as a plus and by others as a disqualifying feature (these could hardly be used for monitoring while making a tape recording of a live performance, for example). But for listening to music at home for enjoyment, these phones should be an ideal choice for many people. Also, their very modest price is a strong point in their favor.

Circle 142 on reader service card

THE JBL L150 is a moderately large floor-standing three-way speaker system whose proportions are reminiscent of both conventional and "tower" speaker configurations. The wooden cabinet, handsomely veneered in walnut, is 41½ inches high, 17 inches wide, and 13 inches deep, and the speaker weighs 80 pounds. About half of the enclosure volume is devoted to the bass section, a 12-inch woofer with a 3-inch-diameter voice coil and a 12-inch passive radiator. Above them, vertically aligned just to the right of the cabinet center line, are the 5-inch cone midrange driver (in an acoustically isolated subcompartment) and a 1-inch dome tweeter.

The crossover frequencies are not stated, but there are slotted level-adjustment controls on the front panel for the two high-frequency drivers. The center control settings presumably give flattest response from the speaker (although this is not explicitly stated). The input terminals are recessed into the rear of the cabinet. The sculptured grille, which is retained by plastic snaps, is available in a choice of colors—brown, rust, or camel. The suggested retail price of the JBL L150 speaker system is $595.

Laboratory Measurements. For our measurements and most of our listening, we set the midrange and high-frequency level adjustments to the middle of their respective ranges. All measurements were made with the speaker grilles in place. The speakers were placed about 1 foot from a shorter wall of a rectangular room and about 8 feet apart.

The semireverberant-field frequency-response measurements, made at a microphone position about 12 feet in front of the left speaker and about 30 degrees off the axis of the right speaker, showed a smooth, slowly rising response from about 1,000 to 20,000 Hz. There was a midrange "bump" centered at 300 Hz, evidently caused by reflections from the back wall or neighboring objects. The close-miked bass response was measured separately at the driven and passive cones, and the curves were summed to derive an equivalent anechoic bass response which was "spliced" to the mid- and high-frequency response curve.

The final composite frequency response was uniform within ±2.5 dB from 85 to 8,000 Hz. The output at 20,000 Hz was about 6 dB above the average lower-midrange level. The bass output rose below 100 Hz to a maximum of +6 dB at 40 Hz before dropping off at lower frequencies.

The effectiveness of the 12-inch passive radiator in extending the low-bass output of the L150 was demonstrated by the fact that the output at 20 Hz was only about 2 dB under the average midrange level. If the output between 100 and 200 Hz (or between 2,000 and 4,000 Hz) is taken as a reference level, the overall response of the L150 can be described as a very impressive ±4 dB from 20 to 20,000 Hz.

The high-frequency level adjustment, which affects only frequencies above 1,300 Hz, can increase the output by a maximum of 4 to 5 dB above 7,000 Hz, and it can attenuate it by some 12 dB or so at the highest frequencies. The midrange adjustment operates between 400 and 6,000 Hz, with a maximum boost of 2 dB or cut of 5 dB at about 1,500 Hz.

The L150 is rated at a nominal impedance of 8 ohms, which was confirmed by our measurements. The impedance varied smoothly between about 7 and 12 ohms from 20 to 20,000 Hz except for the resonant rise to just over 20 ohms at 43 Hz (there is a second bass resonance below our low-frequency measurement limit of 20 Hz).

The bass distortion was unusually low. In fact, without the spectrum analyzer, it would probably not have been possible to measure it because of masking by ambient room noise. At a constant 1-watt input, the distortion in the speaker's output was only 0.1 per cent at (Continued on page 48)
Stanton-The Professional in The Recording Industry

Application—Stanton plays back for broadcast

Stanton provides a professional quality phono cartridge for evaluation and playback in the broadcast industry. The Stanton 681 Series are light tracking force cartridges that have been designed to overcome operational problems caused by rough handling that results in stylus damage without sacrificing quality performance or sound.

The 681 Series has enjoyed overwhelming professional acceptance and demand, and covers a wide range of applications...from critical auditioning in the record library to on-the-air broadcasting.

Because they are built for ruggedness they can withstand the rigors of broadcast application and handle slip cueing, back cueing, and mishandling. Broadcasters rely on this series for live applications where a break in the stylus can ruin station programming.

The 681 Series is individually calibrated at the factory and each unit is guaranteed to meet specifications.

Stanton is the premier choice of the Broadcast industry worldwide. From disc cutting to disco to home entertainment your choice should be the choice of the Professionals...Stanton cartridges.

For further information contact: Stanton Magnetics Inc., Terminal Drive, Plainview, New York 11803

CIRCLE NO. 44 ON READER SERVICE CARD
100 Hz, increasing smoothly to 0.21 per cent at 70 Hz, 0.45 per cent at 50 Hz, and still only 2 per cent at 25 Hz. These figures represent the distortion in the output of the dominant bass radiator, which was the driven cone above 45 Hz and the passive cone below that frequency. A 10-dB increase in drive level had surprisingly little effect on the measured distortion, which was 0.24 per cent at 100 Hz, 0.6 per cent at 50 Hz, and 3.2 per cent at 30 Hz.

The JBL L150 is not a particularly sensitive (efficient) speaker, especially considering that it is a ported design (the passive radiator can be considered as equivalent to a vent or port in the woofer system). With an input of 2.93 volts of random noise in the octave centered at 1,000 Hz, the output sound-pressure level of the speaker measured at a 1-meter distance was 86 dB. (JBL states that a 10-watt amplifier will provide a "comfortable listening level," and for best possible performance a 300-watt amplifier is recommended.) The tone-burst response was generally good, although the usual search was required to find the particular microphone location that gave the best response at each frequency (this is typical of many multizone speaker systems, and the cause is interference between the outputs of the various drivers).

- **Comment.** Listening to the JBL L150 and comparing it with several other comparably priced speakers, we found its balance over the audible spectrum to be excellent. There was a slightly warm character, but no sense of "brightness," "presence," "absence," or any of the other effects normally attributed to a surplus or deficiency of output over an octave or more of the audio range. The high-frequency rise is so slight and so gradual that one is not really aware of it in listening. In many listening rooms it would no doubt not even exist thanks to added absorption by room furnishings. The tweeter of the L150 had satisfactory dispersion up to 10,000 Hz, but the outputs of the left and right speakers in our raw measurements diverged somewhat in the octave above 10,000 Hz, where the right off-axis speaker output was some 6 dB under the left on-axis speaker output.

Nothing we heard in the sound of the L150 impelled us to readjust the tweeter and midrange level controls. The size and weight of the speakers discouraged us from moving them to different rooms, where some balance adjustment might have been beneficial because of a different acoustic environment.

The low-bass emphasis of the L150 is a bit more audible than its slightly accentuated high-frequency response. Occurring well under 100 Hz, it contributes virtually no coloration to program material (this, of course, is also very much a function of the listening environment). It does not make voices "boomy," as a speaker with a bass peak in the 80- to 100-Hz range will do, but there is enough boost at those frequencies to be heard as warmth. However, unless the program contains real low-bass energy, one is never made aware of the L150's exceptional performance in the lowest audible octaves.

The deep-bass response of the L150 can be nothing less than overpowering, given the right program material. A good organ recording or a properly recorded bass drum will rattle the walls (literally) and excite a host of buzzes from anything in the vicinity that is not firmly fastened down. This is always a potential problem when measuring the output of (or even listening to) a speaker having a really strong deep-bass response, but such speakers are relatively uncommon. The JBL L150, whose size and appearance are compatible with most home decor, is one of the very few such speakers we have heard that combine a room-shaking and very low-distortion bass with a smooth high-frequency response that extends to well beyond the range of human hearing. An impressive performer.

_Circle 143 on reader service card_

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CROWN'S "Straight Line One" preamplifier (SL-1) and "Power Line One" power amplifier (PL-1) are matching components incorporating many of the advanced concepts first offered in the company's more elaborate and expensive products. The SL-1 is a basic control center designed for exceptionally noise-free and distortion-free amplification. It has much in common with the deluxe Crown DL-2 control center. Like the DL-2, the SL-1 passes the signal through a minimum of circuit elements when its controls are in their nominally "flat" settings. It has no tone controls, and the only circuit function that intentionally alters the frequency response is the low-cut filter.

The front panel of the SL-1 has only two knobs, BALANCE and VOLUME, each of them operating a thirty-one-position step switch. The volume control adjusts the gain in 2-dB steps over a 60-dB range and has a fully "off" setting at its counterclockwise limit. The bal-

(Continued on page 50)
If you're looking for incredible sounding speakers at an affordable price, by all means listen to ours! You will find that for less money than you planned on spending you can get much better sounding speakers than you dreamed you could ever afford. Polk Audio loudspeakers have received worldwide praise because people recognize that they offer remarkable value. Critical acclaim such as the following makes it clear why Polk speakers have become famous for offering the best possible sound for the money:

“Polk Audio is a small, Maryland-based company whose speakers enjoy an enviable reputation among audiophiles who would prefer to own such exotica as the Beveridge System 25W-1 ($7000 per pair) or Pyramid Metronome ($5200 per pair) but don't have the golden wallets to match their golden ears!” The Complete Buyer's Guide to Stereo/Hi-Fi Equipment

“...the Polk Model 10 is certainly a very fine speaker...the frequency response covers the entire audio range with commendable flatness...The transient response of the Model 10 is absolutely first rate, and the hemispherical dispersion is superb (we cannot recall measuring better dispersion on any forward-radiating speaker). The tone burst response was exceptional...the total effect is of an exceptionally pleasing sonic balance with plenty of spaciousness or 'depth'.” Stereo Review

Polk Audio loudspeakers, starting around $125 each, are available at the world's finest hi-fi stores. Write us for complete information on our products and the location of the Polk Audio dealer nearest you.

Polk Audio Inc. 1205 S. Carey St., Baltimore, Md. 21230 Dept. CI

*Distributed in Canada by Edon Acoustics — Ottawa

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ance control adjusts the relative channel gains in 1-dB steps, cutting off one channel completely at each of its limits. All other controls are pushbuttons. Four select the input source (they are marked PHONO, TUNER, AUX 1, and AUX 2, but all are identical high-level inputs). A pair of buttons provide monitoring from either of two tape identical high-level inputs). A pair of buttons selects the input source (they are marked.

The phono-preamplifier circuits have been designed for minimum noise, and the combination of tight shielding and minimum external lead length is said to make the preamplifier relatively immune to r.f. interference from radio transmitters.

with 1,000 picofarads. Each of the inputs has a 25,000-ohm impedance. The A-weighted noise levels of the phono and switching modules are specified as -94 and -101 dB, but with slightly different reference conditions. Regardless of the details of the specifications, it is clear that the noise level of the SL-1 is likely to be as hard to hear as it is to measure. The same comment applies to its distortion, which is rated at less than 0.0009 per cent from 10 to 20,000 Hz at the rated 2.5 volts output into an IHF load. The phono-module distortion is of the same order of magnitude, and Crown makes it very clear in a footnote to their specifications that especially designed test equipment is necessary to measure the distortion of the SL-1. The Crown SL-1 has a 19 x 31/4-inch rack-mount panel, available in a choice of flat-black or satin-aluminum finish, and it extends 7 1/4 inches behind the panel. The phono module is 4 1/4 x 5 1/4 x 1 3/4 inches.

On the rear of the PL-1 are two sets of speaker outputs, controlled by the front-panel pushbuttons, and a pair of continuously energized main-output terminals that are ahead of the protection relay. These outputs can be used when it is desired to bypass the normal 7-second turn-on delay. The two main-output "hot" terminals can be used to drive a mono speaker when a slide switch on the rear of the amplifier is set to MONO.

Both the SL-1 and PL-1 have brightly chromed chassis, with functional block diagrams printed on the top covers showing the signal paths through the units. They have front-panel handles for ease in installing or removing them from a rack. Like the SL-1, the PL-1 is available with a choice of black or satin-aluminum panel finish. Attractive wooden cabinets are available to house either unit or the pair (as shown in the lead photo). Suggested retail price of the Crown SL-1 is $599, and of the PL-1 $499. The single cabinet is $55, the dual model $75. Additional phono modules cost $225.

Despite its apparent simplicity, the Crown SL-1 has some operating features rarely found even in the most complex-appearing preamplifiers. For example, the four inputs need not be assigned as marked; up to four phono-cartridge inputs can be accommodated by using one phono module for each and powering all of them from the SL-1 (a special interconnecting cable assembly is required for this). The four switched a.c. outlets in the rear of the SL-1 can handle up to 1,200 watts, making the SL-1 suitable for controlling the most powerful amplifiers likely to be used in the home. On the rear apron of the preamplifier are two parallel sets of main outputs for driving two power amplifiers or one amplifier and an accessory such as an oscilloscope or level indicator. Standard phono jacks are used for all external signal connections. On the front panel, two red LED indicators flash when clipping occurs in any part of the preamplifier circuitry.

The remote phono module has switchable input terminations of 47,000 and 100,000 ohms and a very low non-adjustable input capacitance rated at only 5 picofarads. There are individual screwdriver level adjustments for the two channels, with an overall phono-gain range from 30 to 50 dB. The output impedance is 600 ohms, and the rated output is 2.5 volts with a maximum unclipped output of 11 volts. The main preamplifier (the "switching module") has a maximum gain of 20 dB and a rated output of 2.5 volts into an IHF standard load of 10,000 ohms in parallel with 1,000 picofarads. Each of the inputs has a 25,000-ohm impedance. The A-weighted noise levels of the phono and switching modules are specified as -94 and -101 dB, but with slightly different reference conditions. Regardless of the details of the specifications, it is clear that the noise level of the SL-1 is likely to be as hard to hear as it is to measure. The same comment applies to its distortion, which is rated at less than 0.0009 per cent from 10 to 20,000 Hz at the rated 2.5 volts output into an IHF load. The phono-module distortion is of the same order of magnitude, and Crown makes it very clear in a footnote to their specifications that especially designed test equipment is necessary to measure the distortion of the SL-1. The Crown SL-1 has a 19 x 31/4-inch rack-mount panel, available in a choice of flat-black or satin-aluminum finish, and it extends 7 1/4 inches behind the panel. The phono module is 4 1/4 x 5 1/4 x 1 3/4 inches.

The overload LED is the readout of Crown’s proprietary IOC (Input/Output Comparator) system. This circuit continuously compares the input and output waveforms of the amplifier, and even a slight difference (corresponding to an inaudible distortion level) is sufficient to activate the warming light. The IOC light is also tied to the d.c. speaker-protection system of the PL-1. If any significant d.c. voltage appears at the outputs and its polarity does not reverse within 7 seconds, the speaker outputs are automatically disconnected. The same circuit provides a 7-second turn-on delay to keep transient "thumps" out of the speakers.

(Continued on page 52)
The inside story of a classic.

Introducing a new type of record cleaner. Meet the CLASSIC 1, the only cleaner of its kind. Developed to satisfy you, the discriminating audiophile.

Neutralizing the static charges that attract and hold destructive microparticles of dust and dirt on your record's surface is one of the major problems in record care.

Ordinary cleaners attempt to reduce static charges by applying fluid directly to the surface of the record or cleaning unit. Direct application of fluid involves an inherent risk of harmful residue build-up and should be avoided except in the case of abnormally dirty or greasy records. In fact, normal maintenance should not involve wetting the record.

At last, the CLASSIC 1 has the answer to safe and effective cleaning. Not only are static charges reduced, but the problem of residue formation is eliminated. Cleaning is safe and effective because inside the CLASSIC 1 is the exclusive MICRO STOR SYSTEM which utilizes a humidification/cleaning process rather than a 'wet' technique.

The secret to the MICRO STOR SYSTEM is a permeable matrix of many thousands of tiny glass beads which retain the cleaning fluid. Through capillary action, a vapor penetrates the velvet surface creating a field of humidity sufficient to reduce static charges. Disc contaminants can now be removed safely and easily without wetting the record and risking residue build-up.

Discover the ultimate in record care. The CLASSIC 1, a Sound Saver product.

Available at finer audio dealers...
The basic preamplifier frequency response was flat within 0.1 dB from 5 to beyond 20,000 Hz, and it was down a mere 0.5 dB at 20,000 Hz. It was not affected detectably by phono-cartridge inductance. The input resistance of the phono module was 48,000 ohms, and its capacitance was too low to measure.

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

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

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

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

So even after a Maxell recording is 500 plays old, you'll swear it's not a play over five.
Installation of the Month

By David Ranada

WHERE do you install your stereo system if your hobby is collecting and refinishing antiques? In the old-time equivalent of a modern-day equipment rack, of course! That’s just what Steve Raymond of Mankato, Minnesota, has done with a “Victor Talking Machine” originally purchased by his grandfather in 1919.

After talking his grandparents into letting him liberate the Victrola from a dusty attic corner, Mr. Raymond removed the still-functional acoustic phonograph, refinished the cabinet, and installed his stereo system. That system consists of a Dual 510 turntable with a Sonus Gold Series Blue Label phono cartridge, a dbx 119 dynamic-range expander, a BSR FEW III equalizer, a Dynaco PAT-5/FET preamp, a Tandberg 3341X tape deck, and a Dynaco FM-5 tuner. On an auxiliary shelf are a Marantz 250 power amplifier, a Dynaco Quadaptor, and a speaker-selector switch. Mr. Raymond’s listening-room loudspeakers are a pair of Marantz HD-770s, with a pair of Rectilinear XIs used as rear-channel units. In the bedroom are a pair of Rectilinear XIA loudspeakers. Mr. Raymond also has a set of Koss Pro-4/AAA headphones that he uses when he takes the Tandberg deck to a local college coffee house to make live folk-music recordings. The Victrola cabinet also has lights installed to ease connection chores.

While his musical tastes are quite eclectic, Mr. Raymond says he places emphasis on light rock and British folk music. Motorcycling is also a hobby of his, along with restoring antiques. The latter activity sometimes turns up some surprises. For instance, the complete direct-from-disc, direct-coupled, horn-loaded, transformerless, electronics-free playback system that originally occupied the Victrola cabinet cost his grandfather $168, crank and all. In those days, when you could get a good steak for a buck, that was a “high-end” audio system.

Is your system an Installation of the Month? To find out whether it is, send a clear snapshot and a brief description of its components to STEREO REVIEW, Dept. IOTM, One Park Ave., New York 10016.
What's better than belt and direct drive? The best of both in one turntable. Direct drive specs with the acoustic and mechanical isolation of belt drive.

**PHILIPS EXCLUSIVE DIRECT CONTROL ELECTRONIC DRIVE SYSTEM.**
A speed monitor at the driving disc continuously checks and re-checks your platter speed. Instantly corrects for any variations in voltage, frequency, platter pressure, temperature—even belt slippage.

**PHILIPS FREE-FLOATING SUB-CHASSIS.** For superb acoustic and mechanical isolation. To cushion the platter, the tonearm—to protect your valuable records—and to keep rumble remarkably low.

**PHILIPS NEW CONCEPT IN TONEARM DESIGN.** Philips turntables include specially designed straight, low mass, tubular aluminum tonearms with very low friction bearings. To track even your most warped records accurately.

**PHILIPS ELECTRONIC FEATURES.** Certain models have electronic touch switches for reliable, silent, vibration-free operation. Accurate electronic pitch controls. Digital and LED indicators to monitor platter speed and identify functions. And photo-electronic sensors to initiate the automatic tonearm return.

**PHILIPS RECORD PROTECTION SYSTEM.** Philips even built an accurate stylus pressure gauge, to keep the pressure off your records. Nobody ever thought of that before. Until Philips.

**ALL AT A PRICE THAT'S WELL UNDER CONTROL.** From $170 to $300. With Quartz Control, $240 to $400. By joining our European research facilities with American know-how, Philips produces a full line of audio equipment: high on performance and value. That's what sets us apart from the competition. Here and around the world.
POLITICS today, God knows, offers few opportunities for quietly amused contemplation. World emergencies are so real, the stakes so high, the times of difficult decision so close, the predictions of incipient hard times so near the mark that one can hardly believe the inspired silliness of what the New York Times reports today (November 30, 1979): the wooing, by the three major Democratic candidates for the office of President of the United States, of "important new political assets of an altogether different kind—rock stars, Nashville pickers and popular singers."

President Carter reportedly is worried about the alleged defection of Jimmy Buffet, who supported him in 1976, to the Kennedy camp. Senator Kennedy this year paid a personal visit to the Eagles in an attempt to lure them over from Governor Edmund Brown, who retaliated by making several pilgrimages to himself to that particular shrine. In the meantime, there is reported to be a strain in the relations between Governor Brown and his erstwhile African safari companion, Linda Ronstadt, brought about not by disagreements as to whether Miss Ronstadt will go on stage to raise money for the governor's presidential campaign or limit herself to convincing other performers to put their talents at the governor's disposal. Brown reportedly has a lineup already of the Eagles, War, Helen Reddy, and J. D. Souther, the songwriter. President Carter seems to be directing maximum attention to Willie Nelson, who, so far, is remaining neutral. But if the President's blandishments can conquer Willie, can all of Texas be far behind?

The ostensible reason for all this attention to rockers, pickers, and singers is financial. There is a legal limit of $1,000 on individual campaign contributions, but there is no limit at all on what a benefit concert, featuring one or more big-name stars, can raise for a candidate. Quite beyond that, though, given the complexity of world and domestic problems and Americans' newly prevailing tendency to distrust virtually anything any politician has to say, is the force that can be exerted on the mind of the voter by a well-loved entertainer. In the baldest terms, then, the questions become, first, whether we can predict the results of the election from the record charts, and second, whether we can determine the outcome of the election through the manipulation of forces originally designed to produce results on the charts.

CONSIDER, for example, the following fictitious scenario. Former Governor Reagan solicits help from Frank Sinatra, whose public announcement of support immediately predetermines the vote in Nevada and Atlantic City. Governor Brown and Linda Ronstadt have a spat, and, while the governor has quietly been investing in albums by both Emmylou Harris and Crystal Gayle, his advisors have taken a strong stand on his making a safari to India in the company of Donna Summer. The governor, however, feels that California (which is to him the United States) is not yet quite that ready for disco.

President Carter has been making inroads with the Kondalls, Charlie Daniels, George Jones, Loretta Lynn, Johnnie Cash, and Jim Reeves (who must have been born again) by speaking their own language to them, all on the basis of intensive but confidential research which shows that, unknown to record-company executives, c&k-is the next big thing. Senator Kennedy, who has once again decided to run in 1984 rather than 1980, has laid the groundwork for a fantastic, new, comprehensive Osmonds fan club, on the grounds that in four years many of their fans will be old enough to vote.

George Bush, not previously a factor in the record market, has taken to wondering about the potentialities of classical music for vote getting. President Carter too, never deaf to the power of the classics, has arranged to read the verses on the next recording of Saint-Saëns' Carnival of the Animals. John Connally makes headlines by offering a radical new proposal to change American listening habits. Middle Eastern music, says Connally, has never given a fair shake from radio or television in this country. Senator Howard Baker, in the meantime, has mounted an intensive research project on the techniques of crossover artists.

Silly? You bet. "Give me the making of the songs of a nation," said Andrew Fletcher of Saltoun in 1703 (I looked it up, "and I care not who makes its laws.") Me neither.
YOUR TURNTABLE PROBABLY DESERVES BANG & OLUFSEN.

If you’ve spent a fair amount of time and money on your audio system, it’s likely your turntable is ready for the new MMC 20CL cartridge. You do need a tonearm which can track successfully at one gram, one that has its own resonance well damped, and one which features minimal horizontal and vertical friction. Many of today's higher quality units meet these criteria; more likely than not so does the one you own.

THE MMC 20 CL, A REFRESHING PERSPECTIVE IN CARTRIDGE DESIGN.

Critical acclaim has identified the MMC 20CL as an exceptional cartridge. It is. It will not only give you more music from your records, but will insure those records last significantly longer. However, it is not one of those 'astounding breakthroughs' that always seem to be hovering around cartridge design and its promotion. No, while the 20CL does incorporate new thinking, new materials, and new manufacturing methods, it should be reasonably viewed just as it is: simply one step closer to the theoretical ideal. When we introduced the first stereo cartridge to Europe over 20 years ago, we knew that someday we would have the 20CL. Our approach to cartridge engineering tells us that 20 years from now we will have something significantly better.

SINGLE CRYSTAL SAPPHIRE, BECAUSE THE CANTILEVER IS CRITICAL.

Unlike aluminum and beryllium, single crystal sapphire transfers the motion of the stylus tip without adding any measurable vibration, and hence distortion, of its own. The absence of this vibration and flexure in the cantilever means the undulations in the record groove are transferred exactly and generate an exceptionally accurate electrical signal. Music is no longer lost between the stylus tip and the armature. Your records open up and music unfolds with new clarity, definition, and spaciousness.

REDUCING EFFECTIVE TIP MASS, BANG & OLUFSEN'S ENGINEERING TRADITION.

As early as 1958, our research demonstrated that effective tip mass (ETM) was the single most determining factor behind record wear and the loss of high frequency sound information. While some manufacturers are now beginning to realize the importance of this specification, only Bang & Olufsen can look back upon a continuous chain of improvements in this critical area. Today, the MMC 20CL with its Contact Line, nude diamond, ultra-rigid sapphire cantilever, and the patented Moving Micro Cross armature features an ETM value of only 0.3mg.

LOW INDUCTANCE, OUTPUT REMAINS CONSTANT REGARDLESS OF LOAD.

As you know, low inductance in a cartridge is related directly to the strength and constancy of the electrical signal fed to your preamplifier input. What you may not know is that the MMC 20CL has an inductance among the lowest of all high quality cartridges available today. This is due to a design which incorporates an exceptionally powerful permanent magnet and coil cores of very low permeability. This design results in very low cartridge induced noise. Subsequently you receive an excellent signal-to-noise ratio without being required to use auxiliary equipment.

INDIVIDUALLY CALIBRATED.

When you manufacture very high quality cartridges, each unit must be tested—not one out of two, or ten, or twenty, but each one. This is why when you purchase the MMC 20CL, you will receive the test results for your individual cartridge. These results include: output voltage, channel balance, channel separation, tracking ability, and a frequency response graph for each channel.

Give your turntable what it deserves. The MMC 20CL with our new universal connector can be mounted directly on most high quality tonearms.
THE SILEY SEASON

I}s getting up, getting down, and shaking your booty at 142 tpm (thumps per minute) finally getting to you? Madman Tony K. suggests you do The Funky Western Civilization for a refreshing change of pace, but Root Boy Slim screeches that you should go all the way and Boogie Till You Puke. And if you're tired of assembly-line lyrics about perfect, golden-haired, blue-eyed dream girls, the Fabulous Poodles' Anna Rexia may be more in line with your fantasies.

Such things suggest that rock is regaining a vital, if sometimes bizarre, sense of humor, which is a welcome sign of sanity. In the early and middle Seventies rock was so puffed up with tedious self-importance that it deserved to have its shoe laces tied together and a "Kick Me" sign hung on its rear. By the late Seventies even Frank Zappa had lost his effectiveness as a pop humorist because of his relentless misanthropy.

The decade was not totally without humor, to be sure. Randy Newman could always be counted on for the needle-pointed zinger delivered so deftly that the victim often didn't feel a thing. And a few artists, such as Jimmy Buffett, Steve Goodman, Arlo Guthrie, and John Prine, kept their sunny sides up by poking fun at human weaknesses.

But the zaniness that began to infiltrate rock a few years ago goes far beyond that kind of good-natured ribbing. Take the tech-no-weirdness of Devo, for instance, a group that claims to have "devol'ed" from a long line of brain-eating apes in Akron, Ohio. Devo delights in spastic electronic-rock performances of tunes like Jocko Homo and Mongolid, ironic tributes to genetics, repressed sexuality, and automation. Co-captain of the band is Mark Mothersbaugh, who is quoted in an interview in the Berkeley Barb as saying, "Our parents are all spuds from Northwestern Ohio. For fifteen years I went to church with Mr. Potato Head." Devo is strange—and strangely lovable.

Then there are the B-52's. (Their name is an in-joke reference to the grotesque bouffant wigs worn by group members Kate Pierson and Cindy Wilson.) Toward the end of 1979 the group had a hit, Rock Lobster, with quirky vocals, unexpected electronic punctuation, and loopy lyrics about an aquatic soirée. Kids in discos on both coasts were known to fall to the floor and flop about each time vocalist Fred Schneider uttered the line "Down, down, down...."

