RHYTHM AND BLUES: A BASIC LIBRARY OF A BASIC MUSIC
SUCCESS STORY: THE REMARKABLE TOKYO QUARTET

EQUIPMENT TEST REPORTS:
- Carver C-4000 Sonic Holography/Autocorrelator Preamplifier
- Fisher CR-4025 Stereo Cassette Deck
- SAE Model 180 Parametric Equalizer
- Shure/SME Series III Tone Arm
- Sherwood S-7650 Stereo Receiver

LAS VEGAS SHOW REPORT: THIS YEAR'S NEW EQUIPMENT
Most speaker companies try to impress you by describing the "wonderful" sound that comes out of their speakers. At Pioneer, we think the most believable way to describe how good HPM speakers are is to tell you what went into them.

**THE HPM SUPER Tweeter:**

**SPEAKER TECHNOLOGY RISES TO NEW HIGHS.**

In many speakers, you'll find that the upper end of the audio spectrum is reproduced by an ordinary tweeter. In HPM speakers, you'll find that the high frequencies are reproduced by a unique supertweeter. It works by using a single piece of High Polymer Molecular film, (hence the name HPM) that converts electrical impulses into sound waves without a magnet, voice coil, cone, or dome.

And because the HPM supertweeter doesn't need any of these mechanical parts, it can reproduce highs with an accuracy and definition that surpasses even the finest conventional tweeter. As an added advantage, the HPM film is curved for maximum sound dispersion. So unlike other speakers, you don't have to plant yourself in front of an HPM speaker to enjoy all the sound it can produce.

**MID-RANGE THAT ISN'T MUDDLED.**

For years, speaker manufacturers have labored over mid-range driver cones that are light enough to give you quick response, yet rigid enough not to distort. Pioneer solved this problem by creating special cones that handle more power, and combine lower mass with greater rigidity. So our HPM drivers provide you with cleaner, and crisper mid-range. Which means you'll hear music, and not distortion.

**WOOFERS THAT TOP EVERY OTHER BOTTOM.**

Conventional woofers are still made with the same materials that were being used in 1945. Every woofer in the HPM series, however, is made with a special carbon fiber blend that's allowed us to decrease the weight of the cone, yet increase the strength needed for clarity. So you'll hear the deepest notes exactly the way the musician recorded them.

And because every HPM woofer also has an oversized magnet and long throw voice coil, they can handle more power without distorting.

**OTHER FEATURES YOU RARELY HEAR OF.**

Every HPM speaker has cast aluminum frames, instead of the usual flimsy stamped metal kind. So that even when you push our speakers to their limit, you only hear the music and never the frames. In fact, our competitors were so impressed, they started making what look like die cast frames, but aren't. HPM speaker cabinets are made of specially compressed board that has better acoustic properties than ordinary wood.

Their speakers have level controls that let you adjust the sound of the music to your living room. And these features are not just found in our most expensive HPM speaker, but in every speaker in the HPM series. All of which begins to explain why, unlike speakers that sound great on only part of the music, HPM speakers sound great on all of it.

At this point, we suggest you take your favorite record into any Pioneer Dealer and audition a pair of HPM speakers in person. If you think what went into them sounds impressive, wait till you hear what comes out of them.


CIRCLE NO. 85 ON READER SERVICE CARD
WHAT COMES OUT OF A SPEAKER IS ONLY AS IMPRESSIVE AS WHAT GOES INTO IT.
It was inevitable...

With all the rapid developments being made in today's high fidelity technology, the tremendous advance in audible performance in Empire's new EDR.9 phono cartridge was bound to happen. And bound to come from Empire, as we have been designing and manufacturing the finest phono cartridges for over 18 years.

Until now, all phono cartridges were designed in the lab to achieve certain engineering characteristics and requirements. These lab characteristics and requirements took priority over actual listening tests because it was considered more important that the cartridges "measure right" or "test right"—so almost everyone was satisfied.

Empire's EDR.9 (for Extended Dynamic Response) has broken with this tradition, and is the first phono cartridge that not only meets the highest technological and design specifications—but also our demanding listening tests—on an equal basis. In effect, it bridges the gap between the ideal blueprint and the actual sound.

The EDR.9 utilizes an L. A. C. (Large Area Contact) 0.9 stylus based upon—and named after—E. I. A. Standard RS-238B. This new design, resulting in a smaller radius and larger contact area, has a pressure index of 0.9, an improvement of almost six times the typical elliptical stylus and four times over the newest designs recently introduced by several other cartridge manufacturers. The result is that less pressure is applied to the vulnerable record groove, at the same time extending the bandwidth—including the important overtones and harmonic details.

In addition, Empire's exclusive, patented 3-Element Double Damped stylus assembly acts as an equalizer. This eliminates the high "Q" mechanical resonances typical of other stylus assemblies, producing a flatter response, and lessening wear and tear on the record groove.

We could go into more technical detail, describing pole rods that are laminated, rather than just one piece, so as to reduce losses in the magnetic structure, resulting in flatter high frequency response with less distortion. Or how the EDR.9 weighs one gram less than previous Empire phono cartridges, making it a perfect match for today's advanced low mass tonearms.

But more important, as the EDR.9 cartridge represents a new approach to cartridge design, we ask that you consider it in a slightly different way as well. Send for our free technical brochure on the EDR.9, and then visit your audio dealer and listen. Don't go by specs alone.

That's because the new Empire EDR.9 is the first phono cartridge that not only meets the highest technological and design specifications—but also our demanding listening tests.

Empire Scientific Corp.  
Garden City, N.Y. 11530
The Equipment

NEW PRODUCTS
Roundup of the latest audio equipment and accessories .......................... 18

AUDIO NEWS
You, Me, and the FCC .................................................. GARY STOCK ........................ 30

AUDIO QUESTIONS AND ANSWERS
Turntable Troubles, Quality Loss, Nonlinear AM ................................. LARRY KLEIN ......................... 36

AUDIO BASICS
Signal Processing—2 ................................................. RALPH HODGES ....................... 40

TAPE TALK
Meters vs. Electronic Indicators ................................................. CRAIG STARK ......................... 42

TECHNICAL TALK
Audible Differences .................................................................. JULIAN D. HIRSCH .................. 45

EQUIPMENT TEST REPORTS
Hirsch-Houck Laboratory test results on the Carver C-4000 Sonic Holography
Auto correlator preamplifier, Fisher CR-4025 stereo cassette deck, 
SAE Model 180 parametric equalizer, Share/SME Series III tone arm, 
and Sherwood S-7650 stereo receiver ........................................... JULIAN D. HIRSCH .................. 46

LAS VEGAS AUDIO SHOW
A preview of what the coming year in audio will bring ...................... RALPH HODGES ....................... 79

The Music

BASIC LIBRARY OF RHYTHM-AND-BLUES
Tracing the development of a significant American musical style .......... PHYL GARLAND ............... 72

A VISIT WITH THE TOKYO STRING QUARTET
"... the Juilliard showed us the best side of quartet playing" .......... ALLAN KOZINN ...................... 88

BEST RECORDINGS OF THE MONTH
Yougi Egorov’s Schumann ................................................. 93
Scoto and Domingo: Opera Duets ............................................. 94
Dire Straits: Subby Original .................................................. 94
June Christy: “Impromptu” ................................................... 95

CLASSICAL DISC,classical TAPES
Stunning Monteverdi ................................................................ 99
A Quartet of Chopinists ......................................................... 100

POP ROTOGRAVURE
A Little Barber Festival ........................................................ 115

POOP ROSTOGRAVURE
Boo!toun Rats: “Tonic for the Troops”, .................................. 121
Marvin Gaye: “Here, My Dear” .............................................. 122
Blues Brothers: “Briefcase Full of Blues” .................................. 124
Voyage: “Fly Away” ................................................................ 126

CLASSICAL DISCS AND TAPES

POPULAR DISCS AND TAPES

BULLETIN ......................................................................... WILLIAM LIVINGSTONE ........ 5

LETTERS TO THE EDITOR ................................................. WILLIAM ANDERSON ........... 8

GOING ON RECORD .......................................................... PAULETTE WEISS ............... 68

ADVERTISERS’ INDEX ....................................................... JAMES GOODFRIEND ........ 70

COVER © 1979 BY ZIFF-DAVIS PUBLISHING COMPANY. All rights reserved. Stereo Review, May 1979, Volume 42, Number 5. Published monthly by Ziff-Davis Publishing Company; Editorial and Executive Offices at One Park Avenue, New York, N.Y. 10016; Telephone: 212 725-3500. Philip B. Korsant, President; Furman Hebb, Executive Vice President; Selwyn Taubman, Treasurer; Philip Sine, Secretary. Also publishers of Boating, Car and Driver, Cycle, Flying, Popular Electronics, Popular Photography, Psychology Today, Skiing, Stereo Directory, and Tape Recorder Annual. One-year subscription rate for U.S. and possessions, $9.98; Canada, $10.98. All other countries, one-year subscription rate $14.98, cash orders only, payable in U.S. currency. Second-class postage paid at New York, N.Y. and at additional mailing offices. Authorized as second-class mail by the Post Office Department, Ottawa, Canada, and for payment of postage in cash. SUBSCRIBE SERVICE: Forces 3575 and all subscription correspondence should be addressed to Stereo Review, Circulation Department, P.O. Box 2771, Boulder, Colorado 80302. Please allow at least eight weeks for change of address. Include your old address as well as new—enclosing if possible an address label from a recent issue. Material in this publication may not be reproduced in any form without permission. Requests for permission should be directed to Jerry Schneider, Rights and Permissions, Ziff-Davis Publishing Co., One Park Avenue, New York, N.Y. 10016.
The first high-technology record cleaner was the Discwasher System. Four scientific revisions later, the Discwasher is literally years ahead of all other devices.

**WITH PRIORITY TECHNOLOGY:**
Discwasher D3 Fluid is proven by lab tests to be the safest active cleaning fluid for record care. But a good fluid is not enough. The Discwasher System is also a precision removal system that uses capillary action with slanted micro-fibers to lift dust, dirt, and dissolved debris off the record, rather than pushing them around like "dry" and "constant humidity" methods. The real dimensions of record care are safety plus integrated function.

**WITH PROVEN VALUE:**
The uniquely styled Discwasher handle is constructed of hand-rubbed walnut which will long outlast "plastic wonders". This easily held handle is lightweight because of an integral cavity which conveniently holds the D3 Fluid bottle. A special brush to clean the directional-fiber Discwasher pad is included without charge, and also fits inside the handle cavity.

**WITH GENUINE SATISFACTION:**
Only Discwasher gives immediate performance, long-term record safety, pleasing physical characteristics and a price that hasn't changed in five years.

Seek out the Discwasher System, by name. Only Discwasher delivers technology, value and satisfaction.

CIRCLE NO. 18 ON READER SERVICE CARD

**YOUR RECORDS DESERVE SUPERIOR CARE: SEEK OUT THE DISCWASHER® SYSTEM**
IN-WARRANTY REPAIRS TO AUDIO COMPONENTS may become subject to regulations imposed by many state legislatures, according to Lawrence Kanter of the Federal Trade Commission. In a speech at the recent Las Vegas Consumer Electronics Show, Kanter said that consumer electronic products are among the goods about which the FTC receives large numbers of complaints about in-warranty service. The FTC believes that this is because electronic service shops are inadequately paid by manufacturers for warranty work and therefore cannot afford to do a thorough job of servicing. Upcoming state regulations might require that manufacturers pay repair stations warranty rates equal to those charged for out-of-warranty work. Another possibility would be an FTC-mandated requirement that audio manufacturers disclose, as part of the warranty information they make available to the consumer, whether they are paying warranty repair rates that are below retail-level repair rates.

DISCO is now about 25 per cent of the United States' $4 billion annual record business, according to an estimate by Robert Summer, president of RCA Records. RCA's emphasis on disco has helped quadruple the company's profits to record levels since 1975, when disco first began to seize a meaningful share of the market.

ANGEL RECORDS' NEW AUDIOPHILE LINE, the 45 Sonic Series, consists of 12-inch, 45-rpm classical discs. Launched in April with a release of ten albums, the series contains such orchestral spectaculars as Gershwin's Rhapsody in Blue, Ravel's Boléro, Respighi's Pines of Rome, and Stravinsky's Firebird Suite. The works were chosen for their suitability for sonic demonstration, and the performances, which have previously been released on 33 1/3-rpm discs, have been remastered for the new series. Among the benefits Angel claims for the faster speed are greater volume and wider dynamic range. Playing time per record is about half that of a conventional LP. List price: $8.98.

MULTICHANNEL TV SOUND: The Electronic Industries Association (EIA) formed a special subcommittee in March to make technical recommendations for a system of broadcasting stereo TV sound. The recommendations will be submitted to the Federal Communications Commission. The EIA, an umbrella organization representing electronic manufacturers of all types, has long been active in advising the federal government on communications-related issues, submitting recommendations and studies on such subjects as stereo AM and FM quadraphonic broadcasting.

TRAVELING WITH A RADIO is a 360-page guide to 8,096 AM and FM radio stations in 3,323 cities and towns in the United States. Designed primarily for motorists, the book lists, in addition to dial settings, the maximum broadcast power, program format, and network affiliations of the stations. It also indicates which stations broadcast in stereo or four-channel. Available from Donnelly & Sons Publishing Co., P.O. Box 4152, Colorado Springs, Colo. 80930 for $5 postpaid.
NORTH AMERICAN STEREO AM BROADCASTS will probably originate with station CKLW in Windsor, Ontario, Canada. Approval for test broadcasts, which will try to determine the relative compatibilities of the five proposed stereo AM systems with existing mono receivers, has been obtained from both Canadian and U.S. governments. Depending on cooperation from the various system manufacturers, the transmissions could begin as early as mid spring. Station CKLW is a 50,000-watt facility broadcasting at 800 kHz with a reach that covers most of Michigan and parts of Ohio and Pennsylvania on good days.

LONDON RECORDS' FIRST DIGITALLY RECORDED RELEASE is a two-disc album by the Vienna Philharmonic conducted by Willi Boskovsky. Recorded live at the orchestra's New Year's Day concert this year, it includes Franz von Suppé's Beautiful Galatea overture and waltzes and polkas by Karl Ziehrer and Four Straussés (Johann Jr. and Sr., Eduard, and Josef). Bearing a new LDR logo (for London Digital Recording), the set is priced at $19.96.

THE SOCIAL NOTE OF THE SEASON: The irrepressible Nick Lowe (whose sequel to "Pure Pop for Now People" is expected momentarily) is reported ready to tie the knot with Carlene Carter, youngest member of the legendary Carter clan and an exceptional singer and songwriter in her own right. Carlene, by the way, will be assisted on her second album by Clover, the California pub band that provided the uncredited back-ups on Elvis Costello's "My Aim Is True."

THE MAGNAVISION VIDEODISC SYSTEM will be on sale in three stores in the Seattle-Tacoma region of Washington by April. The dealers chosen by Magnavox are Allied's Bon Marché, Frederick & Nelson, and Doces Home Furnishings. Except for Atlanta, where the Magnavision player and MCA videodiscs were introduced last December, Seattle and Tacoma are the only cities in the United States to have access to videodisc hardware and software. Magnavox has also announced six new dealerships in the Atlanta area. Both announcements suggest increased Magnavox video production.

MUSIC ON TV THIS MONTH includes a double header for strings on PBS May 8. It begins with Alexander's Bachtime (sic) Band, a documentary showing sixty-six gifted young music students under the tutelage of violinist and conductor Alexander Schneider playing three works by Bach. The Heifetz Concert which follows on most PBS stations is the TV "concert debut" of violinist Jascha Heifetz, originally aired on NBC in 1971. Heifetz plays works by Gershwin, Bach, Bruch, Mozart, Debussy, and Prokofiev. Check local listings.

DEBBIE HARRY OF BLONDIE (Stereo Review's March cover girl) appeared recently at New York rock club Hurrah as a back-up musician for underground avant-garde violinist Walter Stedding, apparently to appease the fans who consider her group's unexpected disco hit, Heart of Glass (Chrysalis), a crass commercial sellout. Ms. Harry contributed appropriately atonal noodling on (no fooling) trumpet. But can she play Carnival of Venice?
We've just improved every record you own.

Of course the new AT25 doesn't look like other stereo phono cartridges. It's entirely different. And not just on the outside. We've rethought every detail of design and construction. All in the interest of the smoothest, cleanest sound you've ever heard. The AT25 frequency response is utterly uniform. Definition and stereo separation are remarkable. Dynamic range is awesome. Even the most demanding digital and direct-to-disc records are more spectacular, more musically revealing.

But set our claims aside and listen. The AT25 is unexcelled for transparency and clean, effortless transient response. Individual instruments are heard crisply, without stridency even at extremely high levels. Even surface noise is less apparent.

The cutaway view shows you how we do it. Start with the coils. Just two, hand-wound in a toroidal (doughnut) shape. A unique shape which cuts losses, reduces inductance, and lowers impedance. The coils are wound on laminated one-piece cores which also serve as pole pieces. Again, losses are lower. Eddy current effect is also reduced. Which all adds up to superior transient response. It's like having the electrical performance of the finest moving coil designs, but with the high output of a moving magnet. The best of both worlds!

Each magnetic system is completely independent. No common circuits. We even add a mu-metal shield between the coils to insure no leakage between channels. Which results in stereo separation which must be heard to be believed. But there's more. An entirely new stylus assembly with one of the smallest whole diamond styli in series production. Only 0.09mm in cross section and almost invisible. It's nude-mounted and square-shank to insure exact alignment with the groove. And it's set in a Beryllium cantilever that eliminates flexing.

Instead of snapping into place, this stylus assembly is held rigidly to a precisely machined surface with a small set screw. A small detail which insures perfect alignment, no spurious resonances, and simple stylus replacement.

We treat cartridge shell resonances too, with special damping material applied to the top of the unique plug-in shell. The magnesium shell even has a calibrated adjustment for styli overhang to insure perfect installation.

The many technical differences between the new AT25 and every other stereo cartridge are fascinating... and significant. But the real difference is in the resulting sound. It's almost as if you had plugged your stereo system directly into the studio console. Every subtlety of artistic expression is intact, no matter how complex—or simple—the music, no matter how loud—or soft—the performance. It's as though a subtle barrier had been removed adding clarity and presence to every record you own.

A cartridge of this sophistication and high quality cannot be produced quickly. Initially the AT25 may be in short supply. But your patience will be rewarded with performance which will send you back through your record library to discover nuances you never suspected to hear. And you'll eagerly await the sonic splendors of tomorrow's digital recording techniques.

This outstanding performance is now available two ways: the direct plug-in AT25 and the standard-mount AT24. Either one will make every other component you own sound better, including your records!

We've just improved every record you own.

Of course the new AT25 doesn't look like other stereo phono cartridges. It's entirely different. And not just on the outside. We've rethought every detail of design and construction. All in the interest of the smoothest, cleanest sound you've ever heard. The AT25 frequency response is utterly uniform. Definition and stereo separation are remarkable. Dynamic range is awesome. Even the most demanding digital and direct-to-disc records are more spectacular, more musically revealing.

But set our claims aside and listen. The AT25 is unexcelled for transparency and clean, effortless transient response. Individual instruments are heard crisply, without stridency even at extremely high levels. Even surface noise is less apparent.

The cutaway view shows you how we do it. Start with the coils. Just two, hand-wound in a toroidal (doughnut) shape. A unique shape which cuts losses, reduces inductance, and lowers impedance. The coils are wound on laminated one-piece cores which also serve as pole pieces. Again, losses are lower. Eddy current effect is also reduced. Which all adds up to superior transient response. It's like having the electrical performance of the finest moving coil designs, but with the high output of a moving magnet. The best of both worlds!

Each magnetic system is completely independent. No common circuits. We even add a mu-metal shield between the coils to insure no leakage between channels. Which results in stereo separation which must be heard to be believed. But there's more. An entirely new stylus assembly with one of the smallest whole diamond styli in series production. Only 0.09mm in cross section and almost invisible. It's nude-mounted and square-shank to insure exact alignment with the groove. And it's set in a Beryllium cantilever that eliminates flexing.

Instead of snapping into place, this stylus assembly is held rigidly to a precisely machined surface with a small set screw. A small detail which insures perfect alignment, no spurious resonances, and simple stylus replacement.

We treat cartridge shell resonances too, with special damping material applied to the top of the unique plug-in shell. The magnesium shell even has a calibrated adjustment for styli overhang to insure perfect installation.

The many technical differences between the new AT25 and every other stereo cartridge are fascinating... and significant. But the real difference is in the resulting sound. It's almost as if you had plugged your stereo system directly into the studio console. Every subtlety of artistic expression is intact, no matter how complex—or simple—the music, no matter how loud—or soft—the performance. It's as though a subtle barrier had been removed adding clarity and presence to every record you own.

A cartridge of this sophistication and high quality cannot be produced quickly. Initially the AT25 may be in short supply. But your patience will be rewarded with performance which will send you back through your record library to discover nuances you never suspected to hear. And you'll eagerly await the sonic splendors of tomorrow's digital recording techniques.

This outstanding performance is now available two ways: the direct plug-in AT25 and the standard-mount AT24. Either one will make every other component you own sound better, including your records!
AESTHETICAL UNEMPLOYMENT

While tending, as Elvis used to say, to business a few weeks back, my eye fell upon this headline in the record-industry newsweekly *Billboard*: “CBS and WEA Profits Sag.” Since Columbia and the Warner Communications family of labels together account for something like a third of the discs sold in this country, I read on to see why. The reasons given were several: a strike; increased manufacturing, advertising, and promotional costs; and lagging sales in the second half of 1978, the year of the “sag.” But I did not see among them the observation that neither Columbia nor Warners has been exactly at the heart of the disco market which is lately estimated to make up a hefty 25 per cent of domestic record sales.