The Kinks continue to dispense their wry social commentary, and Tim Curry maintains his position as a certifiable loony with I Do the Rock, a swipe at pop culture. Most of the new musical humor, however, comes from the New Wave, the crew that enlivened the last days of the past decade in other ways as well. Their comic styles range from the light novelty numbers of the B-52's and the Flying Lizards to the explosive outpourings of Tony K., who pairs brilliantly funny lyrics with no-holds-barred rock-and-roll. Somewhere in between lie the other musical jokesters: Ian Dury, with his oddball British-music-hall-flavored rock; Nick Lowe, master of deft, upbeat pop; Joe Jackson, Elvis Costello, and Talking Heads, who strike their serious material with occasional wit; and the Roches, whose musical zaniness is hard to categorize, though some critics call it New Wave Folk.

Actually, the New Wave as a whole looks pretty funny—the purple-dyed hair, the outrageous costumes, and the limb-flailing dances with such names as the Patty Duke. And the underground bands have funny names, too—Los Microwaves, the Fabulous Swilltones, the Cramps, and the Dead Kennedys (well, maybe not all that funny). It's all reminiscent of those silly seasons documented by Life magazine in its heyday. Along with photos of college students swallowing live goldfish and stuffing themselves into telephone booths, Life ran shots of women with their hair dyed pink or green to match their similarly dyed poodles. It proves that punk hairdressers weren't the first to think of a colorful way to put on the dog.

The return of humor to pop music is probably part of a general revival of interest in comedy in these bad-news days. For the first time, comedy albums—by the likes of Steve Martin, Robin Williams, and Richard Pryor—have achieved platinum sales. Not since the Sixties, when Bob Newhart and Bill Cosby were at their peak, has there been such a demand for humor on vinyl. Perhaps back then they knew what Devo succinctly tells us today: It's a wiggly world, we might as well wiggle along with it.

THE Pop Beaat

By Paulette Weiss

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The Pop Beat

By Paulette Weiss

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CIRCLE NO. 21 ON READER SERVICE CARD

58 STEREO REVIEW
Why Yamaha speakers sound better than all the others. Even before you hear them.

To make a speaker that produces accurate sound is not simple. It requires painstaking attention to detail, precise craftsmanship, and advanced technology.

And that's where Yamaha comes in. We build all our speakers with the utmost precision in every detail.

As the premier examples of Yamaha loudspeaker craftsmanship, read what goes into the two speakers shown, the NS-690II and the NS-1000M. Then you'll understand why Yamaha loudspeakers sound better. Even before you hear them.

**Precision Yamaha crafted cabinetry**
- (1) The walls on these, and all Yamaha speaker cabinets, are sturdily braced and crossbraced at every possible stress point.
- (2) The corner seam craftsmanship is so fine that it looks like the cabinet is made from one continuous piece of wood.

- The back panels on these speakers are flush-mounted for maximum air volume within the cabinet.
- (3) Inside, a ½" felt lining "decouples" the cabinet from the drivers to achieve acoustic isolation of the woofer from the cabinet.
- (4) Thick glass-wool also aids in damping the woofer for maximum performance.

Lift one of these Yamaha speakers. It's uncommonly heavy and sturdy.
- (5) We even glue and screw the woofer cutout from the baffle to the inside rear panel for greater cabinet rigidity.

Now knock on the cabinet. It will sound as solid and substantial as it is.

**Precision Yamaha Drivers**
- (6) The drivers are mounted on computer-cut baffle boards with exacting, critical tolerances to insure precision fit. All Yamaha speakers are acoustic suspension design, and this precise fit is critical for an airtight seal and optimum woofer recovery.

The drivers on these, and all Yamaha speakers, are flush-mounted on the baffle board to avoid unwanted diffraction of the sound waves.
- (7) This is especially important because all our tweeters and mid-high range drivers are the maximum-dispersion dome type for the most natural reproduction of voice and instruments.
- (8) We use chrome-plated machine screws (rather than wood screws) with two washers (regular and lock) to insure an unyielding mounting.
- (9) The speaker frames shown are die cast rather than stamped. That's so they won't twist and alter the voice coil alignment during assembly and use.

**Other Precision extras**
- All terminals are quick connect, screw-mounted assemblies.
- The wire leads are carefully soldered, not clipped.

All our speakers use full LRC crossover networks. These crossover networks are among the most advanced available.

**Precision that stands alone**
- There's more. Much more. But, there is another fact of Yamaha loudspeaker construction that simply stands alone in the industry. Each component used in the two Yamaha speakers shown is manufactured by Yamaha. From the hefty die-cast speaker frames to the unique, ultra-low mass beryllium dome diaphragm.

That's a statement no other manufacturer can make.

And therein lies Yamaha's story. If we put this much care and craftsmanship into the making of our components and cabinet structures, then imagine the care, precision and craftsmanship that go into the quality of the final sound. A sound built upon Yamaha's unique 98-year heritage as the world's largest and most meticulous manufacturer of musical instruments. From our most economical loudspeaker to our top-of-the-line models shown here, Yamaha retains the same attention to detail and craftsmanship.

Look before you listen. You'll be convinced that Yamaha loudspeakers sound better than the rest. Even before you turn them on. Then ask for a personal demonstration of these and other Yamaha loudspeakers at your Yamaha Audio Specialty Dealer, listed in the Yellow Pages. Or write us: Yamaha, Audio Div, P.O. Box 6600, Buena Park, CA 90622.
A Buyer's Guide to Amplifiers

in which are answered the two Big Questions:

- How much amplifier power do you need?
- Should you buy separates or integrated units?

By Craig Stark
The heart of every home music system is the amplifier. It processes and controls the audio signals from phono cartridges, FM and AM tuners, and tape recorders, and the like, and it provides the necessary power to drive the system’s loudspeakers. Selecting from the many available models the one that best suits your needs and pocketbook requires that you make some general at-home decisions before setting off for the showroom. Here are some guidelines to help get you started.

Receiver or Separates?

The first decision you’ll face (it might be wise to make it only tentative initially) is whether you should buy your amplifier as part of an all-in-one package, called a receiver, that also includes an FM tuner; whether you should buy a separate tuner and an “integrated” amplifier; or whether you should separate the system even further into a tuner, a preamplifier, and a power amplifier. Let’s examine these options a little more closely.

Probably as a carry-over from broadcast and recording-studio practice, the processing/control and the power-delivery functions of the amplifier have traditionally been split between two separate units: a “preamplifier” and a “power amplifier.” Large numbers of heat-producing and hum-sensitive vacuum tubes made this physical separation almost mandatory in the pre-transistor era, and even today it is the favored arrangement among most dedicated audiophiles. The most powerful power amplifiers and the most sophisticated preamplifiers are usually available only as “fully separate” components; these provide the greatest system flexibility if you anticipate making reasonably frequent equipment changes as the state of the art (or your audio appetite) progresses.

The pure separates might also be said to have two disadvantages: size and cost. The cost factor is a difficult one to pin down, since for many dedicated audiophiles a simple formula such as “dollars per watt” for a power amplifier (“dollars per control” might be the equivalent for a preamp) is rather like comparing a Ford, a Rolls Royce, and a BMW in terms of “dollars per horsepower.”

Where cost (or space) efficiency is the primary consideration, there’s little question (unless your geographical area lacks good FM reception) that you are best advised to buy your amplifier as part of a receiver; putting three components on one chassis, in one cabinet, and with only one power supply makes possible very large economies in manufacturing from which you can profit.

Further, since receivers are the most popular way of buying an amplifier, the price competition among them is the greatest. And, though receivers used to lack a number of the “features” of separates, today it is rare to find a function or a feature left out that can be included at reasonable cost.

Why, then, should anyone consider the other alternative, the “integrated” amplifier? It includes both preamp and power amplifier, but it requires an additional unit—a tuner—if you want to pick up radio broadcasts. To some extent, it is a matter of whether you’re willing to accept the manufacturers’ choice(s) of features, power, etc., or whether you prefer to make up your own package with its specific strengths in the areas that are important to you. By choosing a separate “integrated” amplifier you may pay a bit more (when you add on the price of a tuner), but you get a little more custom tailoring, so to speak. In a few cases the difference may be audible: to get adequate FM reception in a difficult location you might have to buy a more powerful and complex receiver than your amplifier needs would dictate. In most situations, however, the choice between a receiver and a separate “integrated” amplifier plus tuner will rest more on personal priorities than on audible differences. Equivalently powered receivers from the same company will generally have slightly varying distortion specifications, but the difference would not really be enough to be concerned about.

Power and Dollars

The second big decision is a little more complicated, though it rests on a simple question: “How much amplifier power do I need?” Since rated power output is by far the most important element in determining the price of an amplifier, it is obviously poor economy to buy a 150-watt amplifier if a 25-watt unit will do the job just as well. On the other hand, perhaps the safest generalizations about an amplifier in a home audio system are that (a) it is probably putting out less power then you think for most listening, and (b) it won’t have enough in reserve when you want to crank up the volume. The amplifier power figures given in the table (see next page) will provide a reasonable starting point if you bear in mind that the loudest music you hear at a symphonic concert is likely to be in the 95- to 100-dB range (depending on where you sit), while rock music frequently exceeds 110 dB.

The table correlates four factors: (1) amplifier power required, (2) loudness level obtainable, (3) room size (given “average” furnishings), and (4) speaker efficiency. Some additional considerations about sound level are treated in the box on power and loudness (see page 63); for our purposes here it is enough to know that each 3-dB change in loudness level represents a 2:1 change in amplifier power, even though it represents much less than a 2:1 change in perceived loudness. Going from a 15-watt to a 30-watt amplifier will raise the available loudness by 3 dB, which is certainly perceptible. In terms of power alone, however, it makes no sense to trade in a 60-watt amplifier for a 75-watt amplifier, even though you are adding 15 watts, for in this case the change is only 1 dB, which is inconsequential. To improve significantly on the 60-watt amplifier’s output you would have to go to 120 watts.

Relatively little need be said about the room-size factor, for you’re not likely to able to change it much. But the larger and more sound-absorbent the room, the more power you will need to obtain the same listening level. The table presupposes that we are dealing with “average” furnishings, and large amounts of sound-absorbing material (overstuffed sofas, drapes, cases filled with books, and the like) will dictate the use of a somewhat larger amplifier than the table recommends.

If you’re changing speakers or shopping for your first system, one sure way to reduce your amplifier power needs is to choose a somewhat more efficient (technically, a more sensitive) loudspeaker system. As the table shows, it takes 125 watts of amplifier power to produce a 105-dB sound-pressure level with a low-efficiency speaker in a 2,000-cubic-foot listening room, while the same loudness can be obtained with only 20 watts if you use a high-efficiency speaker. More and more, today’s speaker manufacturers are providing information on loudspeaker sensitivity by supplying a sound-pressure level per watt per meter rating figure for their products. While not all these ratings follow precisely the same measuring procedure, they do provide an index to relative speaker efficiency.

As you might expect, however—no free lunches ever here—there are usually some trade-offs in speaker size, price, or in deep-bass response between low-efficiency (say, 87 dB SPL or lower with 1 watt input measured at 1 meter) and high-efficiency (93 dB SPL or higher) speakers, so it may be false economy to limit your listening to the high-efficiency models in order to save on amplifier power. (Overleaf)
GUIDE TO AMPLIFIERS...

In the final analysis, of course, there comes a point when we have to stop dreamily contemplating the price-no-object, super-power amplifier that could handle any imaginable program material or speaker and apply the realistic constraint of what our budgets can afford. Here, features other than power will also enter the picture, although as a general rule the number of "features" in an amplifier tends to increase with the power rating and the price. Because one of the common side effects of audiophilia is a dedication to design approaches whose virtues are not reflected in conventional specs, price comparisons among separate preamp and power-amp combinations are nearly meaningless. Therefore, in order to establish some relative guidelines in respect to dollars, watts, and features, let us examine the specs you can expect to find within different price categories of integrated amplifiers.

**Under $200.** This is the "entry level" for integrated amplifiers, and it consists primarily of units with a 20- to 40-watt power rating and distortion generally hovering below the 0.1 percent point. All of the more or less "standard" features will be included:

- an input-selector switch with provisions for a magnetic phono cartridge, a tuner, and an "aux" source similar to a tuner; provision for at least one tape deck, and sometimes two, though in this price range you can usually dub tapes in only one direction.
- There will be separate bass and treble tone controls, though not a bypass switch; you simply set the knob to "0" (or however the center point is marked) when you don't want to modify the tonal spectrum. There will be a switchable "loudness compensation" feature designed to boost the frequency extremes to make the music sound fuller at low volume. And there will usually be either a subsonic filter or a high-cut filter to reduce noise in their respective ranges, though the high filter can't be expected to be particularly effective at this price level.

Phono equalization is generally rated at within ±0.5 dB of the RIAA curve (often over the 30- to 15,000-Hz range rather than the newer 20- to 20,000-Hz range used by more expensive units); the phono signal-to-noise ratios will be, on average, in the 75-dB area, and the phono-overload level (the maximum output that can be accepted from a cartridge without producing distortion) will generally range in the 150- to 170-millivolt level, which should be adequate for all but the highest-output phono pickups playing all but the "hottest" discs.

Even at this level, a surprising number of new amplifier models include some kind of power-output indicator (meter or LED display) and provision for hooking up a second pair of speakers. In view of the low power available, this latter feature, if included, should be used with some caution. (At least two models in this price class include "DC circuitry," which is explained on page 64.)

**$201-$300.** While the sonic performance in the under-$200 price class is certainly adequate for most people's hi-fi needs, it is not up to the "state of the art," and the available power is decidedly on the low side. In the $201-$300 bracket both aspects improve, with rated power output generally ranging from 40 to 50 watts and almost all distortion figures being reduced to the second decimal place; 0.05 per cent total harmonic distortion (THD) might be considered average.

With a few exceptions, phono RIAA accuracy is likely to be similar to that of the previous class, although the overload margins begin to creep up slightly (for example, 180 mV) and the average phono signal-to-noise ratio tends to improve slightly to about 77 dB. A few models in this price class offer the possibility of accepting a moving-coil phono cartridge, and about half of them provide two-way tape-dubbing facilities. More than half have both high-cut and low-cut filters, must have a power-output level indicator, and almost all offer two-system speaker switching/connection facilities. About half appear to employ "DC circuitry."

(Continued on page 64)
RELATIVE SOUND LEVELS

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<tr>
<th></th>
<th>Sound Pressure (dynes/cm²)</th>
<th>Decibels</th>
<th>Power at Ear (watts/cm²)</th>
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<tr>
<td>50-Hp Siren</td>
<td>140</td>
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<td>Threshold of Pain</td>
<td>130</td>
<td>10^6</td>
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<td>Hammering on Steel Plate (2')</td>
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<td>Threshold of Hearing</td>
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POWER AND LOUDNESS

Physical, psychoacoustic, and musical factors all enter into any consideration of the amplifier power required to produce a particular "volume level" with your music system. In objective terms, the intensity of a sound is measured as a sound-pressure level (SPL) which can be compared to other sound levels on a logarithmic scale of decibels (dB). As shown in the accompanying illustration, the range of pressures—from the threshold of hearing to the point where sound becomes painful—covers a span of approximately 130 dB, representing a power ratio of ten trillion to one. A 1-dB change in loudness is about the smallest that can easily be perceived by the unaided ear.

Because the ear follows a generally logarithmic response rather than a linear one in translating SPL changes into changes in perceived loudness, doubling the power of the sound (a change of 3 dB) does not produce the sensation of twice the loudness. The increase is certainly audible, but it seems rather slight. In order for a sound to appear subjectively twice as loud as another, the power must be increased by a factor of ten (10 dB). Thus, while 2 watts (or less, as we'll see below) will create a rather high sound level on most component systems, doubling the power to 4 watts would make only a small loudness increase, and doubling the apparent loudness would require a power increase to 20 watts.

The music itself imposes still further demands on amplifier power because of its high peak-to-average levels. The initial few milliseconds of a musical note can easily demand ten times or more as much power as the average of the note as a whole. Thus, if the average power required for very loud music reproduction was 20 watts, the actual momentary peak levels would require 200 watts. Because the peaks are so fleetingly brief in time, the ear does not respond to them fully, but the amplifier and loudspeakers do—or try to! If the amplifier cannot deliver the needed power—or if the speaker cannot handle it—the peaks are clipped, and the result is distortion—which, depending upon a complex of factors, may or may not be audible.
**GUIDE TO AMPLIFIERS...**

- **$300 to $400.** Most models in this price range offer 50 to 60 watts, and the rated distortion figures are likely to be 0.05 per cent or lower. Phono signal-to-noise ratios of 80 dB or so are now the norm, with overload points at 200 mV or higher. RIAA accuracy is also improved, covering, frequently within ±0.3 dB, the full 20- to 20,000-Hz spectrum. High-level-input switches are all but universal. Tone-defeat (bypass) switches are nearly a standard feature in this price class, and more than half the models have tone-control bypass switches. Nearly all have effective subsonic filters, and a number have high-cut filters as well.

  Two-system speaker switching is nearly universal, most units have power indicators, and about half have a "muting" switch that lowers the volume (usually by about 20 dB) in order to permit answering a telephone or a pestering child. Most amplifiers in this bracket employ "DC circuitry," and a number have "pre-main" connector jacks that allow the preamplifier and power amplifier to be electronically separated (as with full separates) so you can insert an accessory in the signal path if desired. Tone-defeat (bypass) switches are all but universal.

- **$401 to $500.** A power output of 70 to 80 watts is now the order of the day, and distortion has dropped to the point where several units are rated in the third decimal place (for example, 0.008 per cent). Phono signal-to-noise ratios are now in the high 80s or low 90s, with 200 mV or more overload. RIAA phono equalization accuracy is normally within ±0.2 dB in this price bracket, two-way tape dubbing is universal, and pre-main jacks are more frequent than not. Tone controls are improved as well, with about half or more of the units offering not only tone-bypass switches, but switchable selection—sometimes with more than two choices—of the "turnover" frequencies at which the bass and treble controls begin to take effect.

  Almost all the amplifiers in this range are "DC," most have muting switches, and nearly all offer power-output indicators, often in the form of fluorescent displays. Almost all have both high- and low-cut switched filters, and about half provide inputs for a moving-coil as well as a moving-magnet phono cartridge.

- **$501 to $700.** Still higher power—80 to 110 watts, typically—with about half the units having distortion ratings in the third decimal place. Buyers who can afford this class of amplifier are often attracted to separate components, so pre-main jacks are mandatory. Phono signal-to-noise ratios are again in the high 80s or 90s, with well above 200 mV overload capacity. Most units now offer moving-coil as well as regular moving-magnet phono inputs, and a significant number offer switch-selectable impedance matching on the phono inputs to permit a precise match for the needs of any particular cartridge. All the previously mentioned features are incorporated, and "DC circuitry" is nearly universal.

- **$701 and up.** At this point the choice between an integrated amplifier and a separate preamp and power amplifier is, for all intents and purposes, simply a matter of whether you want to have one unit or two. Power outputs are 100-plus watts, phono signal-to-noise ratios are at 90 dB, and the whole panoply of features previously discussed is standard. Indeed, at this point, many of the popular "separate" preamplifiers offer much less control flexibility than these high-level integrated units do; the assumption being made, for example, that the user is likely to want to use a separate equalizer rather than ordinary front-panel tone controls.

**AND** that, "basically," is it, all the bare-bones information (plus a little preliminary decision making) you'll need to prepare you to deal knowledgeably with the amplifier market. Test reports are a great help too, of course, though it must be remembered that only God has a test bench big enough to accommodate them all. Don't, in other words, let the fact that a unit hasn't been tested keep you from giving it the benefit of a once-over with your own educated eyes and ears.

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**DC AND FAST AMPLIFIERS**

[caption]

In today's more expensive amplifiers, "DC circuitry" is becoming more and more common. Assessment of its audible significance in specific cases is best left to the rigor of a formal test report, but both it and the associated concept of high "slew-rate" or "fast" amplification are so prevalent in today's designs that they deserve a general explanation.

In its strictest sense, a DC (direct-coupled) amplifier is one that will pass a direct current. The power-amplifier section of a number of today's amplifiers are "DC" in this sense, though most are careful to include speaker-protection circuitry that will prevent any large amount of direct current from flowing into the loudspeaker.

The reason for using DC design, according to its advocates, is that it prevents low-frequency "phase shifts" that can "muddy" bass reproduction. This claim is by no means universally accepted (the issue of the audibility of phase shift has been fought over for years), but if they are audible, a direct-coupled power amplifier at least degrades performance, but it allows the designer to use direct-coupled circuitry throughout the power amplifier nonetheless. The phase shift imposed by a single capacitor, especially if it is very large, is very slight at any audible frequency.

Although there is no necessary correlation between DC design and high slew rate, in practice the two tend to go together in today's amplifier market. Slew rate is a measure of the number of volts, from extreme positive to extreme negative, that an amplifier can pass within a specified time (normally, 1 microsecond). In essence, it is an index of the amplifier's full-power response to extremely high frequencies, and the advocates of high-slew-rate design contend that this is the way to avoid a form of distortion known as "transient intermodulation distortion," or TIM for short. Just how audible TIM is even in conventionally designed amplifiers is again a matter of dispute, but a "fast" or "high-slew-rate" amplifier avoids what at least may be a problem.
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Stereo Review's Record of the Year Awards for 1979

in recognition of significant contributions to the arts of music and recording during the 1979 publishing year

This issue marks the thirteenth annual presentation of Stereo Review's awards for outstanding records of the year, and the ground rules for such awards are by now well known. In brief (and as the headline above indicates), they are art-rather than commerce-oriented, although an entry is not automatically disqualified should it happen to make the charts. But it should be pointed out, there are certain records, some of them quite estimable, that never get into these listings, never win an award, and only rarely, if ever, receive honorable mention. The records I refer to are the reissues, whose number each year seems to increase, and whose importance has by now reached almost dramatic levels.

The record business has always operated on the basis of obsolescence. One pop song or pop artist is succeeded by another; one recording of Scheherazade is succeeded by another. Why? Because there is always a market for a new pop song or artist, and there is always a market (incredible as it may seem) for a new Scheherazade. More things go in and out of the catalog, of course, than pop hits and Rimsky-Korsakov, and so there gets built up in limbo a huge recorded repertoire, some of which legitimately belongs there, but a portion of which has real aesthetic value. It is the intelligent combing through this enormous mass of stuff and the selective reissue of some of the best records that we would like to commend here. We are not about to start a new series of awards for reissues, but it would be criminal not to express some appreciation to the companies involved for the return of some great records to the catalog.

Therefore, we would like to thank Quintessence Records for Elly Ameling's "Schubertiade" (PMC 7099), Jean-Pierre Rampal's Richter and Benda flute concertos (PMC 7140), and Timolety Dokschitzer's Haydn and Hummel trumpet concertos (PMC 7135); both Quintessence (PMC 7133) and Musical Heritage Society (MHS 3956) for Oistrakh and Richter's Franck and Brahms violin sonatas; RCA for Horowitz's great Moussorgsky Pictures at an Exhibition (ARM-13263); Philips/Festivo for Handel's Water Music by Van Beinum (6570 171) and the Tchaikovsky symphonies by Igor Markevitch (6570 160-162, 153, 110, and 047); Deutsche Grammophon for "Fiedler's Favorite Overtures," and DG's Privilege subsidiary for Clara Haskil's Mozart Concerto No. 13 (2335 115) and Wolf's Spanish Song Book with Schwarzkopf and Fischer-Dieskau (2726 071); Columbia/Odyssey for Albeniz's Iberia with Arrau (Y 35229); Desmar for Arrau's "Historical Recordings" (GHP 4001/2); Varese Sarabande for Milhaud's Joys of Life (VC 81051); Time-Life for a magnificent set of jazz reissues; and a variety of other companies for fine jazz reissues too numerous to mention.

As for the new records of artistic and technical excellence, their names and numbers are inscribed on the following pages, partially as a well-deserved honor, and partially in the hope that this will serve to get them the attention they merit now, and that we will not, for many years at least, have to call attention to them as wonderful records that have returned from the land of the lost as new reissues.

—James Goodfriend, Music Editor
CORY DAVE: Cory and Me. New York International BXL1-3408.

BRITTEN: Peter Grimes (Jon Vickers, Heather Harper; Royal Opera House Chorus and Orchestra, Colin Davis cond.). Philips 6769 014.


CHOPIN: Concerto No. 2; Nouvelles Études; Scherzo No. 2 (Emanuel Ax, piano; Philadelphia Orchestra, Eugene Ormandy cond.). RCA ARL1-2868.

MOZART: The Marriage of Figaro (José van Dam, Ileana Cotrubas; Vienna Philharmonic Orchestra, Herbert von Karajan cond.). London OSA 1443.

BARRIOS: Guitar Music (John Williams). Columbia M 35145.


DONNA SUMMER: Bad Girls. Casablanca NBLP2 7150.


SHOSTAKOVICH: Lady Macbeth of Mtsensk (Galina Vishnevskaya, Nikolai Gedda; London Philharmonic, Mischa Rostropovich cond.). Angel SCLX-3866.

Record of the Year Awards for 1979
SELECTED BY THE EDITORIAL STAFF AND CRITICS FOR THE READERS OF STEREO REVIEW

Certificate of Merit awarded to
Earl Hines
for his outstanding contributions to the quality of American musical life

Honorable Mentions

BERNSTEIN: Songfest (Clamma Dale, Donald Gramm, others; National Symphony, Leonard Bernstein cond.). DEUTSCHE GRAMMOPHON 2531 044.

CHOPIN: Piano Concerto No. 1 (Krystian Zimerman, piano; Los Angeles Philharmonic, Carlo Maria Giulini cond.). DEUTSCHE GRAMMOPHON 2531 125.


ELVIS COSTELLO: Armed Forces. COLUMBIA JC 35709.

DIRE STRAITS: Communiqué. WARNER BROS. HS 42779.

GRIEG: Piano Concerto in A Minor (Percy Grainger, piano roll; Sydney Symphony Orchestra, John Hopkins cond.). RCA AR1-3059.

GRIEG: Peer Gynt (Oslo Philharmonic Chorus, London Symphony, Per Dreier cond.). UNICORN UNC2-75030.

JOE JACKSON: Look Sharp! A&M SP-4743.

BILLY JOEL: 52nd Street. COLUMBIA FC 35609.

MASSENET: Cendrillion (Frederica von Stade, Nicolai Gedda, others; Ambrosian Opera Chorus; Philharmonia Orchestra, Julius Rudel cond.). COLUMBIA M3 35194.

MILHAUD: Protée; Les SONGes (Utah Symphony and Chamber Orchestras, Maurice Abravanel cond.). ANGEL S-37317.

NANA MOUSKOURI: Roses & Sunshine. CACHET CL3-3000.

ANNE MURRAY: New Kind of Feeling. CAPITOL SW-11849.

RANDY NEWMAN: Born Again. WARNER BROS. HS 3346.

GRAHAM PARKER AND THE RUMOUR: Squeezing Out Sparks. ARISTA AB 4223.

MINNIE RIPERTON: Minnie. CAPITOL SO-11936.

SAM RIVERS: Waves. TOMATO TOM-8002.


THE ROCHES: WARNER BROS. BSK 3298.

KENNY ROGERS: The Gambler. UNITED ARTISTS UA-LA934-H.

SCHUBERT: Alfonzo und Estrella (Peter Schreier, Edith Mathis; Berlin Radio Choir and State Orchestra, Otmar Suitner cond.). ANGEL SCX-3878.


VILLA-LOBOS: Guitar Etudes; Suite Popular Brasileira (Julian Bream, guitar). RCA AR1-2499.

FREDERICA VON STADE: Song Recital. (Frederica von Stade, mezzo-soprano; Martin Katz, piano). COLUMBIA M 35127.

VOYAGE: Fly Away. MARLIN MA 2225.
JAZZ is young enough that some of its historically greatest practitioners, still active today, can be said to have been around almost from the beginning. Earl Hines could never have been found pounding the keys of a bordello piano in New Orleans in the early years of the century (he was born in 1905 in Duquesne, Pennsylvania), but he was a big man in Chicago in the Twenties, almost an opposite number there to Jelly Roll Morton—who most certainly could have been found in one of those hotter locations. Morton, too, was a great pianist and a great historical figure; but Hines, a major musical force even in the Twenties and Thirties, continues to be one in the Eighties. He is jazz history alive and in action. He was at home in the music yesterday, and he is just as at home today—never out of date, always individual, as stylish as they come, and totally immune to mere fashion. There is only one Earl Hines.

To present to him an award for significant contributions to American music is only to make official what is already obvious. Hines' contributions are as evident in his playing today as they are in his records from earlier times—remember, he was the pianist on the fabulous Jimmie Noone sides that came out of Chicago, and he was the pianist on many of the great early Louis Armstrong records. His presence is, indeed, so singularly apparent that he hardly needs credit on the record labels. The keyboard style he created cut through the fabric of the band, it could stand up to the greatest horns, and it could even—unintentionally, for Hines is a modest man—sometimes steal the show. His contributions are equally evident in the reflections we find bouncing throughout the jazz world, for Hines' piano style influenced hundreds of players, directly and indirectly, and his eye for talent discovered and his helping hands molded many a star, instrumental as well as vocal, out of talented but awkward kids.

And so jazz, in its fullness and richness, is in measurable part a Hines creation. To honor Earl Hines is to honor jazz. There is, I think, something inescapably right about that.

—James Goodfriend, Music Editor

"YOU got the melody at the beginning and the end, so I guess that was the Devil in between."

Earl Hines had just finished recording Between the Devil and the Deep Blue Sea for a collection of piano solos on Harold Arlen themes. His smoothly self-effacing reply to a compliment was nevertheless a revealing description of the performance. Not, surely, that the Devil should really be credited with the improvisation between the melodic statements, but that its spontaneity and invention did indeed suggest some kind of possession.

For more than fifty years Hines has been famous for the independence of his two hands, and they still continue to take him into unique, tortuous mazes from which only he can find the exits. "Sometimes I don't know how I'm going to get out," he often says. "I frighten myself." But, landing firmly and accurately on the beat, he always does manage to get out despite the complexity of preceding passages where the beat is not so much audible as implied. This is not merely a matter of intuitive genius, but of vast experience as well.

For many jazz enthusiasts, Hines' early associations with Louis Armstrong and Jimmie Noone typified him as a musician of similar stylistic persuasion. It is certainly significant that he participated in the making of the greatest records by each of those two outstanding artists from New Orleans. As recently as October 29, 1979, an editorial in that city's Times-Picayune referred to him as a musician "whose genius is universally recognized" and one with "obvious artistic and spiritual links" to the Crescent City. For several years during the Fifties, primarily for domestic reasons, he led a Dixieland band in San Francisco, and in 1975 he recorded with Wallace Davenport and other local musicians in New Orleans for an Italian company, but it should be borne in mind that the two periods he worked with Armstrong and the one with Noone were of relatively short duration. Of much more importance is the fact that for nearly twenty years he led one of the best big bands in the country. And his heart is still with the big bands to this day. Despite all the adulation he has received around the world, he likes to say, "I'm a band pianist, not a soloist."

As a boy in Duquesne, Pennsylvania, he received orthodox musical training from a German teacher who...
believed in Czerny, Chopin, Liszt, Bach, and Beethoven. He made rapid progress on the piano and began playing organ regularly in his Baptist church when he was only nine (his mother was an organist), but as a young teenager he was introduced by a cousin to night life in nearby Pittsburgh. There he was promptly attracted to jazz by the playing of a somewhat primitive pianist named Toadlow. Later he acquired the basic elements of his craft from two rather more sophisticated pianists in Pittsburgh: Johnny Watters, who had a showy right hand, and Jim Fellman, who played tenths smoothly in the bass. Hines solicited their aid and added their individual devices to his own burgeoning technique. A banjo player instilled in him the importance of regular tempo, but the prime influence on his melodic conception was the trumpet.

The common assumption is that what became known as Hines' "trumpet style" derived from the Armstrong association, although the pianist's father, Joseph Hines, led the Eureka Brass Band in Duquesne and played cornet. Earl was drawn to the instrument too, and gave up blowing only when he found it hurt him behind the ears. His great admiration for Joe Smith, a cornet player later famous for his records with Fletcher Henderson and Bessie Smith, is highly relevant, however.

Smith was working in the Pittsburgh area, and in his autobiography (The World of Earl Hines, Charles Scribner's Sons) Hines says of him: "There was a boy there at one time who played some of the finest trumpet I ever heard in my life. I never before heard a man play an open horn with just a coconut shell and get a velvet tone, almost like a human voice. I just couldn't believe it. I followed him everywhere he went. He used to go to a lot of these parties with Jim Fellman and sit in. I sat and listened to him whenever I could, and marveled at his style, and wanted to play what he played on trumpet. It gave me a lot of new ideas and it is too bad so few people realize today what a great musician he was."

Meanwhile, Hines had been experiencing the professional life as accompanist for singer Lois Deppe on Pittsburgh's hectic Wylie Avenue. "He could play and read anything," Deppe recalled. "One time he played the prelude from Pagliacci for me, and The King of the Ocean from Meyerbeer's opera L'Africaine." When Deppe sang at an Ebenezer Baptist Church benefit in 1924, his young protégé accompanied him in music by Gounod and Handel, as well as in several spirituals. Their joint success eventually led Deppe to form a big band, which in turn led to another characteristic in his resourceful pianist's style.

"The band was so large," says Hines, "I had to figure a way to be heard, because they constantly drowned me out. So I started to use octaves, and with octaves I could cut through the sound of the band. We had no amplification then and singers were using megaphones." A remarkable octave technique is still a striking feature of Hines' playing today.

He was eighteen when he went to Chicago in 1924, but it was not until four years later that his totally new conception of jazz piano was revealed to the world at large. With Deppe, he had previously been to New York, where he met Luckey Roberts, Willie "The Lion" Smith, and Duke Ellington. Besides the Pittsburgh pianists and Joe Smith, he had also heard Eubie Blake at his aunt's house. Blake recognized his talent immediately and promised that he would feel his cane if he had not left Pittsburgh by the time he returned. Fifty years later Blake claimed Hines was then playing the way he always did!

The early Chicago years were unquestionably crucial. Hines found it a tough city. "You had to act bad whether you were bad or not," he said. "Jelly Roll Morton had found that out long before I did, and that's why he carried a gun and talked loud." Together with Teddy Weatherford and Glover Compton, Morton was regarded as one of the city's outstanding pianists, and Hines probably learned something from him in terms of structure, shading, and pacing. Certainly, a kinship can be found in their sense of the dramatic. But it was Weatherford who was generally regarded as the newcomer's most serious rival, although records scarcely support this. The discs Weatherford made in Paris in 1937, in very favorable circumstances, show him to have been a pianist limited in comparison with the Hines of nine years before. At thirty-four, Weatherford should have been in his prime.

For a time Hines worked as a single at the Elite No. 2 Club, where he played on a small piano that could be rolled from table to table. Then he went to California and back with The Charleston Revue as pianist in Carroll Dickerson's band. When Louis Armstrong later took over Dickerson's band at the Sunset Café, Hines became the musical director, but veteran pianists like Tom Whaley and Marguerite Rosson both insist that his piano style was formed before this association began. However that may be, the records he made in 1928 were the first to display his full, revolutionary po-

"The man who taught me most of what I know was Earl 'Fatha' Hines, one of the greatest pianists of all times." —Billy Eckstine
tential. Those he had made with Lois Deppe in 1923 were restrained and inconclusive, but the eighteen titles he recorded while he was a member of the Jimmie Noone band at the Apex Club in the summer of 1928 introduced a remarkably assured and imaginative musician.

"Noone was a very fine clarinetist," Hines recalls, "but like several others from New Orleans he was a sort of jealous fellow, and he didn't want anyone to get more applause and consideration than he did. I knew how important it was to play softly in that kind of group, and I never forgot what King Oliver once told his guys when they were playing for dancers. 'Let me hear those feet,' he said. 'I want to hear the shuffle of feet.' But I'd made a lot of friends at the Sunset, and they would come in to hear me. They'd stand around the back of the piano to listen to me, and Jimmie didn't like that either. From then on I got to take fewer solos! Finally my contract ran out and I just walked off the place, although the people that I owed it big to begged me to stay."

The instrumentation of Noone's group was unusual: clarinet, alto saxophone, piano, guitar, bass, and drums. The saxophonist played a melodic lead, and against this Noone and Hines variously embellished and improvised, the pianist the more unpredictably. Despite Noone's jealous attitude, he seemed to be lifted and inspired on the records by Hines' buoyant backing.

Louis Armstrong had already won a big reputation among musicians with such Okeh records as "Cornet Chop Suey" before he and Hines joined forces. They met first in the poolroom at the black Local 208 of the musicians' union on State and 39th in 1925.

"A month or so later," Hines remembers, "they had finally put a piano in there, and I was running through some tunes when he came in. He took his horn out and began to blow. I'll always remember the first tune we played together. It was The One I Love Belongs to Somebody Else. I knew right away that he was a giant. Nobody could play the horn the way he played it. He really knew that trumpet. From that time on, we began to hang out together. He was a very happy-go-lucky fellow, and we used to have so much fun. Later on, after Joe Glaser became his manager and they started billing him as 'The Greatest Trumpet Player in the World,' Louis changed and became more serious, although he never really wanted the headaches and responsibilities of leading a band."

That was why I became musical director of the band we were both in at the Sunset Café. It was Carroll Dickerson's to begin with, but Carroll had been drinking too much, so they let him go and made Louis the leader. I had learned a lot watching Carroll, and the experience I got at the Sunset proved very valuable to me a little later. They put on big shows there with singers, dancers, comedians, and all kinds of acts, and there was plenty of competition from the Plantation across the street. In those days Chicago was 'way ahead of New York and its Cotton Club.'"

"The association with Louis all through this period was very inspiring to me," recalls Hines in his autobiography. "He was called 'Satchelmouth' and I was called 'Gatemouth.' We were very close and when we were playing we would steal ideas from each other. Joe Smith was playing a type of thing very similar to what Louis was doing at that time, but it was smoother, and it didn't have the punch Louis had. Now, of course, you couldn't be around Louis as much as I was without catching some of his spirit and drive."

"When we were playing together, it was like a continuous jam session, like when we made that record of Weather Bird Rag. When people talk of my 'trumpet style,' I think they usually mean when I phrase in octaves like a trumpet player would play, but I used tremolo to give an effect like his vibrato, too. I'd reduce the weight of the note and use the sustaining pedal as the sound of the note thinned out."

Among nearly a score of classics Hines and Armstrong recorded together in 1928, Weather Bird Rag was a duet that put them beyond category. Their West End Blues was another sensation, and it remains one of the few unanimously acknowledged masterpieces of jazz. They completely dominate a performance that combines dignity and grandeur with extraordinary emotion. Armstrong was at an imaginative peak, and no other pianist of the time could have provided the challenge and spur that Hines did.

"Making records," Hines says, "was something we loved to do. We hardly thought about the money. Ideas used to come to us in the studio, and we were getting our kicks without thinking about making our reputation by records. But I think the public realized we were really playing from the heart. When Louis and I listened to what we had done, we'd grin when we heard something we liked, but we were also quick to criticize our own work."

The vitality, the spontaneous element in the music, and the genuine

"The great styling and phrasing of Earl Hines had tremendous influence on my own piano styling."

—Nat Cole

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Hines in 1941 with band members Truck Parham (bass), Rudy Taylor (drums), and Hurley Ramey (guitar).
feeling surely account for the enduring appeal of those records. Hines explains how one of his most famous solos came to be made:

"57 Varieties was really an accident. Louis and I were resting, but it was a cold day and I went to the piano just to keep my fingers warm. I was fooling around with Tiger Rag, hardly thinking, when a girl came out and whispered to me to finish it. I'd had no idea they were recording. They came up with that title later because the Heinz people in Pittsburgh, who made ketchup and pickles, used it in all their Advertising. So we borrowed it from them, but I never played that again!"

The significance of "hardly thinking" in that statement possibly needs emphasis. By 1928 Hines already had what he calls his "photographic memory" for chords, and also a large range of "licks," "riffs," and other devices that his fingers could apply almost intuitively in the musical equivalent of a stream of consciousness. To this day, he rarely plays even the most familiar pieces precisely the same way twice. The overall structure of his performance may remain the same, but within it there are frequent modifications and new insights that vary according to his mood.

Although Hines' piano solos did not attract the same attention as his collaborations with Armstrong, they were noticed by the Q.R.S. piano-roll company, which summoned him to New York. He made eight solos for them that almost immediately became collector's items when they were issued on four 78-rpm records. He also remembers cutting two piano rolls, but these were not issued and have never been traced. By an odd coincidence, he discovered when he was working in Buffalo in 1975 that Q.R.S. was still thriving, whereupon he made four piano rolls for the company, including Blues in Thirds and My Monday Date, both of which he had recorded for them forty-seven years before. "It was interesting to do," he said, "but much harder than making ordinary records. I was just so surprised to find that player pianos were still very popular."

Emphasis on 1928 is necessary because this was the year when the Hines piano style almost overnight became the most influential of any in jazz. But it was seen then as the antithesis of the "stride" style as perfected by the great school of Harlem pianists that included James P. Johnson, Willie "The Lion" Smith, and Fats Waller. Besides their regular, driving bass patterns and full chords in the treble, there was a lingering flavor of ragtime thought and practice in their music. In sharp and mordant contrast were Hines' single-note lines, bright "trumpet" octaves, and broken bass rhythms. It is therefore surprising that he names Fats Waller as his greatest influence.

Waller, while he was playing at the Vendome Theatre in Chicago, used to visit the Sunset Café after his night's work was over, and there the two pianists would play duets. Hines is full of hilarious stories about what happened on those occasions. He especially relishes the memory of Waller's impatience with a musician of inadequate reading ability. "What key are you struggling in?" Waller shouted. "Turn the page!"

Despite their differing musical styles, Hines and Waller became fast friends. Hines could and can play excellent "stride" piano, and he did so on a Verve album he made with Johnny Hodges called Stride Rite. "That's what I learned to do first," he said when some expressed surprise at this ability. But stride is not a style that really suits his temperament, whereas Waller was its supreme exponent. Pianist Dick Wellstood once astutely noted (in a liner note for Chiaroscuro..."Since I was first attracted to Earl Hines' tremendous talent, I have admired him beyond all others in American music." —Stan Kenton
Records) that Hines does not possess "the phlegmatic unflappability necessary to maintain the momentum of stride. He needs silence in the bass, room to let the flowers grow... ." What the two men had in common was a complete and unsurpassed rhythmic authority, whether playing alone or as part of a band's rhythm section. "They used to be regarded as rivals," trombonist Dicky Wells said in his book The Night People, "but Earl was crazy about Fats, idolized him." Both were very powerful players who believed in making the piano sound, and both had a considerable compositional gift. While Hines was not a prolific song-writer like Waller, he was nevertheless responsible for several numbers that became staples in the jazz repertoire, such as "My Monday Date," "Mood Indigo," "You Can Depend on Me," and "Blues in Thirds." Yet his determination to keep Waller's name alive has since led him to play and record Waller's songs more often than his own! A similar concern for the memory of other musician friends is evidenced in the medleys he often plays of numbers associated with Duke Ellington, Louis Armstrong, Johnny Hodges, and Don Redman.

All the activity of 1928 came to a climax on his birthday, December 28, when he opened with a big band at a Cotton Club in New York. He was serious about his music, but the importance of "entertaining" the customers was not lost on him. Bandleaders such as Paul Whiteman and Guy Lombardo were frequent visitors, and the great classical pianist Walter Gieseking, when he was in Chicago, reputedly went night after night just to hear Hines.

The band improved steadily, and records made in 1932, 1933, and 1934 show it to have already become one of the best in the country. Hines was fortunate in his arrangers, men like Cecil Irwin, Henri Wood, Jimmy Mundy, Quinn Wilson, Reginald Fore-sythe, and Budd Johnson, and his flair for finding and nurturing talent was soon demonstrated. He has always found and hired many fine singers and musicians, and when they wanted to go out on their own he seemed to have little difficulty in finding comparable replacements. Among those who came into prominence with him over the years were Omer Simeon, Darnell Howard, Walter Fuller, George Dixon, Jimmy Mundy, Budd Johnson, Trummy Young, Alvin Burroughs, Shorts McConnell, Ray Nance, Franz Jackson, Scoops Carry, Wardell Gray, Benny Green, and—during the period in the Forties when his band was known as the "incubator of bop"—Charlie Parker and Dizzy Gillespie. As soloists, they were never held back. "You go out there and blow," Hines would tell them. "Don't worry about stealing my thunder. Steal it if you can!"

His ear for singers was remarkable, and he employed, among others, Arthur Lee Simpkins, Herb Jeffries, Ida James, Madeline Green, Billy Eckstine, Sarah Vaughan, Johnny Hartman, Etta Jones, Helen Merrill, Lonnie Satin, and, for the last decade, Marva Josie. "The man who taught me most of what I know," Billy Eckstine said in 1959, "was Earl 'Fatha' Hines, one of the greatest pianists of all time."

Work at the Grand Terrace was no sinecure. The hours were from 10:30 to 4:30 in the morning, seven nights a week, during which time the band played for dancing and accompanied three shows. The club's operation was complicated to some extent when gangsters moved in on it. Hines became familiar with Al Capone and his lieutenants. "It was a case," he said, "of being like the three monkeys: see no evil, hear no evil, speak no evil. Otherwise you might be found dead in Jackson Park someplace."

Regular work through the Depression was, of course, rare for black bands, but additional compensation for the hard working conditions at the Grand Terrace came from radio. The band broadcast every night over NBC's two networks, east on the Blue network to New York, and west on the Red network to California. More even than records, this made the Hines piano style familiar to musicians all over the country as well as in Canada. It was from this time on that his influence as a piano stylist became pervasive, not only in regard to solos, but also in the way he made the piano sound in and through the ensembles. Among those who acknowledged or reflected this influence are Nat Cole, Stan Kenton, Teddy Wilson, Horace Henderson, Jess Stacy, Zinky Cohn, Ram Ramirez, and Billy Kyle. Dizzy Gillespie explained in The World of Earl Hines how Hines' influence even affected the premier bebop pianist: "Billy Kyle was Bud Powell's main inspiration until Charlie Parker came along, and Billy Kyle was directly influenced by Earl Hines. I'm sure Bud appreciated the contribution of Earl Hines, but it takes time for a musician to become adult enough to look back and see how these things developed. In Bud's case, you might say Billy Kyle was musically like his father, Earl Hines like his grandfather." A little later in the same interview, Gillespie added, "I don't believe in disowning your grandfather or turning your back on what went before."

Nat Cole in later years recalled standing in the alley beside the Grand Terrace and listening to the band. "The great styling and phrasing of Earl Hines," he said, "had a tremendous influence on my own piano styling." In a note on a 1963 Capitol album, Stan Kenton stated, "Since I was first attracted to Earl Hines' tremendous talent, I have admired him beyond all others in American music. His ability..."
to swing and his fantastic sense of originality have been and still are a constant source of wonderment to me.” Teddy Wilson, who stayed—and studied—with Hines when he first arrived in Chicago, credited him with having “the most powerful rhythmic drive, more so, I’d say, than Art [Tatum] or Fats.” And years later, after performing with Hines on a tour of Latin America, he added another encomium: “He’s still my Number One jazz pianist.”

The Grand Terrace broadcasts were greatly appreciated throughout the Southwest and in Kansas City. There is a lot of Hines to be heard in the early playing of Mary Lou Williams (also originally from Pittsburgh) and even in that of Fats Waller’s famous disciple, Count Basie, both of whom were Kansas City favorites. Listen, for example, to Basie’s solo on Bennie Moten’s 1932 version of Moten Swing. Where the Hines and Waller influences were most magnificently fused was in the work of the great virtuoso Art Tatum. He could play like either one of them, as well as in his own unique way.

“When I first met Art Tatum in 1931, he was already outplaying everybody,” Hines insists, “but he was not getting the attention he deserved. He used to do imitations of Fats Waller, James P. Johnson, and me, and very, very well. All he wanted to do was play piano, and he could do as much with his left hand as most guys could do with their right. When I had my own club in Chicago, he’d come by late at night and still be there at the piano when I came down to attend to business the next day. He was like Fats Waller in the way he would show you what he did and how he did it. We were like friends who had the same interest and wanted to help each other. I never did like the competitive thing where guys struggled to ‘cut’ each other, to prove they were the best. That only led to bragging and ill-feeling.”

Hines is well aware of his own capability, and so are promoters who book him on concert programs with other pianists. They always want him to close the show, because they know no one can really follow him, but Hines demurs and asks to go on before intermission. “The last man on is the last man off,” he reasons, “and the last to get back to his hotel.”

World War II spelled the end of the Swing Era, and when Hines finally broke up his big band in 1947 it was to rejoin Louis Armstrong in an all-star group for two years. After that, he led his own small groups with varying success through the Fifties—a difficult time for jazz—while enjoying a relatively quiet life with his family in Oakland, California, and conducting a weekly radio show. He was on the point of quitting the music business altogether in 1964 when he was invited to give three concerts at the Little Theatre in New York. They were so enthusiastically received that from then on he was returned to the international limelight, appearing everywhere in this country and touring in Europe, Japan, Latin America, Australia, and, for the U.S. State Department, in Soviet Russia. The many records he has made in the past fifteen years show the full scope of his artistry more even than his personal appearances. Alone in the studio, without accompaniment of any kind, and preferably without the earnest attention of a self-important “producer,” his imagination expands luxuriantly. Unconfined, too, by the limitations imposed by 78s, his performances have grown longer. This, incidentally, enables him to illustrate the kind of improvisation often described in accounts of the Harlem stride pianists, who played chorus after chorus, every one different. With Hines, it is as though he were throwing open the doors to different rooms, each with a different view and a different decor.

In liner note after liner note, astonished reference is made to recordings he has made in one “take.” They were not, however, made without preparation. If the number were one with which he was very familiar, he would try out a few ideas on the keyboard before calling “Okay” to the control room. Usually, after the first take, there would be no point in trying another one unless he decided to change the tempo. Sometimes, when confronted with entirely new material, he would study the sheet music carefully, paying particular attention to the bridge. My Shining Hour, for example, was quite unknown to him when he first went into the studio to cut it, but he liked it at once and five minutes after seeing it for the first time he recorded a definitive eleven-minute version. “I had no idea it was that long,” he said afterwards—a not uncommon but, in his case, a perfectly genuine comment. Playbacks often make him laugh. “We got a little far out that time,” he said after one up-tempo original. “The left hand got away from the right.” When he made four albums of Duke Ellington’s music for Master Jazz, he was much concerned about the composer’s possible reaction to them, particularly to the last chord in the bass of Heaven.

Back in the Thirties, they used to say I must have had the webs cut between my fingers,” he said with a smile. “They couldn’t figure out how I played some of the things I did. Now Duke could reach that chord in Heaven, and so could Luckey Roberts, but I can’t. I couldn’t even make tenths until Jim Fellman showed me how to stretch my fingers. That was back in Pittsburgh long, long ago.”

Extraordinarily, Hines’ two hands encompass the whole history of jazz, but more extraordinary is the fact that in his sixth decade of professional activity they still remain marvels of creativity.

Stanley Dance has written on music for numerous magazines, including Saturday Review and Down Beat, and is author of The World of Swing, among other books.
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CIRCLE NO. 15 ON READER SERVICE CARD
Sherrill Milnes as Rigoletto
(photo courtesy Metropolitan Opera/James Heffernan)
The success story of the New York City Opera and its leading lights, Julius Rudel and Beverly Sills, is unique in the annals of modern opera. In fact, it resembles the story of many an opera company in the eighteenth and nineteenth centuries—Local Company Makes Good, Gains International Rep.

The difference, of course, is that the old opera companies made their reputations with new works, while the City Opera, in its move to Lincoln Center, had to abandon new repertoire to reach its present stature. Even its former involvement with unusual older works was curtailed as it shifted steadily toward the center. Perhaps the trend will be reversed in the new Sills administration just begun.

Meanwhile, the house has strengthened its hand enormously in the field of the traditional favorites while continuing its praiseworthy habit of discovering and using new talent that is both young and American. Not incidentally, Julius Rudel has in the process grown tremendously—to the point where he has become one of the outstanding conductors in the theater today. This slow growth and maturation through steady and deep work with a single company (it is equally true of Sills, by the way) is unusual in today’s world of mass communications, jet planes, and superstars on the run.

All of which brings us to Angel’s new recording of Verdi’s Rigoletto. It is not, of course, a City Opera recording, but it can be considered as being among the fruits of the foregoing history anyway. For at the core of this urgent performance are Rudel’s conducting—rich and expressive, filled with dramatic vitality and intensity—and the Rudel/Sills collaboration. The eternally youthful quality that characterizes the voice of Beverly Sills enables her to sing these young-girl roles with a conviction that is quite moving. If you are a fan of the big, sumptuous, modern Italianate voice, you may not like her portrayal of Gilda. And in any case, like Callas, Sills was always at her best in the opera house, the total personality being a great part of the musical communication. I would venture to say, however, that the operatic voices of the first half of the nineteenth century were of the Sills mold: much simpler than they generally are today, fresh, elegant, sweet, flexible, and musical.

...the operatic voices of the nineteenth century were of the Sills mold: much simpler than today, fresh, elegant, sweet, flexible, and musical.

VERDE: **Rigoletto.** Beverly Sills (soprano), Gilda; Sherrill Milnes (baritone), Rigoletto; Alfredo Kraus (tenor), Duke of Mantua; Mignon Dunn (contralto), Maddalena; Samuel Ramey (bass), Sparafucile, Monterone. Ambrosian Opera Chorus; Philharmonia Orchestra, Julius Rudel cond. ANGEL SZCZ-3872 three discs $27.94, © 4Z3X-3872 $27.94.
Amii Stewart's
"Paradise Bird":
Moving On Out
Beyond Disco

IT MUST be a sign of changing times impending when a singer whose career rests on a disco smash (Knock on Wood) chooses a moody, pulled-back ballad as the title song for her second album. Amii Stewart clearly wants to be known as something more than "just" a disco star. Based on her work in Ariola's new collection of seven songs, I'd say she's going to make it: "Paradise Bird" is a superbly produced album by a wonderful pop singer. But don't move out too fast there, all you discophobes; Stewart hasn't yet forsaken disco entirely. The Letter, her cover of the Boxtops' old rock-'n'-roller, drives the disco beat home with a satisfying solidity, and the album's big number is clearly the up-tempo-and totally disco—Jealousy. Shot through as they are with the same complex drum arrangements that sparked the dynamite Knock on Wood, these are both terrific dance tracks. They also prove that a good singer need not resort to the tonsil-rattling yell so many disco vocalists use to carry a song. Stewart sings disco. She sings it soft, and she sings it big. She can open up into an easy, clear soprano (at one point in The Letter a long-held vocal note melts seamlessly, thrillingly into a perfectly imitated instrumental tone), and she can throttle down to gravel-voiced throatiness with equal ease. The voice has a tremendous flexibility, and it is a tribute to the care exercised by producer Barry Leng that everything Stewart does, even in the midst of arrangements as happily busy as they are in Step into the Love Line, can be heard and appreciated. In terms of showcasing a vocalist through an utterly astonishing clarity of sound, this is among the best engineered dance records I've ever heard. Gentlemen, take a bow.

But save a big share of credit for the arrangers too; they are obviously men rich in musical imagination and taste. Example: the side-two dissolve from the fast, hot tempo of Jealousy into the slow, sexy bounce of Right Place, Wrong Time must be called a Classic Disco Moment. Furthermore, there's a refreshing range of feeling here, from the dreamy pensiveness of Paradise Bird to the disco assertiveness of He's a Burglar and Jealousy. And for once here's a pop album that knows we like to dance as well as listen. Buy it and do both.

—Ed Buxbaum

AMII STEWART: Paradise Bird. Amii Stewart (vocals); vocal and instrumental accompaniment. The Letter; Paradise Bird; He's a Burglar; Jealousy; Right Place, Wrong Time; Step into the Love Line; Paradise Found. ARIOLA SW-50072 $7.98, © 8XW-50072 $7.98, © 4XW-50072 $7.98.

Belated Discovery:
Yolanda Marcoulescou,
A Romanian Soprano of Eloquence and Facility

YOLANDA MARCOULESCOU is a Romanian-born soprano, formerly a prominent member of the Bucharest Opera, who now teaches voice at the University of Wisconsin. Her previous recordings of French art songs have garnered unanimous critical raves. Quotations from some of these (mine included) are displayed on the liner of the present disc.