Like the Grammy Awards (see Steve Simels’ comments on page 148), Columbia and Warners are Johnnies Come Lately to disco, having vainly waited some five years for the “fad” to go away, five years during which a number of small independent labels were having, so to speak, a ball. How is it that all those high-powered, visionary, with-it talent scouts, public-pulse feelers, and market experts managed to miss out on the Next Big Thing (which disco surely is) until it was almost too late? Well, there are, first of all, the penalties of gigantism: a slower reaction time, cumbrous movement, and, particularly, a long period of gestation (the elephant spends eighteen months in utero). But more to the point is the considerable power of a vested interest: rock. Almost two decades of incumbency have solidified the grip of the rock generation on the repertoire policies of most of the major record companies. During this period, a-&-r men (and women), publicists, and even a few executives earned their merit badges as arbitri elegantiarum, rock division, by out-predicting earlier seers who mistakenly thought that pop music had reached its apotheosis in the art of, say, Miles Davis, Los Indios Tabajaras, and the Anita Kerr Singers. None of these office holders are going to give up their positions without a fight, particularly for a music they neither like nor understand.

In time, however, they will have to surrender to a new generation of pop-music manipulators: young disco jockeys, who speak an exotic technical lingo still in the process of being invented, are already making their way into recording studios to do things the “old timers” cannot. But where will they all go, these casualities of aesthetic change? Some few of the more flexible, more professional studio workers will doubtless weather this storm as they have others, but many can not (or will not) make the leap into disco and will simply (though not without bitterness) leave the music industry. The more business-minded will make their way into the executive suite, whence they will be in a position in future to decree “revivals” for rock as their predecessors have done in the past for jazz. And finally, the more articulate will talk their way into academia, either as “oldie-goldie” radio disc jockeys or as accredited classroom pundits. There they may be able to make common cause with the jazz specialists, perhaps even with the ethnomusicologists (when you get right down to it, rock is a kind of folk music). But they will not have an easy time of it. They will be at the bottom of the pecking order in a society where the infighting and backbiting of the record industry will seem mere child’s play, and they will be competing with another group of displaced persons—the unassimilable rock critics—who are even more articulate than they.

Though I do have opinions about all the music this discussion has been dancing around, I have kept them resolutely apart. That resolve does not forbid my pointing out a moral, however. It concerns the Peril of Excessive Contemporaneity: he who lives 100 per cent in the present has no future.
Era IV begins! The new Shure V15 Type IV phonograph cartridge is an altogether new phono cartridge system that exceeds previous performance levels by a significant degree — not merely in one parameter but in totality. The Type IV offers:

- Demonstrably improved trackability across the entire audible spectrum.
- Dynamically stabilized tracking overcomes record-warp caused problems, such as fluctuating tracking force, varying tracking angle, and wow.
- Electrostatic neutralization of the record surface minimizes clicks and pops due to static discharge, electrostatic attraction of the cartridge to the record, and attraction of dust to the record.
- An effective dust and lint removal system.
- A Hyperelliptical stylus tip configuration dramatically reduces both harmonic and intermodulation distortion.
- Ultra-flat response — individually tested.

V15 Type IV
Super Track IV
Stereo Dynetic® Phono Cartridge

For complete details on this remarkable new cartridge write for the V15 Type IV Product Brochure (ask for AL569) and read the exciting facts on the V15 IV for yourself.

CLASS CONSCIOUS

Peter Reilly’s March reviews of “The As-taire Story” (not my cup of tea) and, especially, Barbra Streisand’s “Greatest Hits, Volume II” (I can take it or leave it) were so beautifully written that I was once again reminded of the plain class of the material in Stereo Review. I really only care about what Mirella Freni or Placido Domingo or Kiri Te Kanawa have done lately, but when the prose comes out like Mr. Reilly’s I’ve got to write in with congratulations. I’ll even forgive you for the blonde in tights on the cover!

RON MEYER
Kirkwood, Mo.

INCOMPATIBLE VIDEOCDS

Ivan Berger’s and Gary Stock’s “Audio/Video News” articles on the various approaches to videodisc recording (August 1978 and March 1979) were excellent. Unfortunately, the way the various manufacturers are going about choosing a standard format is very reminiscent of the way they approached the market with quadraphonics several years ago. Are they going to ruin a good thing again by introducing incompatible equipment? I would like to see the Magnavox optical-pickup system adopted, since the old needle-in-a-groove method of extracting information from discs would seem to be a step backward rather than forward.

LARRY BERGENSON
Racine, Wis.

BASIC REPERTOIRE

I would like to thank Stereo Review for undertaking the task of publishing and regularly updating The Basic Repertoire. I have just bought a stereo system, and choosing records has become almost as important to me as choosing the right components. Although I had made some poor selections (because I had no prior knowledge about orchestral recordings), I am sure that I can rely in the future on Richard Freed’s recommendations in The Basic Repertoire. I was pleased to find that some of the records I had selected on my own were on his list. The booklet is especially helpful in pointing out good budget-price recordings. If you lived in Hawaii you’d be shocked by our record prices!

JERRY M. YOUNG
Honolulu, Hawaii

See the announcement of the updated 1979 edition of The Basic Repertoire on page 135.

POP’S DADA

In Steve Simels’ review of Bryan Ferry’s “The Bride Stripped Bare” in the March issue there is a reference to Ferry’s “Marcel Duchamp Meets Ronald Coleman intellectual lounge-lizard act.” Who is Marcel Duchamp? And what is a lounge lizard?

TOM COSTELLO
Anaheim, Calif.

Marcel Duchamp is a gentleman who descends staircases slowly; a lounge lizard reclines on the last step and watches him.

HIRSCHFELD

I was thrilled to see theatrical caricaturist Al Hirschfeld’s portrait of Beverly Sills on the cover of the February Stereo Review. Is Hirschfeld represented by a gallery? I would like to see more of his work.

SHIRLEY WEINBAUM
Poughkeepsie, N.Y.

Al Hirschfeld does indeed have a gallery: he is represented exclusively by the Margo Feiden Gallery, 51 East 10th Street, New York, N.Y. 10003. We are told that they have more than fifty years of his work on permanent display.

CARLENE CARTER

I was glad that Stereo Review’s critics and editors gave Carlene Carter’s debut album an honorable mention in the 1978 Record (Continued on page 14)
Behold! Our new ZX—this is not transportation...this is
a love affair. This is a car you never let near the car wash. This is
a car you tip the parking attendant so you can park it yourself...
a car that turns heads as quickly as cameras. This is a car you
write a new license plate for. This is the sensuous new ZX...so intimate, so
thrilling...you'll take the long way home.

The new ZX is a sports car with moves you've never seen.
They come from a furious fuel-injected six-cylinder engine; fully
independent suspension; power disc brakes all around; a
sensitive power steering system that keeps you in
touch with the road (standard on the 2+2 Coupe);
and bury radials at all four corners. The performance
runs torrid...the quality runs deep. We've fitted
doors to frame, buckets to body, carpets to floor
with nary a tolerance for error. A superb example of perfection
with fuel-injected value. It is...AWESOME!
Richard Freed’s February “Best of the Month” review of Klaus Tennstedt’s recording of the Mahler First was a remarkable testament indeed. I cannot recall another evaluation in print of an active conductor’s work that was so adulatory, and to call Tennstedt “an absolute master” seems almost reckless.

Readers who have actually heard Tennstedt in performance, however, know that such praise is not excessive. The apparently instinctive sense of phrasing, pacing, and continuity noted by Mr. Freed has contributed to the overwhelming success of many of his concerts. In the last few years the American Midwest has enjoyed Tennstedt’s work on a fairly regular basis, with repeated appearances in Cleveland, Detroit, and Cincinnati, and at the Blossom and Meadowbrook summer festivals. A limited correspondence circle has developed to keep interested concert-goers apprised of forthcoming Tennstedt engagements.

Richard Freed
Springfield, Ill.

Klaus Tennstedt
- Richard Freed’s February “Best of the Month” review of Klaus Tennstedt’s recording of the Mahler First was a remarkable testament indeed. I cannot recall another evaluation in print of an active conductor’s work that was so adulatory, and to call Tennstedt “an absolute master” seems almost reckless.

Readers who have actually heard Tennstedt in performance, however, know that such praise is not excessive. The apparently instinctive sense of phrasing, pacing, and continuity noted by Mr. Freed has contributed to the overwhelming success of many of his concerts. In the last few years the American Midwest has enjoyed Tennstedt’s work on a fairly regular basis, with repeated appearances in Cleveland, Detroit, and Cincinnati, and at the Blossom and Meadowbrook summer festivals. A limited correspondence circle has developed to keep interested concert-goers apprised of forthcoming Tennstedt engagements.
Sound to the left of you. Sound to the right of you. Sound from behind you. The Bose Model 601 Direct/Reflecting speaker.

Six drivers—two woofers and four tweeters—are precisely positioned within each enclosure to radiate sound in many directions. And fill the room with music.

So no matter where you stand or sit in a room, you hear accurate stereo balance. And accurate location of each instrument.

You hear every musical note with clarity and precision. From the highest strings of a violin to the deepest thump of a bass drum.

Sound is reflected off the walls and ceiling of the room, as well as directly to you. The result? A proper balance of reflected and direct sound... like that you hear at a live performance.

Plus, the Bose 601 can be driven with amplifiers from 20 to 150 continuous watts per channel.

The Bose Model 601 Direct/Reflecting speaker. Surround yourself with sound.

Better sound through research.

100 The Mountain Road, Framingham, MA 01701
Covered by patent rights issued and pending. Cabinets are walnut veneer.
Power can be a wonderful thing in an amplifier—if the manufacturer doesn’t have to trade off too much to achieve it. A car that is powerful and fast is worthless if it isn’t also safe! Speaking of speed, how fast is fast in an amplifier? A fast slew rate will certainly reduce high frequency distortion. (Having spearheaded the technology in that area, we are well aware of the benefits of a speedy amplifier.) But if a manufacturer seize on slew rate as a “hot button” and sacrifices other critical design parameters, then speed, in and of itself, becomes a handicap rather than a benefit.

So instead of a race for speed or power per dollar, we prefer goosebumps per dollar. Because that has to do with music. And somewhere in the cacophony of claims for a tad less of this and a lot more of that, the music must be served. For it is the beautiful sweep of the strings, the bite of the brass, the crescendo that reaches deep into your musical consciousness and moves you to goosebumps that makes you buy high fidelity equipment in the first place. Without goosebumps, specifications are just a bunch of scribbles on paper.

At Harman-Kardon, ultra wideband response for more open sound, the reduction of transient intermodulation distortion (TIM) and interface intermodulation distortion (IIM) by the minimal use of negative feedback and a slew (no pun intended) of other new understandings about high fidelity have been used in a totally balanced way to achieve the sound we get. No “hot buttons” here. Indeed, we believe the sound room is as important as the laboratory, that the music you hear is what counts—not the din of advertising claims. That’s why when you buy one of our products, you get exactly what you pay for. More performance per dollar. More music per dollar. And more goosebumps!

For more information, visit your Harman-Kardon dealer and pick up a free colorful brochure entitled “What Makes Harman-Kardon Sound Better.” Or write to Harman-Kardon, 55 Ames Court, Plainview, N.Y. 11803

harman/kardon
Hear all the music.

55 Ames Court
Plainview NY 11803
few moments a privileged answer to the question of what the great castrati singers of the first two centuries of opera actually sounded like: thrillingly, hair-raisingly incredible.

So, too, Nyiréghyázi, the last of another line, is a kind of pipeline down time's corridor, one that permits us some idea of what the great piano virtuosos of the nineteenth century sounded like. The answer, for those who care to listen, is again hair-raising. The experience will be closed to those who cannot listen through the static of a couple—nay, fistful!—of missed notes and beyond the (now) scandalous liberties those virtuosos customarily took with the music they played. More's the pity, for they will then never be able really to comprehend the almost hypnotic hold Liszt and others had on their audiences. The listening isn't easy, but suspend disbelief and it will be rewarding: there is no one else today who plays in this tradition, not even me.

Columbia's second album of Nyiréghyázi (his first was reviewed in our October 1978 issue by Music Editor James Goodfriend) has just been released (M 35125), and I recommend to all audiophiles, particularly for the performances of Grieg's Der Hirtentum and Tchaikovsky's Waltz in A-flat Minor, heterodoxial as all get-out, but a very definition of waltz rhythm nonetheless. (Nyiréghyázi, by the way, recently brought to an end his tenth marriage.)

Young Masters

- In Peter Reilly's January review of Billy Joel's "52nd Street," he said that the album "belongs in any serious collection of young pop masters." I wonder if Mr. Reilly has ever sat down and made a list of other albums in that category.

Peter Reilly replies: You won't wander too far off the mark if you check into the work of Janis Ian, Randy Newman, Peter Allen, Don MacLean, Harry Nilsson, the McCarrige Sisters, Jimmy Webb, James Taylor, Jimmy Buffett, and, perhaps more variably, Arlo Guthrie. All these artists are working within a continuum, so it would be misleading to recommend any particular albums.

Hafler "Quad"

- Richard Marlen's outrage, in February "Letters to the Editor," over Ralph Hodges' column on the Hafler ambiance decoder ("Audio Basics," December 1978) is uncalled for. I have used this system, in the form of the Dyna Quadrotor, for about seven years, and I know the good things it does. Many stereo records come through with believable ambiance, though some do produce quad "ping-pong" effects. Binaural recordings decode believably, sometimes to better effect than with their intended headphone listening. The best effect, though, the system constitutes a significant step forward in fidelity to the original performance. And the bonus is that dynamic range seems to expand with no actual increase in volume; depth perspective is improved too.

It's amazing that this concept hasn't caught on. It's like the giveaway matchbook, which you can get anywhere, costs nothing, and works exactly as it is intended to. But some people still prefer fancy, gold-plated lighters to do the same thing.

CARLOS E. BAUZA
San Juan, Puerto Rico

- My thanks to readers David Green and, especially, Richard Marlen, whose February letters rattled my cage and got me to reread Ralph Hodges' "Pseudo Time Delay" article. The diagram he provided revealed that my own setup could easily be adapted for pseudo time delay, and the result has been to transform my stereo room (which my wife calls her dining room) into a mini music hall.

DONALD H. CAMPBELL
Reading, Pa.

- I find it both amusing and frustrating to see the reader interest as (illustrated in "Letters to the Editor") in the David Hafler "pseudo-quad" or "pseudo time-delay" hookup. It's amusing because I first read about Hafler's circuit in Ralph Hodges' fantastic original article in the April 1971 STEREO REVIEW. Within minutes I had hooked up a couple of extra speakers and was overwhelmed by the result. I haven't returned to two-speaker stereo since.

It's frustrating because this indicates that quadraphony has become nothing more than a curiosity to many. Most quad records were deleted two years ago or more, and so far as I know there are no longer any quad amplifiers or decoders (except perhaps one or two quite expensive models) readily available. It's true that at its worst quad made classical music sound very unnatural and that the new time-delay systems provide sound closer to that of a concert hall. However, these systems are very expensive, and a sensibly used Sansui QS decoder will always provide more natural concert-hall sound than simple stereo. With popular music the difference between quad and stereo is even more dramatically apparent, since these days there's no such thing as a "natural-sounding" pop recording anyway.

It's a travesty that quad was allowed to die just because the manufacturers (except Angel and a few smaller labels) stopped making quad records. Special records aren't even necessary, because with all the out-of-phase recordings quad and stereo will produce a dramatic effect even with only two channels.

DAVID M. DOLAN
South Pasadena, Calif.

Metric Lesson

- "Tape Recording: A Short Primer" in the March issue contains the statement (pages 75-76) that tape-deck head gaps are "measurable in microns (millions of an inch) . . . . A micron is a millionth of a meter, or about 40 millionths of an inch. Many modern heads do in fact have gaps as small as 1 micron.

NORMAN BREMER
Ithaca, N.Y.

Technical Editor Ralph Hodges replies: Mr. Bremer is entirely correct about the definition of "micron." and we regret the error. But his concluding statement needs some qualification. A 1-micron head gap is adequate for a cassette-deck play head, but it is a little narrow for a head combining both the record and play functions.

MAY 1979 17

FREE details ... A DIFFERENT KIND OF RECORD CLUB

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

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

Look at these benefits:

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

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

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

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

Discount dividend certificates Dividend Gifts—Every shipment carries a dividend gift or dividend certificate. Certificates redeemable immediately for extra discounts.

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

Discount Accessory Guide Diamond needles, cloths, tape cleaners, etc. Discount Music Club is your complete one-stop music and accessory buying service.

Quick Service same day shipping on many orders rarely later than the next several days. Partial shipments always made in the event of unforeseen delay. All at no extra cost to you.

100% Iron-Clad Guarantees on all products and services. Everything is guaranteed factory fresh and free of defects or damages of any sort. Your total satisfaction is unconditionally guaranteed.

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

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

Discount Music Club, Inc.
9-0579
505 Main Street, New Rochelle, N.Y. 10801

NAME

ADDRESS

CITY

STATE NO. 16 ON READER SERVICE CARD
high. The latter characteristic, according to Audio-Technica's new AT3OE is unusual among moving-coil cartridges in that its stylus is user-replaceable and its compliance is fairly high. The latter characteristic, according to the manufacturer, enables the cartridge to have good tracking ability even at relatively low tracking forces (recommended tracking force is 1.4 to 2 grams). The AT3OE has a mode, elliptical stylus tip with dimensions of 0.3 x 0.7 mls. Output level is rated at 0.28 millivolt referenced to a 5-cm/sec lateral velocity, and frequency response is 15 to 25,000 Hz; stereo separation at 1,000 Hz is 25 dB. Price: $100. For amplifiers or receivers without a moving-coil phono input, Audio-Technica offers the AT630 step-up transformer at a price of $95.

Circle 121 on reader service card

The Nikko NR-1219 AM/FM receiver uses two horizontal rows of twelve LED's each to indicate the receiver's peak power output in each channel. The 1219 is rated at 100 watts per channel (both channels driven into 8 ohms), with a rated total harmonic distortion of 0.03 per cent or less. It is a direct-coupled design using a pure complementary output-stage configuration. Frequency response of the power-amplifier section is rated at 20 to 20,000 Hz. The FM tuner has a phase-locked-loop multiplex section and a circuit that uses phase cancellation, rather than simple filtering, to remove the multiplex pilot signal. A system Nikko calls "T-Lock" is used to assure exact FM tuning. Tuner specifications include: usable sensitivity, 1.8 microvolts; alternate-channel selectivity, 80 dB; capture ratio, 1 dB; total harmonic distortion, 0.15 per cent in stereo; image rejection, 90 dB; and i.f. rejection, 95 dB. Front-panel features of the 1219 include a midrange tone control, switchable FM de-emphasis, dual FM tuning meters (with a special status light to indicate when the T-Lock system is operating), and both audio and FM muting switches. Dimensions are 21¾ x 7 x 15 inches. Price: $650.

Circle 120 on reader service card

The Altec Model 14 is a two-way, vented-enclosure loudspeaker with a 12-inch woofer and the company's "Mantaray" mid- and high-frequency driver. The Mantaray is a rectangular horn whose phasing plug uses radial rather than circumferential slots. This configuration, according to Altec, provides a frequency response wider than that of a horn with a conventional phasing plug. The Model 14 also incorporates a switchable power-sensing and limiting circuit ("Automatic Power Control") that lowers input power to the speaker, so as to prevent overload, without deactivating it entirely. The circuit is said to be sensitive to amplifier clipping and to sense average rather than peak levels, thus eliminating the possibility of a power reduction on normal musical peaks. Specifications of the Model 14 include a frequency response of 35 to 20,000 Hz, a sensitivity of 95 dB for a 1-watt input (measured at a distance of 4 feet), minimum power requirement of 10 watts, and a maximum power-handling capability of 60 watts without the Automatic Power Control and 200 watts with the circuit in use. Nominal impedance of the speaker is 8 ohms, and the crossover frequency is 1,500 Hz. Level controls for midrange and treble, as well as an overload indicator lamp and test-switch for the lamp, are found on the system's front panel. Dimensions are 30 x 21 x 16½ inches and weight is 77 pounds. The enclosure is finished in oiled walnut. Price: $495.

Circle 122 on reader service card

The power-output circuit of the Sansui G-4500 AM/FM receiver uses a true complementary-symmetry configuration, a circuit type long favored by audiophiles for use in high-power designs. The G-4500 is rated at 40 watts per channel, both channels driven into 8 ohms, with total harmonic and intermodulation distortion below 0.1 per cent. The preamplifier section of the receiver incorporates a phono stage having a 200-millivolt input capability, a signal-to-noise ratio...
The New Advent Loudspeaker is the newest version of this country's most popular and imitated speaker system. (More than eight hundred thousand original and New Advents have now gone into people's homes.) It is the standard of value in loudspeakers, the speaker most often used as a reference by the people who make and sell audio equipment.

Here are what we feel are the basic reasons for its popularity:

- For a fraction of the expected price, the New Advent covers the entire ten-octave range of music, with exceptional smoothness and low distortion.
- It provides the final half-octave of lowest bass response, supplied by very few speakers at any price. (This half-octave isn't present on all music and recordings, but when it is, the audible difference New Advents make is something to hear.)
- Its extended high-frequency response and excellent dispersion make for the kind of clarity and musical definition that helps bring music alive in your living room.
- Its power handling allows enjoyment of realistic sound levels in good-sized listening rooms. It can be used safely for music listening with high-powered amplifiers and receivers, yet its efficiency is more than adequate for comfortable listening with moderately powered amplifiers and receivers. (People can and do start off with as little as 15 watts per channel to drive New Advents, graduating later to as much as 150 watts in no-holds-barred systems.)
- Its performance on any kind of music—rock, classical or anything in between—isn't at the expense of another. Its carefully chosen (and maintained) frequency balance across the audible range is designed to produce natural, convincing sound with the whole range of music and recording techniques found on recordings and broadcasts.
- Its quality is maintained by painstaking manufacture and testing. The drivers (designed and built by Advent) are individually response-tested before installation in their cabinets. And after manufacture every finished system is given a thorough response check before shipment. Speakers with very small deviations from the standard are rejected.

Behind all these factors is the basic design intent of the New Advent: to supply everything that has real importance for the great majority of critical listeners—with no corners cut, at the lowest possible cost.

If you are looking for exceptional performance, value, and enjoyment in a speaker, you owe it to yourself to hear the New Advent. We think you will have no trouble hearing why so many people buy and enjoy it.

For more information, including a list of Advent dealers, please send us the coupon.