For the benefit of those skeptics who may feel that it is easy for an artist to shine in such off-beat material as the songs of Albert Roussel and Florent Schmitt (where competition is all but nonexistent), let me say that Miss Marcoulescou's achievements in more familiar operatic fare are just as impressive. Throughout the eleven selections in her new Orion release the level of artistry is consistently high, and it is moreover equally idiomatic in the French and the Italian selections. She is a simply marvelous singer, gifted with a warm and expressive voice and a well-schooled technique that combines lyric eloquence with coloratura facility. The flighty nature of Philine (Mignon) and the dizzy charm of Manon are captured here just as surely as the lyrical yearnings of Bizet's Leila and Rossini's Mathilde, and the sensitivity of her "Depuis le jour" places her rendition on the level of the best I know. And there is also included a
An Outstanding New Mahler Fourth by André Previn and The Pittsburgh Symphony

Recorded in London in the summer of 1978 at the end of a European tour, Angel's new realization of the Mahler Fourth Symphony by André Previn and the Pittsburgh Symphony strikes me as outstanding in every way, and though it may not quite displace the 1966 Szell/Cleveland Orchestra reading (Columbia MS 6833) in my affections, I have a feeling that I'll be giving it a lot of repeat plays.

There are many interpretive pitfalls in this most intimate and lyrical of the Mahler symphonies. If the conductor is too “straight” with the music, it comes out bland; if too “expressive,” the result may come dangerously close to kitsch. Previn appears to have made a careful study of the performance traditions of the Mahler Fourth, in particular of the handling of the string portamento indications in the score. The opening movement is relatively brisk in pace and notable for the precise balances that are established between the various strands of melodic texture. In the Ländler movement, with its scordatura solo violin, the sense of dislocated key centers is conveyed with unusual effectiveness.

But it is in the wonderful rondò-variation slow movement that Previn's reading and the playing of the Pittsburgh orchestra most command the listener's attention, for great pains have been taken to bring out the special character of each variation—a very difficult thing to do at a slow tempo without losing the big line of the music. The interpretive gamble pays off handsomely, however, and the result is a realization of this movement that is singular in its intensity and cumulative power. Elly Ameling, an ideal choice for the solo vocal role in the final movement, brings just the right blend of childlike naïveté and intense spirituality to this delectable music—"heavenly delights" indeed! She may be just a mite close to the microphone, but not obtrusively so.

The EMI recording team has devoted every bit as much care to its job as André Previn has to his interpretation and the orchestra to its playing. The sonics are extremely wide in frequency range and very clean, and there is a fine sense of both breadth and depth in the stereo image.

—David Hall

MAHLER: Symphony No. 4, in G Major. Elly Ameling (soprano); Pittsburgh Symphony Orchestra, André Previn cond. ANGEL SZ-37576 $8.98, © 4ZS-37576 $8.98.

A Pair to Draw to: Millie Jackson and Isaac Hayes in Flawless Harmony

Pairing Millie Jackson and Isaac Hayes, those two grand masters of the "musical rap," is so natural an event that it is a wonder nobody thought of doing it before now. After all, both are likely to do as much talking as singing on their albums, constructing intricate word pictures of conniving mistresses, gossiping housewives, and lovestruck men struggling to free themselves from disastrous affairs, and all driven by deliciously lustful motives. Indeed, an evening spent with a selection of their better recordings is comparable to a whole month with one of those turtle-paced daily television soap operas.

The similarity of these two performers is not limited merely to their novel approach, for it reaches into the very musical fabric of their work. There is a pungent flavor of the blues in both their styles. Both have resonant, substantial voices that are ideal for projecting the nuances of intense emotion. And both seem to sing from the gut, though with the cool, sophisticated control that lies at the heart of the
She delivers her down-to-earth ma-
cause of the apparent ease with which
some take Millie Jackson lightly be-
great albums of the genre. And while
my Award, ranks among the all-time
first r-&-b composer to win an Acade-
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should be recalled that his soundtrack
sight of his earlier accomplishments, it
cent lean years have caused us to lose
innovators. Though Isaac Hayes' re-
'blues.
As individuals, they are truly gifted
innovators. Though Isaac Hayes' re-
cent lean years have caused us to lose
sight of his earlier accomplishments, it
should be recalled that his soundtrack
for the film Shaft, which made him the
first r-&-b composer to win an Academ-
my Award, ranks among the all-time
great albums of the genre. And while
some take Millie Jackson lightly be-
cause of the apparent ease with which
she delivers her down-to-earth ma-
terial, a tough intelligence underlies
her every spoken and sung utterance.
Furthermore, both are as capable as
composers as they are as performers.

Little wonder, then, that Polydor's
"Royal Rappin's," which brings them
together for the first time (at Millie's
invitation), turns out to be a splendid
meshing of talents. They are so utterly
compatible in everything from timing
to blending of vocal textures that it is
difficult to believe this is an initial
encounter. Interestingly, they do more
singing and less rapping on this set
than on their separate outings, concen-
trating instead on spinning out song
after song of superbly funky quality.
They work in such flawless harmony on
Sweet Music, Soft Lights, and You
andFeelsLike the First Time that
they equal Ashford and Simpson in
that pair's best moments. And on the
few occasions when they let loose with
some sassy commentary, they are right
on target. Near the climax of If I Had
My Way, Millie says to Isaac (of hersel-
), "A man of your caliber do
reserve to have something as good as
this!" The same could be said of us all:
we do deserve to have something this
fine.  

MILLIE JACKSON AND ISAAC HAYES:
Royal Rappin's. Millie Jackson and Isaac
Hayes (vocals); vocal and instrumental
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The Kendalls:
A Good Country
Recipe Cooked Up
Just Right

E
since Dolly Parton went and
ooked the middle of the road out of
Country Music there's been a large
vacancy waiting to be filled. Jeannie
Kendall (of the Kendalls, father and
dughter) didn't come down from the
hills just yesterday to try out for it; she
and her daddy have four albums in the
catalog and a string of singles hits (The
Pittsburgh Steelers, Heaven's Just a
Sin Away, Just Like Real People) to
their credit and no lack of recognition.

Still, the Kendalls' new album, "Heart
of the Matter," shows Jeannie surely
and confidently stepping into Dolly's
old place.

Defining that place is difficult, be-
cause what it involves is not so much a
personality or a style or a repertoire as
it is a sound. It's the sound of a high
voice, almost childlike but of consider-
able intensity and with a country way
of saying things, standing up against
all those guitars, dobros, fiddles, and
harmonicas. Jeannie Kendall's voice
has more of a cutting edge than Dolly's
and, interestingly, more of a bluesy
inflection, but it is the same sort of a
sound. She doesn't write songs like
Dolly, and she's probably not the same
kind of original creative personality,
but if she keeps singing the way she
does here and keeps getting the same
kind of superb backing she does here,
she's got the job.

If you listen to any country music on
the radio it's a cinch you've heard I
Don't Do Like That No More, with its
cute pseudo-simple-mindedness, its lit-
tle Dixieland inflections, Royce Ken-
dall's solid "straight man" singing, and
Jeannie as the only singer in recent
memory to phrase like a clarinet. You
probably haven't heard the equally
good I'M Already Blue, which runs
through the colors in expected fashion
but works well because the recipe is
good and it's cooked up right. And you
probably haven't heard Gone Away yet
either, a blues-inflected, up-tempo
wouser in which the whole aggregation
swings like a top jazz or bluegrass
combo with Jeannie riding over the top
like a well... a clarinet.

Unlike the Kendalls' previous al-
bums, this one doesn't have a single
song without something to recommend
it. There are fine obbligatos from Ron
Oates on keyboards, Terry McMillan
on harmonica, and a whole host of
 guitars, and the recording quality is
unusually good. About the only thing I
have to complain of in Brien Fisher's
production is that there are too many
fade-out endings.

Keep your old Dolly Parton albums
for sure, but take a listen—if you
haven't already—to the Kendalls, be-
cause Dolly these days, good though
she is, she don't do like that no more.

—James Goodfriend

THE KENDALLS: Heart of the Matter.
Jeannie Kendall, Royce Kendall (vocals);
instrumental accompaniment. You'd Make
an Angel Wanna Cheat; Put It Off Until
Tomorrow; Gone Away; Everlasting Love;
I'll Be Hurtin' Either Way; Heart of the
Matter; I'm Already Blue; I Take the
Chance; I Don't Drink from the River; I
Don't Do Like That No More. OVATION
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*Technics recommended prices, but actual price will be set by dealers.

As you can see, Technics gives you a lot. A lot of power and a lot of performance at a very good price. That's because our receivers have the technology you need. Like hefty transformers and big power capacitors to punch out deep bass notes with authority. Like a dynamic headroom of 1.4 dB which means 38% extra power (above RMS) on sudden musical transients.

Our phono sections are just as impressive. All have a very high S/N ratio, which means that even quiet musical passages come through clearly. Yet each can handle the high voltages generated by today's best records.

And when it comes to FM, all Technics receivers include MOS FET's for high sensitivity and low noise. "Flat Group Delay" IF stages for clean signal processing. And phase-locked-loop circuitry for accurate stereo imaging.

With the SA-404 and the SA-505 (shown below), you also get 10 LED peak-power indicators. And Acoustic Control that gives you more control over both the bass and treble frequencies than is possible with conventional tone controls.

How do you make the right choice? It's simple. Just compare.

Don’t buy any receiver until you compare its power, performance and price to Technics.
BUZZCOCKS: Singles Going Steady. Buzzcocks is one of the last remaining mainstream British punk bands, which is to say that their style depends on buzzsaw guitars cranked up to an ear-splitting level and played at amphetamine tempos. Their gimmick, these days, is that within such minimalists confines they attempt a pastiche of the melodies and lyrical concerns of Merseybeat-type Sixties pop. Although this can be entertaining in small doses (What Do I Get? could be the Searchers run amuck), over the long haul I don’t think it works. Whether this is because the two styles are, in the end, diametrically opposed or because the Buzzcocks simply don’t play very well, I wouldn’t venture a guess.

BUZZCOCKS: Singles Going Steady. Buzzcocks (vocals and instrumentals). Orgasmics

Addict: What Do I Get?; I Don’t Mind; Love You More; Ever Fallen in Love?; Promises; Everybody’s Happy Nowadays; and seven others. I.R.S. SP 001 $7.98.

Performance: Relentless
Recording: Okay

Though I’ve never heard of this duo, if this album is an indication of what they have to offer, I’d certainly like to become better acquainted with them. Casey James and LeRoy Bell are singing multi-instrumentalists who wrote and produced, with an assist from executive producer Thom Bell, all the material here. The prevailing mood is laidback California soul, but it’s perky enough for dancing at moderate tempos. There is an airiness to the melodies, which have a flavor often more reminiscent of Hall and Oates (vocals and instrumentals) than of r- & -b. The title cut is the choicest one here, with typical of how the album doesn’t quite hold together—is Tennessee Home. Its words evoke a nice mood by describing looking out the window in Tennessee in the rain—the mood sneaking in, Big Two-Hearted River-style, without being mentioned—but the “tune” it’s given, a by-the-numbers jingle, works against the mood. As happens in other Smotherman songs, it also pulls the arrangement into cycling around lightweight riffs, which tends to trivialize the whole thing. Campbell the (co-) producer should give Campbell the singer a break.

GLEN CAMPBELL: Highwayman. Glen Campbell (vocals, guitar, bass); instrumental accompaniment. Highwayman; Hound Dog Man; Love Song; My Prayer; and six others. CAPITOL SOO-12008 $8.98, © 8XT-12008 $8.98, © 4XW-12008 $8.98.

Performance: Null script
Recording: Very good

This is one of those mixed reviews some performances keep getting. Glen Campbell has a wonderful voice, and in the last two or three albums, including this one, he has used it in tougher, more adult ways than he used to. I think he relates to a lyric a lot more that-and typical of how the album doesn’t trivialize the whole thing. Campbell the (co-) producer should give Campbell the singer a break.

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Performance Splendid Recording: Good

This record is almost good enough to make me forgive Jean Carn for deserting the thin ranks of promising jazz singers to join the army of pop hopefuls. About eight years ago she made some exceptionally promising recordings with the gifted but now seldom-heard-from pianist/arranger Doug Carn that suggested she had the potential to aspire at least to a foothold in the throne room of the all-time jazz goddesses. She had an exceptional vocal range, and, though her vibrato was at times disconcertingly broad, her sound was ethereally beautiful. Moreover, she could focus in on a special moment, sustaining its intensity wonderfully through the force of her interpretation.

I was exceedingly disappointed by Carn’s first solo outing on Philadelphia International. After helping elevate the quality of albums by such established artists as Norman Connors and Earth, Wind & Fire, among others, she came up with a trite, conformist dud on her own. In her attempt to go pop, she abandoned all traces of individuality.

This new album gives, at last, some hint of what a pop-oriented Jean Carn has to offer. Evidently the intent was to reach an audience just slightly on the hip side of easy-listening, for the range is from moderate disco and hit-type tunes, such as Start the Fire, to pleasantly restful ballads. The best of the latter is the title track, When I Find You Love, which is sweetly sentimental and ideally suited to Carn’s crystalline voice. Several producers were involved (the traces of synthesized misty moodiness are due to Dexter Wansel), though all the elements serve primarily to support Carn’s polished singing. The album can serve as a palatable appetizer to hold Jean Carn’s fans until she serves primarily to support Carn’s polished singing. The album can serve as a palatable appetizer to hold Jean Carn’s fans until she takes her next step toward full artistic realization.

R.P.G.

RAY CHARLES: Ain’t It So. Ray Charles (vocals, keyboards); instrumental and vocal accompaniment. Some Enchanted Evening; Blues in the Night; Just Because; What’ll I Do; One of These Days; and three others. ATLANTIC/CROSSOVER SD 19251 $7.98, © TP 19251 $7.98, © CS 19251 $7.98.

Performance: Yes and no Recording: Very good

There’s nobody like Brother Ray. He is the King of soul singing, having nailed the whole thing down some twenty years ago. What is left for him now is to demonstrate how he has refined his art in comfortable, confident presentations of what passionate singing is all about.

There are two defects in this game plan. One is generational slippage: Charles has so many imitators that young people hearing him may not realize that he is the original. The other is in the material he chooses. Charles is a pre-eminent ballad singer, but he also wants to be contemporary; on this album the latter sometimes undermines the former. Some Enchanted Evening and What’ll I Do are both taken at a tempo bordering on disco. I have never been enchanted by Rodgers and Hammerstein’s Evening anyway, but Berlin’s What’ll I Do is a superb ballad that’s wasted here. This version gives the merest hint of what Charles could have done with it had he sung it straight.

Blues in the Night and Love Me or Set Me Free are the most successful performances, typical examples of Charles’ extraordinary capacity for identifying and expressing the emotional meaning of a song. Brother Ray has lavished attention on some mediocre material, but he remains unique, and listening to him is always a sweet education.

RECORDING OF SPECIAL MERIT

LEONARD COHEN: Recent Songs. Leonard Cohen (vocals, guitar); instrumental accompaniment. The Guests; Humbled in Love; The Window; Came So Far for Beauty; The Traitor; The Gypsy’s Wife; Our Lady of Solitude; and three others. COLUMBIA JC 36264 $7.98.

Performance: Romantic’s delight Recording: Very good

Leonard Cohen’s work may speak of a stylized world, but it speaks eloquently sometimes. Behind the modest title of this one is a new flurry of insight and murky mood and romantic outlook that might serve also as a celebration of how Cohen has survived the singularly unromantic late Seventies. Obviously, he still speaks to an audience of some size, a fact I find consoling and a fact he seems to recognize, judging by the aura of confidence and authority laid on these quiet songs. Coming off an unpleasant collaboration with Phil Spector, Cohen now appears more himself—more the stylized, romantic peculiarity his archetypal songs say he is.—(Continued on page 88)

NRBQ: The Real Stuff

G ood news: rock-and-roll—the real, good-time stuff—still lives. NRBQ’s latest Rounder album, “Kick Me Hard,” proves it. I dare anyone to listen to Hot Biscuits and Sweet Marie or It Was a Accident and not find it refreshing, unaffected, hilarious, and oh-so-bouncy.

NRBQ refuses to take rock seriously as an “art” form, so they’re able to relax and play some of the most honest music to be heard in many a year. The band’s own writing ranges from passable to excellent, and they make some interesting choices of outside material. This Old House, which probably hasn’t been recorded since Rosemary Clooney’s hit in the early Fifties, gets a Sun Records-style rockabilly treatment that lets it swing like mad. There is also some delicious satire in the album. NRBQ’s version of North to Alaska, a clubfooted ditty that was the title tune of a 1960 John Wayne movie, shows how dumb the damned thing is, and their treatment of Tenderly is a lampoon of all the bad jazz that’s been recorded over the last thirty years.

Though all its thirteen tracks this album never ceases to be entertaining. It’s been very difficult for me to keep it off my turntable, and I suspect it will be the same for you when you hear it. —Joel Vance

NRBQ: Kick Me Hard. NRBQ (vocals and instrumentals). Wacky Tobacky; It Was a Accident; Tenderly; Hot Biscuits and Sweet Marie; Chores; This Old House; Things We Like to Do; All Night Long; Don’t You Know; North to Alaska; I Want to Show You; Don’t She Look Good; Electric Train. ROUNDER 3030 $7.98.
Still, even diehards get just a little antsy after albums have become a way of life for them. 

"Patience is a virtue Stevie Wonder fans have had plenty of opportunity to practice; after all, those legendary waiting albums have become a way of life for them. Still, even diehards get just a little antsy after albums have become a way of life for them."

It was initiated by Michael Braun's invitation to write the musical score for a movie of the same name. But, after one lap around the ol' turntable, it's quite apparent that this is no ordinary soundtrack. "Journey" seems to demand to be taken on its own terms; in any case, its effectiveness as a soundtrack per se can't be judged until Paramount Pictures releases Braun's work sometime this spring.

The album seems at first to be a radical departure from Wonder's previous work, but it is actually a continuation of the voyage of discovery he embarked on in 1971 when, at age twenty-one, he signed that now famous Motown contract and got unprecedented artistic control over the finished product. Since then, he's scanned new horizons and tested the limits of his remarkable versatility, often singlehandedly writing music and lyrics, playing numerous instruments, and singing lead and background vocals. Freed—by his generous contract and the enormous success of his past recordings—from the commercial compulsion to put out at least one album a year, he has taken his own sweet time with "Journey." Rigid timetables are for commuters, not explorers—and apparently not for compulsive perfectionists, either—soWonder albums get finished when they get finished.

In this new one he has discovered another gold mine of sound possibilities. Back around 1972, with "Talking Book," he started tapping a creative mother lode with electronic musical gadgets, and he's been drawing on it ever since. But what else would you expect from the man who, before the ink was dry on the 1971 contract, had said, "I want to get into as much weird shit as possible." Lots of folks who will hear "Journey Through the Secret Life of Plants" are going to realize that he's done just that. The two-album set opens with three intensely visual (yes, that's right) instrumental cuts on which Wonder uses a new gadget called a digital metronome to incorporate actual sounds from nature into his orchestration at the proper time.

As for the sound itself, it's so well musically that any disagreement is entirely off base. My only serious complaint is that one of my favorite tunes, "Come Back as a Flower," just isn't long enough.

The album comes to an end with two thoroughly majestic instrumental cuts, "Tree" and the Finale, that captured the beginning of an era. Although the "Journey" has been concluded, it's pretty safe to guess that Stevie Wonder's musical explorations will continue. I look forward to the next one.

It is worth noting, by the way, that taking your time has demonstrated benefits technologically. This album was digitally recorded and edited (on a Sony PCM 1600). The startling sonic brilliance that results would not have been possible three years ago.

—Zita Allen
The Bose 901 Series IV:
A new approach to room acoustics creates a major advance in performance.

It's well known that living room acoustics are a major factor in how any speaker will sound in your home. Recently, an ambitious Bose research program analyzed speaker performance in dozens of actual home listening rooms. The study showed that, while rooms vary greatly, their principal effects can be isolated to specific types of frequency imbalances. Based on this research, the electronic Active Equalizer of the new Bose 901 Series IV speaker system has been totally redesigned. New controls allow greater capability for adjustment of room factors than conventional electronics, and make possible superb performance in almost any home listening room.

These new room controls also let us develop a basic equalization curve with no compromises for room effects, allowing still more accurate tonal balance. In addition, an important improvement in the design of the 901 driver makes possible even greater efficiency and virtually unlimited power handling.

These innovations combine with proven Bose concepts to create a dramatic advance in performance: in practically any listening room, with virtually any amplifier, large or small, the 901 Series IV sets a new standard for the open, spacious, life-like reproduction of sound that has distinguished Bose Direct/Reflecting® speakers since the first 901.
MARIANNE FAITHFULL: as she was when London swung in the Sixties

than ever. And the production, by Cohen and Joni Mitchell's associate Henry Lewy, is the best I've ever heard on one of his albums. A gypsy violin and an oud have prominent voices in the sound, and they fit Cohen's songs perfectly—except for a couple of songs that a mariachi band fits perfectly. The melodies still hover, Cohen-style, over a fairly small number of blue notes, but he hasn't stolen from himself too much, and they do adequately cover the words, which are attempts—often successful—at poetry. Romantic, yes, but real poetry. It's early yet, but the Eighties are looking up.

N.Y.C.

MARIANNE FAITHFULL: Broken English. Marianne Faithfull (vocals); instrumental accompaniment. Broken English; Witches' Song; Brain Drain; Guilt; and four others. ISLAND HPS 9570 $7.98, © M8 9570 $7.98, © M5 9570 $7.98.

Performance: One great track
Recording: Good

Marianne Faithfull (heavy sigh, as Mork from Ork would say) has been my Ultimate Dream Date for about as long as I can remember, as I think she is for a lot of people who went through puberty when I did. Just ask Patti Smith, for example, who wrote a poem about her I cannot read without quivering. For those of you too young to remember her very well, however, let's just say that of all the female icons of London when it was Swinging (rather than Burning), she was by far the most memorable, with a face that could melt your heart and a voice that a mariachi band fits perfectly. The melodies still hover, Cohen-style, over a fairly small number of blue notes, but he hasn't stolen from himself too much, and they do adequately cover the words, which are attempts—often successful—at poetry. Romantic, yes, but real poetry. It's early yet, but the Eighties are looking up.

"Broken English" is the result of Marianne's hanging out on the fringes of the New Wave scene (her husband, Ben Brierly, who worked on the record, used to be bassist for the Vibrators). Though it's hardly a complete success and fairly reeks of Catholic guilt, it has a number of interesting moments. In particular a powerful if overdressed version of John Lennon's "Working Class Hero." But what you should buy it for is an astonishing cover of Janis Ian's intelligence and perception of any pretense of music making. Tired riffs are repeated ad nauseum throughout the first side, and the second features a horribly sung, supposedly humorous ditty called "Holly Wants to Go to California." I hope she goes, quickly, and takes this album with her. P.G.

JANIS IAN: Night Rains. Janis Ian (vocals, piano); vocal and instrumental accompaniment. The Other Side of the Sun; Memories; Night Rains: Day by Day; Photographs; Jenny (Iowa Sunrise); and four others. COLUMBIA JC 36139 $7.98, © JCA 36139 $7.98, © JCT 36139 $7.98.

Performance: Good
Recording: Good

Although Janis Ian's intelligence and perception continue to shine through all that she does, this album is one of her lesser efforts. The sweaty hand of commercialism seems to grasp her elbow here in at least two of the songs written for film's "Fly Too High," from The Foxes, and Here Comes the Night, the theme for The Bell Jar. Fly Too High, in a rackety arrangement by Giorgio Moroder, is trite by any standard, and it's a woeful descent from the standards Ian herself set years ago. Having Janis Ian compose something for the movie of Sylvia Plath's heartbreaking novel about a disturbed young girl must have seemed like a good matching of talents, but what emerges is a strangely

(Continued on page 92)
The Ultimate Amp.
0Hz to 600,000Hz (+0-3dB).

For the past several years, a special team of top Kenwood engineers have been re-inventing the amplifier using their most sophisticated innovations in circuit design.

This is the result: The L07M11 Hi-Speed™ DC direct-drive amplifier system.

Our research determined that long speaker cables seriously degrade sound quality: Total harmonic distortion doubles, damping reduces by 40%, and there is discernible "ringing." In locating the amplifier close to the speaker by using a special 1-meter cable, THD and damping are not affected and "ringing" is eliminated.

In fact, everything in this amplifier has been engineered to reproduce an input signal audibly free from distortion and coloration. And to achieve a frequency response previously unobtainable. Our DC amplifier improves ultra-low frequency phase shift and transient response. Even the pin plugs of the input cables and locking connectors are gold-plated to insure no signal loss.

Even more remarkable is the inclusion of Kenwood's exclusive high speed circuitry. By allowing the amplifier to react faster to dynamic changes in the musical input, Hi-Speed produces a more accurate sound. This is especially critical in the mid-to-high frequency transients where conventional amplifiers lose their imaging and detail. The L07M11 separates individual singers in a vocal group or individual string players in a symphony orchestra with equal ease.

Of course, to appreciate the many design innovations requires much more space than is available here. Please write for full technical data at the address below. Or better yet, audition this remarkable amplifier system at a Kenwood Audio Purist Group dealer. If you have the ears to appreciate what the Kenwood engineers have accomplished, the L07M11 system will take your breath away.

Typical "square" pulse waveform of conventional amplifier.

Pulse waveform of High-Speed amplifier.

Significant specifications: 150 watts one channel minimum power RMS at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.007% total harmonic distortion. S/N 120dB. Rise time 0.55 µSec. Slew rate ± 170 V/µSec.
When your taste
Winston out-

Warning: The Surgeon General Has Determined That Cigarette Smoking is Dangerous to Your Health.
grows up, tastes them all.

Only Winston's Sun-Rich™ Blend of the choicest, richest tobaccos tastes this full and satisfying.

Winston after Winston.
 facil song that isn't moving on any level.
The title song, Night Rains, has vintage Ian lyrics, flushed with the kind of stark theatrical melodrama that only she can create—"Death becomes a debutante/ Stranded in her gown/Branded like a leper/ And the night rains down ..."—and it is performed with the pulsing, dark intensity that is her trademark. The rest of the collection is relatively indifferent for Janis Ian, though for anyone else it would be superior stuff. Oh well, even the best of us has an off day once in a while.
P.R.

MILLIE JACKSON AND ISAAC HAYES: Royal Rappin's (see Best of the Month, page 81)

RICK JAMES: Fire It Up. Rick James (vocals); vocal and instrumental accompaniment. Love Gun; Come into My Life; Stormy Love; and four others. GORDY G8-990M1 $8.98, © G8-990H $7.98, © G75-990H $7.98.

Performance: Funk fusion
Recording: Very good

I'm a middle-class Jewish boy from the Bronx, so what do I know about funk? Fortunately, there are some artists around—Rick James is one of them—who make funk more accessible by marrying its sexy, basic bump-and-grind rhythms and gospel fervor to other effects. "Fire It Up" is filled with examples of successful funk fusion.

James himself wrote and arranged all the songs here, and he sings them against a "chorale" of hand-clapping girl vocalists and a big-scale instrumental back-up. The best dance cuts are Lovin' You Is a Pleasure—with anything-but-funky strings and dynamic bongos giving it a touch that has to be called romantic—and the faster, grittier Love Gun. Both are high in energy, and neither strays so far from its black roots as to become homogenized suburban disco. Love in the Night and When Love Is Gone, the closers for sides one and two, respectively, take different tacks, demonstrating James' versatility. The former is mainly a soft-rock ballad with a mainstream-pop production, the latter a bluesy song with some surprising electronic effects. The funkiness is muted in the music, but in the lyrics it is served up with no compromise: these songs are dirty.

James deserves good marks for his arrangements, fair to excellent ones for his compositions. My only complaint concerns his singing, which is never really commanding, or even as raunchy as his lyrics. Love in the Night uses his vocal sweetness well, and he shows some power in Come into My Life, which is danceable though uninspired, but generally he sounds bland. E.B.

THE KENDALLS: Heart of the Matter (see Best of the Month, page 82)

MORGANA KING: Everything Must Change. Morgana King (vocals); instrumental accompaniment. Honeysuckle Rose; Just the Way You Are; Give Me the Simple Life; and five others. MUSE MR 5190 $6.98.