Thank you.

Advent Corporation, 195 Albany Street, Cambridge, Massachusetts 02139.

*Suggested price, subject to change without notice.*
The Watts Parastat

In 15 seconds your records are clean, dry, and ready to play.

With some systems you pour liquid on your records (and rub it into the grooves), while with others you brush the dirt around (and rub it into the grooves). The Watts Parastat is neither of these.

By placing a plush velvet pad on either side of a soft nylon brush and adding a drop or two of Parastatik® fluid, a remarkably efficient system is created.

The brush bristles lift the rubbish to the surface. The pads collect and remove it. And the Parastatik® fluid supplies just the right degree of humidity to relax dust collecting static without leaving any kind of film or deposit behind.

No other system does so much for your records in so little time.

So when you want the best, ask for the original. The Parastat, by Cecil Watts.

Watts products are distributed exclusively in the U.S. by: Empire Scientific Corp., Garden City, NY 11530 of 75 dB (measured using the IHF standard), and RIAA correction accuracy within ±0.5 dB. The signal-to-noise ratio of the auxiliary inputs is 95 dB, tone controls (which are detented) provide a ±10-dB adjustment at 50 and 10,000 Hz, and the loudness-compensation switch boosts the frequency extremes of the receiver by a maximum of 7 dB at 50 Hz and 5 dB at 10,000 Hz.

The tuner of the G-4500 has an IHF sensitivity of 11 dB (1.95 microvolts); 50-dB quieting in stereo is achieved with a 38-dBf (44-microvolt) input. Harmonic distortion in stereo is less than 0.3 per cent, capture ratio is 1.3 dB, and alternate-channel selectivity is 50 dB. The tuner’s frequency response is 30 to 15,000 Hz ±1.5, -1 dB.

Front-panel features of special interest include a microphone mixing circuit with a level control, two tuning meters, and an FM interstation-noise muting switch. Dimensions are approximately 17¾ x 6½ x 14 inches. The receiver comes with a simulated-walnut-grain cabinet. Price: $320.

Levitation Systems’ Fully Adjustable Speaker Stands

Levitation Systems’ speaker stands are continuously adjustable over a range of 1½ to 17 inches in height (up to 39 inches on special-order versions) and 0 to 25 degrees in upward tilt. According to the manufacturer, this permits the speaker to be optimally aligned for dispersion and stereo imaging.

The stands are constructed of tubular steel and are said to support speakers of up to 175 pounds. They are available in flat black and chrome finishes; adjustments in height and tilt are made using the supplied Allen wrench to tighten the horizontal support member in the appropriate position. The support member has neoprene bumpers to prevent marring of cabinets, and the vertical stanchion can be used to conceal the speaker cable. Stands fitted with casters are available as an option. Price: $45 to $55 per pair, depending on configuration. For further information contact Levitation Systems, Dept. SR, 187 Streetsboro Street, Hudson, Ohio 44236.

Circle 125 on reader service card

Sony Cassette Deck Uses Microprocessor To Select Programs

Sony’s TC-K60 is a single-motor, two-head cassette deck that uses an integrated-circuit microprocessor to control what is called an “Automatic Music Sensor” function. The AMS circuit permits the user to choose any one of nine recorded program selections (which must be separated by at least four seconds of blank tape) on a given cassette. There is a numerical LED readout for the selector, and pressing the play key together with either the rewind or the fast-forward key causes the deck to search out the chosen selection and switch into the play mode automatically. There is a “record-mute” control button for editing recordings and making the required blank segments between selections. The deck’s transport controls also include an “Autoplay” function, which automatically replays a tape after rewind if the play and rewind keys are pressed simultaneously.

The tape-drive system of the TC-K60 has a slotsless, brushless motor governed by a frequency-controlled servo system operating through a single capstan. The wow and flutter specification is 0.045 per cent (weighted rms), and rewind time for a C-60 cassette is 90 seconds. The record/play head of the deck is of ferrite-on-ferrite construction. Level metering is provided by two thirty-three-element liquid-crystal displays covering a range from -40 to +5 dB. The display changes from blue to red at the 0-dB demarcation point, and the response characteristics can be switched either to hold the highest peak during an entire program or to display peaks for a 1.7-second period. Other front-panel controls include memory and timer switches, a pair of (Continued on page 22)

(Continued on page 22)
The Audiovox DGC-20 is the car stereo with a built-in computer. And some amazing capabilities.

It knows things.
A tiny micro-processor chip inside the DGC-20 has all the information to give you totally electronic tuning. And whether you choose to tune manually or automatically, the know-it-all chip stops and locks onto a station to virtually eliminate annoying drift.

It shows things.
Digital read-out displays the exact AM/FM when switched to mode 1. Also the exact AM/PM when switched to mode 2.

It remembers.
Memory pushbuttons can keep 12 stations "in mind." Even if you forget which station handles Händel or where Waylon wails, the DGC-20 remembers.

It understands.
How to search out and stop at the next available station. Automatic Seek does it.

And then, the Audiovox DGC-20 has some capabilities that are not amazing. Just important. Like a local/distant switch. And a mono/stereo switch. And outputs for 4 speakers and individual left-to-right and front-to-rear balancing controls. And a locking fast-forward and rewind on the stereo cassette player.

If you want to find out about the latest advances in car stereo, stop by your Audiovox dealer and test-listen the DGC-20. The car stereo that's so sophisticated, it thinks before it speaks.
DISCWASHER presents
The Clean Truth About Your Naked Stylus

When your stylus plays over one light fingerprint or one tiny "head" of vinyl stabilizer, the clean naked diamond becomes a glazed, dust-holding abrasive weapon wearing away at your records and masking their true sound. This unseen build-up may actually hold the tracking tip of the diamond out of the record groove.

Accumulated grit on stylus that looks "clean" to the naked eye.

The SC-1 Stylus Cleaner from Discwasher is designed with a brush that is stiff enough to remove harmful accumulation, but gentle enough to avoid damaging delicate cartridge assemblies. Two drops of Discwasher's D3 Fluid add extra cleaning action to erase head of the 581 and 582 is similar to the three-position bias- and equalization-selection switches, and concentric record-level controls. Frequency response is rated at 30 to 13,000 Hz ±3 dB for normal tape, 30 to 15,000 Hz ±3 dB for chromium-dioxide tape, and 30 to 16,000 Hz ±3 dB for ferrichrome tape. With the Dolby circuits switched out, signal-to-noise ratios are 53 dB (normal), 55 dB (chromium-dioxide), and 58 dB (ferrichrome). Total harmonic distortion is specified as 1.3 per cent or less. Dimensions are 18⅛ x 6⅝ x 12¾ inches. Price: $550.

Circle 126 on reader service card

Nakamichi Research has introduced two front-loading cassette decks capable of recording and playing pure-metal tape. The Models 581 and 582 (shown) use much the same transport mechanism as the company's Model 580 in conjunction with new record and playback heads and electronics.

The transport of the 581 and 582 is logic controlled and has three motors—a d.c. servomotor for capstan drive, a high-speed motor for fast-forward and rewind functions, and a third electronically controlled motor used to engage the transport and control other functions through a multipurpose cam. The dual capstans and many of the other moving components in the transport have deliberately asymmetrical masses and dimensions to diffuse any resonances associated with rotational speed. Nonresonant alloys and plastics are also used to reduce resonance. The wow-and-flutter specification for both recorders is 0.05 per cent (weighted rms).

The record and play heads of the two decks are fully separate, with separate alignment adjustments, and are made of Crystalloy. Both heads engage the tape via the central opening in the cassette shell—a closely spaced arrangement designed to eliminate the azimuth adjustment for each cassette necessary with many other machines having three physically separate heads. A special mechanism in the transport forces the cassette's pressure pad away from the tape so that its motion is more directly under the control of the dual-capstan drive. The record head has a 3.5-micron gap and the playback head a 0.9-micron gap; both have slotted "cutouts" on the head surface that are said to promote even head wear. The erase head of the 581 and 582 is similar to the "Direct Flux" head used in the Model 580. Its operating principle resembles that of a transformer in which the actual pole-piece assembly serves as the secondary "winding." Erasure is said to be better than -80 dB.

Specifications for the two units are identical (the sole difference being that the 582 permits off-the-tape monitoring while recording, with simultaneous Dolby decoding; the 581 does not). Frequency response is 20 to 20,000 Hz ±3 dB with ferric, chromium-dioxide, or pure-metal tapes. Signal-to-noise ratio is 68 dB with the Dolby system operating (pure-metal tape). With conventional tapes, total harmonic distortion is below 1.5 per cent, measured at a 0-db recording level; with metal tape it is 0.6 per cent.

Front-panel features for both units include peak-reading meters, fine-adjustment controls for bias and record level, switchable 70- or 120-microsecond equalization, and timer and memory functions. Test-tone oscillators operating at 400 and 15,000 Hz are provided for the bias and record-level calibrations, the results of which read out directly on the meters of both machines. Dimensions are approximately 19¾ x 5¼ x 13¾ inches. Prices: Model 581, $770; Model 582, $890.

Circle 127 on reader service card

ADC's "Armless" Direct-drive Turntable

The ADC Model 1750 DD is a two-speed (33⅓ and 45 rpm) direct-drive manual unit with a quartz-governed, phase-locked-loop configuration for its motor-control circuit. It differs from ADC's Model 1700 DD only in that it does not come with a tone arm. An adaptor kit (included) has mounting plates that fit several popular arms (the ADC LMF, SME, Infinity Black Widow, and Grace among them) and a blank plate that can be drilled out to accept others. The 1750 DD has an unusual base, constructed of two layers of dissimilar materials, that is said to have reso-
If you’re happy with your car stereo, it’s probably because you don’t know any better.

You can blame Detroit for pulling the wool over your ears. They put an FM radio and tape deck in your dashboard and told you it was “stereo.” It wasn’t. They only gave you the start of a stereo system. The rest of it, you get from us. It’s called the Fosgate system. And it makes your car sound as good as your living room. Maybe better. Take our Punch 2100 for instance. Power amp, preamp, and your choice of speakers.

The power amp gives you 100 watts RMS per channel. The kind of power you need for clean, high fidelity playback on the highway. With less than .05% THD, you’ll hear no distortion all the way from 20 HZ to 20 KHZ.

The preamp has LED readouts. And an active equalizer circuit with 216 different ways to shape the sound to your personal taste.

For your car, we make components good enough for your home.

When it comes to speakers, very few can handle the power of the Punch. None can do it for the reasonable price of Fosgate’s speakers. When your Fosgate system is installed, you can crank up the volume so it literally vibrates your rear-view mirror. With rich, well-defined bass. With brilliance and clarity in the mid and high ranges. With accurate separation and full-bodied imaging. Without audible distortion. Even the most demanding audiophile would be impressed. Hear what you’ve been missing all these years. Visit any respectable car stereo dealer and listen to the four Fosgate systems in four different price ranges. Once you know what real car stereo sounds like, you’ll never be happy with anything less than Fosgate.

The Fosgate System
It’s as far as you can go in car stereo.

MAY 1979

CIRCLE NO. 23 ON READER SERVICE CARD
We build a speaker that sounds like music

It can accurately reproduce the 120+ dB peaks that are found in some live music. That's more than just being able to play music loud. It can accurately reproduce the music bandwidth—from below 25Hz to 20kHz. And the Interface:D's vented midrange speaker reproduces midrange sounds with the clarity and purity that allows precise localization of sound sources—both lateral and front-to-back.

The Interface:D is the only commercially available speaker we know of that can meet these criteria. Audition them at your Interface dealer.

Optonica Receiver Has Three Tone Controls

Optonica's SA-5601 is an 85-watt-per-channel AM/FM receiver with several unusual controls and features, including a midrange tone control and two power-output level meters. The preamplifier section of the SA-5601 has two phono inputs, an input-overload level of 250 millivolts, a signal-to-noise ratio of 76 dB, and an RIAA response accurate within 0.2 dB. The bass, midrange, and treble controls have turnover frequencies of 100, 1,000, and 10,000 Hz, respectively; the range of adjustment is ±10 dB for the bass and treble controls and ±8 dB for the midrange control. The high and low filters operate with 6-dB-per-octave slopes below 30 and above 7,000 Hz. The amplifier section has rated total-harmonic and intermodulation distortion of 0.05 percent or less.

The SA-5601 has a switch that permits turning the tuner section off while the preamplifier and amplifier circuits remain active. The tuner stage also has an automatic fine-tuning system (called "Optolock") that is activated when the user removes his hand from the tuning knob after roughly tuning in a station. Usable FM sensitivity is 1.7 microvolts (9.8 dBf), rated sensitivity for 50-dB quieting is 2.5 microvolts (13 dBf), alternate-channel selectivity is 80 dB, and capture ratio is 1.2 dB. Total harmonic distortion in stereo is specified as 0.3 percent or less, and the ultimate signal-to-noise ratio is 80 dB.

Front-panel features include a high-blend switch that reduces reception noise (and stereo separation at high frequencies only), selection from up to three pairs of speakers (alone or in combination), dual FM tuning meters, and indicator lights to show when the receiver's protection circuits are activated and when the FM section is optimally tuned and locked onto a frequency. Dimensions are approximately 21½ x 7½ x 16 inches. The SA-5601 has a rosewood-grain vinyl-finish cabinet with a silver-color metal faceplate; a black-faceplate version, the SA-5605, is available at no extra charge. Price: $600.

BES Introduces "Sound Module II" Loudspeaker Series

The BES Sound Module II loudspeakers use a single plastic-foam diaphragm divided into bass, midrange, and treble sections that are driven by separate voice-coil and magnet assemblies. Sound is radiated from both the front and rear surfaces of the diaphragm, thus setting up a horizontal and vertical dispersion pattern that BES calls "omnipolar."

There are six units in the new series. The SM350 is a two-driver system with 850 square inches total radiating area; claimed frequency response is 40 to 19,000 Hz and efficiency is 88 dB with a 1-watt input. The SM260 is a three-driver system with an 850-square-inch area; frequency response is 38 to 22,000 Hz and efficiency is 88 dB. The SM270, also a three-driver system, has a frequency response of 32 to 22,000 Hz and an efficiency rating of 91 dB. The SM 350 is a four-way design with a total radiating area of 1,300 square inches, a frequency response of 28 to 22,000 Hz, and efficiency of 93 dB. It includes provisions for biamplification. BES' top-of-the-line system, the SM600, has five drivers with a total radiating area of 2,175 square inches, a rat-

(Continued on page 26)
Metal... sound from another dimension

Metal tape is a shining breakthrough in magnetic recording. When matched with a suitably advanced cassette deck, metal tape delivers sonic excellence alien to conventional oxide tapes.

The Nakamichi 582 embodies years of intensive research and close work with many of the world's leading tape manufacturers. It is a cassette deck which sets the standard for performance with metal tape.

There is some history-making technology behind the 582's pace-setting performance. Hard-to-erase metal tape is no problem at all for the 2nd Generation Direct Flux Erase Head. The new micro-precision Crystalloy Record Head handles metal's super-high bias requirement with room to spare. And the ingenious "Discrete" 3-head configuration ensures optimum record and play without any of the drawbacks associated with past 3-head designs.

The 582's impressive specifications only hint at its sonic superiority. With metal tape, the 582 produces recordings of startling acuity and incomparable breadth.

But don't take our word for it. Ask your Nakamichi dealer to demonstrate the 582. He'll show you why your first metal-compatible cassette deck should be a Nakamichi.

Write for more information: 1101 Colorado Avenue, Santa Monica, California 90401.

Nakamichi

Products of unusual creativity and competence...
ed frequency response of 25 to 22,000 Hz, and an efficiency rating of 93 dB. It also can be
bipolarized. Nominal impedance on all BES
systems is 8 ohms. All units except the SM600 are
fitted with oak bases and frames (the
SM600 has a rosewood base and frame). Approximate dimensions (base depth includ-
ed) are: SM250, 28 3/8 x 19 1/4 x 11 inches; SM260, 29 3/4 x 20 5/8 x 11 inches; SM270, 31 1/4 x 21 1/2 x 13 inches; SM330, 39 3/4 x 21 3/4 x 13
inches; SM600, 64 x 21 3/4 x 13 inches. Prices
(in the same order) are: $169, $249, $339, $479,
$649.

Circle 130 on reader service card

**Logical Systems Offers Noise Filter**

- The Logical Systems Model 8800 dynamic
  noise filter operates on the principle of reduc-
  ing the bandwidth of a musical signal on quiet
  passages to remove noise while permitting a
  full-widthband signal to pass through its cir-
  cuits on louder musical passages. The effect
  of this variable-bandwidth approach, accord-
  ing to the company, is to reduce the apparent
  noise level of program material by about 15
  dB at 10,000 Hz. The audio signal is constant-
  ly analyzed not only for bandwidth and level,
  but also with respect to attack and decay
time. A major feature of the unit is that the at-
  tacks and release times of the bandwidth-limit-
  ing circuitry are program-dependent, thus
  preventing the audible "breathing" and
  "pumping" sounds of early noise filters.

Specifications of the Model 8800 include a
maximum filter slope of 9 dB per octave, fre-
quency response of 20 to 20,000 Hz ±0.5 dB,
a minimum bandwidth (the filter curtailing
bandwidth to the greatest degree) of 1,500 Hz,
and a signal-to-noise ratio of 85 dB referred to
a 2-volt output. Total harmonic distortion is
below 0.1 per cent at rated output, and inter-
modulation distortion is below 0.01 per cent.
Dynamic range is 100 dB.

Front-panel controls include a tape-monitor
circuit, a switch that defeats the filter for
comparison of the processed vs. unprocessed
program, a threshold control that varies the
level at which filtering action begins in order
to match the dynamic characteristics of differ-
ent types of program material, and three light-
emitting diodes that indicate the approximate
bandwidth of the filter at a given moment. The
Model 8800 uses standard phono connectors

and can be connected to a system through a
tape-monitor circuit. Dimensions are 9 3/4 x 2 1/2
x 6 1/8 inches. Price: $249. Further information
is available from: Logical Systems, Dept. SR,
3314 "H" Street, Vancouver, Wash. 98663.

Circle 131 on reader service card

**"Micron" Minispeakers Feature Distinctive
Wood Cabinets**

- General Sound of Phoenix, Arizona, has
  introduced three small loudspeaker systems
  in their new "Micron" line. All three are
  available in a choice of white, black, or
  walnut-veneer enclosures with silver trim rings,
  and the speakers in each size are designated as
  belonging to the Micron 400, 500, or 600 se-
  ries. The 400 series uses a 4-inch woofer and a
  1-inch dome tweeter crossed over at 2,500
  Hz; power-handling capacity is specified as 50
  watts rms, efficiency is 77 dB at 1 meter with a
  1-watt input, and rated frequency response is
  125 to 20,000 Hz ±5 dB. The 500 series uses a
  5 3/4-inch woofer and a 1-inch dome tweeter
  with a crossover at 5,500 Hz; power handling
  is 60 watts rms, efficiency is 78 dB with a
  1-watt input, and frequency response is 100 to
  20,000 Hz ±5 dB. The 600 series speakers have a
  6 1/2-inch woofer, a 2-inch midrange, and a
  1-inch dome tweeter; power handling is
  75 watts rms, efficiency is 78 dB with 1 watt, and
  frequency response is 70 to 20,000 Hz ±5
  dB. Approximate dimensions are: 400 series,
  8 x 6 1/2 x 5 1/4 inches; 500 series, 9 x 6 x 7 1/2
  inches; 600 series, 11 3/4 x 7 1/4 x 8 1/2 inches.
  Prices: 400 series, $125; 500 series, $150; 600
  series, $200. For more information write to
  General Sound, Dept. SR, 2434 South 24th
  Street, Phoenix, Ariz. 85034.

Circle 132 on reader service card

**NOTICE:** All product descriptions and specifications
quoted in these columns are based on materials sup-
plied by the manufacturer.

Recent fluctuations in the value of the dollar
will have an effect on the price of merchandise
imported into this country. Please be aware that the prices quoted
in this issue may be subject to change.
Introducing Sharp's solenoid deck that plays selections according to your musical appetite.

If you hunger for one of the world's most advanced tape decks, then Sharp's RT-2251 is for you. The RT-2251 teams the genius of the Sharp Eye™ with the convenience of solenoid controls. A combination you won't find on any other deck.

The Sharp Eye gives you individual song selection. It plays only what you want to hear. And skips what you don't.

And the solenoid controls give you feather touch finger-tip control. For faster response and greater accuracy of all tape functions.

If once isn't enough when one of your favorites finishes, tell the Sharp Eye to play it again. And it will. Automatically.

You even have the option to change your mind. The Sharp Eye lets you interrupt one song and go on to the next. Instantly.

How do we do it? Simple. The Sharp Eye scans the tape at high speed, finds the blank spaces between selections and automatically plays back the music of your choice. To skip a selection it operates in fast forward. And for repeats, it works in reverse.

You'll also like the gourmet specs Sharp's cooked up for you. The RT-2251 serves up 0.055% wow and flutter, a S/N ratio of 66dB (Dolby® on, over 5kHz) and a frequency response of 30-17,000Hz (FeCr).

To get a real taste of our RT-2251, see the Sharp audio dealer nearest you or write Sharp Electronics Corporation, Dept. SR, 10 Keystone Place, Paramus, N.J. 07652.

*Dolby is a registered trademark of Dolby Laboratories.
Introducing The Itsy Bitsy Mitsubishi.

Mitsubishi has put big audio performance into a series of precise little packages. Microcomponents. Stereo components that are compact. But can hardly be called compacts.

They have the same high-performance characteristics as our regular size components. They have to. They're Mitsubishi.

The Micro FM tuner, for one. It's the teeniest tuner in the world. A mere 10 5/8" x 2 3/4" x 9 3/4" big. However, few tuners can measure up to its standards. It has, among other things, a quartz-PLL synthesizer tuning system so sophisticated that it has absolutely no drift. Zilch.

We were no less frugal with features on our Micro Cassette Deck. It has an Automatic Spacing Pause System, Dual Capstan Drive, Separate 3-way Bias and Equalization Feather-Touch Controls and of course, Dolby. Yet measures only 10 5/8" x 5 1/2" x 9 3/8".

For power, the Micro Amp is unbeatable at this size. The little "direct coupled" powerhouse puts out 70 watts per channel. Total harmonic distortion is only 0.01%. For 30 watts per channel, it's an infinitesimal 0.004%.

Our Micro Preamp is made to complement the amp. And faithfully conduct any signal source that goes through it. It has a built-in moving-coil head amplifier. With a signal-to-noise ratio of 77dB even for 100uV input and 0.005% THD, it obviously does the job better than components twice its size.

Small wonder the final touch was to finish them with Champagne Gold face plates.

The new Mitsubishi microcomponents.

Now bigger isn't better. Only bigger.


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

CIRCLE NO. 45 ON READER SERVICE CARD
YOU, ME, AND THE FCC

Historically, the audio industry has not had any substantial degree of contact with the forces of American Big Government. To be sure, almost everyone involved with high fidelity (and almost everyone not involved) pays his or her taxes, but aside from this well-known example of inevitability, and the occasional government-sponsored cause on military electronic-parts standards, the Fed has remained until recently, in the eyes of those with an interest in sound reproduction, a sleeping or indifferent giant.

Hi-fi’s spectacular growth over the past several years has changed all that; the audio-equipment manufacturers now constitute a business group large enough to receive the attention of federal agencies ranging from the Federal Trade Commission to the Environmental Protection Agency. The FTC’s mandatory standardization of advertised power-output claims and the recent Congressional proposals to regulate levels of receiver and amplifier immunity to radio-frequency interference (RFI) are the best-known examples of increasing federal involvement, but there are dozens of less-publicized others.

Of all the government bureaus whose activities impinge on audio, the Federal Communications Commission stands out as one of the most directly influential. The FCC’s impact on high fidelity, in fact, extends back to the early days of hi-fi. Its rulings in the Fifties and Sixties during the infancy of FM were among the first cases of hi-fi standards established by an authority outside the industry rather than by informal agreement between manufacturers.

At this moment, the FCC is in a position to exert a more profound influence on the world of audio, for better or for worse, than at any time in its past. The commission is now taking action on five separate and distinct issues relating directly to the high-fidelity industry, with rulings and standards on all of them either already issued or expected within the next two years.

The most exciting and potentially beneficial of the programs being addressed by the commission, the National Public Radio Satellite System, is actually not an idea conceived by the FCC but rather a brainchild of engineers at another federally financed office, the Corporation for Public Broadcasting. The FCC’s involvement is concerned first with the system’s legal approval and second with the ultimate indirect consequences of its implementation. In January of this year, the commission formally approved a satellite link system that will allow all of the approximately two hundred noncommercial public radio stations in the nation (both FM and AM) to receive and rebroadcast, through the satellites, stereo programs beamed from any of sixteen transmitting facilities. The system will utilize two Westar communications satellites already “parked” in orbit 22,000 miles above the center of the United States, and will provide reproduction quality fully as good as that afforded by conventional FM broadcasts (a 15,000-Hz bandwidth with an ultimate signal-to-noise ratio of at least 70 dB). The satellites will be able to receive and retransmit to the stations up to twelve separate channels of programming in any format, including discrete quadraphony.

Frank Mankiewicz, the president of National Public Radio, feels that the system will usher in “a new era” in public broadcasting. Music, public affairs, and news programs that would not have been technically feasible to produce or send from station to station via either telephone link-up or in the form of mailed tapes will be able to be carried by the satellite; programs in minority languages and on subjects of highly topical or regional interest, at present too expensive to be prepared by individual stations, will become economically practical because the distribution capabilities of the system will allow many stations to share some of the costs of production. Mankiewicz foresees explosive growth in the public-radio sector as a result of the system. “I would be surprised,” he says, “if there were not six hundred or so full-service public radio stations in operation ten years down the road from here.”

If an additional four hundred public radio stations do indeed come into existence, they will occupy many of the broadcast frequencies still available. And this, coupled with the FCC’s avowed determination to involve minorities in broadcasting to a greater degree than in the past, as well as the constant clamor of business groups for station allocations in profitable areas, has moved the commission to study, and to report upon in an obliquely positive fashion, another program with major consequences for the audio industry: reduction of the channel spacing between both AM and FM stations (although it is likely that the concept of reduced spacing would be under review even had the satellite system not been implemented).

In the light of the public interest, the principle by which the FCC is charged with making its rulings, the concept of reducing channel spacing to permit more channels (and, perforce, a greater diversity of radio programming) has obvious merit. Such an action would solve several thorny problems at the stroke of a pen: “equal time” and minority-viewpoint considerations that frequently dictate aspects of the character of present radio programming would have reduced importance with more stations in operation. Financial groups hungry for a piece of the profitable broadcast pie but now frozen out by lack of available channels in large cities could then be accommodated as well.

But, particularly on the FM band, adoption of reduced spacing might be a catastrophe in terms of broadcast quality (quality, paradoxically, is one of the primary concerns of the Public Radio Satellite System’s development). According to FM expert and IHF technical director Leonard Feldman, the 100- and 150-kHz intersatation spacings under study by the commission could render many receivers designed for the current 200-kHz spacings “virtually unusable” in urban areas because their tuning circuits and selectivity curves. (Continued on page 32)
Only the most sophisticated research and development in this industry could create

Two sources of perfection in stereo sound!

Pickering's patented Dustamatic Brush keeps records free of dust and damps low frequency tonearm resonance.

It takes real effort and skill to become the acknowledged leader in the industry, and even more to stay ahead.

Pictured above are just a few of the advanced electronic devices that Pickering employs in product research and custom-designed development. At left above, the XYY plotter on Pickering's Real Time Analyzer and, at the right above, Pickering's remarkable Scanning Electronic Beam Microscope capable of 160,000 times magnification.

Pickering's engineering department is responsible for creating these two outstanding cartridges that, as one reviewer stated: "The XV-15/625E offers performance per dollar, the XSV/3000 higher absolute performance level."

Both the XSV/3000 with its trademarked Stereohedron Stylus tip for the least record wear and the longest stylus life achievable so far... and the XV-15/625E... represent best buys at their price levels. Audition them today at your Pickering Dealer.

For further information write to Pickering & Co., Inc., Dept SR, 101 Sunnyside Blvd., Plainview, N.Y. 11803

CIRCLE NO. 41 ON READER SERVICE CARD
McIntosh has received peerless acclaim from prominent product testing laboratories and outstanding international recognition! You can learn why the “more than a preamplifier” C 32 has been selected for these unique honors.

Send us your name and address and we'll send you the complete product reviews and data on all McIntosh products, copies of the international awards, and a North American FM directory. You will understand why McIntosh product research and development always has the appearance and technological look to the future.

Keep up to date.
Send now -

McIntosh C 32

“More Than a Preamplifier”

McIntosh has received peerless acclaim from prominent product testing laboratories and outstanding international recognition! You can learn why the “more than a preamplifier” C 32 has been selected for these unique honors.

If you are in a hurry for your catalog please send the coupon to McIntosh. For non-rush service send the Reader Service Card to the magazine.

CIRCLE NO. 44 ON READER SERVICE CARD

Audio News . . .

were designed for use with a 200-kHz spacing. Many frequency-synthesizing and quartz-locked tuners would be simply incapable of tuning in stations at certain frequencies, and the spacing would also similarly rule out many of the proposed discrete quadraphonic broadcast systems still under consideration (the study on reduced channel spacing was originally commissioned as part of an inquiry into quadraphonic broadcast standards. New tuner and receiver designs could probably be adapted to the changes, but a ruling in favor of reduced spacing would render millions of products now in use throughout the country technically obsolete, although usable in most cases.

As with all FCC studies, the FM spacing issue will pass through a number of intermediate steps, with public announcements and perhaps hearings, before it reaches the final decision stage. Consequently, it is likely to be at least eighteen months before any final standard is issued.

The commission has also funded a similar study with the idea of reducing the spacing between AM stations from 10 kHz to 9 kHz. Most experts agree, however, that such a reduction would not have nearly the effect on broadcast quality that the proposed FM reduction might. Most European and Asian nations now use the 9-kHz spacing, and the FCC permits a higher degree of “overlap” between stations. In fact, FCC regulations at present permit AM stations to broadcast with a signal bandwidth (50 to 15,000 Hz, almost the same as FM) that allows for a substantial 5-kHz overlap, though few stations take advantage of the option. Any decision on the AM-spacing question would have about the same timetable as the FM-spacing issue, according to FCC sources, and no action beyond the report stage is expected for some time.

The entire question of reduced AM-station spacing indicates the conflicting priorities of the commission, however, for while such a reduction is likely to have a negative (though admittedly minor) effect on AM sound quality, the FCC is simultaneously in the final stages of choosing a stereo-AM broadcast system. The intent of the move, according to the FCC, is to upgrade AM listening quality, and provide facilities for stereo broadcasting in large, remote areas where the limited range of FM does not provide an adequate area of coverage, and give AM stations the potential of broadcasting signals competitive in sound quality to that of FM stations—and therefore attract advertisers now oriented solely toward FM. The stereo-AM question is well beyond the investigatory stage; five groups have submitted comprehensive proposals on the technical details of a broadcast standard, each proposal accompanied by the results of exhaustive FCC-sanctioned testing of prototype equipment, and a final ruling is expected within the year—presumably to be followed shortly thereafter by the introduction of stereo-AM-compatible consumer products.

T

The FCC’s investigation of questions of audio-component immunity to radio-frequency interference from ham and CB radio is the best-known of the commission’s activities and has been covered in these pages in past months (see “Audio News,” July 1978 and September 1978) and elsewhere. As detailed in those columns, the original impetus to the FCC’s investigation—the immense number of consumer complaints of interference with all types of electronic equipment (a total of more than 300,000 in the last five years)—led Senator Barry Goldwater (R-Ariz) and Representative Charles Vanik (D-Ohio) to introduce two Congressional bills that would have empowered the FCC either to mandate measures to render electronic equipment immune to common types of interference or to prescribe minimum standards of immunity without regulating the specific countermeasures to be used by the equipment manufacturers.

These measures have been vigorously opposed by the audio community on the ground that the measures mandated by the FCC may have the indirect effect of degrading the performance of audio components significantly. Both bills were allowed to die in the last session of Congress, and Senator Goldwater has since announced that he believes audio manufacturers have begun to take the actions necessary to obviate reintroduction of his bill, though he intends to review the matter periodically. The commission, however, issued a “Notice of Inquiry,” a request for industry and consumer comments on the subject, in November 1978, and FCC sources concede the probability that the update of the omnibus Communications Act of 1934 now being prepared in Congress will give the commission the regulatory powers originally proposed by Senator Goldwater and Representative Vanik without the attention that would be focused on a bill proposed explicitly for that purpose. If this is the case, the response to the Notice of Inquiry may be critically significant to whatever regulation the commission finally issues on the subject.

One clue to the perspective of the commission staff on questions of regulation is contained in the notice itself in the form of an attached copy of an advisory bulletin issued by the Canadian government in 1977. The bulletin (which the notice states has been attached copy of an advisory bulletin issued by the Canadian government in 1977. The bulletin (which the notice states has been attached for the purpose of soliciting public comment) specifies the level of interference likely to be encountered in various geographic areas and establishes a three-level grading system for electronic equipment. Canadian manufacturers are requested to label products in accordance with the grading system as a means of giving their customers some indication of the degree to which components will be affected by interference in different locales. It also warns, however, that the Canadian Department of Communications has the authority to mandate certain levels of performance in electronic components. It is interesting to note that FCC chairman Charles Ferris supported the concept of the Canadian bulletin in his testimony at the Senate subcommittee hearings on the Goldwater anti-RFI bill held last year.

The prospect for major changes as a result of the upcoming FCC rulings is great, both for (as with the Public Radio Satellite System and the advent of high-quality stereo-AM broadcasting) and for worse (as might occur in the case of station-spacing changes or anti-RFI rulings). Clearly, neither the FCC nor the audio community have answers that will please everyone, yet the hope persists that solutions that will satisfy both the interests of the audio enthusiast and the larger needs of the nation can be found.
Introducing Rich Lights from Viceroy.

The first low 'tar' cigarette good enough to be called rich.

Kings and 100's.
The first time you hear the L220's, before you know what's happening to you, you smile.

Later, when you find the words, you'll be able to talk about things like "texture" and "detail" and "subtlety." But right now it's all feeling. It's love at first sound.


Now turn them down for a minute and listen with your eyes. The L220's are tall, tapered, elegant—appearing more slim than they actually are.


That breathtaking stereo imaging you hear is not by accident. It's by design. The components are in precise alignment.

JBL's new L220. Because there's no such thing as too much music.
vertical alignment. They are in precise acoustical alignment, too. The time domain response, the phase linearity is flawless. JBL's engineers accomplished this without creating one of those staggered baffle fronts that cause as many problems as they solve.

Come celebrate the L220's. They're yours for $1,750 a pair. They're a whole lot of loudspeakers from the people who gave high performance sound a first name: JBL.

GET IT ALL.

Last year, 35 of the top 50 albums were recorded or mixed in studios using JBL loudspeakers. Shown here: Criteria Studios, Miami, Florida.

James B. Lansing Sound Inc., 8500 Beverly Boulevard, Northridge, California 91329.
Bib has all the angles for cleaning your tape heads at $10.50

Many years ago, Bib began developing cleaning systems for Revox, Tandberg, and Ferrograph. And since that time, Bib has sought a satisfactory answer to the problem of dirty tape heads and pinch rollers.

As a consequence of its diligent research, Bib has created the Tape Head Cleaner—a totally unique and completely effective instrument that can be used on any brand or style of tape deck.

Because the head rotates around 280° and locks into any position desired, the tool can reach the heads whatever their position. And the tip of the tool is made from a soft synthetic fiber that does not shed, unlike cotton pads or similar devices.

The kit includes an inspection mirror, fluffy brush, head cleaning fluid, and 3 extra snap-on tips.

The next time you’re at your favorite stereo shop, ask for the Bib Hi-Fi Accessories, Inc.

Turntable Troubles

Q. I and many of my friends, have trouble with our turntables (different brands). The problem is that when we are playing records the right channel cuts out. If the tone arm is tapped, the right channel comes back in, only to go out again shortly thereafter. Tapes played through the home speakers don’t do this. Can you tell me what’s wrong and what I need to do about it?

CLARENCE O. PEÇOY
Conway, Ark.

A. I can’t imagine what could cause the problem with several different brands of turntables, unless perhaps you and your friends, being a little short of cash, formed a syndicate to buy a high-price but unfortunately defective cartridge that you share on some regular schedule. Or maybe it’s a defective pre-amplifier that’s been passed around.

In any case, ignoring for the moment your friends’ record players, I would suggest some minor servicing steps for yours. First, remove the cartridge head shell from the arm. Then remove the cartridge stylus assembly (assuming it is removable) and put it aside for safekeeping. Now gently rub a pencil eraser across the exposed contacts on both the head shell and the tone arm that provide the electrical connections between the two. This will remove any built-up insulating oxidation. Make sure that the four thin wire leads that go from the inside rear of the head shell to the cartridge’s terminal pins are tight at both ends. Note that there are a few turntables whose head-shell leads are crimped rather than soldered to the terminal-pin clips. In a number of cases inadequate crimping has caused intermittent connections, with resulting signal loss and hum. The solution is to squeeze the cramped connections with a pair of long-nose pliers—or, better yet, to solder the wires to the pin clips (but not the cartridge pins).

The other common place for an intermittent connection to develop is in the shielded phono leads themselves, either at the tie points or sockets under the turntable base where they connect to the tone-arm leads, or at the preamp’s phono-input end. Gently wiggle the leads while a record is playing will usually provoke the trouble if its source is in either of these two areas. Tightening, cleaning, or re-placing the leads is in order once the problem has been localized. If none of these procedures help, check the muting contacts that are part of the turntable mechanism beneath the turntable base. The muting setup is usually nothing more than a flat spring-like arrangement that shorts out both signal leads (to prevent extraneous noises) when an automatic tone arm is cycling. Sometimes these muting switches get out of adjustment and blank out the signal at random intervals.

As to why you and your friends all suffer from the same turntable problem despite having different equipment...that remains a mystery.

Quality Loss

Q. I was recently told by a salesperson at a relatively good audio store that the quality of a well-known line of receivers has dropped to the point where their life expectancy is only one or maybe, if you’re lucky, two years. Is this likely to be true?

ANDREW TOMERS
Chelsea, Mass.

A. Lately I’ve been receiving two or three letters a month from readers asking some variant of this question. Sometimes electronic components are involved, at other times tapes are the problem. Readers tell me about various “routines” they get from salespeople, such as, “Sure, I’d be glad to sell you a Piowood Model 99X, but it’s only fair to warn you to hold onto the packing carton because...” And so on. It’s all relative.

As to why you and your friends are suffering, it’s only fair to warn you to hold onto the packing carton because...” And so on. It’s all relative. But in a real sense, many of today’s hi-fi equipment is designed, servicing, and using hi-fi equipment tells me that any component can—and will—break down at some point in its lifetime, no matter how well it was designed or how long it was supposed to be in service. If it breaks down in a month or so you’ll have to ship it back to the manufacturer yourself.” Or, “Sure, that product got a good review from the magazines, but...” And so on. It’s all relative. But in a real sense, many of today’s hi-fi equipment is designed, servicing, and using hi-fi equipment tells me that any component can—and will—break down at some point in its lifetime, no matter how well it was designed or how long it was supposed to be in service. If it breaks down in a month or so you’ll have to ship it back to the manufacturer yourself.” Or, “Sure, that product got a good review from the magazines, but...” And so on. It’s all relative. But in a real sense, many of today’s hi-fi equipment is designed, servicing, and using hi-fi equipment tells me that any component can—and will—break down at some point in its lifetime, no matter how well it was designed or how long it was supposed to be in service. If it breaks down in a month or so you’ll have to ship it back to the manufacturer yourself.” Or, “Sure, that product got a good review from the magazines, but...” And so on. It’s all relative. But in a real sense, many of today’s hi-fi equipment is designed, servicing, and using hi-fi equipment tells me that any component can—and will—
Just when you think audio technology's reached its peak, along comes Onkyo, making it even better. Our latest is an improvement on the superb performance of DC amplifiers.

Super-Servo circuitry — another Onkyo exclusive — uses the extraordinary characteristics of operational amplifiers in a unique, negative feedback loop. Thus you get the benefits, particularly at the low (2Hz and below) frequencies not offered by other DC amps.

Super-Servo... another example of how Onkyo stays a step ahead of state-of-the-art.

When we did, the result was three-dimensional imaging such as you've never heard. Sound you won't hear in conventional amplifiers. Or in other DC amplifiers. Only in Onkyo's Super-Servo amplifiers.

You have a choice of three, Super-Servo integrated Amps:

- **A-7040**: 50 watts per channel, minimum RMS at 8 ohms, both channels driven from 20-20,000Hz with no more than 0.026% THD.
- **A-7070**: 70 watts per channel, minimum RMS at 8 ohms, both channels driven from 20-20,000Hz with no more than 0.02% THD.
- **A-7090**: 110 watts per channel, minimum RMS at 8 ohms, both channels driven from 20-20,000Hz with no more than 0.018% THD.

Talking about power is only part of it. Onkyo's Peak Power Indicator is an array of LED's which light up according to power output per channel, from the very bottom to and over the top... calibrated in watts at 8 ohms.

Of course you get everything else you'd expect from Onkyo. Multiple inputs and outputs. Total protective circuitry for speakers and amplifier. Human engineered control placement with sound-shaping noise and filters. An immense, cool-running power supply.

Hear the brilliant audio quality of Super-Servo performance at your Onkyo dealer, or write for additional information. Super-Servo... another example of how Onkyo stays ahead of state-of-the-art.

**Artistry in Sound**

**ONKYO®**

Eastern Office: 42-07 20th Avenue, Long Island City, NY 11105 (212) 728-2970

Midwest Office: 935 Sivert Drive, Wood Dale, IL 60191 (312) 595-2970

West Coast Distribution Center: Damark Industries, Inc. 20600 Nordhoff Street, Chatsworth, CA (213) 998-6501

Canada: Sole Distributor, Tri-Tel Industries, Ltd., Ontario, Canada
Audio Q. and A. . . .

parts beyond their temperature, voltage, or current ratings; to install the best available parts the budget for the specific unit will allow; and then to employ adequate quality-control procedures in the burn-in, adjustment, and final check out. Nevertheless, the combination of human fallibility and the innate perversity of electromechanical devices will undoubtedly keep warranty stations and repair shops in business forever.

A leading manufacturer of high-power amplifiers once told me that about 5 per cent of his total units "out in the field" (meaning in customers' hands) have broken down in some way, minor or major, and he feels that 5 per cent is not out of line even for a company that scrupulously obeys the "rules" cited above. The same average-breakdown figure was provided by one or two other companies. Assuming that 5 per cent is an accurate average for the industry, I'm sure it could be reduced by several more points—but only by procedures that would add substantially to the ultimate consumer cost of the component. And, unfortunately, steps taken to reduce the failure rate by, say, 2 per cent would benefit only 2 per cent of the component's purchasers, while everyone who buys the component would pay a higher price.

Every manufacturer decides for himself exactly how far he will go in the effort to make his products 100 per cent reliable (an impossible goal). It's possible to keep costs down by skimping on parts and factory testing but, in the long run, it is obviously very risky for a company's reputation and profits to settle for too high a breakdown rate. Fly-by-night outfits run no such risks, of course, since they don't expect to be around "for the long run." But I strongly doubt that any established, well-known audio-equipment manufacturer knowingly or habitually ships defective or about-to-be defective merchandise to his dealers in an effort to realize a fast buck.

So what is the basis for these stories that readers pass on to me? I'm sure some of them originate with people who happen to have run into a couple of "lemons"—in a particular line and are now soured on the brand that denigrates them at every opportunity. (Remember that when something goes wrong during the warranty period, it is usually the dealer who has to bear the brunt of the customer's wrath and handle the repair.)