Performance: Ragged
Recording: Good

The unhappy news is that Morgana King's voice is now in such worn, ragged condition (Continued on page 96)
tech talk:
Phase linearity.

To understand what an MCS Series Linear Phase speaker can do, you have to understand what a conventional speaker can't do. A conventional speaker can't deliver all the sound it produces to your ear at exactly the same instant. The major cause of this lies in the way a conventional speaker is constructed. As you can see by the diagram, a conventional speaker is arranged with the woofer (bass), mid-range and tweeter (small high-range speaker) mounted so that their outer edges are on the front surface. As you can also see, these speaker elements differ in depth. That means the acoustical centers in the middle of each speaker which actually produce sound are also staggered. And so is the sound reaching your ear. MCS Linear Phase speakers start out with specially designed speaker elements and crossover networks. Then the elements themselves are staggered (see diagram again) in such a way that their acoustical centers are precisely aligned. The result is sound to make you think you've never heard stereo before. But don't take our word for it, listen to your ears. After all, where MCS Series Linear Phase speakers are concerned, one sound is worth a thousand words. MCS Series Linear Phase speakers. Only at JCPenney.

Model 8310 2-way Bass Reflex $119.95 (each)
Model 8320 3-way Bass Reflex $199.95 (each)
Model 8330 3-way Bass Reflex $299.95 (each)

Full 5-Year Warranty on MCS Series® speakers. Full 3-Year Warranty on MCS Series receivers, turntables, tape decks, tuners and amplifiers. If any MCS Series component is defective in materials and workmanship during its warranty period, we will repair or replace it—just return it to JCPenney.

Prices higher in Alaska, Hawaii and Puerto Rico.
It was in the late winter of 1979 that I first began to hear tales of peculiar, even weirdly aberrant, behavior on the part of my old friend Ernest Akeley. There were disquieting rumors about his overindulging in certain contraband substances, hushed stories of fluctuations with such forbidden books as the dread Digitalchronomicon, and whispered reports of his emerging periodically from the Record Plant displaying a visage of such ghastly pallor as to freeze the soul of the beholder. But all these I dismissed as mere exaggeration, overlooking, out of an almost habitual loyalty, the vague hints about some "queer business." Akeley had himself let drop to me in unguarded moments. So, when an invitation came to visit him at his ancestral geodesic dome beside the decibel-blasted heath in witch-haunted Arkham, I accepted without hesitation, let alone trepidation.

When he greeted me in his art-deco study, however, I was immediately seized with an almost palpitable dread. The cause was not merely the hideous, loutsome "music" that droned threateningly over his quadraphonic audio system ("Art-rock," he cackled dryly, "the last surviving remnant of a music of great antiquity"), or even the track lighting "the transforma-tions with such forbidden books as the dread Digitalchronomicon, and whispered reports of his emerging periodically from the Record Plant displaying a visage of such ghastly pallor as to freeze the soul of the beholder. But all these I dismissed as mere exaggeration, overlooking, out of an almost habitual loyalty, the vague hints about some "queer business." Akeley had himself let drop to me in unguarded moments. So, when an invitation came to visit him at his ancestral geodesic dome beside the decibel-blasted heath in witch-haunted Arkham, I accepted without hesitation, let alone trepidation.

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"Good God, Akeley," I cried, "what unimaginable catastrophe has wrought this appalling change in you?"

The thing that had once been my friend regarded me with a glittering stare that chilled me to the bone.

"Hear me well," he hissed in tones suggestive of other species. "The transformation is almost complete and I have little time."

I sank into a chair, unable to move.

"You may have heard," he continued, "that in the years since our college days I have been engaged in certain outré pursuits. The stories are true: I have spent the last decade and more in an attempt—successful, as you can see—to turn myself into a Mastering Engineer. This alteration has given me access to certain secrets denied to mortal kind. With them I have attained to almost miraculous achievements. Yes, already I have heard things that are undreamed of even in the innermost sanctum of Trouser Press! Do you understand? Yes! It was I who mastered what was supposed to be Emerson, Lake and Palmer's swansong album! It was I who mastered "Love Beach!"

Blood thundered in my temples, and my chest felt as if it had been tackled by Meat Loaf. Then, in a whisper I barely recognized as my own, I replied, "But surely Emerson, Lake and Palmer have . . . broken up?"

"Yes," Akeley replied, "but don't you see? Yet another album was required before the arcane balances of corporate expenditure would come to final rest. And so I struck a deal with certain forces."

"You don't mean," I cried, "the Warner Communication Companies!"

"Yes," he intoned, "and you are about to hear the result, the awful price I have paid for consenting to master the repellent dogswill known as 'In Concert' these many months after ELP had ceased to exist!"

The music rose slowly, agonizingly, to a shattering, half-familiar crescendo. A look of cosmic terror seized what was left of Akeley's face, and he began to scream the fearful words that will haunt me for the remainder of my days.

"Oh, no . . . pointless synthesizer noodling . . . shameless audience pandering . . . lyrics beyond the limits of banality . . . The Enemy God! . . . the rape of Pictures at an Exhibition!!"

He sank to the floor, and as I sat there, paralyzed with fear, he began to dissolve slowly into the floor boards, a spreading, noxious puddle of polyvinyl chloride!

"Too late, too late!" he screamed. "But you must warn them! It's already been released . . . it's already been released!"

And then he was gone. Trembling, half-mad with fright, I leapt from my chair and bolted from that accursed house and the music that had destroyed my friend utterly. But as I turned the ignition key in my rented Pinto, I knew that the nightmare was only beginning. For right there, over the FM radio, came the abominable, unmistakable sounds I had just heard in the study of poor, doomed Ernest Akeley, the posthumous, soon-to-be-mega-platinum threnody by a group that had already cost one man his immortal soul and may well have tainted my own sanity irrevocably. The sounds of Atlantic SD 19255. The sounds of "Emerson Lake and Palmer: In Concert." The sounds of . . . THE BAND THAT WOULDN'T DIE!

—Steve Simels

EMERSON, LAKE AND PALMER: In Concert. Emerson, Lake and Palmer (vocals and instrumen-tals); other musicians. Introductory Fanfare: Peter Gunn; Tiger in a Spotlight: C'est la Vie; The Enemy God; Knife Edge; Piano Concerto No. 1; Pictures at an Exhibition. ATLANTIC SD 19255 $8.98, © TP 19255 $8.98, © CS 19255 $8.98.
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Here is a selection of useful products that are suited for your own use or for gift-giving.

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B. ATTACHE/OVERNIGHT CASE. A terrific idea! This case has two separate sections. By day, half of it functions as an attache. By night, the other side opens to hold an extra shirt, socks, overnight necessities. All leather with brass trim. 17" x 13" x 5". #19847 $189.95 (4.35)

C. THE MUSIC CARD. An 8 digit calculator that also gives you the fun of composing small tunes up to 11 tones. Complete scale and vibrato. Automatic power shut-off (after 6 minutes), special protection circuit saves contents in memory! LCD display, percent, square root, independent memory and constant in all 4 functions. Available plain or personalized with your business card reproduction on back. (Embossed and debossed logos will not reproduce.) 5/32" x 3/8" x 21/32". Plain #51533 $29.95 (2.45)‡
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D. SPORTS TIMING. The Casio chronograph is a good timepiece and a good timer. LCD readout shows hour, minute and second plus AM/PM and has a push button calendar to indicate month, date and day of week. Stopwatch times up to one hour at 1/100 sec. Shows lap time/net time, 1st, 2nd place times. Features dial light, plastic case and strap. #45710 $29.95 (2.55)‡

E. CURRENT CONVERTERS. A set that will take you traveling with confidence. Includes a 50 watt converter, a 1600 watt converter and 4 adapter plugs. All packed in a convenient travel case. #24457 $32.95 (1.95)‡

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that listening to her requires as much effort as it seems to take her to give anything like the kind of performance that made her known as one of the most distinctive stylists in the business. Unfortunately, even such a relatively untaxing song as Just the Way You Are can find her trying to focus the top notes by adopting that same tight, strangled whine (which almost passes for singing) that Ethel Waters used toward the end of her career. King was never in the same class as Waters, but she always had taste and intelligence. It is sad but true that neither of those attributes is of much help when the instrument itself fails. The really great ones can go on as if nothing had happened and the audience will fill in the blank spots on their own. But Morgana King never reached that kind of celebrity; all that can be heard now is a vague suggestion of what was once there.

LIVE WIRE: Pick It Up. Live Wire (vocals and instrumentals). Hit & Run Driver: Money; Thinking of You; Water into Wine; Lone Car Cruising; Paid in Smiles; and four others. A&M SP-4793 $7.98, ® ST-4793 $7.98, © CS-4793 $7.98.

Performance: Morbid
Recording: Good

Despite some occasionally interesting lyrics, Live Wire does not so much write songs as attach words to guitar riffs, and since the vocals are delivered in a monotone mumble the effect is less than striking. The songs here are mostly about chasing or being chased by evil women, coveting other people's money, and not liking being English. Sad.

MELISSA MANCHESTER. Melissa Manchester (vocals); vocal and instrumental accompaniment. Pretty Girls; Fire in the Morning; Don't Want a Heartache; When We Loved; It's All in the Sky Above; and five others. ARISTA AL 9506 $7.98, ® 8T 9506 $7.98, © ACT 9506 $7.98.

Performance: Too many tracks
Recording: Very good

The way they put records together these days, it's a wonder things ever come out in one piece. Take this latest album by Melissa Manchester. If one is to believe the credits, the strings were recorded at a studio in Los Angeles, the Tower of Power horn section in Sausalito, and the singer in Atlanta (except for Lights of Dawn, which was done in L.A.), where the tracks were mixed, and then the whole thing was mastered in Nashville. Soon-er or later somebody is going to deliver the wrong horn or string track and things will simply fall apart. They almost do on this one anyway. Manchester is as gutsy a singer as anybody in the business, at her best when she's belting out an aggressive number like Holdin' On to the Lovin', complete with hand-clapping accompaniment, or singing her heart out in a shamelessly romantic ballad such as Lights of Dawn. Most of the time, though, she is thwarted here by a series of sentimental insipidities—not to mention all those grossly gorgeous arrangements trucked in from out West.

LOUISE MANDRELL AND R. C. BANNON: Inseparable. Louise Mandrell, R. C. Bannon (vocals); instrumental accompaniment. Inseparable; Hooked on a Feeling; I

(Continued on page 102)
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Graphic Illustration: Simulated oscilloscope data from Hitachi Toyokawa Laboratory

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THE FABULOUS POODLES are indeed fabulous. I'm sorry I missed their first album, but "Think Pink" (Epic), their second, should go a long way toward giving New Wave a good name. This band's writing is literate in a way that hasn't been heard since the halcyon days of the mid and late Sixties when the better British and American bands were operating. There aren't any real melodies in the Poodles' songs, but the arrangements and the energy of their performances make melody unnecessary. Melody would, in fact, be an unwelcome and inappropriate intrusion on their adventurousness, and this adventurousness—along with a cynical sense of humor—is what makes the Poodles a group to be prized.

There is some confusion between the terms "punk rock" and "New Wave," and a further confusion about the British and American approaches to both. "New Wave" is a refinement of "punk." The motivation behind "punk" in England was nihilistic, an expression of anger at a political/social (read: class) system peculiar to England, but American "punk" is decadence for the sake of decadence. "New Wave" in England is simply a reassessment of the facile British faculty of social satire, a form in which they have excelled for centuries. American "New Wave" follows the British lead; as their groups do better, so will ours.

There is another aspect of punk/New Wave that needs to be understood if it is to be placed properly in the overall context of rock. In the late Sixties—Woodstock time—rock was presented as a moral force, with overtones of a lay religion and, by implication, a utopian political scheme—that is, sweet anarchy, in which no form of government or social class would exist or be necessary. It was, therefore, in recognized political terms, left-wing. But punk in England is generally right-wing. The "pure punk" groups in England today are forthrightly patriotic, and many of their songs deal with such topics as the Berlin Wall and a possible Soviet invasion of Western Europe. This stance has not found musical expression in America yet, but it well may: remember, the Ayatollah Khomeini hates music.

In contrast to punk, New Wave discusses the world as it is and nothing more. It neither promises heaven, as Sixties pop-rock did, nor declares hell on earth, as the craziest punk groups do. New Wave leaves the making of the world up to the audience. This is a radical departure in the rock realm, and it is basically conservative.

TALKING about the world as it exists is the Poodles' forte. The new album opens with the only song here they didn't write, Man with Money; the gist of which is: "My girl won't pay attention to me unless I can spill some bucks on the table, so I'll break into a store and steal some." Who wrote this tune? The Everly Brothers—the same duo whose harmonies influenced the early, angry Beatles. It was many years after the Beatles' "cute boys" success that the Everlys were able to express their frustration at being typed as goody-goody boys (they eventually broke up as a duo, with mutual recriminations), so the Poodles' use of the song is an expression of (already?) third-generation anger.

The Poodles' own material is cynical—and hilarious. Bionic Man is about a car-crash victim who is transformed by medical miracle into a freak with an ersatz body, Cossack Cowboy is a portrait of a disco stud, Suicide Bridge considers the pros and cons of self-destruction, Anna Rexia deals with the nervous disease (anorexia) in which people obsessed with the phantom of being overweight starve themselves to death, Vampire Rock is a satire on the audience's devotion to the music, Any Port in a Storm is a frank description of a one-night stand, and Pink City Twist—a deliberately monotonous instrumental with spoken inserts—skewers three generations of rock-and-roll mediocrity.

It is obvious that the Poodles have complete command of the stylistic history of rock-and-roll, which they use to fine, humorous advantage. It is also obvious that they understand the emotional history of rock—its effect on audiences as well as the boomerang ego effect on rock musicians. These would be merely slick technical skills were it not for the Poodles' challenge, and it is a mighty one. For nearly thirty years both musicians and listeners have considered rock to be an answer. The Poodles' challenge is to present rock once again as a question. Why is rock important? What does it do, what does it mean, what relevance does it have to real life as opposed to dream life?

Such insistence on the question of rock may well rejuvenate a tired form and make it once again an adventure, ending not with a promise of heaven on earth but with a way to live on earth as it is, without illusions and self-deceptions.

—Joel Vance

THE FABULOUS POODLES: Think Pink. The Fabulous Poodles (vocals and instruments). Man with Money; Bionic Man; Any Port in a Storm; (Hollywood) Dragnet; Bike Blood; Cossack Cowboy; Anna Rexia; You Wouldn't Listen; Suicide Bridge; Pink City Twist; Vampire Rock. Epic JE 36256 $7.98, © JEA 36256 $7.98, © JET 36256 $7.98.

Bobby Valentino, Bryn Burrows, Tony deMear, Richie Robertson

The Poodles Think Pink

THE FABULOUS POODLES
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See your local Air National Guard recruiter. Or call us toll-free 800-638-0936 (except in Alaska, Hawaii and Puerto Rico); in Maryland call 301-981-3610.

We Guard America's Skies.
Want To; Here We Are; We Love Each Other; Reunited; and four others. Epic JC 36151 $7.98, © JCA 36151 $7.98, © JCT 36151 $7.98.

Performance: Lost in the gloss
Recording: Glossy

The idea here, I guess, was to, um, share with the whole world this, um, wonderful thing they have, for Louise Mandrell and R. C. Bannon are an item, as they say, in real life. So each and every song plays up its own angle of this being-an-item stuff. Technically, they're both pretty good singers; Louise Mandrell is more stylish than her sister Barbara—her voice has more, um, body to it—and Bannon is one of these new smooth, croony c- & w types, but not nearly as obnoxious about it as Billy "Crash" Craddock. The blend of their voices, though, is okay but nothing special. The songs are going to be around, apparently from friends and neighbors to presidents and ambassadors—who get drunk and fight, and he says, Hey, would you hold it down?/Some of us are trying to be happy. In Disco Man, the joke is in the melody; he's appropriated the one to This Old Man (the 'knick-knack, pattiwack' song), and slipped it under a parody-sized glob of disco arrangement and such words as, "Disco Man he's so bad/What he ain't got he has had/With a T-bar top car never far away/Disco Man goes all the way." There are small jokes about form in The Hat and It's a Miracle That You're Mine (which ambles gradually into an English music-hall romp where every instrument has a calliope attitude), but they're really just goofs. Pleasing the Crowd, with a straight blues structure, and Old Friends, which is cinematic about old people sticking together, are reasonably impressive serious songs. One wants more of the old impishness, of course—there's not as much crazy wisdom here as there should be in a Roger Miller album—but this does more than merely keep his hand in. There's enough to it to make you want more.

N.C.

ROGER MILLER: Making a Name for Myself. Roger Miller (vocals); instrumental arrangement. The Hat; If I Ever Fall in Love; Ringing Up Rosie; Freedom; Hey Would You Hold It Down; Old Friends; and four others. 20TH CENTURY-FOX T-592 $7.98.

Performance: Still crazy
Recording: Good

Roger Miller chose this title so he could make a joke on the jacket, which shows him carving the letters of his name out of wood and putting them up on the wall. In the grooves he doesn't always have his old zany drive—he usually concocts a number of straight songs nowadays, apparently trying to give his albums balance—but when he's on, he's the Roger Miller I wouldn't want this world to be without. In Hey Would You Hold It Down, he keeps running into people—from friends and neighbors to presidents and ambassadors—who get drunk and fight, and he says, Hey, would you hold it down?/Some of us are trying to be happy. In Disco Man, the joke is in the melody; he's appropriated the one to This Old Man (the 'knick-knack, pattiwack' song) and slipped it under a parody-sized glob of disco arrangement and such words as, "Disco Man he's so bad/What he ain't got he has had/With a T-bar top car never far away/Disco Man goes all the way."

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N.C.

DENE MUSTIN: Dene Mustin Sings Your Requests. Dene Mustin (vocals, piano); instrumental accompaniment. Send In the Clowns; It Amazes Me; Bluesette; Why Did I Choose You?; All the Things You Are; and six others. AUDIOPHILE AP-134 $7.98.

Performance: Very good
Recording: Good

Dene Mustin, whom the liner notes here describe as "the best thing to hit the South since coarse ground grits," is a strikingly fine piano player and a singer who deals in much the same repertoire as Bobby Short and Mabel Mercer. She has a disconcerting habit of seeming, by intonation, to criticize some of the lyrics she sings. In Let There Be Love, for instance, she trills the words "sparkling champagne" as if to say, "Is that precious enough for you?" and then comes down warmly and securely on good of "chili con carne" when it appears. Aside from this nit-picking (but then again, she is singing pop classics, isn't she?), almost everything is right with Dene Mustin. She does a lovely, full-voiced Send In the Clowns, a superior All the Things You Are, and a really grand Bluesette. Nice work.

P.R.

WILLIE NELSON SINGS KRISTOFFERSON. Willie Nelson (vocals, guitar); instrumental accompaniment. Me and Bobby McGee; Help Me Make It Through the Night; The Pilgrim, Chapter 33; Why Me; For the Good Times; and four others. COLUMBIA JC 36188 $7.98, © JCA 36188 $7.98, © JCT 36188 $7.98.

Performance: Good
Recording: Good

I don't know about Willie Nelson's timing here. It seems either too late or too early to do an album of Kris Kristofferson's standards, as we've heard so much of them in the last ten years. But Nelson usually knows what he's doing and, indeed, the delicacy or fragility of his vocals will make you listen, however saturated you thought you were. What actually bothers me about this is the band, which doesn't seem to find much to do with these songs. It avoids using the same arrangements the other covers used, but it seems to do a lot of laying back on the beat and vamping instead of coming up with interesting fills. In some cases, a Kristofferson song suggests a counter-melody and only one counter-melody, and it may simply be impossible to find another one that will fit. But here, too, I suspect Nelson had something in mind, and it could be that this austerity around the vocal line is something that gets better when you live with it—which a reviewer gets to do only after he has done his thing. The songs are going to be around, and I think many people will take the album as something to play years from now rather than days or weeks from now. So ask me again in a few years.

N.C.

JUICE NEWTON: Take Heart. Juice Newton (vocals, percussion); instrumental accompaniment. Sunshine; Just Holding On; Until Tonight; Tear It Up; You Fill My Life; San Diego Serenade; and four others. CAPITOL ST-12000 $7.98, © 8XT-12000 $7.98, © 4XT-12000 $7.98.

Performance: Hardy and healthy
Recording: Very good

Here's a possible sleeper, and it's simply a matter of a strong, clear voice and no-nonsense production. Juice Newton sings arrow-straight, hitting a note dead center with one of those voices that could pierce armor plate and sound pretty at the same time. Producer and sometime guitarist Otha Young has kept the backing straightforward and uncluttered. The only thing missing is one terrific, truly elevating song to serve as a centerpiece. The one I like best here, far and away, is Tom Waits' San Diego Serenade, but it is by nature a supporting, down-in-the-album kind of song. The others are pleasant, by and large, but not very sam-

(Continued on page 104)
The all-new Toyota Corolla Tercel has front-wheel-drive. Plus it's the highest mileage, lowest priced Toyota you can buy.

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Which brings creeps into the lyrics that rock-and-roll will one song with "People get ready, there's a establishment (Kantner actually starts pausing only long enough to kick hell out and take all the good guys away from all this, predictions that the ships are going to come in") so uniformly dull that I was able to catch a alarmingly alike, and he has made an album so uniformly dull that I was able to catch a teeny-tiny nap as it droned on and on and on... P.R.

**RECORDING OF SPECIAL MERIT**

**THE POLICE: Reggatta de Blanc.** The Police (vocals and instruments). Message in a Bottle; Reggatta de Blanc; It's Alright for You; Bring On the Night; Deathwish; Walking on the Moon; and five others. A&M SP-4792 $7.98, © AAM-4792 $7.98, © AAM-4792 $7.98.

Performance: **Superb**

Recording: **Excellent**

To a certain extent, the Police could be (and have been) accused of cashing in on the New Wave. They’re not kids, after all, and although they play as hard and fast as anybody, they do nothing to conceal their jazz and r–b grounding or their considera-ble instrumental expertise. But the fact is that, reverse snobbery notwithstanding, they’re a superb band whose imaginative fusion of New Wave energy, Sixties hooks, and mutated reggae continues to be one of the most interesting sounds around.

The format of this new album is basically the same as on their debut, though this one seems to have a trifle more polish in the production. No new ground is broken, but it has a considerable refinement of approach. There are some new wrinkles, to be sure: the jazz and r–b grounding or their considera-ble instrumental expertise. But the fact is that, reverse snobbery notwithstanding, they’re a superb band whose imaginative fusion of New Wave energy, Sixties hooks, and mutated reggae continues to be one of the most interesting sounds around.

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No compromise
Winston Lights didn't compromise on great taste to get low tar. Why should I?

Winston Lights taste good like a light cigarette should.

Warning: The Surgeon General Has Determined That Cigarette Smoking is Dangerous to Your Health.
Suzi Quatro started off some ten years ago in Detroit as a tough kitten playing bass and singing. The times weren’t yet ripe for her, and they might never have been but for the proverbial lucky break: after a period in limbo she won a continuing role on the TV series Happy Days. That national exposure prepared the way for her to score last year

**Carlos Santana:** punchy, soulful guitar work

that seems carefully modeled on that of such black American women singers as Summer and Millie Jackson. She has a whiskey voice, a tightly controlled energy, and even some references to kinky sex in her lyrics. But she comes across as a German singing actress in the Dietrich/Lenya tradition trying to adapt her style to American mass-market rock-and-roll. And it doesn’t work.

**SANTANA: Marathon.** Santana (vocals and instrumental). Marathon: Lightning in the Sky; Aqua Marine; All I Ever Wanted; Love; Hard Times; and four others. COLUMBIA FC 36154 $8.98, ® FCA 36154 $8.98, © FCT 36154 $8.98.

**Performance: Punchy**
**Recording: Clear and clean**

Santana, the original Latin-rock band, has gone through still more personnel changes, breaking in here, among others, a pretty good lead singer, Alexander J. Ligertwood. It has also gone through a number of musical changes over the last decade, but “Marathon” returns to something like its beginnings. This album sounds quite a lot like the band did in 1969, in fact, basic rock-and-Latin. And the main attraction, predictably, is the punchy and soulful guitar of Devadip Carlos Santana, who before this was off for a while playing jazz with John McLaughlin. The new songs are just so-so; I guess we all made do with this little of a melody in 1969, but it bothers me a bit more than that now, and the lyrics aren’t likely to change my life either. Still, the vocals are good, the integration of rock with the rhythms is good, and I continue to like Carlos’ feel for when to play and when to leave a hole, as well as the emotional way he plays when he does play. Oh, there are a couple of gratuitous, wailing clichés solos, but blame it on the tunes. Compare this album with some by Foreigner and other Johnnies-come-lately who think they can rock, and you’ll appreciate it.

**LEO SAYER: Here.** Leo Sayer (vocals, harmonica); instrumental accompaniment. The World Has Changed; When the Money Runs Out; Lost Control; An Englishman in the U.S.A.; Work; and four others. WARNER

**Performance: Rather tepid**
**Recording: Very good**

“Weet with love” is the theme of Barbra Streisand’s latest album, and there’s certainly

(Continued on page 109)
When you bought it, cassettes cost a buck and noise reduction meant turning it down.

Now you're ready for JVC's new metal-compatible decks.

Aren't you glad you waited to get a new cassette deck?
Because the ultimate technology is here: metal particle tape.
Less tape hiss, higher highs, lower lows, louder output, a wider dynamic range of loud and soft passages ... in short, you can finally record a cassette that's virtually indistinguishable from the source.

But getting this kind of performance out of metal tape means putting special circuitry and tape heads into the cassette deck.

That's why most other manufacturers have only added metal compatibility to their expensive top-of-the-line decks.*

Only JVC is far enough ahead to offer you six metal models starting at under $300, suggested retail price.

Packed with features like ultra-hard, low distortion Sen-Alloy heads, Spectro-Peak and Multi-Peak metering, systems that let anyone record a perfect cassette, Super-ANRS noise reduction and B.E.S.T., an automatic computer that finetunes tape to deck in less than 30 seconds.

So before you consider metal tape an unaffordable audiophile's luxury, call 800-221-7502 (in N.Y. State call 212-476-8300) for the name of your nearest JVC dealer. Or write to US JVC Corp., 58-75 Queens Midtown Expressway, Maspeth, NY 11378.

He'll prove to your ears and your pocketbook that you're ready for metal particle tape technology.

*Correct at time of printing

CIRCLE NO. 63 ON READER SERVICE CARD
The New Yashica FX-3
Step-up to 35mm photography at an economical size and price.

Easy LED System readout. Easy to capture the action.

Perfect exposure made easy with the new FX-3. Sensitive SPD sensors read the light from your subject as it comes through the lens and activates LED symbols in the viewfinder. These symbols (a minus, a plus and a dot) tell you in an instant if your picture is under- or over exposed. Or if you need to use a flash.

Yashica’s FX-3 lets you freeze a ski jumper in mid-air or stop a racing car as it roars around the track. The wide range of shutter speeds make the FX-3 an action SLR camera. And the built-in self-timer lets you be a part of your own pictures.

Easy to get great results.

Yashica’s FX-3 with quality optics, makes it easy for you to get great results. And the Yashica-Contax bayonet mount accepts Yashica ML or YUS lenses as well as famous Carl Zeiss T* lenses.

Easy to handle.

Lightweight and very compact, that’s the new FX-3. Small and comfortable enough to fit in the palm of your hand. And light enough to carry with you all day long. It weighs less than a pound.

YASHICA
411 Sette Drive, Paramus, New Jersey 07652
CIRCLE NO. 56 ON READER SERVICE CARD
A as a worldly friend of mine remarked, "Evita" may be the only musical in history that found fame and fortune on the basis of a five-word phrase." How right he is. Don't Cry for Me Argentina—just that phrase, no more—is a wonderful wedding of memorable words and evocative music. But nothing else, absolutely nothing else, happens either before or after that. Not even in the same song: "I kept my promise/You kept your distance." Now just what the hell does that mean, precisely? Nothing. Precisely. The rest of the

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P.K.

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JOHNNIE TAYLOR: She's Killing Me. Johnnie Taylor (vocals); instrumental accompaniment: She's Killing Me; Little Dancin' Queen; Play Something Pretty; The Users; and three others. COLUMBIA JC 36061 $7.98, ® JCA 36061 $7.98, ® JCT 36061 $7.98.

Performance: Memphis r & b revisited

Recording: Good

As one of the few performers to survive the collapse of Memphis-based Stax Records (an acknowledged rhythm-and-blues force during the Sixties and early Seventies), Johnnie Taylor must be commended for his sheer ability to endure. Though he has been delving into modishly tailored material since he was signed by Columbia in 1976, his roots are in the black musical tradition, and he's been around far longer than most people realize.

Few recall that during the Fifties Johnnie Taylor replaced the late Sam Cooke as lead singer with the gospel group the Soul Stirrers. Cooke not only moved from gospel to r & b (a common maneuver executed by many black artists who started out in the church), he also crossed over into the popular mainstream with such hits as You Send Me and Twistin' the Night Away. Taylor has remained closer to his roots. His willingness to adhere to fundamental r & b, modified only by a few more contemporary elements, is quite evident on this new album, which is a product of that same tough musical integrity. Taylor remains the same, though he is being packaged differently. So don't be fooled by the strident cover graphics; this is not just another disco album. No, this is

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music for the show (and the strange kind of Esperanto gibberish that suffices as a book) is the kind of empty bombast Shakespeare meant when he wrote "full of sound and fury, signifying nothing."

On MCA's Broadway-cast recording, Patti LuPone attacks the role of Eva Peron apparently under the impression that that cucumber-cool lady was simultaneously a half-sister to Anna Magnani and Kay Starr. But her muscular approach does match the tone of the whole recorded production, which moves swiftly and directly. Not to any place in particular, however. LuPone sees her big role as Turandot, and by the time she's finished with it one can safely say that it has been sung—and then some. Mandy Patinkin as the Che Guevara figure wanders in and out of the action sounding disconcertingly like an Irish tenor who has

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suggest you dig out the one made two or three years ago by Olivia Newton-John. It is by far the best thing she's ever done and by far the best performance of it anywhere, ever. I'll leave you with Heywood Hale Broun's conjecture about future Broadway musicals and that Evita has been a success: Broun sees the day when something very like Coochie, Coochie, I'm Your Duce will be drawing sensation-seeking crowds. Unfortunately, he's probably right. After all, it has already been Springtime for Hitler. —Peter Reilly

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EVITA (Tim Rice–Andrew Lloyd Webber). Original Broadway-cast recording. Patti LuPone, Mandy Patinkin, Bob Gunton, others (vocals); orchestra, Rene Wiegert cond. MCA MCA2-11007 two discs $11.98, ® MCAT2-11007 $11.98, ® MCAC2-11007 $11.98.

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FEBRUARY 1980

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Little Johnnie Taylor singing his heart out much the way he did in the old Memphis days, with little evidence of time’s wear and tear. P.G.

**RECORDING OF SPECIAL MERIT**

MARLENE VERPLANCK: Marlene VerPlanck Loves Johnny Mercer. Marlene VerPlanck (vocals); Tony Monte (piano); Bucky Pizzarelli (guitar); Milt Hinton (bass); Butch Miles (drums). I Remember You; Early Autumn; Skylark; Midnight Sun; Jeepsers Creepers; Fools Rush In; That Old Black Magic; and nine others. AUDIOPHILE AP 138 $7.98.

Performance: Super
Recording: Excellent

After listening to “Marlene VerPlanck Loves Johnny Mercer,” one can only come to the conclusion that Johnny Mercer, were he still with us, would love Marlene VerPlanck right back for the gusto and tender loving care with which she sings his wonderful songs. All sixteen songs here are standards (I could hum each one just from the title), and they can seldom have been better performed. When the effortlessly stylish and consummately graceful VerPlanck voice lavishes itself on, say, Fools Rush In, Skylark, I Remember You, or even, so help me, the old novelty song Jeepsers Creepers, you know that you’re listening to pure gold—and you know what that’s worth these days.

Most of these songs come from forgettable musical films made during the Thirties and Forties when Mercer was one of the hired hands in the Hollywood film factories (along with Frank Loesser, Harold Arlen, and Julie Styne) and songwriters were considered little more than tune-picking hacks whose major duty was to provide an excuse for the latest starlet to mouth some words while the audience concentrated on her bazooms and derrière. Most of those starlets, who weren’t treated much better than cattle either, have passed into oblivion, but the songs they were given stubbornly live on. When they fall into the talented hands of a singer like Marlene VerPlanck their innate quality shines out, like a newly restored Old Master you had always thought was a student’s daub. P.R.

VIOINSKI: No Cause for Alarm. Violinski (vocals and instrumentals). Cricket, Bloody Cricket; Sudden Romance; Rosanna; No Cause for Alarm; Clog Dance; and five others. JET JZ 36133 $7.98, @ JZA 36133 $7.98, @ JJ 36133 $7.98.

Performance: No cause for celebration
Recording: Very good

Violinski is a group of fun-loving young Englishmen who take their name from the bright-blue electric violin played, much too loudly, by Mike Kaminski (better known as a member of the Electric Light Orchestra). They are lively performers, and they show off their capabilities best when they cut loose entirely from the prevailing contemporary idiom, as in the propulsive and utterly alive Clog Dance. Occasionally their lyrics shock with a Clockwork Orange sort of fiendish energy: “Don’t call your lover a cow/You wouldn’t like it yourself/Just drop her one in the face/Kick her all over the place.” Much of the time, though, the music of Violinski is just noisy noodling dominated by the inflated drone of that damned violin. P.K.

**RECORDING OF SPECIAL MERIT**

DENNIS WILLIAM WILSON: One of Those People. Dennis William Wilson (vocals, guitar, bass); instrumental accompaniment. It’s Just Me; Man Made of Glass; What’s a Couple More; She’s the Shadow of Jane; Did You Think It Was Over; A Little Bit Gone; and four others. ELEKTRA 6E-230 $7.98, @ ET8-230 $7.98, © TC5-230 $7.98.

Performance: Impressive
Recording: Clean

I don’t know, maybe there is a folkie comeback in the offing. Recorded in Nashville, this album doesn’t have the purist guitar-accompaniment-only sound of twenty years ago, but neither does it have a country or rock sound. It has the unfussy backing and other trappings, including some pretty good songs, of a troubadour’s album, and such a thing is an extension of folk attitudes. Dennis William Wilson (not to be confused with the Beach Boys’ Dennis Wilson) sings like he writes: quietly and with taste and nuance. He deals in observations that reach below the surface of things, but he keeps the language simple, presenting vignettes and little stories. Wilson’s way of doing things is so personal that he might turn out to be a specialty item.

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**BEFORE YOU THROW OUT A GOOD TURNTABLE OR SPEAKER SYSTEM, CONNECT WITH A GREAT AMPLIFIER.**

**THE PHASE 400 SERIES TWO.**

Some speakers sound fine, until you hit a low passage. Then they turn to mud, or rumble at you like a cheap turntable. Chances are, that muddy, distorted sound is in fact the result of an inadequate amplifier stretched to its limits. Clipping! To improve your sound, you need plenty of reserve power. The Phase 400 Series Two delivers the tremendous power reserve you need for sonic accuracy over the audible frequency spectrum. To accurately reproduce low frequencies without clipping, your speakers require up to 10 times the minimum power requirement of the mid-range frequencies. With the Phase 400 Series Two, when you listen to the 1812 Overture, you hear the blast of the cannon with awesome clarity. Even the deepest notes are clearly distinguishable. ACCURACY YOU CAN HEAR. To improve accuracy, the new 400 Series Two utilizes an advanced BI-FET input stage. This integrated circuit keeps the output virtually identical to the input. Distortion and noise are reduced to virtually inaudible levels. Beautiful music in, beautiful music out. ACCURACY YOU CAN SEE. You might have some questions about the 400’s instantaneous LED output meters. Conventional-style VU meters are slow in comparison because they have to move the mass of the needle. The LED’s move at lightning speed, accurately monitoring the output voltage, with scales for 8 and 4-ohm impedances. For accuracy, the meter contains 32 graduations, plus 4 fixed flashers to alert you to clipping. You have a visual safeguard, in addition to the Electronic Energy Limiters to prevent damage from overloads. See your Phase dealer about the Phase 400 Series Two. We think you’ll recognize accuracy when you hear it. And when you see it.
even if we get a new spate of troubadours, sort of the way Fred Neil was in the blues renaissance of the late Sixties. As of now, this is music that somebody cares about, music that can't be subverted into a light show, and I'm glad to have that.

LAUREN WOOD. Lauren Wood (vocals, keyboards); Novi Novog (viola, synthesizers); Ernie Eremita (bass, percussion); vocal and instrumental accompaniment. Nothing but a Heartache: Where Did I Get These Tears; Dirty Work; Gotta Lotta; Overload; and four others. WARNER BROS. BSK 3278 $7.98, © M8 3278 $7.98, © M5 3278 $7.98.

Performance: Overwrought
Recording: Very good

Lauren Wood, whose work the Warner Bros. publicity department calls a “captivating blend of rock & roll, R & B and a touch of that Sunnybrook avant garde,” mostly writes her own songs and sings them with the aid of two faithful friends, Novi Novog and Ernie Eremita. Under the alias of Chunky, she also dubs in background vocals and helps out on the keyboards. A busy girl. Her songs are mostly concerned with the usual ups and downs of lovers as well as shattered dreams and broken marriages. Occasionally the literary imagery of heartache explodes into an exasperated cry of sheer alarm. It is possible that this attractive young woman with the rather sweet voice is just trying to do too much. Maybe she should get somebody else to play the keyboards.

THEATER • FILMS

APOCALYPSE NOW (Carmine and Francis Coppola). Original-soundtrack recording. The Doors; the Rhythm Devils; Flash Cadillac; Vienna Philharmonic Orchestra. Sir Georg Solti cond.; others. ELEKTRA DP-90001 two discs $15.98, © D8-90001 $15.98, © D5-90001 $15.98.

Performance: Beside the point
Recording: Exceptional

Apocalypse Now is a jungle boat ride almost three hours long through the Tunnel of Hate that was the war in Vietnam. Although the whole thing falls apart and becomes ridiculous—no amount of symbolism out of The Golden Bough can save it—the voyage itself is memorably hair-raising, and not a little of its effectiveness comes from the multichannel soundtrack, almost two-thirds of which is contained in this two-record album.

Seeing the movie in a big theater, like the Ziegfeld in New York City, with loudspeakers planted all around the auditorium, one's ears are kept in a constant state of astonishment by the sounds of battle and the cries of jungle creatures. Then there is the music: the harsh rock snarl of Satisfaction performed by the Rolling Stones, the Doors intoning that grim ballad The End, Solti's recording of the Ride of the Valkyries, bland, innocent period songs presented in ironical counterpoint to gory events, and original music of spine-chilling aptness and intensity composed for synthesizers by Coppola and his father Carmine (who collaborated with Nino Rota on the music for The Godfather, Part Two).

The decision to try to put so much of all this, including long passages of narration and dialogue, on this ambitious set of records was not a wise one. The result is not the kind of excitement one feels watching the film in a theater, but rather disorientation and bewilderment. The physical impact of the sound is greatly diminished with only two channels (there should have been a quadraphonic version) even on good home equipment, and most of the time one is so frustrated trying to dope out what is happening (it is somewhat easier, of course, if you've seen the movie) that the whole experience becomes vexatious rather than gripping. It is hard to say whether the music alone would have stood up well on a single disc, since it is so intimately tied to the images it accompanies in the film, but at least one would have been spared all those stretches of incomprehensible dialogue. A text might have helped.

(Continued overleaf)

Vernon Burch (vocals); vocal and instrumental accompaniment. Let Me Know (I Have a Love); Tonight; and four others. Recording: Fine. Performance: Obscured. Recorded: Finely. CCLP 2009 $7.98, © CCL8 2009 $7.98, © CCL5 2009 $7.98.

Performance: Obscured. Recorded: Fine. What a difference an arranger makes! If I were Vernon Burch, I'd sign Richard Evans and Fred Wesley to long-term contracts. The three songs here that they worked on—Evans arranged For You, the best cut all around, and Once Again in My Life, while Wesley did the surprisingly successful disco treatment of the pop standard Try a Little Tenderness—are the only opportunities we get to hear what Burch can really do as a singer. And that's quite a lot. He has a light voice that's wonderfully flexible and seamless throughout a wide range, and he uses it daringly, especially in Tenderness, where the disco-ization works mostly because of his free phrasing within the strict rhythm.

The rest of the album is much less successful. The arrangements are so busy that sometimes even the dance beat is lost, not to mention the singer. Few male vocalists could cut through the dense, fractured orchestrations of Sammy Joanne or Dr. Do It Good, and Burch is not one of them; his subtle way against the hype, her strength is not as a singer. And that's quite a lot. He has a light voice that's wonderfully flexible and seamless throughout a wide range, and he uses it daringly, especially in Tenderness, where the disco-ization works mostly because of his free phrasing within the strict rhythm.

GLORIA GAYNOR: I Have a Right. Gloria Gaynor (vocals); vocal and instrumental accompaniment. Let Me Know (I Have a Right); Say Somethin'; You Took Me In Again; Tonight; and four others. POLYDOR PD-1-6231 $7.98, © BT-1-6231(A) $7.98, © CT-1-6231(A) $7.98. Performance: Sometimes wonderful. Recorded: Okay. When producer-arranger Mike Theodore's name appears on a dance record you can count on several things: orchestrations laden with strings and shot through with electronic gimmickry, a heavily layered sound, and power. This dynamic Tempest Trio album lives up to all those expectations. I especially like the opening of Last Call for Love, in which a mini-fugue for horns introduces a jazzy combo of piano and electric violin which in turn gives way to the vocal. This is fine musicianship.

Unfortunately, too much of Theodore's work is buried by the engineering job. At least in these LP mixes, the thump of the beat is so isolated from the rest of the music, which sounds strangely muffled, that it becomes downright annoying. That's too bad, because with a better mix some of these cuts would be terrific. Love Machine could have been a hot, up-tempo dance sensation like Voyage's classic Fly Away and the funkier hand-clappers Do You Like the Way That It Feels and Starlight could have been sexy bombshells.

The vocals by the female trio are straight soul-disco. On the slower numbers they belt out the lyrics with tremendous power. Again But scratch the surface of their work and there's a glimmer of excellence. Their voices, which lie mostly in a medium-high register, mesh well, and they sing with a keen precision, winding their way through arrangements that are more demanding than most of what one hears in this mode. They never lapse into shoddiness or strain for false effects, preferring to bounce into the notes with a natural effervescence. The tasteful accompaniment is fine for dancing without crowding out the voices. The softer song Somebody, Somewhere provides an effective contrast to the rousingly energetic performances in the rest of the album.

P.G.
TAPE
DOLBY
HX

DOLBY HEADROOM EXTENSION:
A Significant Advance in Cassette Recording

At higher frequencies, with even the best tape formulations, there are two major problems in cassette recording. The most familiar is hiss, background noise which is particularly annoying at higher frequencies. The other is tape saturation, the inability of tape to capture high frequencies at high levels. You may have noticed tape saturation as the dulling of highs on percussion, brass instruments, or other program material rich in high frequencies, as well as the distortion of closely-miked sibilant voices.

For years Dolby B-type noise reduction has been an effective treatment for tape hiss as a serious problem in cassette recording. Now a new development from Dolby Laboratories significantly reduces high-frequency tape saturation as well.

Dolby HX

Dolby headroom extension, or Dolby HX for short, is new circuitry which works in conjunction with Dolby noise reduction in a recorder to improve significantly the usable dynamic range of any tape, particularly at high frequencies. As you can see from Figure 1, Dolby HX permits recording information at 10 kHz and above at a level on the order of 10 dB higher than is currently possible. In addition, as shown in Figure 2, there is a substantial reduction of the severe IM distortion that results when tape saturates. And finally, Dolby HX also optimizes performance at low and middle frequencies for minimum distortion, modulation noise, and drop-out effects.

How Dolby HX works

Dolby HX works by automatically varying a recorder's bias level in response to the changing high-frequency content of the music being recorded. At the same time, the recording equalization is automatically modified to prevent any change in frequency response. Therefore at each moment, Dolby HX provides just the right bias and equalization to optimize tape performance for the music, unlike the fixed bias and equalization of conventional decks which must compromise tape performance at least part of the time.

Much of the time on most music, the bias with Dolby HX is relatively high for best performance at low and mid frequencies. But when unusually high-level high frequencies of the type which would cause tape saturation come along, both bias and equalization pre-emphasis are momentarily lowered to increase the tape's high-frequency headroom far beyond the normal limit. Information about the high-frequency content of the music is derived from the recorder's Dolby noise reduction circuits, which are already programmed to scan the music in precisely the way required by Dolby HX.

What Dolby HX means to cassette recording

Dolby HX makes it possible to make more accurate recordings of difficult program material, and to make accurate recordings more easily. The improvement is realized on any tape type for which the recorder is set up, so that less-costly iron oxide tapes perform like the more exotic formulations, and the more exotic formulations are further improved.

Just as important, the improvement Dolby HX provides is inherent in the recording process, so no special playback processor beyond normal Dolby noise reduction is required.

The difference will be heard when playing the tape on any deck. All decks equipped with Dolby noise reduction, and all Dolby encoded cassette recordings, will continue to be fully compatible with each other.

New cassette deck models incorporating both Dolby HX and Dolby noise reduction are on the way, watch for them over the next few months at your hi-fi dealer's. In the meantime, if you would like a complete technical description of how this new development works, please write us at the address below.

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WHO do the best singers say is the best singer? In or near country music, the answer is always, resoundingly, GEORGE JONES! Now some of the best singers (and writers) both in and not very near country music have backed up that abstract tribute with a tangible one. Its name is “My Very Special Guests” and it is very special.

Waylon Jennings, James Taylor, Emmylou Harris, Linda Ronstadt, Tammy Wynette, Willie Nelson, Johnny Paycheck, Elvis Costello—Elvis Costello!—Dennis Locorriere

stranger in my house is me. It includes some country-style phrasemaking (“there’s no welcome in the window”) and Costello almost comically trying to adopt a country singing style by opting for a kind of cloying growl, sort of like Joe Cocker and Mickey Newbury squashed together.

Almost all the songs, however familiar a few of them are, are welcome. The only really trivial one is It Sure Was Good, which producer Billy Sherrill helped write. It’s a formula song aspiring to go out like the tag line of a TV commercial: “We don’t know what it was/But it sure was good.” It’s the one George does with Tammy Wynette, and no doubt somebody’s instincts dictated including some such song to soften the emotional impact the ex-spouses still have on each other. Some think Jones’ best duets were with Willie and the boys and the girls. They all sing.

Samplers of this sort are prone to suffer from a too-informal, too-tossed-off quality, but with Jones singing you never have to worry about that. “Tossing off” a song is simply not in him. He gets totally inside the thing, often sounding driven if not possessed, as if the act of singing is his only real emotional release. And it may be. He has lived what the late Jimmie Rodgers would have called a checkered life, and most of his acclaim has come only in the last few years.

Growing up in an urban part of Gulf Coast Texas (made urban by the country people flocking in for jobs during the war years), Jones developed a knack for imitating other singers. A Nashville producer says he can imitate anybody. His first favorites were Bill Monroe and Roy Acuff, and historian Bill C. Malone says, “The phrasing of Acuff can be heard when Jones reaches for the higher notes.” At one point the young Jones was imitating exactly like Hank Williams. Then there were the rockabilles; Jones had such a traditional hard-country sound that he had to wait until the rockabillies craze died down before he was really noticed in the Sixties. And then there was the drinking. Jones is as much a legend for his drinking stories (and the chaos that often ensues after them) as he is for how many good singers say he’s their favorite singer.

Drinking, unfortunately, doesn’t have a calming effect on him. Quite the opposite. “When he’s sober,” says a long-time picker on the Nashville scene, “he’s as nice a man as you’d ever want to meet. When he gets drunk, he gets into things. Sometimes he gets mean, or wants to fight, and sometimes he doesn’t—but he always gets into trouble.” And it’s all so public, of course, true-life soap opera for Nashville and beyond. Say this for the country-music community, though: it does not take the chaos that often ensues after them as it is for how many good singers say he’s their favorite singer.

That translates into what we call soul when he’s singing, and soul is an important thing in the voices of all his helpers in this album. Soul is embodied in the case of Linda Ronstadt; a few female singers would want their bit to follow the deliciously surprising and appropriate phrasing of Emmylou Harris, but Ronstadt, joining Jones in a Jim Rushing song, shows what body in a voice can do. Her part in this reaffirms that the core of her appeal is in her earthiness; she’s still one of the sexiest singers around.

But they’re all impressive, Willon and Waylie and the boys and the girls. They all obviously came to the project with respect and a sense of purpose, and they don’t fool around none. They sing.

GEORGE JONES: My Very Special Guests. George Jones, Waylon Jennings, James Taylor, Emmylou Harris, Linda Ronstadt, Tammy Wynette, Willie Nelson, Johnny Paycheck, Elvis Costello, Dennis Locorriere, Ray Sawyer, Pop and Mavis Staples (vocals); Jim Isbell (drums); Tommy Cogbill (bass); Charlie McCoy (harmonica); Tommy Allsup (guitar); other musicians. Night Life: Bartender’s Blues; Here We Are; I’ve Turned To Stone; It Sure Was Good; I Gotta Get Drunk, Proud Mary: Stranger In My Place; I Still Hold Her Body; Will The Circle Be Unbroken. Epic JE 35544 $7.98, © JET 35544 $7.98, © JEA 35544 $7.98.
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unfortunately, they either have a limited range or are restricted by the arrangements to the middle-choest voice, and this narrow focus becomes tiresome before the record is over. If the vocal arrangements had as much flair as the orchestral ones and if the recording were better, this would be a first-rate album. As it is, it's still recommendable as high-energy dance music. E.B.

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(List compiled by John Harrison.)

RECORDING OF SPECIAL MERIT

DAVE BRUBECK: Back Home. Dave Brubeck (piano); Jerry Bergonzi (tenor saxophone, electric bass); Chris Brubeck (trombone, electric bass); Butch Miles (drums). Cassandra; The Masquerade Is Over; Hometown Blues; and three others. CONCORD JAZZ CJ-103 $7.98.

Performance: Fresh as ever
Recording: Excellent remote

Some twenty-five years ago, the Dave Brubeck Quartet was all the rage on college campuses from coast to coast; there probably wasn't a dorm where you could not find at least one of the group's Columbia albums, and every self-respecting jazz fan knew the names of Brubeck's sidemen. After the quartet disbanded in 1967, Brubeck kept an increasingly lower profile, but his musical activities continued, first with a new group in which he teamed up with Gerry Mulligan, then with a family group that included sons Chris and Danny. In more recent years, however, Brubeck has spent much of his time composing ambitious symphonic works, some of which have been performed by the New Haven and Dallas orchestras.

"Back Home" is an aptly titled album, for it was recorded in concert at last year's Concord Jazz Festival in Concord, California, where Brubeck was born sixty years ago and on the very land where his father once grazed cattle. The saxophone is now a tenor and the bass is electric, but the new quartet is much the same as the original one. Brubeck (happily, still playing acoustic piano) has not altered his well-known style, nor does he need to, for it sounds as fresh today as it did coming through my Granco FM tuner in the late Fifties. Tenor saxophonist Jerry Bergonzi does more to give the group a different sound than ever before. As always, the group is flexible. Fortunately, the group, which has undergone only one personnel change (Shelly Manne's replacement by Jeff Hamilton), has had its growth well documented on five Concord Jazz albums, beginning with "The L.A. Four Scores" in 1974 (the young label's eighth release) and reaching a new peak with "Live at Montreux," the hundredth album issued by this dedicated California record company.

Recorded in concert at the famous Swiss jazz festival last summer, "Live at Montreux" captures Messrs. Bud Shank, Laurindo Almeida, Ray Brown, and Jeff Hamilton lovingly caressing every nuance of their tastefully selected program, which includes such well-known Tin Pan Alley fare as Cole Porter's I Love You and the 1956 Comden/Green/Styne hit Just in Time, two original numbers, Hamilton's Hammertones and Almeida's Return of Captain Gallo, and one of the most arresting Duke Ellington medleys I have heard in years. I'm hard put to single out any of these tracks; the performances and arrangements are simply wonderful throughout. Moreover, as I pointed out in my last review of the L.A. Four, though Jeff Hamilton is the unknown in this stellar cast his presence gives the group a new, exciting dimension with his liberated drums. If you like your jazz swinging with lightness, fired with imagination, and performed with virtuosity, you're going to love this record. —Chris Albertson

L.A. FOUR: Live at Montreux, Summer 1979. Bud Shank (alto saxophone, flute); Laurindo Almeida (guitar); Ray Brown (bass); Jeff Hamilton (drums). I Love You; Hammertones; Duke's Mélange Medley— I Let a Song Go Out of My Heart/Caravan/ Take the "A" Train/Rockin' in Rhythm/ Just in Time; Return of Captain Gallo. CONCORD JAZZ CJ-100 $7.98.
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character than does the electric bass; whereas the late Paul Desmond contributed a cool, nonchalant, and ever-so-smooth sound to the quartet, Bergonzi's horn is chatty, seething, and sonorous. Expect to hear much more from him in the future.

On Two-Part Contention, Brubeck's son Chris switches from bass to trombone. His tone and style on that instrument blend gloriously with Bergonzi's as Papa Brubeck stamps the light fantastic in a Garner/Piano Red mode. Yesteryears, the Jerome Kern standard, reflects beautifully the ballad side of Brubeck, but Hometown Blues is my personal favorite—at the moment, anyway. This is the kind of album I can listen to again and again, each time discovering a new favorite. "Back Home" is a worthy addition to the fast-growing catalog of Concord Jazz, one of the most consistently high-quality labels in today's market.

C.A.

CHICK COREA/HERBIE HANCOCK.
Chick Corea, Herbie Hancock (pianos), Bouquet; Homecoming; Ostinato; The Hook; and two others. POLYDOR PD-2-6238 (two discs $11.98), ST-2-6238 $11.98, CT-2-6238 $11.98.

Performance: Advancing back
Recording: Good remote

In the early part of 1978, pianists Chick Corea and Herbie Hancock, two of jazzdom's major defectors to the Land of Fusion, left their electronic gear and sidemen behind and did what appeared to be a penance concert tour. With only two grand pianos, Corea and Hancock gave older fans a taste of the kind of music that had made them fans to begin with and startled some of their fusion following by showing a side of themselves that had been in the shadows too long. "I was freaked out," I overheard a fan who belongs in the latter category say, "I had no idea that Herbie could really play the piano." He should have heard Hancock before gadgetry got the best of him, for the sad fact is that all that time spent on electronic keyboards has adversely affected his approach to an acoustic piano. Time ought to remedy that, you say, and you are probably right, but Hancock has since plugged himself back in and immersed his talent in pop ("Feets Don't Fail Me Now," Columbia JC 35764) that obscures his talent beyond recognition. Chick Corea seems less scarred by the electronic experience, probably because he continues to spend more time on the acoustic side of the fence.

The acoustic tour was, by all accounts, an unqualified success at the box office, and—judging by the response I witnessed at Carnegie Hall and that on the live recordings—the public was not disappointed. If you missed the concerts, this Polydor album and "An Evening with Herbie Hancock and Chick Corea," on Columbia PC 35663, will give you a good idea of what went on. Because the two pianists are signed to different labels, an arrangement was made to have each company issue its own two-disc version of the proceedings. There is some duplication of material; Hancock's Maiden Voyage and Corea's La Fiesta together fill side four of both sets. Granted, the performances are different (longer and more intense in the Columbia version, but why limit the variety at all when the occasion is so rare? Not all the material in this Polydor release falls into the jazz category. There is, for example, a joint composition entitled The Hook, which approaches Henry Cowell by way of Keith Jarrett and features some tampering with the piano strings. Then, too, there is an ostinato from Béla Bartók's 1935 Mikrokosmos for two pianos, four hands, a very far cry from the thump and twang of discofusion.

As one who has consistently lamented these two pianists' neglect of intelligent music, I should be the first to welcome the efforts that have crystallized in both the Columbia set and this album, so let me not be unduly harsh in my criticism. Sure, their playing shows some rustiness, but on the whole it is so far above what they usually foist on us that I must applaud.

C.A.