Other reasons for bad-mouthing a product are far less legitimate and may even constitute libel. Obviously, no store can carry all brands, since dealers have to exercise some discretion in the amount of money they tie up in stock. Thus, for some dealers, may seem adequate justification for disparaging a non-stocked product line when a customer asks about it. Certainly if a dealer doesn't want to sell a particular line because he can't make an adequate profit on it (usually as a result of competition from local discounters), that is his right. However, it is obviously not his right to lie about the reasons for his disenchantment with the line. (Note that in none of these product put-downs is sonic quality per se the issue, simply because there is no easy way to demonstrate the alleged sonic inferiority of a line of equipment.)

For some dealers, tape presents the same sort of problem. Some tape brands are more profitable or more available to a given dealer than others. Among tape dealers (and, I'm sorry to say, some tape manufacturers), product derogation usually focuses on the question of excessive head wear—since there is no easy way a consumer can judge the truth of the matter for himself.

The only comfort I can offer on all these matters is to say that I have never seen or heard any convincing evidence that any brand-name component or tape presently available has a consistently bad record for blowouts, breakdowns, or head damage. Despite his best efforts, you can find a bad batch in any manufacturer's line, but a dealer who says that a given manufacturer has a consistently bad record is kidding himself—or, more likely, you.

Nonlinear AM

Q. Only a few receivers have an evenly spaced linear dial scale for AM tuning similar to the one now standard for the FM band. Can it be all that difficult or expensive to build in, since many cheap car radios have them. Since a linear scale makes tuning much easier, especially in the closely spaced higher AM frequencies, why aren't they used?

Stephen Ricketts Prince Edward Island, Canada

A. I find it hard to understand Mr. Rickett's preoccupation with nonlinear dial scales when AM tuners also suffer from such a wide variety of severe audible defects, including very limited frequency bandwidth, noise, and distortion. A simple cure for all the audible ills—and the nonlinear dial scales—would be a liberal application of money to the problem areas. However, as long as the active element in the AM-tuner section of most receivers consists of a single integrated circuit, one must expect something substantially less than the ultimate in AM performance.

The as yet unresolved question (which I'm sure many manufacturers are asking themselves) is whether a sufficient number of audio consumers would pay the higher price that a higher-performing AM section would entail. Currently the single-IC AM section costs a manufacturer perhaps $3 to $4 overall, which raises the retail price of a receiver by perhaps $15 to $20. Given this five-times-the-parts-cost rule of thumb, I doubt that many listeners are so enamoured of the idea of high-quality AM that they would be willing to pay a substantial premium (probably upwards of $75) to achieve it.

This logically brings us to the question of stereo-AM broadcasting. I understand that in any of the contemplated stereo-AM broadcast systems, a single IC could provide all the stereo AM section required—which to me means that one IC is all that most receivers are likely to get. Why, then, do so many of the high-fidelity manufacturers appear ready to hop aboard the stereo-AM bandwagon when what is offered will almost invariably be of inferior quality? The reason, I think, is each manufacturer's fear that a competitor who does offer stereo-AM equipment will do better among first-time buyers and others who aren't aware of the equipment's limitations. This is not to say that stereo AM can't be broadcast and received with reasonably high quality. What I'm predicting, in the light of past experience, is that it won't be.
0.04% WRMS (JIS C5521) wow and flutter. -70 db (DIN 45539 E3) rumble. ±0.06% speed deviation.

Those are turntable specifications above. Measurements relating to motor noise caused by rotation of the platter, and sound distortion caused by speed deviation. In this particular case, the numbers indicate that wow, flutter and rumble are so minimal your ear can't hear it. And that's something you can prove to yourself—just by giving this MCS Series® Direct Drive Turntable a trial run.

The reason you won't hear any wow, flutter and rumble is simple. We've designed this fully automated, multi-play turntable with the most advanced features. A DC servo motor assures constant speed. Direct drive gives you extremely quiet operation, and excellent signal to noise ratio—because the platter is actually part of the motor. All of which helps to eliminate distortion.

If it still seems complicated, just listen to the sound of MCS. It says more than all the tech talk in the world.

The MCS Series® 6700 Direct Drive Turntable with Shure® cartridge, $219.95.

Full 5-Year Warranty on speakers. Full 5-Year Warranty on 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.

IT MAKES EVERYTHING CLEAR.
Sold and serviced at JCPenney

CIRCLE NO. 51 ON READER SERVICE CARD
SIGNAL PROCESSING—2

Last month in this column we took a look at signal processors whose effects are specifically intended to be heard. There is also a large family of related devices that try to prevent you from noticing things you don’t want to hear—such as noise, distortion, and limitations (deliberate or otherwise) in dynamic range or frequency response. And there are even some esoteric processors that work, often in mysterious ways, to correct various infelicities in microphone technique, in the recording chain, and in playback systems. In short, there is a host of “black boxes” out there—some used mostly in the professional sphere, some intended for the home listener or amateur recordist, and others straddling both worlds—that are capable of doing interesting, even surprising things to audio signals.

One of the most familiar is the Dolby B-type noise-reduction system, which is found in almost every cassette deck claiming high fidelity and in a fair number of receivers and tuners as well. The Dolby system has only one object: to prevent noise, specifically the hiss that plagues tape recording and FM broadcasts, from intruding upon the listening experience. The Dolby system uses a fairly complicated dynamic processing action (meaning that the action does not remain constant but changes with signal conditions) applied in two steps. Step one takes place before the noise source (the tape or the broadcast process) is encountered by the audio signal, step two during the actual listening. Step one consists of boosting the signal-to-noise ratio of the tape or broadcast medium by selectively compressing the dynamics of the signal, whereas step two undoes that compression and restores the original dynamics. If this suggests that a Dolby processor (or processors—for Dolbyized FM broadcasts the radio station must use one as well) must be carefully calibrated for precise complementarity of the two steps, that is indeed the case. Note also that any noise present in the original signal remains in it; the Dolby process is intended only to keep more noise from being introduced by the taping or broadcasting.

Although it is the best-known, Dolby B-type processing is far from the only example of this kind of noise reduction. JVC offers its own ANRS system, one version of which is compatible with the Dolby process (in other words, step one can be done with a Dolby unit and step two with a JVC, and everything will still come out reasonably okay). The noncompatible dbx system is popular with some home recordists, as is its close relative, the MXR processor; and in professional recording studios you’ll find several systems in use—one of which, developed by Telefunken, is due to be introduced shortly in a consumer version.

But what of noise that has already contaminated the signal, which the foregoing systems will treat just as if it were part of the music and let pass right on through? Handling this sort of noise is a difficult business. Any successful processor will first have to recognize the noise for what it is, then somehow contrive to get at it and pull it out without doing serious damage to the music, which undoubtedly shares some of the same frequencies. The simplest approach for hissy noise is the dynamic filter—a high-frequency filter that is automatically brought in and out of the signal path and altered in the degree of its effect by signal conditions. More specifically, when high-frequency information falls to a very low level, such a filter assumes that there is no music present, only noise, and acts to remove it. When significant high-frequency musical activity resumes, the filter becomes inactive, since the higher-level, high-frequency music will, it is hoped, mask the noise. As these things go, a basic dynamic noise filter is a relatively simple affair, but its fundamental principles can be applied in much more complicated ways, such as in the “auto-correlators” offered by Carver Corporation and Phase Linear. Here the techniques for distinguishing noise from music are considerably more sophisticated, and the filtering action itself is no mere high-frequency rolloff but instead resembles the action of an automated multiband equalizer. These devices are dramatically more effective than a basic filter—and dramatically more expensive.

Entirely different approaches to noise reduction are required for the amplified “Rice Krispies” noises so familiar to those who play records, because these noise signals would “look” like music to a dynamic filter. Accordingly, the noise-detection circuits of devices intended to deal with them are designed to concentrate on other criteria—usually the rise time of the signal (impulse noises such as record pops and pops “riding” on the tail of the phase relationships of the impulse signal between the two stereo channels. When the circuits have evidence that a signal is a spurious noise and not, say, castanets or a woodblock, their usual action is to switch off the whole signal—or a good part of it—for a split second, so that the music you don’t want to hear ceases the speakers. These tiny fraction-of-a-second interruptions cannot be perceived, and special circuits are also employed to ease the transitions between the signal-on and signal-off status. Still, the technique has not yet reached perfection, and of the available “impulse-noise suppressors” (from Burwen, Garland, and SAE), some do better with little tick-like noises and others excel with big “pops” such as are caused by deep record scratches.

Another type of signal processor, the dynamic-range expander, acts to make soft signals softer and (often) loud signals louder, so that the transitions between the signal-on and signal-off status are more gradual. This is achieved by treating different groups of frequencies (or signal levels) independently. The most prominent company to offer consumer-type expanders is dbx, although RG Dynamics has also become popular recently. Incidentally, many of these devices can also be used to reduce dynamic range, making all sounds, whether originally loud or soft, come out at about the same level.

The list of available signal processors is much longer than the space left to discuss them. There are time-delay units and other devices that process stereo signals in intricate ways to enhance some special aspect of the reproduction (see in particular the review of the Carver C-4000 preamplifier on page 46) and some that deliberately add strange effects for the sonically jaded. There is even one (from dbx) that synthesizes extreme low frequencies when there were none to begin with. Few audiophiles like the way all these devices sound, but many treasure a few. If you are interested in making a significant audible improvement in an already good system, signal processing is probably the way to go.
If music is the big thing in your life, you’re sure to love Sansui’s new little speakers.

If you love music, you want to hear it all. The full frequency range. The full dynamic range. Even if your listening room isn’t as big as a concert hall. But to reproduce low frequency signals, the speaker has to move a lot of air. That’s why most woofers are much larger than most tweeters, and why most speaker cabinets are so big.

And that’s why the new Sansui J11 is a major breakthrough in speaker design. From a woofer no bigger than most tweeters — in a cabinet the size of a loaf of bread — Sansui engineers have been able to achieve outstandingly rich bass response. All the way down to 45 Hz.

Part of the secret is the lightweight but unusually rigid diaphragm material, aided by a long-throw surround and a powerful magnet structure designed for high output, linear response, and low distortion. And a special voice coil that allows you to run up to 60 watts of power without fear of heat build-up.

Another part of the secret is that we’re really using two woofers. The second one is called a “passive radiator,” for it has no magnet or coil structure of its own. But it’s acoustically coupled to reinforce the output of the regular woofer, to move all that air for big bass response.

The soft-dome tweeter design gives you wide dispersion for the best stereo imaging, and its powerful 9000 Gauss magnet structure and integral phase equalizer provide the high output and clarity needed for real-life music reproduction.

And if you like to take your music with you, you’ll appreciate the almost indestructible, handsome, aluminum enclosure of the J11. Attractive enough to put anywhere, you can hang it from a nail in a wall, or get Sansui’s versatile swivel bracket for more permanent installations.

If you have just a little more room and appreciate the lustre of a Steinway finish as well as a Steinway sound, you’ll love the J33. A bit larger than the J11, it has an 8” woofer for still more efficiency. And its mirror-image pairs give music mirror-image perfection.

Visit a Sansui authorized dealer soon and compare the J11 and J33 to some of the giant-size models. Close your eyes, and the difference will disappear.

J11: sensitivity: 86dB/W/M; 11-13/16” H x 4-13/16” W x 5-3/16” D. J33: sensitivity: 90dB/W/M; 16-1/8” H x 9-7/8” W x 7-1/8” D. Both models packed in matched pairs in a convenient carrying case.

SANSUI ELECTRONICS CORP.
Lyndhurst, New Jersey 07071. Gardena, CA. 90247
Sansui Electric Co., Ltd., Tokyo, Japan
Sansui Audio Europe S.A., Antwerp, Belgium
In Canada: Electronic Distributors
CIRCLE NO. 54 ON READER SERVICE CARD
**METERS VS. ELECTRONIC INDICATORS**

More and more of the new cassette decks use illuminating bar-type electronic displays to indicate signal levels instead of the level meters we've been accustomed to, and readers have asked me whether the new-style indicators are really accurate or are just another dramatic-looking gimmick.

Considering the main function of record-level indicators in a consumer tape deck, I think that, in most systems, the advantages of the new electronic displays far outweigh the advantages of meters. For certain specialized applications, however—such as calibrating adjustable controls or noting actual signal-level measurements—the traditional meters continue to enjoy a slight edge. To understand why this is so, let's review what record-level indicators are supposed to do and how they go about doing it.

When you record music or speech, it is important to get as much signal as you can onto the tape before distortion becomes severe. This is because there is an irreducible minimum of tape noise ("hisss") present at all times, and only by recording at as high a level as is safely possible can you improve the chances that when you play the tape you won't have to turn your volume control up so high that this annoying background hiss becomes audible. The chief task of a record-level indicator, then, is to monitor the constantly changing input signal with reference to a known, calibrated point (conventionally marked "0 dB" or "0 VU") above which distortion problems are likely to occur.

The first consumer recorders I can recall actually used electronic indicators—to wit, a pair of neon bulbs, one of which was supposed to stay on more or less continuously while the other was supposed to flash only occasionally to give warning of the loudest parts. But even the best VU meters have two drawbacks when used as record-level indicators. In the first place, they are, electrically speaking, "average-responding" instruments. If all you wanted to tape were pure tones in which the relationship between peak and average signal levels is fixed, this would be no difficulty. Unfortunately, both music and speech are characterized by the presence of many very large, very brief bursts of energy (called "transients"), and it is these peak levels, not the average levels, that drive tapes into distortion. And it is just these peak levels that a VU meter is least able to indicate reliably.

The addition of a little electronic circuitry can be used to transform an "average-reading" meter into a "peak-reading" meter (technically, a "quasi-peak-indicating" instrument), which is certainly easier for the average recordist to use and is preferred by many European professionals as well. Either way, however, there is still the second drawback of a meter system to consider. Since the pointer of a meter is, obviously, mechanical in its operation, there is always a time lag between...
tween when a signal is applied and when it registers. Moreover, the pointer's momentum can cause it to overshoot the proper reading. Thus, depending on the mechanics ("ballistics") of their movements, two different record-level meters of the same general type (two VU or two peak-indicating meters, for example) can respond very differently to a series of rapidly changing signals.

At the professional level, where one can spend $50 or so for a single meter, the complete electromechanical performance of a meter can be very tightly specified, but this is obviously impractical in the consumer marketplace. The practice of using VU-type meters together with a single peak-reading LED, as numerous cassette-deck manufacturers have resorted to in recent years, is in a sense just combining the meter system with the old neon-bulb overload indicator—though with one important difference: modern LED's can be calibrated to a much greater degree of accuracy than the old neon-bulb indicators. Thus, some of the "all-electronic" record-level indicators consist of a string of several such indicators (with modern, easily produced resistive voltage dividers feeding them). Other electronic displays are of the plasma or fluorescent type, and at least one (with sixty-four elements per channel!) is available that uses color-changing liquid crystals. All the new-style indicators completely eliminate the problems associated with mechanical meter movements. Indeed, their action is so rapid that special circuits are required to keep them illuminated long enough for the human eye to follow their shifting readings!

Because electronics alone govern the turn-on and turn-off times of these new record-level indicators, they can be given either the relatively slow-changing characteristics of a VU meter or ultra-rapid peak-indicating characteristics at the touch of a button. A further refinement built into some models is a "peak-hold" circuit that permits the user to store (from a few seconds to an hour or more) the maximum peak level encountered—which is, of course, very useful if one is planning to dub from LP's. The basic accuracy of these indicators in terms of the calibration scale is at least as great as that of all but the very finest meters.

The one desirable feature that is lost (at least in some of the electronic displays) is the continuous and precisely calibrated scale resolution that a meter provides. This is no serious flaw in terms of recording, for with music or speech signals the illuminated pattern of the electronic indicators can be read as easily as the eye can resolve the continuous variations of a needle pointer. On the other hand, with machines that have user-adjustable bias and/or equalization controls or front-panel Dolby-level adjustments using steady, fixed-level tones, a conventional meter movement is somewhat more convenient.

In any case, the greater the number of discrete levels capable of being displayed on one of the new all-electronic indicators, the closer it will approximate the resolution provided by a meter. To measure very close difference, such as between the sensitivity of two samples of tape, I'd still be inclined to rely on an external, laboratory-grade meter, but for general recording purposes the all-electronic record-level indicators seem to me to be a real step forward, and not a gimmick—although they are fun to watch!
Any audio professional will tell you. The fidelity of your recording depends on the quality of your recording level meter.

That's why Sony Audio created the fastest, most accurate, most versatile, most reliable, brightest, and easiest-to-read recording level display meter in tape deck history. Period.

Our Liquid Crystal Peak Program Meter IC responds in an incredible 1 millisecond. That gives you the quickest measurement possible, even on the most sudden transient signals.

To demonstrate, clap your hands in front of a microphone. Watch any ordinary VU meter as it tries to respond. Not very much will happen. Now try the same thing with our LCD meter and you'll see that total burst of sound completely displayed.

And speaking of displays, you get a Double Indication System which displays peak levels in two ways: Auto mode, which holds peak levels for approximately 1.7 seconds, or Manual mode, which maintains peak level readings over the entire length of your recording.

Unlike other displays, our LCD meter gives you 33-step accuracy over a wide -40 to +5dB range. It changes color above 0dB, so you never miss an overload reading. And it even has an element life span of more than 50,000 hours.

Finally, the tremendous brightness and logical design of the LCD meter make precise comparisons between left and right channels easier. In any kind of light.

But not only does Sony Audio have the LCD meter. We've got the cassette deck to deserve it. The TC-K60.

With our own hesitation-free brushless/slotless BSL motor, our own newly developed Dolby* IC, our own Ferrite-and-Ferrite head, and our own microprocessor-controlled Automatic Music Sensor that lets you preselect any of up to nine recorded program segments.

Enough talk. The TC-K60 with Liquid Crystal Peak Program Meter is one Sony Audio product you've got to see for yourself.

So look. Then listen.

You'll never be satisfied with anything less.

*TM Dolby Laboratories Inc.
Technical Talk

By Julian D. Hirsch

Audible Differences

From time to time (and with increasing frequency these days) I read subjective reviews of high-fidelity components that make me wonder whether I am living in the same world as their authors. Many, if not most, of the people who profess to hear sonic qualities that they feel are not explainable by objective testing hold such testing in contempt. From their point of view, given the occurrence of "huge," "tremendous," "dramatic" sonic differences between components whose performance appears to be essentially identical in laboratory measurements, only one conclusion is possible: those so-called "objective" tests are meaningless since they fail utterly to correlate with the subjective sound quality of an audio component.

However, there is a reverse side to this coin. Those of us who do not hear these vast differences during carefully controlled experiments—or who have repeatedly caught the subjective reviewers in inconsistencies that cast grave doubts on the validity of their conclusions—may perhaps be excused if we see them as irrational, technical ignoramuses, to say the least.

Before considering whether there is a "right" and a "wrong" way to evaluate audio components, let us admit from the outset that these controversies can be interesting and thought provoking, especially if one does not take them too seriously. There is ample room for a diversity of opinion in this as in any field, and surely life would be dull if we all saw (and heard) things the same way. I certainly do not rule out the ability of some people to hear certain things that I do not, as this has been demonstrated to me on a number of occasions. Some people are blessed with a sense of absolute pitch, for example, and for all I know there may be some out there who even have extrasensory powers. All I can say with assurance is that I do not possess these talents, and therefore tend to believe what my training and experience as an engineer tell me are the most meaningful and valid answers to questions of fact. These answers are obtained by experiment and measurement rather than by intuition or prejudice.

My tolerance for some of the subjective critics is strained somewhat by their (to me) unbelievable excesses of hyperbole. On more than one occasion I have had some "tremendous" difference in sound pointed out to me and have indeed heard a difference—which I found not particularly significant. For reasons that escape me, many people insist not only on focusing on these minuscule differences, but on ranking them as "objectively" better or worse. When dealing with purely subjective effects, I view this attitude as one of intolerable arrogance bordering on idiocy (I hear a difference that I judge to be tremendous); therefore, you must hear it also—and find it tremendous).

I will grant that sometimes these subtle equipment differences can exist for no apparent reason. But when the difference is really "huge," it should be obvious to anyone. When I walk into a room in which a program of limited bandwidth, with severe distortion, is being played, no debate is necessary to establish that the sound quality is "bad." Measurements would surely confirm that judgment.

It seems quite evident to me that two things can be different without one's necessarily being better or worse than the other. I have heard live music played in a number of halls and rooms, each time with different audible qualities. Unless the acoustic effects of the room were so extreme as to render this live sound unpleasant, I would feel no obligation to render a better-or-worse sonic judgment. It is clear to me that most of the subtle differences that are the bread and butter of the subjective critics fall in the same category.

As with a live performance, even if the reproduced sound is really very different, it is easy (for me, at any rate) to become accustomed to it so long as its quality is not actually bizarre or offensive. Note that I hold no brief for purely objective measurements, either. If we knew exactly what to measure to define the sound of anything, we would have no need for subjective judgments. Unfortunately, measurements do not tell us enough about how something sounds. They can tell us quite a lot about what it does, however, and how its performance compares with that of competitive products.

In closing, I would like to point out one very fundamental difference between objective and subjective measurements or tests. If our laboratory tests of a product produce results at variance with those obtained by the manufacturer or anyone else, it is usually possible to determine the reason for the difference without the necessity for argument. Also, in measurement we are never concerned with quality judgments—"better" or "worse"—but only with "how much" or "what." Subjective reviewers could benefit from a realization that their judgments are at least as fallible as those of a laboratory tester (in my view, much more fallible), with the added problem that differences are not so easily resolved between conflicting subjective opinions. For that is just what they are—opinions; it is risky to view them as facts.

Tested This Month

Carver C-4000 Sonic Holography/Autocorrelator Preamplifier
Fisher CR-4025 Cassette Deck • SAE Model 180 Parametric Equalizer
Shure/SME Series III Tone Arm • Sherwood S-7650 Stereo Receiver

(Continued overleaf)
BOB CARVER, one of the true innovators in the high-fidelity field, has devoted much of his professional life to finding ways to remove—or at least to minimize—those qualities in home music reproduction that prevent it from sounding like a live performance. The autocorrelator noise-reduction and peak-unlimiter circuits he designed for the first Phase Linear stereo control center several years ago effectively added about 17 dB to the dynamic range of home-music reproduction. We find that these circuits, used in combination, are almost always able to make a significant improvement in the sound of the program material. Although one can sometimes hear undesirable side effects, they are rarely evident. And, in any case, the benefits far outweigh the weaknesses.