RECORDING OF SPECIAL MERIT

PAUL MOTIAN: Le Voyage. Paul Motian (drums, percussion); Charles Brackeen (so-prano and tenor saxophones); J. F. Jenny-Clark (bass). Cabala/Drum Music; The Sunflower; Abacus; and two others. ECM ECM-1-1138 $8.98, © M5E-1138 $8.98, © M5E-1138 $8.98.

Performance: Excellent
Recording: Excellent

Drummer Paul Motian's background includes work as a sideman with Lennie Tristano, Bill Evans, Oscar Pettiford, Keith Jarrett, and, somewhere in there, even Arlo
Guthrie and Morgana King. In recent years he has come into his own as a leader on a succession of notable ECM dates with varying but uniformly interesting personnel.

"Le Voyage," recorded a year ago, features a well-integrated trio playing music that is deeply emotional and clearly comes from within the players. The album takes its title from one of the five Motian compositions that make it up, but as a whole it conveys the feeling of a voyage through misty corridors full of pleasant little surprises. We are guided by the roly-poly deep sound of Jenny-Clark's ambling bass, propelled gently by Motian's delicate percussive touches, and greeted around various bends by Charles Brackeen's Lon Chaney-esque reed sounds. Technically, the recording shows the usual ECM care, and there's even a bit more bubbling, guttural hysteria that erupted too often in the music of Manhattan's Lower East Side a decade ago—and often seemed to be no more than a smoke screen designed to cover up the weaknesses of mediocre musicians—comes through on parts of this album, but Wright and his men erupt with authority. Even the late Eddie Jefferson gets into the act on No End to the Sun, gargling and sputtering like a man possessed as he translates his innovative Fifties vocal exercises into the language of a younger, more politically motivated generation. The result is interesting and quite musical in a strangely unmelodic sort of way. Far more traditional, but not altogether so, is Jefferson's work on Long Way from Home, which strikes a blues groove with Wright switching to bass clarinet and trumpeter Kamal Abdul Alim going for his muted Miles roots.

The four instrumental selections that complete the album include Cowboys and Indians, which has interesting work by Philly Joe Jones, Reggie Workman, and percussionist Khalil Abdullah; I cannot believe that trumpeter Alim's sloppy notes are all deliberate, however, and, though Georges Arvanitas eases his piano into the rhythmic work of his colleagues very neatly, he is heard to better advantage on November the First. Everybody shines on Odeon, a piece that straddles the line between the more conventional and what only a decade ago would have been considered "out there" by many. I like this album, despite its occasional hit-or-miss nature. It has some spark to it. It's not great music, but it is undeniably music of substance.

C.A.

RECORDING OF SPECIAL MERIT

FLORA PURIM: Carry On. Flora Purim (vocals); vocal and instrumental accompaniment. Sarara; Carry On; Love Lock; Corine; Freeway Jam; and five others. WARNER BROS. CR 2014 $7.98.

Performance: Good
Recording: Excellent

This is an interesting album by an interesting artist. Flora Purim is not only one of the better female Latin singers around, she's also a fine arranger and a songwriter with a nice, individual approach to what I guess one would have to call "quiet mood songs." With the exception of Sarara, which is some kind of cross between jazz and disco, most of the material here is the lurch, murmurous, night-thrashing sort of thing that can contribute mightily to the Joy of Stereo. The production by George Duke is excellent in every respect. The title song, Carry On, rises above everything else in Purim's gorgeous performance, but even the weakest track, Once I Ran Away, doesn't offer all that much to complain about. Nice work.

P.R.

FRANK WRIGHT: Kevin, My Dear Son. Frank Wright (bass clarinet, tenor saxophone); Kamal Abdul Alim (trumpet); Georges Arvanitas (piano); Reggie Workman (bass); Philly Joe Jones (drums); Khalil Abdullah (percussion); Eddie Jefferson (vocals). Odeon; November the First; Cowboys and Indians; and three others. CHIAROSCURO CR 1980 $7.98.

Performance: Interesting
Recording: Good

Saxophonist Frank Wright was a minor voice in the avant-garde jazz movement of lower Manhattan during the second half of the Sixties. Later, he went to Europe, where an American passport and working knowledge of an instrument are often enough to get you recording dates, club engagements, and an intellectual following. But Frank Wright has more to offer than a green passport. It is hard to tell from this album just how well Wright knows his instruments, for much of what we hear appears to be executed with abandon, though not of the reckless kind. The bubbling, guttural hysteria that erupted too frequently in the music of Manhattan's Lower East Side a decade ago—and often seemed

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CIRCLE NO. 10 ON READER SERVICE CARD

February 1980
ALAIN: Suite for Organ (see POULENC)

RECORDING OF SPECIAL MERIT

BANCHIERI: Festino. The Scholars Vocal Ensemble; Elisabeth and Guy Robert (lutes). MUSICAL HERITAGE SOCIETY MHS 4039 $5.20 (plus $1.25 postage and handling from the Musical Heritage Society, 14 Park Road, Tinton Falls, N.J. 07724).

Performance: Sparkling Recording: Beautiful

Having conceived Festino as an evening's entertainment, Adriano Banchieri treats his guests to a rich palette of madrigals, canzonettas, villanellas, lute dances, and just about every other musical genre favored in Renaissance Italy. The subjects of his program range from the ridiculous to the sublime as animals attempt counterpoint, crows swallow turds, and lovers delight to the songs of nightingales.

Although the jacket offers us no information about the Scholars Vocal Ensemble, their spirited performance here demonstrates their quality. Not only do they produce a comic effect without resorting to vulgar distortions of the music, they also mold and balance the delicate textures of the more serious sections. Banchieri wrote for individual singers, passing out solos, duets, and trios in various combinations to be intermixed with the full ensemble. Each singer of this marvelous group has a distinctive sound that gives character to his solo passages but at the same time blends well for the ensemble writing. Especially contagious is the rhythm that animates the Festino's lively dances. Truly, this is an anthology of music for every taste.


Performance: Intensely lyric Recording: Very good

Bartók's two violin sonatas, composed for Jelly d'Aranyi, used to be considered knotty and problematic, for there are passages in them, especially in the Sonata No. 1, where Bartók seems to be struggling to reconcile his ethno Magyarism and his essentially classical outlook with the innovations of Schoenberg's "Second Viennese School." Nevertheless, the music of both sonatas is immensely vital, highlighted by the ethereal slow movement of No. 1 and the kaleidoscopic second half of No. 2, with its wonderful musical substance and astounding variety of coloristic effects. As might be expected of music written by a composer-pianist, the piano parts are not stinted either.

Sandor Vegh, the distinguished Hungarian soloist and chamber musician, is paired here with a remarkably gifted younger British pianist, Peter Pettinger. Beautifully refined and subtle—and vital when needed—as Vegh's playing is, it is Pettinger who very nearly steals the show with the rhythmic alertness of his contribution. The recording itself is a factor here: the overall ambience is lovely, but the piano seems to have just slightly more presence than Vegh's violin, whose tone, though sweet, lacks the unassuming ease of, say, Isaac Stern's. Vegh is heard to best advantage in the second half of the two-movement Sonata No. 2, where he performs with fantastic agility and verve, and the Telefunken engineers have done a first-class job in dramatically capturing all of Bartók's coloristic effects. A fine record, but I might remind readers of a unique documentation of the Second Sonata played by Joseph Szigeti with Bartók himself at the piano; recorded at the Library of Congress in 1940, it is still available on Vanguard (304/5E).

D.H. BEETHOVEN: Serenade in D Major, Op. 8 (see DOHNÁNYI)

BERG: Three Movements from the Lyric Suite (see SCHOENBERG)

BÉRIOT: Scène de Ballet, Op. 100 (see RE-SPIGHI)

BERLIOZ: La Damnation de Faust, Op. 24. Plácido Domingo (tenor), Faust; Dietrich Fischer-Dieskau (baritone), Mefistofel; Yvonne Minton (mezzo-soprano), Marguerite; Jules Bastin (bass), Brander; Claudine Chastagnol (soprano), Celestial Voice; Choir of the Orchestre de Paris; Paris Children's Choir; Orchestre de Paris, Daniel Barenboim cond. DEUTSCHE GRAMMOPHON 2709 087 three discs $29.94.

Performance: Outstandingly lyric Recording: Excellent

One of the great "ifs" of musical history is what would have happened if Berlioz had had access to the theater or the opera house. Berliozian music-drama would have been a healthy alternative to the Wagnerian kind. But it didn't happen that way, and instead we have a special repertoire of works that hover between concert oratorios and opera. Of these, The Damnation of Faust is certainly the most intriguing. Berlioz identified very closely with the restless yearning and searching of Faust, and it is that lyric yearning, as much as the demonic fantasy, that gives its character to the work. And it is that character that stands out in this recording.

Casting Plácido Domingo and Dietrich Fischer-Dieskau as, respectively, Faust and Mefistofél was inspired. Domingo is the rare Italianate tenor who can sound intelligent as well as beautiful. He is also able to internalize the expression of sorrow so that it

Explanation of symbols:

- = open-reel stereo tape
- = eight-track stereo cartridge
- = stereo cassette
= = quadraphonic disc
- = digital-master recording
- = direct-to-disc recording

Monophonic recordings are indicated by the symbol ◊

The list on page 120 is the one reviewed; other formats, if available, follow it.

Reviewed by RICHARD FREED • DAVID HALL • GEORGE JELLINEK • PAUL KRESH
STODDARD LINCOLN • ERIC SALZMAN
There is not a phrase that could be more persuasively shaped, yet none calls undue attention to itself. I especially like the unfussy elegance of the famous oboe solo in the slow movement, which is expressive in a subtly understated way that ensures effectiveness. In short, I simply don’t know a more delightful version of this lovely work.

At a total playing time of twenty-nine minutes, though, the symmetry surely could have been accommodated on a single side instead of being split for turnover after its second movement, with only the ten-minute Jeux d’Enfants suite as filler. Now that Philips’ list price is nearly ten dollars, this is an optimistic economic consideration as well as a matter of deep concern. The first movement of the suite (Marche) is a little aggressive, but the rest is delicious. 

BLISS: Sonata for Viola and Piano (see VAUGHAN WILLIAMS)

In the slow movement, which is eloquent, the orchestra is at the very top of its form, balances are impeccable, and the sound itself is unusually clean; the sound itself is first-rate in terms of balance, presence, and overall vividness. The whole production, which includes exemplary notes by Michael Steinberg, strikes me as surely the most enjoyable way to have Dvořák’s Op. 65 in recorded form.

—Richard Freed
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CIRCLE NO. 9 ON READER SERVICE CARD

RECORDING OF SPECIAL MERIT

BRAHMS: Piano Concerto No. 1, in D Minor, Op. 15. Garrick Ohlsson (piano); London Philharmonic Orchestra, Klaus Tennstedt cond. ANGEL SZ-37568 $8.98, @ 424-37568 $8.98.

Performance: Excellent
Recording: Good

This is a marvelous performance, fully as satisfying as those by Gilels and Jochum (Deutsche Grammophon 2530 258), Solomon and Kabelik (Turnabout THS 65110), and Rubinstein with Reiner (RCA ARL1-2044). Garrick Ohlsson, I think, has as much individuality as these illustrious predecessors', and he shows as much apparent affection for this sometimes hard-to-love work. The big, dramatic sections come off convincingly because they are utterly free of bluster; there's an impression of vast amounts of strength held judiciously in reserve. And too, sentiment is held in check in the adagio, to similarly ennobling effect. There is a good deal of unselconscious poetry in Ohlsson's playing, and in Klaus Tennstedt, whose Brahms is as interesting as his Mahler, he has a partner who is with him every step of the way in realizing the truly symphonic proportions of the work. The recording itself is generally good, being especially rich through-out the long first movement, but in the last movement the richness thins out and the strings tend to sound a bit strained and blunted. Nevertheless, this is a most distinguished release, as reasonable a candidate as any for first choice among the recordings of Brahms' First Concerto.


Performance: Con amore
Recording: Richly resonant

If we are to take the listing in the fifth edition of Grove's Dictionary as gospel, violinist Salvatore Accardo and the Leipzig Gewandhaus Orchestra under Kurt Masur have given us thus far nine out of the ten works that Max Bruch composed for violin and orchestra. Only the Op. 85 Romanza is lacking. I wish I could say that this series has produced some major rediscoveries, but, to my taste at least, Bruch never again achieved the level of inspiration of his celebrated G Minor Concerto. The one possibly viable Bruch rediscovery of the so-called Romantic Revival has been the Two-piano Concerto, of which two recordings are now available.

Nonetheless, it is clear that one could not ask for a more persuasive advocate of these lesser works than Accardo, who boasts both superb technique and true romantic ardor, combined with flawless taste, in his playing. In the Third Violin Concerto, the slow movement, lengthy though it is, has the best music. The broodingly meditative Romance also offers some prime examples of the Bruch lyrical style at its best. The Adagio Appassionato is an effective virtuoso vehicle, as is the mazurka-like finale of the concerto. The opening movement of the latter, though, I find rather labored and thin. The collaboration of Masur and his Leipzig players is absolutely first-rate, and the recorded sound is excellent.


Performance: Cool and clean
Recording: Intimately scaled

These two carefully crafted discs demonstrate, to my satisfaction at least, that analog taping and mastering today can produce results not audibly inferior to direct-to-disc or digitally taped recordings.

My taste, the 45-rpm disc from Reference Recordings is the more successful, chiefly by virtue of a beautifully voiced and regulated piano (Steinway) in combination with a first-rate microphone setup in an excellent acoustic environment (Royce Hall at UCLA). As is made plain in the jacket notes, an equal measure of tender loving care was applied through every stage of recording, mastering, and production. Steven Gordon's performance (using the Warsaw Chopin Institute's Paderewski Edition) is conscientious, yet warm and vital. Both his pianism and the sonic excellence of the recording appear to best advantage in the feathery scherzo and the great slow movement, in which subtle differentiations of touch and coloration are given unusual attention. The finale gets a real virtuoso treatment.

Sonar Records has gone at its Chopin undertaking with equal care but has elected to stick with the usual 33 1/3-rpm LP format, the Leonard Bernstein pianist Daniel Epstein to give us three smaller pieces in addition to the A Minor Sonata. Everything here is on a smaller scale than on the Steven Gordon disc. The room in which the recording was made seems much smaller and Epstein's reading cooler and more rhythmically cool, though these latter impressions may be produced as much by the acoustics as the actual performance. Certainly the piano sound does not match the richness of the Gordon disc. Interpretively, the high points in Epstein's performance are the drive and urgency he brings to the final movement of the sonata and his volatile handling of the E Major Scherzo.

RECORDING OF SPECIAL MERIT

CORELLI: Concerti Grossi, Op. 6. 1 Musici. PHILIPS 6770 023 three discs $29.94, © 7650 023 $29.94.

Performance: Vintage I Musici
Recording: Sumptuous

One does not judge Corelli's concerti grossi; rather, they judge the listener. After all, they

(Continued on page 124)
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CIRCLE NO. 31 ON READER SERVICE CARD
were and still are considered the paragon of Baroque taste. Corelli's taste is not to be questioned; it was exquisite, and the proportions of the music are divine. Now to the performances.

Musici is at its best here, playing cleanly with a silken tone and luminous texture. Their interpretations are logical, and they pace each concerto as a single piece rather than a series of isolated movements. Thus, though Corelli's musical language is admittedly somewhat limited, each concerto has its own special flavor. Listening to all twelve brings constant variety and surprise.

Musici's attitude toward authentic performance practice is neatly summed up in the closing paragraph of the booklet that accompanies this set: "The modern bow's possibilities of sustaining notes and of expressiveness have overcome the defects of the Corelli bow, thus rendering the abuse of floriture in the slow movements unnecessary." A few ornaments have sneaked in, but there is certainly room for more. The continuo is authentically used; in the concerti per chiesa an organ is used for the ripieno and a harpsichord for the concertino; in the concerti per camera a harpsichord is used for both groups. The contrast in the concerti per chiesa is stunning and very well captured in the recording. As for dynamics, all of Corelli's are strictly adhered to. (There is, however, a dynamic mannerism that becomes galling after a bit: a crescendo is applied to all rising sequences and descending ones invariably get a diminuendo.)

All in all, this is a fine addition to the Corelli catalog. The string playing is tops, and Corelli's ebullient music comes off wonderfully well.

S.L.


Itzhak Perlman (violin); Pinchas Zukerman (viola); Lynn Harrell (cello). COLUMBIA M 35152 $8.98.

Performance: Charming
Recording: Clean but unbalanced

As Peter Eliot Stone points out in his liner notes to this charming album, the string trio was an eighteenth-century item that disappeared for a hundred years and has reappeared only in this century. Ernst von Dohnányi's trio is dated 1904, but, except for a few minor details, it could have been written many years earlier. It is, to put it mildly, Brahmsian. It is also a bit Beethovenian. Like the Beethoven Op. 8—that composer's best-known (and once popular) work in this medium—the Dohnányi serenade begins and ends with a march theme and features a theme and variations, not to mention other similarities.

Dohnányi or Beethoven, is very profound; unlikely as it may seem, the principles—string or with piano—were a kind of popular chamber music. It is the reputation of the players and the ease and charm of their delivery that will count for most listeners. But the recording of the Beethoven, in particular, is heavily overbalanced toward the violin.

E.S.

RECORDING OF SPECIAL MERIT


Performance: Superb
Recording: Very good

Continuing his ambitious project of recording all the piano sonatas of Jan Ladislav Dussek (1760-1812), Frederick Marvin here offers a third volume of fascinating works revealing this Bohemian composer's rich and varied musical language. Ranging from the smoldering drama of the early G Minor Sonata to the sentimental romanticism of the late E-flat Sonatas, these pieces are filled with haunting melodies, daring harmonies, and bravura pianism.

Marvin has evolved a perfect Dussek style. Yielding to the sentimentality of much of the melodic writing, he is not afraid to caress a phrase, lovingly lingering at its climax and pulling it back into shape at just the right time. Added to this is a keen sense of pianistic coloring, subtle dynamic control, and an ability to hold a structurally sprawling work together. The only thing lacking is the degree of sparkles needed for Dussek's drawn-out passages of jeu perlé, but this is a minor flaw in the face of Marvin's overall superb musicianship. There are many more sonatas to come, and if future recordings are on a par with this one, the complete series will be a monumental achievement.

D.H.
to encounter this composer. It is especially welcome because *Dies Natalis*, surely the best-known of Finzi's works, has not been represented on records in this country since Everest deleted the all-too-briefly circulated disc on which it was conducted by Christopher Finzi, the composer's son (SDBR 3365, with Imogen Holst conducting her father's Choral Fantasia and Psalm 86 on the other side). That earlier performance was perhaps a bit more animated in some sections, to the benefit, but this new version is handcrafted precisely accomplished and beautifully recorded—and it is available now.

The text of *Dies Natalis* is drawn from the autobiographical and poetical works of Thomas Traherne, a seventeenth-century writer few of us would know about except for Finzi's interest in him. A motet on another of Traherne's texts in 1924, some fifteen years before *Dies Natalis* was completed. The somewhat later For St. Cecilia (1947) was commissioned jointly from Finzi and his contemporary Edmund Blunden, one of whose poems he had set as a song in 1931. A Cecilian ode is a festive affair, and this one has its share of fanfares (recalling, quite agreeably, the general feeling and coloring of Walton's coronation march *Crown Imperial*), but it is in the main a lyrical, even contemplative work, merely framed by the ceremonial gestures, and it is in these lyrical passages that Finzi's own voice is most clearly heard.

Richard Hickox conducts both works with real sensitivity; Philip Langridge gives a fine account of himself, as do the orchestra, the chorus, and the recording engineers. Anyone who thinks he might be interested to encounter this composer. It is a must. If not, the record is a must anyway, because it will surely win you over to a magnificent instrument and some magnificent music.

S.L.

**HAYDN: Armida.** Jessye Norman (soprano), Armida; Claes H. Ahnsjö (tenor), Rinaldo; Norma Burrowes (soprano), Zelmira; Samuel Ramey (bass), Idreno; Robin Leggate (tenor), Ubaldo; Anthony Rolfe Johnson (tenor), Clotario. Lausanne Chamber Orchestra, Antal Dorati cond. **PHILIPS 6769 021** three discs $29.94.

**Performance:** Very good

**Recording:** Excellent

I read with some astonishment in the informative and altogether admirable annotations for this release that *Armida* (1783) received more performances in the princely theater at Eszterháza than any other Haydn opera. The adventures of the crusading knight Rinaldo and his infatuation with the sorceress Armida had, of course, long fascinated composers, beginning with Lully and continuing through Handel, Gluck, Haydn, and Rossini all the way to Brahms. Haydn's treatment of the subject is, however, singularly untheatrical. Nothing much happens in his *Armida*, and the hero's (?) endless vacillation between his crusading mission and his seemingly pleasing state of enthrallment ultimately becomes tiresome. On stage, Armida would be a hopeless affair, but on records the musical enjoyment is considerable. Haydn lacked the innate dramatic gifts and sense of balance of Gluck (to say nothing of Mozart), but Armida has a number of grateful and virtuosic arias, a few (too few) ensembles, some strikingly powerful dramatic recitatives, and orchestral writing that is pretty marvelous throughout.

The performance here deserves all praise, as does Philips' endeavor to bring all of Haydn's operas to records. Antal Dorati and the first Lausanne ensemble could hardly be bettered: they bring the music to life with vigor and brilliance. Jessye Norman's singing seems to have taken on a stronger dramatic intensity, and she has rarely been heard in such voluptuous vocal form. A more dramatic and assertive voice than Claes Ahnsjö's would have been desirable for Rinaldo's music, but Ahnsjö laudably copes with most of its requirements. Norma Burrowes and the Messrs. Leggate and Johnson are very good in their smaller roles, and Samuel Ramey is downright superb in his. Armida's cause is proudly served by the forces assembled here.

**G.J.**

**RECORDING OF SPECIAL MERIT**


**Performance:** Masterly

**Recording:** Superb

Beethoven referred to Mauro Giuliani as "the divine Giuliani." Contemporary Londoners were so impressed that they founded the first guitar magazine in English and called it the *Giuliandia*. According to said journal, he was "the Paganini of the guitar," a statement amply proved by the pyrotechnics in his writing. The two Rossiniane offered on this album are among the grand tradition of operatic medleys—spatially scaled, ingeniously constructed, full of dramatic contrast, and delightful to hear. The variations, as one would expect, achieve a brilliance that is dazzling. The theme by Handel is none other than *The Harmonious Blacksmith*, and, if it may be somewhat sacrilegious, Giuliani did far more with it than Handel did.

Angel Romero's performance is superb. Especially masterly is the range of tonal coloration he achieves in passages ranging from sheerly melodic to convincing transcriptions of Rossini's ubiquitous crescendos. Besides possessing a fantastic technique, Romero is also a sensitive musician. His phrasing is finely wrought, the music is beautifully paced, and the rhythmic control is propelling. If you have a taste for either Rossini or the guitar, or both, this disc is a must. If not, the record is a must anyway, because it will surely win you over to a magnificent instrument and some magnificent music.

S.L.
I have always had a soft spot in my heart for Morton Gould’s Latin-American Symphonette. In my opinion, it is as masterly a piece of dance stylization in twentieth-century terms as any from the comparable eighteenth-century repertoire. The languorous Tango movement is a classic of its kind, and the piece as a whole is absolutely made to order for advanced recording technology. Now Varese Sarabande has released a digitally mastered recording of it, along with several other works by Gould, in a topflight London Symphony performance led by the composer.

The plinks, clicks, rasps, and booms of the Latino percussion battery to be heard here are an audiophile’s delight. But, as I’ve often noted in past reviews of digital/analog discs, it is the quiet moments that are the most telling. Listen, for instance, to the hushed reprise of the Tango and savor not only the overtone components of the plectral and percussive sounds but also their exquisite lateral and depth localization. The very popular third movement, Guaracha, which follows the Tango, offers a similar example of quiet fidelity, though in a brasher musical context. The more ambitious end movements come off magnificently. I used to consider the Conga finale noisy and insubstantial, but here it is musically convincing. This can be ascribed not only to Gould’s superb conducting (this is his first recording of the work) but also to the producers’ first-rate job of microphone placement in an ideal recording locale (Watford Town Hall in a suburb of London). The timpani and bass drum are placed fairly well back and not allowed to overpower the rest of the orchestra.

One of the other works on the disc, Festive Music, which was first performed in 1965, receives its recording première here. Its three movements are in turn proclamatory, lyrical, and assertive, the middle one being imbued with a telling eloquence. There is an important solo role for offstage trumpet, and it is beautifully played by Maurice Murphy.

Overtones of America’s Gay Nineties are blended with amusingly satiric bits in Philharmonic Waltzes, which was written in the late Forties for a New York Philharmonic pension-fund benefit. Like that of the Symphonette, this is its first recording by the composer. The Cotillion from Fall River Legend and the Quickstep from the Symphony on Marching Tunes are both stylized pieces of Americana, in Gould’s own brilliant manner, of a type to be heard also in scores by Aaron Copland and Roy Harris. The London Symphony is in top form throughout, and I don’t think I have ever heard Gould conduct with more vitality and communicativeness.

It is interesting to compare this disc sonically with another of Gould’s advanced-technology recordings of his own music, Crystal Clear’s direct-to-disc release with the London Philharmonic playing two of my favorites, the Spirituals for Orchestra and Foster Gallery (CCS 7005). That too has great sound, but I find the string balance decidedly better in terms of presence on the Varese Sarabande disc. My one quibble with the new recording concerns a touch of muddiness in the low percussion in the Festive Music. This is possibly a consequence of a more reverberant ambience used to provide the deeper acoustic perspective needed for the offstage trumpet. In any event, this is a release that can be ranked with Telarc’s Cleveland Orchestra Pictures at an Exhibition and the new Delos recording of the Haydn and Hummel trumpet concertos by Gerard Schwarz (reviewed elsewhere in this issue) as among the finest products yet from the new digital recording technology.

—David Hall

GOULD: Latin-American Symphonette; Fall River Legend, Cotilllon; Festive Music; Philharmonic Waltzes; Symphony on Marching Tunes, Quickstep. London Symphony Orchestra, Morton Gould cond. VARESE SARABANDE © VCDM 1000.10 $15.

recorded go at these two works, both conductor and orchestra are in fine fettle, and the EMI/Angel production crew seems to have learned how to get the best out of the Philadelphia Opera House recording locale. The sound generated by the Philadelphia strings in the opening pages of the neo-Baroque Concert Music has the enormous richness we have come to associate with them. It appears that Ormandy has bent every effort into achieving, with strings and brass alike, the most richly burnished sonority possible, even to the extent of placing the opening movement somewhat more deliberately than Hindemith himself did in his 1958 recording (still available on Seraphim). The second, fugue-textured movement, with its characteristic ascending three-note brass figure, goes at a livelier clip and comes off brilliantly. The Weiberian jeu d’esprit also goes very well indeed, with some outstanding solo flute work in the variation movement. Most important, Ormandy brings out to the full not only the music’s high spirits, but its humor as well. The recording job is altogether outstanding in sonic richness, excellence of stereo localization and depth illusion, presence, and wealth of detail, all of it captured in proper proportion.

D.H.

LISZT: Consolation No. 3; Mephisto Waltz No. 1 (see SCHUMANN)

RECORDING OF SPECIAL MERIT

MAHLER: Symphony No. 4, in G Major (see SCHUMANN)

RECORDINGS OF SPECIAL MERIT

MOUSSORGSKY: Pictures at an Exhibition (see STRAVINSKY)

RECORDINGS OF SPECIAL MERIT

MOZART: Flute Concerto No. 1, in G Major (K. 314); Flute Concerto No. 2, in D Major (see BEST OF THE MONTH, page 81)
There are by now so many excellent recordings of the Mozart flute concertos (including two or three different ones by Rampal and two or three different ones by Galway) that the discophiles interested in this music can hardly go wrong. Flute fanciers, indeed, may find themselves irresistibly attracted to six or eight such packages, with the two listed here definitely among them. Aurèle Nicolet is surely one of the most elegant practitioners we have, and in David Zinman he has a most sympathetic partner (Zinman provided the cadenzas for the lovely K. 315 Andante, by the way). The orchestral playing and the sound are both splendid. The Pickwick disc, though, imported from England by Quinsigress at less than half the Philips price, is even more striking. There is a magic in the playing here—a unanimity of outlook enhanced by a stimulating give and take between soloist and orchestra—that is not, I think, to be found in any other recordings of these concertos, including Galway's own slightly later one with Rudolf Baumgartner and the Lucerne Festival Strings (RCA ARL1-2159). I do not regard myself as a flute-fancier especially, but this is a record I would have to own no matter how many other recordings of the concertos I might have already.

R.F.
clearity in Stockholm's Engelbrekt Church, is a powerful one, and the orchestral collaboration is first-rate throughout. I still cherish, however, the 1962 Angel recording with soloist Maurice Durufle, who gave the work its world premiere.

Jehan Alain (1911-1940) died during World War II at the age of twenty-nine, but he left an extensive body of organ and piano compositions, of which the Litaniæ for organ has become a favorite showpiece. The Suite for Organ offered here dates from the composer's twenty-third year and was the first work to earn recognition for Alain's exceptional gifts. Blending post-Impressionist and post-Franckian styles, it displays masterly craftsmanship and brilliantly effective scoring. The performance by Kjell Johnsen is excellent. The liner notes are in Swedish and French, with a précis in English and a catalog of Proprius discs presently available from AudioSource.

D.H.

RACHMANINOFF: Barcarolle and Humoresque, Op. 10, Nos. 3 and 5 (see SCHUMANN)

RESPIGHI: Concerto Gregoriano. Kurt Stichler (violin); Leipzig Radio Symphony Orchestra, Ernest Borsansky cond. BERIOT: Scène de Ballet, Op. 100, Carl Taschke (violin); Leipzig Philharmonic Orchestra, Herbert Kegel cond. VARESE SARABANDE VC 81090 $7.98.

Performance: Fluent Recording: Dated, Beriot better

Respighi's Concerto Gregoriano has not been entirely neglected—there have been a few performances of the work in this country in recent years—but it can hardly be described as well known, and this recording, originally issued here on the Urania label in 1953, seems to be the only one since the beginning of the microgroove era. The concerto was composed in 1921, a few years after The Fountains of Rome but before The Pines and Feste Romane. While it documents Respighi's fascination with Gregorian chant, it shares to a large degree the grandiose character of the better-known tone poems; in the second and third movements especially, it might have been a model for the scores for various Hollywood Biblical epics. Although the performance recorded here is fluent and even impassioned, the work strikes me as the sort of thing one wants to hear once out of curiosity and is not too eager to return to. Nonetheless, it was a worthwhile salvage job on Varese Sarabande's part, even if the sound very much shows its age.

Charles-Auguste de Beriot (1802-1870), the patriarch of the Belgian violin school, seems not to have been represented on records since Urania deleted this recording of his Scène de Ballet in 1960. It is an engaging if not particularly memorable little showpiece, rather in the manner of the numerous operatic fantasies and "paraphrases" of Beriot's time but apparently built wholly on original material. The performance has all the panache needed to put such a piece over, and the sound, two years fresher than that of the Respighi, stands up pretty well. R.F.

SAINT-SAËNS: Samson et Dalila. Elena Obraztsova (mezzo-soprano), Dalila; Plácido Domingo (tenor), Samson; Renato Bruson (Continued on page 132)
Fact: five new Shure Cartridges feature the technological breakthroughs of the V15 Type IV

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There are many good qualities in this third stereo version of *Samson et Dalila*. Recorded during the 1978 Orange Festival in France, it breathes the aura of a well-tuned ensemble, with a first-rate chorus, and the orchestra responds to its regular conductor with fiery and sensuous sounds. As for the technical side of the recording, it is rich-sounding and filled with revealing nuances, though the overall perspective is not the most lifelike imaginable, probably because of the acoustic qualities of Orange’s Théâtre Antique National.

Above all, it is the presence of Plácido Domingo that may make this the preferred version of the opera for many fans. Domingo, blessed with a sensitivity and legato technique that are beyond the capabilities of his recorded competitors, is in full and vibrant vocal form, and his Samson is convincing in both his heroism and his vulnerability. There are good contributions from Pierre Thau, the only French singer in the cast, though both Renato Bruson and Robert Lloyd handle the text with laudable expertise. The former is somewhat lacking in the sinister quality the High Priest ought to have, but his vocalism is above criticism, and the latter sings the part of the Old Hebrew with good style and impressive sonority down to a fine sustained low E.

While I find Barenboim’s leadership impressive in many ways, particularly in the closing scene of Act II, the Bacchanale, and the rest of the third act, some of his tempo choices are questionable: the pace set for Dalila’s first two arias seems too slow, as is that for the Dance of the Priestesses in Act I, and the duet between Dalila and the High Priest (“Il faut, pour assouvir ma haine”) sounds rushed. But the set’s main drawback, I am afraid, is Elena Obraztsova, a frequent Priest and the duet between Dalila and the High Priest ought to have, but his vocalism is above criticism, and the latter sings the part of the Old Hebrew with good style and impressive sonority down to a fine sustained low E.

While I find Barenboim’s leadership impressive in many ways, particularly in the closing scene of Act II, the Bacchanale, and the rest of the third act, some of his tempo choices are questionable: the pace set for Dalila’s first two arias seems too slow, as is that for the Dance of the Priestesses in Act I, and the duet between Dalila and the High Priest (“Il faut, pour assouvir ma haine”) sounds rushed. But the set’s main drawback, I am afraid, is Elena Obraztsova, a frequently exciting but vocally coarse singer whose Amazon-like stance militates against the character’s sensuous allure. Aside from her uneven tone production and frequent lapses from pitch, how can we accept the plausibility of the Biblical tale when Dalila sounds more martial than Sosmon?

Of the three versions in the catalog, Angel S-3639 offers the best Dalila in Rita Gorr, and if you admire Jon Vickers’ heroic-sounding, tortured, and non-legato Samson, that is the version you should get. The version on RCA ARL3-0662, with Christa Ludwig and James King in characteristic form, is also a strong one, but for many the excellence of Plácido Domingo in the present set is likely to be the decisive factor, the shortcomings of the Dalila notwithstanding.

G.J.

### SCHNITTEK: Concerto Grosso for Two Violins, Harpsichord, Prepared Piano, and Strings (see SIBELIUS)


**Performance:** Frustrating  
**Recording:** Edgy and dryish

This looked like an imaginative coupling and an appropriate encore after Boulez’s fine four-disc set of Webern’s music (Columbia M4 35193), but listening proved to be a frustrating experience, and the frustration was compounded each time I went back with new hope. In Boulez’s earlier recording of *Verklärte Nacht*, in the work’s original sextet version (Everest SDBR 3170), the imposition of a conductor on so small a group may have accounted for the relatively stiff, juiceless performance, but it was consistent in its course and, on its own terms, musically quite satisfying. In the more sumptuous-sounding string-orchestra version, Boulez has the juices flowing, but there is a lot of gear-shifting, with glaring contrasts between sections of impassioned commitment and others of time-killing blandness. Since this record represents our only opportunity at present to obtain Berg’s orchestral setting of his *Lyric Suite* outside Karajan’s four-disc Schoenberg/Berg/Webern collection (Deutsche Grammophon 2711 014), it is especially disappointing to report that this side, too, fails to be very convincing. Boulez makes every strand clear, but he seems to me to miss the boat in what is, especially in the first of the three movements, essentially romantic and expressive music. The sound is almost achingly dry on this side and edgy in spots in the Schoenberg. All that is consistently enjoyable about this release is Benjamin Folkman’s annotation, which is especially illuminating on the Berg work.

R.F.

### SCHUBERT: *Der Hirt auf dem Felsen; Auf dem Strom; Lieder* (see Collections—Elly Ameling)

### SCHUBERT: Lieder (see Collections—Leon-tyne Price)


**Performance:** Solid  
**Recording:** Exceptionally handsome

A $28 price tag for a recording of the Schubert *Great C Major Symphony* is a stiff ante indeed. Of course, it was digitally mastered and is spread out over four sides, the latter a tactic that may be a necessity at present to avoid the sort of pre-echo I have found on
some other digitally mastered discs. There is
not a trace of pre-echo here, and the record-
ing is so fine as to suggest an exceptionally
tactured to sound of a full classical
symphony orchestra. I don’t think I’ve heard
another orchestral recording quite this weight-
ty and so imbued with presence.
On the other hand, although this East
Berlin orchestra is a very decent and capable
aggregation under conductor Heinz
Rößger is not a Furtwängler or Toscanini.
In terms of both interpretation and fine per-
formance detail, this Schubert Ninth is not
on a particularly elevated plane. What we get
is a good, solid reading, unmanneled for the
most part but with a slow movement in which
the con moto element seems to have been left
out. If you buy this album, you buy it for the
sound. D.H.

**SCHUMANN**: *Humoreske*. Op. 20. RACH-
Humoresques, Op. 10, No. 5. LISZT: *Consola-
tion No. 3*. Mephisto Waltz No. 1. Vladimir
Horowitz (piano). RCA AR 1-3433 $8.98,
© ARK 1-3433 $8.98.

**Performance**: Bardic

**Recording**: Hard piano sound

Robert Schumann’s *Humoreske* is not as well
known as other parts of that delirious series of
compositions that make up his first twenty-
three *opera*. In competition with such famous
music as the *Carnaval*, the *Fantasiestücke*,
the *Sinfonie C*, the *Noveletten*, the
*Kinderszenen*, the *Kreisleriana*, and so on, it
is perhaps not surprising that some things
would be overlooked. And the *Humoreske*
may suffer from its name; we all remember
Dvořák’s *little* witty. But Schumann’s *Hu-
morese* is a major twenty-five-minute work on
the order of the *Kreisleriana*, and it is in
that panoply form that Schumann seems
to have invented. It is like a series of tales
connected both in a dramatic way and by the
recurrences of certain ideas and sections.
This is bardic music, and it is perfect for
Vladimir Horowitz, who plays the piano the
way a great storyteller tells stories.

*Barcarolle* and *Humoresques* is much
closer to the familiar notion of a playful little
piece, but it does have a certain *diablerie*.
Its contrast with the attractive *Barcarolle* here
is obviously meant to parallel the Liszt pairing;
Horowitz can be a neat programmer. The
*Mephisto Waltz* is also a storytelling piece
but with theatrical embellishments, and, as if
Liszt’s own embellishments weren’t enough,
Horowitz adds some of Busoni’s and a few of
his own. I would call this performance
brilliant and a bit brittle.

The record comes from the series of
semipublic concerts that Horowitz has been
giving for the express purpose of recording.
There is no doubt that there is a great deal
more power in these live performances than
there would be in a studio session, but the
piano sound strikes me as hard.

E.S.

**SCHUMANN**: Symphony No. 3. in E-flat
Major, Op. 97 (“Rhenish”). The Bride of
Messina Overture, Op. 100. Philharmonia
Orchestra, Riccardo Muti cond. *Angel* □
SZ-37603 $8.98.

**Performance**: Virile

**Recording**: Excellent

This disc opens with the virtually unknown
overture that Schumann composed for Schil-
ler’s tragic drama, and Riccardo Muti gives it
a taut and forceful reading that makes the
most of its many fine pages which include a
tension-laden introduction and an exception-
ally lovely lyrical clarinet episode. The same
approach prevails throughout much of the
*Rhenish* Symphony. It seems somewhat over-
aggressive, although less so in four-channel
playback. The intensity of the outer move-
ments, and a measure of relieving contrast in
the gentler treatment and judicious rubato
Muti brings to the third movement. The
recording is vivid and full-bodied. D.H.

47. SCHNITTE: Concerto Grosso for Two
Violins, Harpsichord, Prepared Piano, and
Strings. Gidon Kremer, Tatjana Grindenko
(violins); London Symphony Orchestra, Gen-
raly Rozhdestvensky cond. *Vanguard*
VSD-71255 $7.98.

**Performance**: Schnitke brilliant

**Recording**: Schnitke better

Latvia-born Soviet violinist Gidon Kremer
has been a steadfast champion of *contempo-
rary* Soviet music, and the *Concerto Grosso*
by Alfred Schnitke (b. 1940) offered here
seems to me an excellent example of the “new
paths” being pursued by such postwar Soviet
composers as Boris Tischchenko (b. 1939),
Sergei Slonimsky (b. 1932), Rodion Schedin-
drin (b. 1932), and Edison Denisov (b. 1929).
This generation appears not only to have
thrown “Socialist Realism” into the dustbin
of history but also to have treated it with
a good dose of sarcastic laughter. Indeed, a
tone of sarcasm and parody à la the very
young Shostakovich prevails through much of
the highly entertaining Schnitke piece
which is very zestfully performed here by all
concerned. The work also has echoes of
Pendererecki, John Cage, and the neo-Baroque,
plus collage elements including irreverent
quotations from Corelli, Bach, and Tchai-
kovsky. It remains to be seen whether the
music of this new generation will measure up
to the best of Prokofiev and Shostakovich, but
at least it has provided a strong breath of
fresh air and much needed humor.

In the Sibelius concerto Kremer projects
an inner-directed vision of the music that is
quite different from the customary virtuoso
approach. I was impressed from the very start
with both the sweetness of his violin tone and
the purity of his intonation. He truly excels in
the slow movement, though he seems less
comfortable in the extroverted finale.
Regrettably, although the Schnitke is both
played and recorded excellently, the Sibelius
suffers from a lackluster orchestral accompa-
niment in the outer movements and an exces-
sively reverberant, unbalanced recorded
sound. (In some of the solo passages, it
sounds as if Kremer were pacing back and
forth on the stage.)

D.H.

**R. STRAUSS**: *Songs* (see Collections—Le-
tyne Price)

**STRAVINSKY**: The Firebird, Suite. MOUS-
SORGSKY: Pictures at an Exhibition. Robin
McCabe (piano). *Vanguard* VSD-71264
$7.98.

**Performance**: Strong

**Recording**: So-so

Robin McCabe is the young pianist from
Puayllup, Washington, whose career from

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Two of dubious origin (in at least one case, the cosmic scheme of things is not great. Ms. The Firebird music is no exception, although piano, and his music nearly always sounds ballet score. Stravinsky composed on the tion (by Guido Agosti) of the last third of the Pictures, which she plays with real force and Crowell, Progress, 

Despite this, the performance is noteworthy. Although the trio sonata was by far the most popular type of chamber music during the Baroque era, comparatively few of them have been recorded, and fewer still are to be heard in the concert hall. Perhaps the reason for this is that the typical trio sonata was Hausmusik designed to be played by amateurs (with good technique, let it be added) for their own enjoyment. The genre simply does not translate well to public performance because too much of its intimacy evaporates in such an ambiance.

As might be expected, Telemann wrote bucketfuls of trio sonatas, the ten in this album being a mere drop in one bucket. Considering that many of the Telemann trio sonatas published today are hack work at best, the performers on this album have gathered together a collection of remarkably high quality. These are all strong works, with many moments of great beauty and a constant display of wit, elegance, and ingenuity. The variety is amazing, and one never feels that formula is eclipsing fresh invention.

The beauty of this performance lies in the combination of authentic instruments. The recorder and Baroque violin are perfectly matched; each has its own distinctive timbre, but they balance flawlessly, allowing one to hear the two individual lines weaving their intrinsic patterns. They are supported by a lush but never obtrusive continuo that marks the harmonic progress. Alice Harnoncourt and Kees Boeke are equally well matched. They think alike musically and play their instruments easily, employing all the mannerisms of the period. Of course, the sound takes a little getting used to, especially the flat and sometimes scruffy tone of the violin, but after an inch of side one, the players are accepted and one listens within the framework of a truly Baroque sound palette.

This is certainly one of the finest recordings of trio sonatas available. And there are so many more! We desperately need a complete Corelli set, and what about Handel's Op. 5, certainly one of the best sets ever composed? I hope this record will start something. S.L.

RECORDING OF SPECIAL MERIT

Performance: Dazzling
Recording: Rich

Both of these splendid works were composed in the early 1930s for the famous English violist Lionel Tertis (who died five years ago, a month before Bliss, at the age of ninety-eight). Both are fully idiomatic, in terms of both the viola and the respective composers, and neither could ask for a more sympathetic or persuasive performance than Emanuel Vardi and his young keyboard associate give on this richly recorded disc. It is nowhere mentioned in the book that Vaughan Williams actually composed his eight-move-ment suite for viola and orchestra; it is time we had a recording of the work in its original form, and I hope RCA can be persuaded to make its recent one with Frederick Riddle available in this country. But Vardi's playing

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Performance: Port
Recording: Pithy

Although the trio sonata was by far the most
is on so high a level that this version does not seem in any sense a substitute or compromise, and in the more dramatic Bliss sonata he brings off a dazzling tour de force that is definitely in the service of the music, which needs just such a performance to encourage the circulation the work deserves.

R.F.

VERDI: Rigoletto (see Best of the Month, page 78)


FEBRUARY 1980

WAGNER: Tristan und Isolde: Prelude and Liebestod. Tannhäuser: Overture; Dich, teure Halle; Elisabeth's Prayer. Montserrat Caballé (soprano); Strasbourg Philharmonic Orchestra, Alain Lombard cond. RCA ARL1-3351 $8.98, @ ARK1-3351 $8.98.

Performance: Good

Recording: Very good

I admit having approached this release with some misgivings. It bears the title “Caballé Sings Wagner,” and she does indeed—part of the time. Actually, there are only eighteen minutes of Caballé on the disc, though twenty-four minutes are devoted to the Tristan prelude and the Tannhäuser overture, neither of which really cries out for a new version. But my annoyance soon passed. Alain Lombard’s readings of the purely orchestral music (and of the Liebestod as well) have some less than inspired moments, but on the whole they are effective and well executed, and Caballé is in close to her top vocal form. She captures Isolde’s glorious final moments movingly, and, though she lacks the thrusting sound we usually associate with “Dich, teure Halle,” the vocal image she projects in the two Tannhäuser arias fits the character of Elisabeth perfectly. Her pronunciation of the German text is reasonably clear, but she misreads one word in “Dich, teure Halle.” The recorded sound is good, and RCA deserves a special word of praise for the immaculate disc surfaces.

J.G.

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GERARD SCHWARZ is both trumpet soloist and conductor on two digitally mastered Delos releases that are, to my ears, among the very finest achievements, musically and sonically, yet to result from the new recording technology. "The Sound of Trumpets" offers Baroque repertoire and "The Classic Trumpet Concerti" works by Haydn and Hummel; it is hard for me to imagine their being surpassed musically, and sonically they are as close to perfection as we can get short of an all-digital disc.

Schwarz is, of course, one of the best trumpet virtuosos around, and he also has the taste and historical knowledge to deal brilliantly with the problem of ornamentation in Baroque music. Moreover, on the evidence of these recorded performances, he is a first-rate conductor. He is accompanied on both discs by the Y Chamber Symphony of New York, which consists of some forty of the city's finest free-lance instrumentalists. They play together under Schwarz's direction at the 92nd Street YW-YMHA, and in the last couple of years he has honed the group to a level of finesse and flexibility comparable to that of a great string quartet. On three of the pieces in "The Sound of Trumpets," Schwarz is joined by other members of the New York Trumpet Ensemble, a topnotch group of players.

Both discs were recorded in the same ideal locale, New York's Masonic Temple Auditorium, and the production team has performed flawlessly in terms of microphone placement and mixing. The stereo "imaging"—spread, localization, depth illusion—could not be better. The balances and dynamics are just right, and both room ambiance and the trumpet overtones are captured accurately. The digital tape mastering by Soundstream, the disc mastering by JVC, and the plating and pressing by the Victor Company of Japan are all first-rate.

The Baroque disc includes a couple of musical/sonic super-spectaculars: gorgeously ceremonial pieces by Altenburg and Biber in which antiphonal trumpets (totaling seven and eight, respectively) are set against the chamber-size string ensemble, with timpani supplying the appropriate rhythmic punctuation. Contrast is provided by the more lyrical works by Torelli, Vivaldi, and Telemann with their Italianate agilità. One could enumerate felicitous details of performance or interpretation in these latter pieces endlessly: for instance, the marvelous ornamentation in the Torelli sonata, the brilliant execution of the finale of the Vivaldi concerto, and the delightful echo effects in the second movement of the Telemann concerto.

As for the two Classical concertos, I just can't see how they could be played better. There are terrific verve and finesse in both the solo and the ensemble work, and for the first movement of the Haydn Schwarz has worked up a cadenza that simply must be heard to be believed, if only for the aplomb with which he tosses it off. The Hummel concerto is played here in its original key of E major, and this performance for me adds several cubits to its musical stature. It is a fascinating amalgam of Classical convention and a Romantic element normally associated with the early Schubert symphonies. Schwarz and his players outdo themselves in the rondo-finale with its dazzling coda.

What it all adds up to is two discs with the best available performance and sound in some marvelously enjoyable music. Need I say more? —David Hall


Performance: Artistic
Recording: Good

The accordion as a serious musical instrument? You bet. There are two or three accordionists at large in this country who can make some classical instrumental superstars look to their laurels. I've had the pleasure of working with one of them, William Schimmel, over a period of years, and I can testify that, in the right hands, the accordion can be a highly artistic and expressive instrument.

Robert Davine has one of those right hands (a good left one too) and a musical head as well. The problem all accordionists have is with repertoire, however, and this record is no exception. The best music here is in David Diamond's Night Music and in two folkloric pieces, Gart's wonderfully Russian Vivo and an ultra-Hungarian piece by Matyas Seiber, a composer better known for his twelve-tone works. These are the pieces that use the instrument in the most creative and effective way, and Davine knows exactly how to take advantage of his opportunities. At any rate, a recording of twentieth-century music for the accordion is, just by its very existence, something else. Let us hope that such performers as Davine and Schimmel will create or stimulate a whole new repertoire for their instrument and rescue it from its won't-you-dance-the-polka kitsch image.

E.S.


Performance: Exquisite singing
Recording: Fair

Now here is a confused record, the confusion brought on, I would guess, by the unresolved question of just what sort of record it is meant to be and whose. On the cover is a picture of beautiful Carole Farley, but the title is "And Vienna Dances." Dances? To a group of soprano arias? The title is in quotation marks too, but it is a quotation of none of the lyrics sung on the album, and so one wonders not only what it is doing there but what it is. The nearly unreadable liner notes offer no enlightenment on the matter. Those are merely the externals.

The record itself begins with a Kostelanetz instrumental (there are four such altogether), and by the time Carole Farley gets into the act, one is already convinced that Kostelanetz has no love for music of this ilk and that the orchestra is there only for the union scale. Truly, I have heard more sympathetic performances from outdoor bands at seaside resorts. The pity of this is that Farley at times sings absolutely exquisitely: I cannot even imagine the Countess Maritza excerpts being sung better. She may not
come by the style naturally, but clearly she has learned how it is supposed to go. Maritza is a long way stylistically, if not graphically, from Lucrezia, the role in which Farley has achieved a major critical success, but it is obvious that with the right sort of musical encouragement she could become a great singer in a great operetta tradition.

Meanwhile, underneath the luscious singing, and framing it on all sides, the band plays on, technically proficient but really quite vulgar. The record also shows evidence of engineering lapses in the splicing from take to take, with a different acoustical ambiance and a different level of tape hiss. Kostelanetz has not been around all these years without making some genuine contributions to the recorded literature. It's really too bad that this was not one of them, because anyone interested in the repertoire really too bad that this was not one of them, Four very unusual groups of songs make up 35139 $8.98. Three Songs Dedicated to Andalusian Cital.


Performance: Flavorful Recording: Very good

Four very unusual groups of songs make up this recital, all apparently receiving their first recordings. The Aztec songs collected by the contemporary Mexican composer Salvador Moreno are primitivist, incantatory, and quite fascinating. The songs of Julian Bautista (1901-1961), with lyrics by Federico García Lorca, are in the Falla vein and contrast sharply with the posthumously published Albéniz songs, which take on an Italian coloration to go with their sentimental lyrics about love, death, and remembrance. The Sephardic Songs of Rodrigo embrace a prayer, a love song, a lullaby, and one too brief to fit into any category.

Victoria de los Angeles brings to this highly specialized repertoire an abundance of sensitivity, charm, and temperament, but also a voice that has lost a great deal of its once prodigious range, color, and expressiveness. That her singing can still give pleasure is a tribute to her enormous artistry and resourcefulness. But her all too careful tone production and indistinct pronunciation fall far short of the high standard to which she has accustomed us through the years. The lively and stimulating pianism of Geoffrey Parsons is a notable asset.

G.J.

YOLANDA MARCOULESCOU: Great Opera Arias (see Best of the Month, page 80)

LEONTYNE PRICE: Lieder by Franz Schubert and Richard Strauss. Schubert: Die Junge Nonne. Nacht und Träume. Liesebotschaft; Ave Maria; Gretchen am Spinnrade; Mignon. Lied II; Die Allmacht. R. Strauss: Morgen!; Seitdem Dein Aug'; Heimkehr; Befreit; Als Mir Dein Lied Er-

This is an unusually demanding program engaging every facet of a recitalist's art, and Leontyne Price carries it off most impressively. If I find the Schubert side the more satisfying of the two it is because the seven Schubert songs are all winners. Few singers could ever match the lovely legato Price brings to Ave Maria and Nacht und Träume or the muted intensity of her Die Junge Nonne. Liesebotschaft, though well sung, lacks naturalness, and Die Allmacht, with its wide range and weighty utterance, is problematic for any soprano without Flagstad-like resources.

The Strauss songs are less even in quality, but Price responds to the best of them (Morgen!; Breit' über Mein Haupt, and Cäcilie) with all the expressiveness at her command. Cäcilie, in fact, with its powerful climax beautifully realized, makes for an imposing end to a recital that will give a great deal of pleasure, not the least of which is the artist's wondrously radiant top register. My main reservation is that, while a high degree of artistry is always in evidence, spontaneity at times is missing. This is emphasized by a recorded sound that is clean but distant. David Garvey is a praiseworthy accompanist.

G.J.

(Continued on page 141)

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Performance: Enthusiastic Recording: Mighty impressive

As the title indicates, this album is aimed at audiophiles, particularly those who have subwoofers. The organ, in Atlanta's Cathedral of Christ the King, is one of the biggies from Italy's Fratelli Ruffati, and to this enormous sound source is added the twelve-man Atlanta Brass Ensemble, which includes a couple of percussionists. The decay time and resonance characteristic of the cathedral space are ideal for the forces employed—no Mammoth effects here—and the Copland Fanfare makes a fine opener. New to discs is the Salute by the late Sir Arthur Bliss, an effective bit of ceremonial stuff by the Master of the King's Music to commemorate the centennial of Royal Albert Hall.

Least effective of the works recorded here is Richard Morris' arrangement of a little-known Brahms sacred song. But Morris makes up for it with his spectacular organ-brass-percussion arrangement of the famous Eugène Gigout (1844-1925) showpiece. The less said about the thrice-familiar Bach Toccata and Fugue in D Minor the better, for Moriss races through it as if he feared the direct-to-disc cutters were going to run out of groove space. All things considered, this is less a musical than an audiophile production, but it is a mighty effective one. D.H.
FEBRUARY 1980

**Stereo Review**

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**Simels Live**

By Steve Simels

**Gregory Fleeman and the Fleewomen**

"FOLK" MUSIC

There's been a lot of yammer lately about a sort of neo-folk revival, supposedly centered in New York City. Loose talk of this sort apparently stems from people's noticing that both the Roches and Steve Forbert got their starts playing clubs in Manhattan, and actually seem to be selling records, though not yet in such a manner as to reduce the wave of low-level firings at the major record labels. It also makes me slightly uncomfortable: connections between Forbert and the Roches are fairly tenuous stylistically, and in any case the whole notion of a folk "revival" flies in the face of reason. As Lester Bangs rightly pointed out in the January issue, folk music in the Sixties sense (people like Dylan, Eric Anderson, Judy Collins, and so on) never went away at all. It all just changed, for a while, into singer/songwriter or country drag. Hence James Taylor and Willie Nelson.

Nevertheless, there's no disputing that at least in terms of commercial activity the Greenwich Village club circuit is healthier than it's been in a long time, and given the success of the Roches and Forbert, one can assume that a few of the other icons of the scene will probably be snatched up by the majors in short order. Especially if Forbert's third album goes platinum, which is a pretty safe bet. Face it: the record companies, like the TV networks, are suckers for anything that smells like a trend. Whereas six months ago they were signing any jerk with a disco that smells like a trend. Whereas six months ago they were signing any jerk with a disco...
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