In the first control-center preamplifier to come from Carver Corporation, a newly formed company, Carver has incorporated improved versions of the autocorrelator and peak unlimiter. The peak unlimiter is faster acting and the noise-reduction circuits have been redesigned with additional separate band settings and gating, with the result that faults in its operation are now even harder to detect. But Carver’s search for realistic reproduction has taken him well beyond the realms of dynamic-range expansion and noise reduction.

In the past few years, consumer add-on time-delay components have become technically feasible, making it possible to enlarge the apparent acoustic size of a home listening room and thereby provide many key aspects of the concert-hall listening experience (see “Time-Delay Systems,” Stereo Review, October 1978). Most commercial time-delay accessories are highly flexible, offering a choice of a number of delays and reverberation “mixes,” and many listeners (myself included) have found that they deliver much of what was once promised, but seldom realized, by commercial quadraphonic hardware and software.

Although they are a step in that direction, even the best time-delay systems fall short of providing a totally convincing illusion that the listener is in the concert hall. Now, Carver Corporation’s new preamplifier has taken the illusion of sonic reality another significant step forward with its “sonic-hologram” system. (Holography is an optical technique that can create an apparent three-dimensional image in space by the use of optical-interference effects. The illusion of three-dimensionality is so great that one can walk around a holographic image, view it from the sides, and even photograph it just as one could do if the real object were there.)

The operating theory of Carver’s “sonic hologram” is close, but not identical, to that of an optical hologram. Its audible effect is to extend the normally all but deathless sound stage heard with conventional stereo speakers around the sides of the room (even, to some extent, to the rear) so as to surround the listener with a sonic illusion that is remarkably close to what might be heard at some real performance. The “miracle” in Carver’s technique is that it uses only the two normal front speakers—and that it works!

In order to make the acoustic magic work in full measure, however, one must sit at some point along a fairly narrow line equidistant from the two stereo speakers (in other words, on the perpendicular bisector of a line joining the speakers). The effect is not nearly so dramatic elsewhere in the room, but the sound is still noticeably better than normal stereo, particularly in respect to a greater sense of “warmth” such as is experienced in a concert hall.

The final bit of icing on this psychoacoustic cake is provided by a built-in time-delay system that is designed to operate with three small speakers (not included with the C-4000). Two of the speakers are placed at the rear of the room, each of them carrying a noncoherent cross-coupled mix of the two channels delayed in time, and a third identical speaker is placed at front center, midway between the stereo speakers and carrying a sum (L + R) delayed signal.

The Carver Model C-4000 Sonic Holography/Autocorrelator Preamplifier includes a full stereo preamplifier (with a moving-coil cartridge pre-preamplifier), a time-delay system with selectable delay times and controllable reverb mix, a small stereo power amplifier for driving the delay speakers (with a nominal 20-watt rating per channel), the sonic hologram circuits, plus the autocorrelator noise-reduction and peak-unlimiter circuits mentioned earlier. In one attractively styled unit, it brings the hi-fi listener unparalleled control over the program material and his listening environment. Considering what it includes and how well it works, the $850 price of the C-4000 makes it one of the best hi-fi bargains around.

- **Laboratory Measurements.** Measurement results on a prototype Carver C-4000 from the standpoint of its function as a preamplifier control center (and ignoring its unique features) were excellent. The RIAA phono equalization was accurate within ±1 dB from 20 to 20,000 Hz and was absolutely unaffected by cartridge inductance. (Equalization accuracy will be rated at ±0.25 dB in production units.) The phono-input capacitive value can be set at 0, 200, or 400 picofarads (pF) to suit most cartridges (in the 0-pF position the capacitance was unmeasurably low—which means that the phono wiring and cables would establish the minimum capacitance level).

The distortion in the preamplifier outputs was barely measurable (0.005 to 0.02 per cent for output levels between 0.1 and 5 volts). The delay-channel power amplifiers in our prototype clipped at 26.5 watts into 8 ohms at 1,000 Hz. The distortion was higher in the prototype but will be rated well below 0.5 per cent. (The delay signals are also available on the C-4000's built-in power amplifiers for use with a separate stereo power amplifier.)

The preamplifier required an AUX input of 50 millivolts (mV) or a PHONO 1 (moving-magnet) input of 0.85 mV for a reference output of 0.5 volt. The phono input overloaded at a very safe 150-mV level. The moving-coil head amplifier on PHONO 2 was not checked since its design had not been finalized. The A-weighted noise level, relative to a 0.5-volt output, was unmeasurable (less than 100 microvolts, or ~74 dB) through the AUX input and a barely measurable 157 microvolts (~70 dB) through phono 1. These are extremely impressive figures when one considers that the rated output of the preamplifier is 2.5 volts and another 14 dB would be added to each figure if it were referenced to that level. Also, switching in the autocorrelator would have reduced the noise by at least another 8 dB.

- **Comment.** The unit we tested was a prototype whose design was not necessarily final in (Continued on page 49)
GOOD SOUND IS ALL IN YOUR HEAD.

AKAI's GX Head is guaranteed* for over 17 years.

What you're looking at is AKAI's exclusive GX Head. A technical departure from any other recording/playback head design on the market today. Its composition: glass and crystal ferrite.

Imagine, if you will, a virtually wear-free head with a smooth glass face that doesn't allow dust to collect. A head that AKAI guarantees to perform for over 150,000 hours.

That's over 17 years of continuous, superb play.

It's a head that many audiophiles feel has set the industry's performance and durability standards. And you'll find it exclusively in AKAI cassette and reel-to-reel decks.

All of which means that to get the clean, crisp sound your head deserves, use ours. AKAI's GX glass and crystal ferrite.

For details, see your AKAI dealer, or write AKAI America, Ltd., P.O. Box 5010, Compton, CA 90224.

AKAI
You never heard it so good.

*limited warranty
THE JVC CASSETTE DECK.
It gives you more of what the others wish they could.

Cassette recording takes a giant step forward with the new series of JVC cassette decks. Each is designed to give you everything you need to get the most out of any tape. And there are totally new features to help you make better-sounding cassettes.

**Exclusive Spectro Peak Indicator System.**
With almost recording studio vigilance, 25 instant-responding LED indicators offer fail-safe protection against distortion produced by tape over-saturation. For the first time, you can constantly visually monitor the levels of five low-to-high musical frequency ranges. Then, on playback, the Spectro Peak Indicator actually lets you see how accurately the deck has performed.

**Expanded Dynamic Range and Better Noise Reduction.**
Our Super ANRS circuitry applies compression in recording and expansion in playback to improve dynamic range at higher frequencies. So distortion is eliminated in sudden high peaks of any musical program. Super ANRS also reduces tape hiss by boosting the deck's signal-to-noise ratio by as much as 10dB over 5000Hz.

**New Head Design.**
Our refined Sen-Alloy head gives you the sensitive performance of permalloy head construction, combined with the extreme longevity of ferrite, for bright, full-sounding recordings.

Get the most out of any tape
Because whichever type you select, you'll extract the most from it with our special recording equalizer circuit that lets you "fine tune" the high frequency response of the deck to the exact requirements of the tape. These innovations alone set JVC cassette decks apart from all the others. Then, when you consider our other refinements, like precision-ground capstans, gear/oil-damped cassette doors, multi-peak LED indicators, independent drive mechanisms, plus top performance specifications, you can understand why we say that JVC gives you more of what other decks wish they could. Visit your JVC dealer and you'll hear why.

JVC
all respects, but there is no reason to expect that the performance quality will be degraded in any way in production. Clearly, the Carver C-4000's overall performance, aside from its special circuits, ranks with the most refined conventional preamplifiers now available.

The true qualities of the special circuits can be appreciated only by listening. For that reason, they were auditioned by several groups in several different environments, with different speakers and ancillary equipment (see Larry Klein's comments following). My remarks apply only to what was heard in the regular Hirsch-Houck Labs listening room, where we used the unit with a pair of test speakers with good polar dispersion but a balance tilted toward the higher frequencies. The delay-channel speakers were inexpensive "mini" systems costing less than $50 retail; their 4-inch woofers would hardly be expected to augment the bass output of the much larger and far more expensive front speakers.

After Carver had made the necessary level and balance adjustments, we sat in the suggested optimum location and listened first in conventional stereo and then with the sonic-hologram generator switched in. To describe the change as "dramatic" would be a gross understatement. The instrumental sounds, originally heard in a more or less narrow line between the speakers, were suddenly located down the side walls of the room to a point nearly as far back as we were sitting (about 12 feet from the speakers). The sound took on a rich, solid quality, and there was a great apparent increase in the bass output. As we settled back to savor a sound quality never before heard in this room, Carver turned on the delay channel and the richness and depth then extended all around us! He then turned off first the delay, then the hologram generator, and the sound simply collapsed to the front of the room and "only" stereo was left. The letdown was akin to what one might experience switching from a fine stereo system to an old mono console radio.

The prospect of sitting in one specific place to listen to music does not particularly appeal to us, though this is certainly a question of personal listening habits. If one moves somewhat forward or back along the line that extends through the preferred position, the "holographic" effect remains, but as you stray from the preferred axis the uncanny sense of reality becomes diluted and then disappears. What is left, however, is a still-strong bass warmth and ambiance, seemingly at least as good as (or better than) anything we had heard in the same room from time-delay systems. That this effect was emanating from only two front speakers was a fact we found intellectually difficult to accept even though we knew it to be so.

This brings us to the "bottom line" in our appraisal of the Carver C-4000. We realize that the preceding description sounds as though it came straight from an advertising copywriter's overheated Remington. At H-H Labs, we consider ourselves to be reasonably objective when it comes to audio, but we were so impressed by what we heard in this brief exposure to the C-4000 that we greatly look forward to getting a production model so that we can listen at some length. I strongly recommend that any audiophile interested in the rapidly advancing state of the audio art listen to the C-4000 for himself just as soon as it reaches audio showrooms. We would not expect any reader to accept our reactions to the C-4000 without question—we probably would not have believed it ourselves had we not experienced it!

Carver C-4000
Preamplifier
Listening Tests

By Larry Klein

When evaluating a product—be it a speaker or an amplifier—that provides special acoustic or psychoacoustic treatment of the signal, certain performance aspects should be checked that are not dealt with in conventional testing procedures. For example, will the product under test work equally well in different acoustic environments? Is the location of the listener (or the product) particularly critical in regard to the results achieved? Will a group of individuals with different prejudices (or tastes, if you prefer) and different hearing acuities have differing reactions—positive or negative—while listening to the same demonstration?

All these questions were considered when Bob Carver and I discussed a test report on his newly developed "Sonic Holography" preamplifier. I had listened to a prototype unit at the Carver Corporation exhibit room at the Las Vegas Winter Consumer Electronics Show, but considering the crowds and the unknown acoustics, all I was prepared to say was that the spatial characteristics of the sound were quite unlike what I normally hear from two conventional speakers. However, I wasn't sure how much I liked what I was hearing, and, of course, I didn't know whether the preamplifier responsible for the effects would sound better or worse at other times and places. So, in the words of Sam Goldwyn, I was that the spatial characteristics of the known acoustics, all marks apply only to what was heard in the Carver Corporation exhibit room at the Las Vegas Winter Consumer Electronics Show, but considering the crowds and the uncertainties company, and plays bass guitar. I was particularly interested in having Ajaye present since over the years he has proved himself to be especially sensitive to audio-system phase aberrations (some early quad synthesizers gave him instant headache) and I wondered whether some aspect of the C-4000's special signal processing might produce a disturbingly audible side effect for him.

The Carver preamplifier was played through a 300-watt stereo power amplifier driving two very high-quality, wide-dispersion, floor-standing speakers placed within normal spacing at the front of the room. As the various participants arrived at Stark's finished-basement laboratory, each was seated facing the two front speakers while both

(Continued overleaf)
direct-cut and conventional discs were played through the preamp. In three cases, uninitiat-ed late arrivals asked to hear the system again—this time without the two side speak-ers operating. When it was pointed out that the side speakers were part of Stark's four-channel system, which at the moment was completely disconnected, the reaction was startled disbelief.

We spent the better part of the day in Stark's laboratory auditioning a wide variety of records. The worst that could be said of the C-4000 system was that if a particular recording lacked phase integrity or reasonable stereo perspective, Carver's holographic cir-cuits were not given enough information to generate the full effect. In such cases, sound reproduction might—or might not—be slightly better than normal, but it was not in any case degraded. When the program material was adequate (I suspect most available rec-ordings are), the assembled golden ears judged that the effect ranged from merely good to startlingly realistic, particularly when directly compared with ordinary stereo reproduc-tion. At its best, the holographic effect caused the sound to appear to originate from various points within a wide arc extending be-hind the speakers and beyond the walls of the room around to the listener's left and right sides. Within this half-circle area, instrument placement was clearly defined, open, and nat-ural. No problems were experienced with effects such as 10-foot-long violins or stacked or clumped instruments. In addition, hall ambience, warmth, or "air" was present in full measure, providing a wonderful sense of acoustic space for much of the material. All of this, mind you, was with two front speak-ers only and without the help of the time-de-lay function built into the C-4000.

Toward the close of the main listening ses-sion, several of the participants expressed concern about the C-4000's possible tendency to produce "surround-sound" effects: the sort of unnatural wrap-around arrangements of instruments all too commonly heard during the four-channel era. Surround sound doesn't particularly bother rock listeners, but for the critical classical listener who wishes to hear music sounding as it does in a live perfor-mance—that is, without unnatural spatial effects—the surround-sound approach exemplifies everything that was wrong with quadra-phonics. Some of these listeners stayed on well into the evening, playing familiar classical tapes and discs (most recorded without exten-sive use of multiking) in several different rooms and through various component sys-tems. After several hours of critical listening, they agreed that the localization of voices and instruments in these "purist" recordings re-mained essentially unchanged, but the sense of air and space around them and the illusion of three-dimensionality were strikingly enhanced by the holographic processing.

The following week Carver took his show on the road: to Hirsch-Houck Labs, to the office of Stereo Review Editor William Anderson, and to the home of Popular Elec-tronics Editor Art Salsberg. In all cases, the response was overwhelmingly positive.

When Carver returned from his travels and set the C-4000 up in my living room for the first time, the listening experience left me in a state that could best be described as "mind-blown." The initial setup procedure for bal-ancing the sonic holograph consists of adjusting the sonic image one side at a time. The right-channel phono lead was unplugged, and we played one of my wife's favorite discs ("Japanese Melodies for Flute and Harp," Columbia M 34568). I clearly heard the flute as originating somewhat to the left of the left speaker/room/ear interfaces. Some of the factors compensated for, according to Car-ver, are the frequency-dependent head-shad-ow effect, the time/phase delay between a listener's two ears, and the arrival times of the first four reflections from the room bounda ries. In addition, there's the "half-sound" (which on a recording embodies much of the hall sound) is extracted acoustically as a re-sult of phase interactions within the cross-fed signals. To put it another way, the sound field created around a listener's head (when he is seated on the critical listening line) is pro-duced by carefully calculated and controlled interference effects, and this is where the ho-lographic reference comes in.

I don't yet fully understand how the "holo-graphic" effect is achieved, but my listening experiences leave no doubt that the technique produces a far more plausible sonic illusion of space and localization than is produced by normal stereo. Bob Ajaye (who is conserva-tive enough to still be using a Marantz 7C tube preamp in his home system), after two days of critical listening, called the Carver invention "a giant leap forward for hi-fi." I agree.

I'm sure that there are at least a few purists among our readers who will be upset by what they feel to be Carver's high-handed manipu-lation of the stereo signal. To them I can only point out that the stereo-reproduction/percep tion process is itself totally artificial. Where in real life is the apparent source of a sound perceived between its two actual sources? But this is exactly what you are hearing when you listen to stereo—or even mono through two widely spaced speakers. Given the basic fool-the-ear artificiality of normal stereo reproduction, I see no reason to object to further psycho acoustic manipulation, particularly when (as in the case of the C-4000 preamplifier) it brings the listener substantially closer to that elusive sonic illusion of being in the presence of a live performance.

—L.K.
Yamaha goes its separates way.

With unprecedented performance, features and price.

**C-4**
Our new C-4 stereo preamp has the most advanced circuitry imaginable to give you sound so real and true, you'll swear it's live. Distortion in the phono preamp section has been reduced to a miniscule 0.0035% at 2V output. Signal-to-noise ratio has been tamed to the virtually inaudible level of 97dB at 0.001V. A special Current Noise Reduction Circuit maintains this high SIN ratio regardless of varying impedances caused by using different cartridges. But you really have to hear the sound of the C-4 to believe such pure musical tonality could pass through a piece of electronics.

The C-4's features put you in total command of its superb sound. Unheard of tone control is yours with the exclusive, continuously variable turnover frequencies for the bass and treble controls. You can select from five ranges for both capacitance and resistance to load your cartridge for optimum performance. The C-4's built-in head amp provides the boost necessary for you to indulge in the transparently beautiful sound of a moving coil cartridge. Without extra expense or noise.

And these are just a few of the fabulous features that make the sleekly styled C-4 a super-sophisticated device with possibilities limited only by your imagination.

**M-4**
Our passion for pure tonality reaches toward perfection in the M-4 stereo power amp. To deliver the cleanest, most musical sound possible, we built it with DC circuitry in a dual mono amp configuration. The dual mono amp configuration results in dramatically reduced crosstalk for dramatically enhanced listening pleasure.

The M-4's specs are nothing short of spectacular. THD takes a bow at an incredibly low 0.005% at rated output of 120W per channel into 8 ohms, 20Hz to 20kHz. Signal-to-noise ratio is, (please hold the applause) an utterly silent 118dB.

Again though, specs can't do the sound of the M-4 justice. This boldly styled, superbly functional power amplifier is solidly in the super state-of-the-art category.

That's what both our new separates are all about. Unprecedented performance, features and styling. And the price? Well, you can benefit from what we learned in precedent-setting sound with our legendary cost-no-object B-1 and C-1 separates. Without paying the price. Audition our new rack-mountable super separates, the C-4 and M-4 for yourself. It's an ear-opening experience you won't want to miss. For the name of your Yamaha Audio Specialty Dealer, check your Yellow Pages or write us.

From Yamaha, naturally

---

YAMAHA Audio Division, P.O. Box 6600, Buena Park, CA 90622.
At TDK, we're proud of our reputation as the leader in recording tape technology. We got that reputation by paying attention to all the little details other manufacturers sometimes skim over. But there's more to a cassette than just tape. There's a shell to house that tape, and a mechanism that has the function of transporting the tape across the heads. Unless that mechanism does its job evenly and precisely, the best tape in the world won't perform properly, and you won't get all the sound you paid for.

The TDK cassette shell and mechanism are every bit as good as our tape. And when you begin to understand the time and effort we've spent in perfecting them, you'll appreciate that our engineers wouldn't put TDK tape in anything less than the most advanced and reliable cassette available.

**The Shell**

Our precision-molded cassette shells are made by continuously monitored injection molding that creates a mirror-image parallel match, to assure against signal overlap, channel or sensitivity loss from A to B sides. We make these shells from high impact styrene, which resists temperature extremes and sudden stress better than regular styrene or clear plastic.

**The Screws**

Our cassettes use five screws instead of four for warp-free mating of the cassette halves. We carefully torque those screws to achieve computer-controlled stress equilibrium. That way, the shell is impervious to dust, and the halves are parallel to a tolerance of a few microns.

**The Liner Sheet**

Our ingenious and unique bubble liner sheet makes the tape follow a consistent running angle with gentle fingertip-like embossed cushions. It prevents uneven tape winding and minimizes the friction that can lead to tape damage. Also our cassettes will not squeak or squeal during operation.

**The Rollers**

Our Delrin rollers are tapered and flanged, so the tape won't move up and down on its path across the heads. This assures a smooth transport and prevents tape damage.

**The Pins**

In every cassette we make, we use stainless steel roller pins to minimize friction and avert wow and flutter and channel loss. Some other manufacturers "cheat" by using plastic pins in some of their less expensive cassettes. We don't.
The Pressure Pad
Our sophisticated pressure pad maintains tape contact at dead center on the head gap. Our interlocking pin system anchors the pad assembly to the shell and prevents lateral movement of the pad, which could affect sound quality.

The Shield
We use an expensive shield to protect your recordings from stray magnetism that could mar them. Some manufacturers try to "get by" with a thinner, less expensive shield. We don't.

The Window
Our tape checking window is designed to be large enough for you to see all the tape, so you can keep track of your recordings.

The Label
We've even put a lot of thought into the label we put on our cassettes. Ours is made from a special non-blur quality paper. You can write on it with a felt-tip pen, a ballpoint, whatever. Its size, thickness and placement are carefully designed and executed so as not to upset the cassette's azimuth alignment.

The Inspections
When it comes to quality control, TDK goes to extremes. Each cassette is subjected to thousands of separate inspections. If it doesn't measure up on every one of these, we discard it. Our zeal may seem extreme, but it is this commitment to quality which allowed us to offer the first full lifetime warranty in the cassette business—more than 10 years ago. 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. It took guts to pioneer that warranty, but our cassettes have the guts—and the reliability—to back it up.

A Machine for All Your Machines
Now that we've told you how we move our tape, let us remind you about our tape. SA, the first non-chrome high bias cassette, is the reference tape most quality manufacturers use to align their decks before they leave the factory. It's also the number one-selling high bias cassette in America. For critical music recording, it is unsurpassed. AD is the normal bias tape with the "hot high end." It requires no special bias setting, which is why it is the best cassette for use in your car, where highs are hard to come by, as well as at home. Whatever your recording needs, TDK makes a tape that offers the ultimate in sound quality. But it's our super precision shell and mechanism that make sure all that sound gets from our tape to your ears, year after year. TDK Electronics Corp., Garden City, NY 11530

CIRCLE NO. 66 ON READER SERVICE CARD
Fisher CR-4025 Stereo Cassette Deck

The Fisher CR-4025 is a moderately priced front-loading cassette deck that uses a single d.c. governor-controlled motor and a permalloy record/playback head. Unusual for decks in this price class, its features include a wireless ultrasonic remote-control box (about the size of a package of 100-millimeter cigarettes) that can operate the pause function from anywhere within a large-size room.

Six sturdy mechanical levers immediately below the cassette well on the left side of the recorder control the transport modes. The reverse, fast forward, and play keys can be pressed in any order without going through the stop function. When the end of the tape is reached in either the play or record mode, the control levers disengage automatically, returning the transport to neutral, but end-of-tape shutdown is not automatic from the fast-forward modes. Pressing the stop key once halts the tape motion; releasing it and pressing it a second time operates the eject function, which tilts the cassette well door open at the top.

Cassettes are inserted into slides on the rear of the cassette-well door, which has a large transparent plastic window that permits the label to be seen with the cassette in place. Since the rear of the cassette well is not illuminated, however, fairly good room lighting is required to view the tape. For routine cleaning and demagnetizing of the heads, two small Phillips-head screws securing the cassette-well door must be removed.

Three two-position lever switches in the center of the front panel select either line or microphone inputs, turn the Dolby noise-reduction system on or off, and set the proper bias and equalization for either chromium dioxide (CrO₂) or ferric (norm) cassette types. Below these are the standard 1/4-inch jacks for a pair of microphones and a set of stereo headphones. Above the switches is the customary three-digit tape counter along with the sensor for the ultrasonic remote-control feature. When the pause function is engaged, either manually or by remote control, a bright red pilot light comes on, though no comparable indicator is provided to show whether the deck is in record or playback mode.

The twin recording-level meters are calibrated from -20 to +5 dB (the Dolby-calibration mark is at +3 dB) and are brightly illuminated from the rear, with the scale below 0 dB in blue and from 0 dB upward in red. Below the meters are the separate left- and right-channel input-level controls. The output levels from the CR-4025 are internally fixed.

The rear panel of the Fisher CR-4025 contains phono jacks for connection to an amplifier or receiver, along with a sensitivity adjustment for the remote-control device. Measuring 15 inches wide, 6 inches high, and 101/2 inches deep, the CR-4025 weighs approximately 13 pounds. Price: $249.95.

- Laboratory Measurements. We checked the playback frequency response of the CR-4025 with our TDK AC-337 test tape, reading the results for the ferric (120-microsecond) equalization directly and applying the standard correction factors when the tape was played in the CrO₂ (70 microsecond) switch position. In both cases the response was exceedingly flat (within ±0.5 dB) from 40 Hz to 1,000 Hz, above which it rose very smoothly to a peak about 2.5 dB above its output at 11,000 Hz. As with the 120-microsecond ferric tapes, the graph shows that, using the recommended BASF cassette, overall record-playback response gradually rises to a peak about 2.5 dB above its output at 11,000 Hz.

Playback of a Dolby-level test tape indicated that the calibration markings on the CR-4025's meters were accurate. As might be expected, however, the gradual rise in high-frequency response was augmented when the Dolby system was switched in. At an input level of -20 dB the Dolby tracking error was within the 2-dB Dolby tolerance in the 2,000- to 12,000-Hz range, though this increased to as much as +3.5 dB between 5,000 and 12,000 Hz when the input level was reduced to -30 dB. At a 6-dB recording level the distortion on playback was 0.7 per cent with the Maxell UD XL-I tape and 1.7 per cent with the BASF.

Lacking any specific recommendations from the manufacturer, we checked the overall record-playback frequency response with Maxell UD XL-I, TDK AD, Memorex MRX₃, and Scotch Master I. At the customary -20-dB level all the curves matched very closely, the UD XL-I being the closest to overall flat response by a small margin. Response with the UD XL-I was down by 3 dB at 40 Hz and at about 15,000 Hz. The TDK AD and Scotch Master I tapes had a very slightly more exaggerated high end, and the Memorex MRX₃ had perhaps 0.5 dB less high-end response, but none of these differences could be considered audibly significant. At the 0-dB level the slightly "hotter" TDK AD extended the response by about 1,000 Hz.

Fisher recommended that we use BASF Professional II as our CrO₂ reference tape, though we also tested the performance of another new chromium-dioxide formulation (Realistic Chrome) and three "chrome substitute" tapes: TDK SA, Memorex High-Bias, and Maxell UD XL-II. The BASF and the Memorex curves were quite similar, the former extending frequency response at the -3-dB point to approximately 14,500 Hz (vs. 14,000 for the Memorex), while the latter exhibited about 1 dB more headroom throughout most of the upper frequencies when recorded at a 0-dB input level. The three other tapes designed to use the chrome (CrO₂) switch position appeared to be slightly overbiased by the CR-4025, as evidenced by a falloff in their frequency response above about 11,000 Hz. As with the 120-microsecond ferric tapes, the graph shows that, using the recommended BASF cassette, overall record-playback response gradually rises to a peak about 2.5 dB above its output at 11,000 Hz.
Quartz-Lock
by Realistic.

±0.0005% Speed Accuracy.

Don't buy any turntable before you see the new direct-drive Realistic® LAB-500. It's already switched many an audiophile to Radio Shack's 22-year-old Realistic brand. The specs tell you why.

Speed accuracy of ±0.0005% just 1.5 seconds after start-up, wow and flutter of 0.025%, rumble of only -70 dB (DIN B). This kind of performance is superior to some broadcast and disco equipment, and is made possible by a massive 12-5/8", 3.1-lb. platter resting directly atop a 12-pole brushless DC servomotor controlled by a quartz oscillator and PLL circuitry. But there's still more to recommend the LAB-500. Like all Realistic turntables, the price includes dust cover and cartridge. And the cartridge is our best, made by Shure, factory mounted in an integrated headshell for minimum mass and precision tracking even at 3/4 gram. Audio response is a linear 20-20,000 Hz. The automatic arm-return is tripped optoelectronically—assuring no change in record speed even at the end of the disc. Out-front controls, including electronically actuated cueing, make operation easy. There are single-play/repeat and anti-skate controls, too.

All this, including the $49.95 value cartridge and hinged cover and low-profile walnut vinyl base, for 259.95*

By Realistic. Sold only at Radio Shack!

* Retail prices may vary at individual stores and dealers.
Professional II chromium-dioxide formulation. The 3 per cent distortion level was reached at inputs of +7 and +3 dB, respectively, for the two tapes. Referred to the 3 per cent distortion point, both tapes achieved a signal-to-noise ratio (unweighted, without Dolby noise reduction) of 53.5 dB. Switching in the Dolby system and using the customary A-weighting curve, the S/N improved to 66 dB for the UD XL-1 and 67 dB for the Professional II, which is fine performance for a deck in this price class.

Wow and flutter of the CR-4025 measured 0.08 per cent (wrms) and 0.13 per cent with the DIN peak-reading method. The ballistics characteristics of the meters, checked with the prescribed 0.3-second pulses, corresponded exactly with VU characteristics. A 0-dB record level required an input signal of 65 milivolts (mV) at the line-input jacks and 0.14 mV at the microphone inputs. Microphone overload occurred with an input level of 25 mV which, while not overly generous, should be sufficient to handle all but high-output microphones. While the playback level of the CR-4025 is not adjustable, adequate volume was achieved using both 600-ohm and (nominally) 8-ohm impedance headphones. Fast-forward and rewind times (for a C-60 cassette) were 78 and 81 seconds, respectively, considerably bettering the 120-second wind/rewind specification.

Comment. The Fisher CR-4025 cassette deck is certainly easy to use, and both its specifications and measured performance are entirely competitive with other units in its price class. The wireless remote-control feature functioned flawlessly, enabling us to eliminate commercials, station breaks, and the like from our armchair while dubbing desired selections from FM broadcasts. The quality of the recordings we obtained in this manner was certainly more than adequate for our purpose, and the remote control eliminated the standard mad dash to the pause lever.

The CR-4025 has its limitations, of course. On very demanding source material (for example, direct-to-disc recordings) the slightly elevated treble response within its range cannot fully compensate for the loss of the extreme high frequencies that much more expensive recorders can capture. We missed the reassurance of a LED indicator reminding us when the machine was in its record mode, and we would have liked to have memory rewind and automatic stop from the high-speed modes. But for the market in which it is intended to compete, we can certainly recommend the Fisher CR-4025 as worthy of serious consideration.

Circle 134 on reader service card

The parametric equalizer, originally conceived as a tool for the professional recording engineer, has become one of the signal-processing accessories available to the home music listener and amateur recordist as well. SAE, one of the first companies to offer parametric equalizers to the consumer market, has recently introduced the Model 180, a lower-cost version of its Model 1800 parametric equalizer.

Although a parametric equalizer resembles a multiband graphic equalizer in many of its capabilities, there are some basic differences. An octave-band equalizer consists of a number of parallel filters (usually ten), each one octave wide, with means for adjusting the gain of the signal channel through each filter. With this arrangement, it is possible to make substantial corrections in the response of a speaker, a room, or the program material. However, a one-octave bandwidth limits a unit’s ability to compensate for sharp, narrow-band response peaks or dips. A 1/3-octave equalizer is better equipped for this, but it is very expensive and has perhaps three times as many controls to adjust. It is almost impossible to equalize in 1/3-octave bands without the aid of instruments such as a pink-noise generator and a spectrum analyzer.

The answer, in many cases, is the parametric equalizer. It has a limited number of frequency bands (usually two to four), but the center frequency of each filter can be set to any of a wide range of frequencies. In addition, the bandwidth of each filter is adjustable over a wide range, varying the width of the peak or dip in response it produces. Like a conventional multiband equalizer, a parametric equalizer is capable of providing a nearly infinite variety of response curves. Since one does not have the visual aid of a row of slider control levers whose positions outline an approximate response curve, a parametric equalizer must be adjusted by ear, and the end result is established by the hearing judgment, patience, and skill of the user.

SAE’s new Model 180 appears to be a slightly simplified version of their Model 1800 parametric equalizer. It is almost the same size and has virtually identical specifications. The rated output is 2.5 volts, with no more than 0.02 per cent distortion from 20 to 20,000 Hz and a noise level at least 90 dB below that output. The basic frequency response of the unit (controls centered) is within ±0.25 dB from 20 to 20,000 Hz.

The Model 180 has two frequency bands per channel, identified as "lo" and "hi." The low band covers from 40 to 1,200 Hz, and the high band from 1,200 to 16,000 Hz. Horizontal sliders adjust the center frequencies of the filters, and calibrated scales show the approximate frequency settings. Another slider varies the bandwidth of each filter from 0.3 octave to 3.6 octaves. A gain control above each group of equalizer controls changes the response from boost to cut (as its setting is varied from +16 dB to -16 dB). At the center (0 dB) position the response is flat. Each stereo channel also has a master level control, normally operated at its 0-dB (minimum attenuation) setting and capable of as much as 70 dB of attenuation.

The only other operating controls of the SAE Model 180 are four pushbutton switches. The Model 180 is normally connected to an amplifier through its tape-recording and monitoring jacks, and these jacks are duplicated in the rear of the Model 180. A tape monitor button on the panel duplicates the function of the system’s main tape-monitoring switch, which must be set to MONITOR in order to use the equalizer. A LINE button inserts the equalizer in the signal path when it is engaged and bypasses it when out. The other two buttons provide the option of equalizing the signal either before it is fed to the tape recorder or at the recorder’s monitor output.

The SAE Model 180 is finished in black, matching the appearance of other SAE audio components. The clearly legible panel markings are in contrasting white. It has no power switch, and so is normally operated from a switched outlet on the amplifier or receiver. A pilot light on the Model 180 shows when it is on, and it has an internal 5- or 6-second turn-on delay to prevent starting transients from reaching the amplifiers or speakers. The SAE Model 180 is 18% inches wide, 4½ inches high, and 3½ inches deep with its walnut side panels and weighs 16 pounds. Price: $250.

Laboratory Measurements. With the standard 1HF load of 10,000 ohms in parallel with 1,000 picofarads, the Model 180’s output

(Continued on page 58)
Real to reel means live performance recording, and that's where the ReVox B77 dramatically demonstrates its superiority over other tape recorders. Only the B77 has the wide dynamic range and generous record headroom you need to capture without compromise the full detail and dimension of live music.

Only the B77 delivers the "ruler-flat" frequency response you get from Willi Studer's legendary head design. Only the B77 combines the convenience of push-button digital logic control of tape motion, professional VU meters with built-in peak level indicators, and a self-contained tape cutter/splicer.

If you're thinking of upgrading your real to reel performance, try the ReVox B77. It's available in half or quarter track, 3¾-7½ or 7½-15 IPS. For complete information and list of demonstrating dealers, circle reader service number or contact us at the address shown below.

Real to reel means live performance recording, and that's where the ReVox B77 dramatically demonstrates its superiority over other tape recorders. Only the B77 has the wide dynamic range and generous record headroom you need to capture without compromise the full detail and dimension of live music.

Only the B77 delivers the "ruler-flat" frequency response you get from Willi Studer's legendary head design. Only the B77 combines the convenience of push-button digital logic control of tape motion, professional VU meters with built-in peak level indicators, and a self-contained tape cutter/splicer.

If you're thinking of upgrading your real to reel performance, try the ReVox B77. It's available in half or quarter track, 3¾-7½ or 7½-15 IPS. For complete information and list of demonstrating dealers, circle reader service number or contact us at the address shown below.
clipped at 8.8 volts. The harmonic distortion at 1,000 Hz was equal to that of our signal generator—between 0.0015 and 0.003 per cent from 1 to more than 8 volts output. At 20,000 Hz it was slightly higher, ranging from 0.002 per cent at 1 volt to 0.007 per cent at 8 volts. At 20 Hz the distortion was between 0.02 and 0.05 per cent from 1 to 8 volts output.

The insertion loss of the equalizer was 1.2 dB with all level controls set at 0. When the equalizer is bypassed it becomes a unity-gain device. The output noise was below our measurement limit of 100 microvolts with no weighting, which means that it was more than 88 dB below rated output. The basic frequency response of the Model 180, with the controls set to 0, was perfectly flat from 50 to 10,000 Hz, down 0.1 dB at 20,000 Hz, and down 0.3 dB at 20 Hz.

The representative frequency-response curves we made with different center frequencies and bandwidths indicate only a little of the capability of the Model 180. We noted that there was often a discrepancy between the panel's indicated center frequency and the actual measured center frequency, but this is of no practical importance since one can hardly adjust a device such as this by trying to match a previously selected response curve. It must be done by ear or with instruments, and the frequency calibrations on the panel are only for general guidance.

- **Comment.** There is little we can say about the operation and performance of the SAE Model 180 except to point out the obvious: it does exactly what is claimed for it, usually with a very large safety margin. It is without question a "noiseless," "noisiness" accessory in every audible sense of those terms. It is completely without switching transients and there is no possibility of damaging anything by incorrect operation of its pushbutton controls (an error either cuts off the sound or produces no change at all).

Being lucky enough not to have any system-response problems that could benefit from equalization, we had to content ourselves with experimenting with the controls to hear the range of effects they produced. It was surprising to discover how many types of frequency-response shapes can be created by a two-band SAE Model 2800 equalizer when those bands are continuously adjustable in frequency and width as well as in amplitude. Recalling our feeling of being slightly overwhelmed by the four-band SAE Model 2800 equalizer a few years ago, we found the relative simplicity of the Model 180 to be especially appealing. Even though the Model 2800 may do "more," we suspect that most consumers will find the simpler and less expensive Model 180 completely adequate for most equalization tasks.

**Circle 135 on reader service card**

---

Shure/SME Series III Tone Arm

When the original SME tone arms made their appearance nearly a quarter of a century ago, they were unique. High fidelity was in its infancy, and most tone arms of the time were crude, clumsy-looking affairs at best, even if they were reasonably satisfactory for the low-compliance cartridges of the period.

The fundamental soundness of the original SME design is underscored by the fact that the same basic approach has been carried over into today's much more sophisticated market. The vertical pivot is a knife edge resting in a hardened V-groove trough that introduces practically no friction in the vertical motion of the tone arm. The horizontal pivot uses precision ball bearings, and its friction is comparable to that of the vertical pivot.

The mounting base of the SME incorporates—and still does—the easiest-to-use arrangement of any arm for adjusting stylus overhang for minimum tracking error during the initial setup. The price one pays for this is the need for an elongated hole in a motorboard, but most high-quality turntables are available with their motorboards (or with inserts fitting the boards) pre-cut for mounting an SME arm. When the arm is installed, one has merely to shift the entire arm in the elongated slot in the base plate until the tracking error at an inner record radius is zero, as indicated on a supplied protractor.

Now SME has developed the Series III version of their tone arm, supplementing (but not replacing) Series II. Despite a strong family resemblance to its predecessors, the Series III is a totally new arm. It does, however, share certain design features with the previous models, including the distinctive mounting base (which fits the former cutouts), the hanging-thread antiskating compensator, and the knife-edge vertical pivot.

The S-shaped arm is a very thin titanium tube with a fixed head that is little more than a means for holding the two cartridge-mounting screws and the finger lift. The entire arm tube plugs into a socket near the arm pivots so as to concentrate the mass of the arm near the pivot where it contributes least to the effective mass at the stylus position.

Since the mass is located near the pivot, the counterweight is also placed very close to the pivots. In fact, it is part of a rather complex carbon-fiber-reinforced molded-plastic structure that almost completely hides the pivot section from view. The counterweight consists of a number of small lead weights that can be installed in a receptacle near the pivots. The smallest mass that will counterbalance the cartridge is used, and the weights (Continued on page 62)
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 . . .
Power!

That's the Jensen Car Stereo Triax® II.
That's the thrill of being there.

Power is right! 100 watts! Now, all the energy and intensity that went into the original performance comes through the Jensen Triax II 3-way speaker.

This incredible 100 watt capability gives the Triax II an unparalleled clarity of sound throughout the entire spectrum.

What gives the Triax II its great power handling and sound reproduction? For starters, the piezoelectric solid state tweeter with low mass and incredible power handling capabilities. It starts reproducing crystal clear high frequency signals at 6,000 Hz...and keeps going well past the range of human audibility.

The 6" x 9" woofer of the Triax II boasts a new large diameter barium ferrite 20 oz. magnet. Which means better heat dissipation and more efficiency for clearer, truer sound at higher listening levels.

A new high power 1½" voice coil on the Triax II translates into less distortion and the ability to achieve higher sound pressure levels.

The midrange unit of this remarkable speaker produces smoother sound with better transient response, less distortion and higher power handling...thanks to its large 2.3 magnet structure.

And the Triax II is fully compatible with the advanced bi-amplified power sources for outstanding clarity and separation.

So go to the concert. Hear the Jensen Triax II. That's the thrill of being there.

JENSEN

The thrill of being there.

For more information, write Jensen Sound Laboratories, 4136 N. United Parkway, Schiller Park, Illinois 60176.

® "Triaxial" and "Triax" are registered trademarks identifying the patented 3-way speaker systems of Jensen Sound Laboratories. (U.S. patent #4,012,215).

CIRCLE NO. 36 ON READER SERVICE CARD
supplied in the arm will balance cartridges having masses between 6 and 10.5 grams (into which group most popular cartridges fall). With other combinations of weights, cartridge masses from 0.1 to 13 grams can be balanced.

A knurled knob moves the entire counter-weight assembly to balance the arm. Another knob moves a secondary weight on the side of the structure is slid forward to a stop, which adds exactly one gram to the indicated value.) Then another knurled knob shifts the entire system laterally to place its center of gravity directly over the center of the knife-edge pivot (the procedure for checking this is explained clearly in the instruction manual). Finally, there is another adjustment screw that moves the application point of the antiskating thread along a calibrated scale to match the tracking force.

In the base of the arm are the arm rest, with a locking clip, the cueing lever, and adjustments for shifting the entire arm for lateral-tracking adjustment and for setting arm height relative to the record for correct vertical tracking angle. A small plastic trough clips onto the base, and a small plastic paddle attaches to the arm in such a way that it extends into the trough as the arm moves laterally. To apply viscous damping to the low-frequency arm resonance, the trough is filled with a supplied silicone fluid and one of the paddles is inserted to match cartridges of different compliance ratings, and one can use less than the full amount of damping fluid if desired. The price of the SME Series III tone arm is $294. Additional arm tubes cost $39.60 each.

- **Laboratory Measurements.** We installed the SME Series III arm on the motorboard of a Sony TTS-3000 turntable, replacing the older SME arm that had occupied that position for many years. The base of the new arm fit the original cutout exactly, greatly simplifying the installation.

Nevertheless, the complete installation of an SME Series III arm is a rather formidable process, although it is rendered fairly painless by one of the best instruction manuals we have ever seen. Each of the fifty-seven installation steps is completely explained and illustrated with a photograph or drawing. However, required about two hours for us to install and set up a Shure V15 Type IV cartridge in the SME arm, plus more than an hour's wait for the silicone to flow from the tube into the damping trough.

When we had set the arm for tangency at a 2 1/4-inch playing radius, the lateral tracking error was less than 0.7 degree per inch over the entire record surface. The tracking-force calibrations were exact in a comparison with an external balance gauge. The SME Series III arm is furnished with a high-quality signal cable (it plugs into sockets underneath the arm). We checked to see what happened when we used the built-in damping of the Type IV cartridge was not used). With no damping, there were two resonance peaks, at 0.1 and 1 Hz, with amplitudes of 2.5 and 3.0 dB, and a dip in output of about 1.5 dB at 10 Hz. The damping left us with a barely measurable rise of 0.5 dB at 20 Hz and a dip of 0.5 dB at 12 Hz. Overall, the response variation without damping was +3.5, -2.5 dB from 6 to 30 Hz, and with damping it was +0.5, -3 dB over the same range. Within the audio range, the undamped rise of 1.5 dB at 20 Hz was reduced to 0.5 dB by the damping action.

The Shure cartridge has its own damping system, which in our tests did vary nearly the same thing for it as the SME damping did. We checked to see what happened when we used both damping systems; the results were very similar to what we found with either one alone. However, for our evaluation of the SME arm we continued to keep the cartridge damping inactive.

Frankly, the audible effects of removing the low-frequency response variation caused by arm/cartridge resonance were not significant (that does not mean inaudible, just not significant). If one's records (and speakers) do not supply audible material at frequencies under 30 Hz (and almost none do), one can hardly expect to hear any dramatic differences in the low bass.

There was, however, a tremendous change in the response of the record-player system to vibration, jarring, and the effects of warped records. Not only was the system less susceptible to acoustic feedback, but it became almost totally immune to jarring of the most severe kind. Hard blows to the turntable base or to the rack in which it was contained (on casters) had no effect on the tracking of records. Pushing the rack across a carpeted floor while records were being played at a 1-gram force did not bounce the pickup from the record or cause it to skip grooves. Warped records, normally playable only by a few radial-tracking arms, presented no problems to the SME/Shure combination. It behaved much as though the stylus were engaged in relation to the groove instead of being held in contact with it by a mere gram of downward force.

- **Comment.** On the objective level, the SME Series III arm has the lowest mass, by far, that we have ever measured on a tone arm. Even with the most compliant cartridges, the low-frequency resonance should be above 10 Hz and well away from excitation (Continued on page 64).
YOU SHOULD EXPECT MORE FROM THE PHASE 4000 SERIES TWO.

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

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

To prevent overloads, studios “peak limit” the high-level attacks common in today’s music. The 4000 Series Two has highly advanced circuits to read peak limiting, and immediately restore the dynamic range. The combined overall dynamic range is increased by 17.5dB. So when Charlie Watts hits a cymbal, it sounds like a cymbal!

The 4000 Series Two also spoils low level gain riding, where the recording engineer adds volume to a low signal to overcome noise on the master tape. The Downward Expander immediately expands the dynamics, so you hear the bass as the conductor called for it, not as the engineer delivered it.

The 4000 Series Two second generation Autocorrelator reduces record hiss, tape hiss, and FM broadcast noise. Weighted overall noise reduction is -10dB from 20Hz to 20kHz. So your music comes clean, and the background is silent.

The 4000 has two new RIAA phono stages which eliminate low level switching and reduce hum and CB interference to a minimum.

Tape monitor and dubbing circuits allow copying between decks, while listening to a third program source. There’s a separate direct coupled (OCL) Headphone Amplifier. An infrasonic filter eliminates audible effects caused by rumble. We could go on forever, but you get the point.

The Phase 4000 Series Two. It’s waiting for you at your Phase Linear dealer.

AND YOU GET IT.

Phase Linear®
THE POWERFUL DIFFERENCE

PHASE LINEAR CORPORATION, 20151 48TH AVENUE WEST, LYNNWOOD, WASHINGTON 98036
MADE IN USA. DISTRIBUTED IN CANADA BY H. ROY GRAY LTD. AND IN AUSTRALIA BY MEGASCOUND PTY. LTD.
CIRCLE NO 52 ON READER SERVICE CARD
by record warps. Its damping system produces the most stable record player we have yet seen (for those who enjoy shocking their fellow audiophiles, one can drop the arm from any height above the record and watch it float gently to the disc surface).

The Series III arm is very easy to handle, and its damping eliminates any tendency for the arm to “get away” from the user’s fingers—a trait we have encountered in some arms. The only criticism of its handling that we can make is concerned with the arm’s outward drift under the influence of the antiskating torque. The calibration of the antiskating system is accurate, but there is not enough friction between the arm and the cueing lift bar, and the outward drift is sufficient to be annoying.

If that is the only flaw in the SME Series III arm, it must be accounted a remarkable success, and that is the way we view it. To be sure, anyone who wishes to mount several cartridges for interchangeable use must be prepared to invest a sizable sum in the plug-in arm tubes, but it seems to us that anyone with roughly $300 invested in a tone arm should be able to afford this added luxury. If there is a better arm to be had, we do not know of it.

Circle 136 on reader service card

Sherwood's Model S-7650 is a compact, moderate-price stereo receiver whose actual performance far exceeds its printed specifications. Believing that the ultra-low distortion ratings presently in vogue do not provide proportionate benefits to the listener, Sherwood has rated the audio amplifiers in the S-7650 at 45 watts per channel into 8-ohm loads from 20 to 20,000 Hz with no more than 0.2 per cent total harmonic distortion. The other amplifier ratings, like the power and distortion figures, are all good enough that in Sherwood’s view (and ours) improvement would not result in any actual benefit to the user. The FM tuner ratings, like those of the amplifier, are also very good, even if not “state-of-the-art” in a purely numerical sense.

The silver-colored front panel of the S-7650 is uncluttered and simple, with a large glass-covered cutout for the dial scales and a large tuning knob to its right. Above the dial scales are two meters for relative signal strength and FM channel-center tuning. Three LED’s indicate whether the AM or FM tuner is being used and when a stereo FM signal is tuned in.

Several identical knobs across the bottom of the panel operate the speaker-selector switch, bass and treble tone controls, balance, volume, and input-selector switch. Each tone control has eleven detented positions. The volume control has a large number of detented steps, and the balance control has a center detent. The available input sources include AM, FM, phono, and auxiliary (plus two tape decks controlled by another switch). The speaker switch activates either, both, or neither of two pairs of speaker outputs. To its left are a headphone jack and the power switch.

Other lever switches operate the loudness compensation, noise filter, interstation-noise muting (for FM reception), mode (mono or stereo), and tape-monitor functions. The last connects the playback output from either of two tape decks (or the selected input program) to the receiver’s amplifiers. On the rear apron of the receiver are insulated spring-loaded speaker connectors, binding posts for the antenna inputs, and a hinged AM ferrite-core antenna. A DIN socket duplicates the functions of one set of phono jacks. A three-position slide switch selects FM de-emphasis time constants of 25, 50, or 75 microseconds. There are accessible fuse holders for the speaker and a.c. line. One of the two a.c. outlets is switched.

The schematic diagram of the S-7650 shows that discrete transistors are used throughout the audio section. In the FM tuner, an integrated circuit provides i.f. gain, limiting, and quadrature detection, while another is the stereo-multiplex demodulator. A third IC provides all AM-tuner functions. The Sherwood S-7650 is housed in an attractive wood-grain-vinyl-clad plywood cabinet. It is 18 inches wide, 5¾ inches high, and 14 inches deep, and it weighs 24 pounds. Price: $400.

Laboratory Measurements. During the one-hour preconditioning period at one-third power output the ventilating grille on top of the cabinet (over the power supply and output transistors) became quite hot, but elsewhere (Continued on page 66)
Never has one speaker system incorporated so many aspects of the state of the art.

The Infinity Reference Standard 4.5

This is a system of breathtaking clarity and detail, yet capable of the awesome punch and power demanded by the finest contemporary digital and direct-to-disc recordings.

The Reference Standard 4.5 frees the intimate warmth of the human voice, the robust sheen of the strings, the fiery attack of the brass, the stab and snap of the bass. The speakers seem to disappear, revealing a concert stage breathing life, delicacy and fury. You hear the musicians, not the speakers.

How does the 4.5 work its musical miracles? The profoundly accurate bass and midbass are partly the result of a remarkable new cone material, polypropylene. It has dramatically less mass, yet significantly greater internal damping than paper cones or other exotic materials. Our polypropylene piston, combined with our exclusive Infinity/Watkins dual-voice-coil woofer principle creates bass frequencies with the snap and definition of the finest dipoles, yet retains the ultra-low frequency response (flat to 23 Hz) that has made Infinity famous.

The transparent crystalline treble issues from our world-acclaimed EMIT™ tweeters in dipole array. Midrange warmth, smoothness and unprecedented definition are the progeny of our lustrous new dipole EMIM™ Electromagnetic Induction Midranges. Like the EMITs, they employ powerful magnets of rare-earth samarium cobalt and etched voice-coils on low-mass diaphragms.

A separate electronic crossover/equalization unit allows you control over variable source material and room anomalies, either in single or bi-amp mode.

A remarkable technological story. And like all great stories, this one ends where it began: with the music. Which is the real reason you should spend $3000* on the Infinity state-of-the-art Reference Standard 4.5.

Infinity

We get you back to what it's all about: Music.

For the nearest dealer's name and address, phone toll-free 800-423-5244, or, from California, 800-382-3972.

CIRCLE NO. 31 ON READER SERVICE CARD
the receiver remained cool. The outputs clipped at 70 watts per channel into 8-ohm loads at 1,000 Hz, for an IHF clipping-headroom rating of 1.92 dB. The IHF dynamic headroom was a rather high 2.72 dB (referred to 45 watts), corresponding to about 84 watts of unclipped output during a short tone burst.

The input sensitivity of the amplifier was quite high, and it required only 23 millivolts (mV) at the AUX input and 0.3 mV at the phono input for a reference output of 1 watt. The A-weighted signal-to-noise ratios, referred to 1 watt, were 81 and 79 dB, respectively, for the two inputs.

At 1,000 Hz, the harmonic distortion was between 0.003 and 0.006 per cent at power outputs between 0.1 and 20 watts, rising to 0.014 per cent at the rated 45 watts output and 0.02 per cent at 65 watts. The intermodulation distortion decreased from 0.037 per cent at 0.1 watt to 0.007 per cent at 10 watts before rising to 0.028 per cent at 45 watts and 0.064 per cent at 70 watts. At rated power, the distortion was typically under 0.02 per cent over most of the audio frequency range, reaching 0.04 per cent at 20 Hz and 0.075 per cent at 20,000 Hz. It was even lower at reduced power outputs, so that the typical distortion at listenable levels and audible frequencies was between 0.003 and 0.01 per cent.

The tone controls had conventional characteristics, with a sliding bass-turnover frequency and a treble response hinged between 2,000 and 3,000 Hz. The loudness compensation boosted both low and high frequencies, but only to a moderate degree that did not create unnatural heaviness in the sound. The high-frequency filter had a 12-dB-per-octave slope and a -3-dB response frequency of 6,000 Hz. The RIAA phono equalization was accurate within ±0.25 dB from 20 to 20,000 Hz. When it was measured through the inductance of a typical phono cartridge, there was a broad but slight rise of about 1 dB in the 8,000- to 15,000-Hz range. The phono-preamplifier stage overloaded at a 210-mV input at 1,000 Hz and at equivalent levels at 20 and 20,000 Hz. The measured phono-input impedance was 50,000 ohms in parallel with 220 picofarads.

The FM-tuner section had a usable sensitivity of 11.8 dB (2.1 microvolts) in mono. The stereo sensitivity was set by the switching threshold of 17 dB (4 µV). The 50-dB quieting sensitivity was 15 dBf (3 µV) in mono, with 0.63 per cent THD. In stereo it was 37.8 dBf (40 µV) with 0.32 per cent THD. The ultimate signal-to-noise ratios (with 65 dBf input) were 76 dB in mono and 70 dB in stereo, and distortion at this input level was 0.17 per cent in mono and 0.1 per cent in stereo.

The frequency response of the S-7650 FM-tuner section, in stereo, was flat within +0.5, -1 dB from 30 to 15,000 Hz. The channel separation was substantial and uniform with frequency, in general measuring between 45 and 50 dB and over 43 dB from 30 to 15,000 Hz. The FM capture ratio was approximately 1.1 to 1.2 dB, and the AM rejection was 50 to 51 dB with input-signal levels in the 45- to 65-dBf range. The image rejection was a very high 95 dB. Alternate-channel selectivity was 69.5 dB, and adjacent-channel selectivity was 3.5 dB. The muting threshold was 14.8 dBf (3 µV). The 19-KHz pilot carrier component in the audio output was a low -73 dB, and the tuner hum was -74 dB. The AM-tuner frequency response was down 2.5 dB at 20 Hz and 6 dB at 2,000 Hz relative to the 1,000-Hz level.

Comment. When we examined the total performance of the Sherwood S-7650, two things stood out. First was the extraordinarily conservative ratings that Sherwood has chosen to apply. The S-7650 could have been rated at 65 watts (with the same low distortion level and wide frequency-response range) with a more than adequate safety margin. The 45-watt rating seems entirely too conservative—it might even discourage a prospective buyer who felt, rightly or wrongly, that he needed more power. It might also give the false impression that the S-7650 is somewhat overpriced compared with other receivers whose advertised power-output ratings are quite similar.

Second, we were impressed by its overall excellent performance, quite apart from its published ratings. The audio and FM distortion and noise levels, tuner image rejection, and selectivity measurements are all characteristic of a top-quality receiver, and most of them are considerably better than the receiver's ratings. In fact, the only significant measurement we made that did not exceed Sherwood's ultraconservative ratings was AM rejection, which was rated at 60 dB but measured about 50 dB.

The general handling characteristics of the receiver were equally satisfactory. However, be sure to check the position of the rear-panel FM de-emphasis switch before placing the receiver into service, since it can easily be displaced from its correct setting during unpacking and installation. The FM interstation-noise muting action was good, although we could hear a slight "thump" when turning off a signal. The audio filter was one of the better ones we have used, thanks to its 12-dB-per-octave slope and well-chosen cutoff frequency.

All in all, the Sherwood S-7650 delivered performance that is typical of the best one can hope for (or will need) in a stereo receiver in an attractive, moderately priced, and ultraconservatively rated package. It is an excellent value, especially if it is judged by what it actually does and not by its modest advertised specifications.

Circle 137 on reader service card
Well match the tonearm on our lowest-priced turntable against the tonearm on their highest-priced turntable.

We'd like to be very clear about what we have in mind. By “their” we mean everyone else's. And, our lowest-priced turntable is the new CS1237.

The CS1237's tonearm is mounted in a four-point gyroscopic gimbal—widely acknowledged as the finest suspension system available. The tonearm is centered, balanced and pivoted exactly where the vertical and horizontal axes intersect.

From pivot to tonearm head, the shape is a straight line, the shortest distance between those two important points. (Curved tonearms may look sexier, but at the cost of extra mass, less rigidity and lateral imbalance—none of which is consistent with good engineering practice.)

Tracking force is applied by a flat-wound spring coiled around the vertical pivot, and this force is maintained equally on each groove wall whether or not the turntable is level. The tonearm's perfect balance is maintained throughout play.

By contrast, tonearms which apply tracking force by shifting the counterweight forward are actually unbalanced during play and prone to mistracking. For example, on warped records the stylus tends to dig in on the uphill side of the warp and to lose contact on the way down.

Vertical-bearing friction in the CS1237 tonearm is astonishingly low—less than 8 milligrams. It can track as low as 0.25 gram—which means it will allow any cartridge to operate at its own optimum tracking force.

There's still more. The counterweight is carefully damped to attenuate tonearm resonances. Anti-skating is separately calibrated for all stylus types. Cueing is damped in both directions to prevent bounce. And because the CS1237 can play up to six records in sequence, the stylus angle can be set for optimum vertical tracking in either single-play or multiple-play.

To find any other tonearm that seriously matches the CS1237's, you have two choices.

You can consider one of the more exotic separates. But you'll find they cost as much as the entire CS1237. (Price: less than $180, complete with base and cover.)

Or you might compare it with one of the higher-priced Dual turntables. You'll find a few additional refinements, but no difference in design integrity or manufacturing quality. Which is why no other turntable quite matches a Dual. Any Dual.
AMATEUR NIGHT

Despite the advice of friends, relatives, and "how to" articles (including Stereo Review's own in March 1978), it's still pretty tough to get started in the music business, especially as a performer. The competition, always stiff, is getting stiffer. Among the thousands of Americans dreaming of stardom are surely some twelve-year-old practicing Linda Ronstadt pouts in a bathroom mirror in Sheboygan and a guy three times her age still polishing his act on the dreary bar and bar-mitzvah circuit in Hackensack. The talent, the drive, and the time they devote to it may vary, but the dream is always the same: SUCCESS, spelled out in ever smaller numbers on the charts and ever larger ones on the recording contracts.

Aspiring musical amateurs in Manhattan were recently given an opportunity the Sheboygan-Hackensack hopefuls might sell their souls for: the first annual Manhattan Music Playoffs offered as its grand prize to nonprofessional musicians not only a recording contract (compliments of Infinity Records) but a week's engagement at a New York club and an appearance on the popular King Biscuit Flower Hour radio program.

The Playoffs is the first project to be launched by a music task force created last September to "revitalize the city's appeal to the music and recording industry, the group aims to "revitalize the city's appeal to the music and recording industry... to stem the flow of entertainment talents from the city to the west coast." If that sounds rather less like artistic altruism than chamber-of-commerce boosterism, the committee makes up for it with real benefits to the young artists it discovers. For example, besides that lovely first prize just mentioned, second and third prizes were also awarded: engagements at two other popular Manhattan clubs. With a little bit of luck, the runners-up have a good chance of running down their own recording contracts.

I first heard about the Playoffs in October of 1978 when I received an invitation to assist in the judging. Amateur musicians began finding out about it at about the same time from large signs posted on buses and subways as well as from a discreetly understated classified ad in the Village Voice. Word soon spread, and the result was the appearance of some two hundred groups at the preliminary auditions on December 2 and 9.

Eligibility requirements were few. The Playoffs were limited to groups of three to seven members playing only what the music industry is pleased to call "contemporary" material. (Later competitions are planned for classical, jazz, and other music categories, although the fuzzi "contemporary" label drew jazz and gospel groups as well as rock, r&b, and disco performers to this first outing.) Group members had to be Manhattan residents and nonprofessional musicians ("nonprofessional" in this case meaning without a recording contract, not that the group had never earned money with their music). Auditions were held in four locations on each of the two slated Saturdays. Each group performed once before a panel of five judges, all members of the music industry.

There were more mini than maxi talents, but the general performance level was gratifyingly high. Despite (because of?) their rehearsal-room pallor, some of those sunlit-starved kids were damned good. But rock wasn't the half of it: my favorite group, Taksim, played a cross between jazz and Mid-eastern belly-dance music, with vocals in the style of Lambert, Hendricks & Ross weaving through the instrumentals. There were hot Latin groups, liver-thumping disco bands, folk acts, and glitter-sprinkled soul groups whose choreography would have shaded the Rockettes. I had such a marvelous time at the audition I was asked to judge that I volunteered to do it again the following Saturday.

Nevertheless, this competition is limited to Manhattanites only, it may turn out to be a productive little talent source. Several record companies have already volunteered contracts as prizes for next year's Playoffs: it's good publicity, and the labels may wind up with a hot new group or two on their rosters. I suspect that when full realization of how all this works sinks in, similar events will start springing up all over the country, perhaps sponsored by the record companies themselves. It's a great idea, and if anybody needs a judge in Sheboygan, I'm willing.
Do you want to own a small car with Oldsmobile looks, comfort and room? You're gonna like our new Omega a lot. A whole lot.

**TRANSVERSE ENGINE.**

Omega's inside size will startle you. We got the room inside by turning the engine sideways and moving it forward. Your legs will appreciate the difference.

Omega's engine is a transverse-mounted 4-cylinder, or you have the option of the world's first transverse V6. Both are GM-built by various divisions, and your Olds dealer has details on sources and availability.

There are other nice surprises.

**FRONT-WHEEL DRIVE.**

Whichever engine you choose sits above the drive wheels, which is what gives Omega the impressive traction of front-wheel drive.

**RACK-AND-PINION STEERING.**

Omega is quick and agile, with rack-and-pinion steering.

If the name MacPherson doesn't mean anything to you in strut suspension, Omega's ride will. It is smooth.

**GOOD GAS MILEAGE.**

With the transverse 4-cylinder, Omega's EPA estimate is 24 mpg. The highway estimate is 38 mpg. Very good indeed, for a car this size.

Remember, the circled EPA estimate is for comparison to other cars. Your mileage depends on speed, weather and trip length; your actual highway mileage will probably be lower than the highway estimate. California estimates are lower.

Are you starting to believe this is an amazing small car? You should.

The 1980 Omega is the Oldsmobile of small cars.

You can buy it or lease it. But you gotta drive it.

You're gonna love it.

The small car just grew up.

Have one built for you.

---

**THE SMALL CAR JUST GREW UP.**

**THE 1980 OMEGA**

**THE OLDSMOBILE OF SMALL CARS.**
Going on Record

By James Goodfriend

A NEW "ASPEKTE"

Obviously, the idea of a mid-price ($6.98 list) record, as exemplified by the Festivo line from Philips and the Privilege line from Deutsche Grammophon, is proving to be commercially sound, for here comes another mid-price label aimed at classical turntables. The name is Aspekte and it comes from Telefunken via London Records, which is the American outlet for Decca/Telefunken/Teldec product. The first release, comprising twenty records, is certainly interesting enough, for it carries still further the repertorial adventurousness that has characterized some of the discs in the Festivo and Privilege releases. But it also raises a couple of questions about London Records' approach to the classical market here.

For example, why would London—which has an enormous backlog of recorded material itself, and the L'oiseau-Lyre and Argo as well as the Telefunken catalogs to draw on—base its mid-price line exclusively on a German source? London does issue material on the budget Stereo Treasury and Richmond labels, and, indeed, London has even licensed some of its records to companies that have no affiliation with it. Second, assuming that the launching of a new record line is a matter of some importance—no matter where the material comes from—isn't it surprising that the whole thing seems to have been whipped up in Germany without even consulting the American record catalogs? I ask this because, for example, one can buy right now excellent performances of Bach's "Coffee Cantata" and "Peasant Cantata" by Nikolaus Harnoncourt's Concentus Musicus of Vienna on Telefunken 6.41079 for $8.98; and one can buy equally excellent performances of them—in fact, the same performances—on Telefunken/Aspekte 6.41359 for $6.98. True, the cover is different on the Aspekte and no text is included (at least it wasn't in my "direct import factory sealed" copy), but still, this duplication does not strike me as particularly thoughtful marketing.

Actually, a fair amount of this first Aspekte release duplicates material currently in the catalog at full price. It has merely been reshuffled and recoupled to produce new discs of greater variety in repertoire, making them perhaps more attractive to less academic-minded collectors. A point of absurdity is reached, though, in the otherwise exceedingly fine series of Baroque recorder music by Frans Brüggen. Volume 2 here contains a lovely and interesting Concerto in F Major for Recorder and Strings by Vivaldi (no Pincherle or other number given) in a fine performance by Brüggen and the Concerto Amsterdam (still available at full price on Telefunken 6.41217). Volume 3 contains the same Vivaldi concerto in the same performance. I suppose such decision-making quandaries are the origin of the old saw "you pay your money and you take your choice."

Well, to get down to brass tacks (one cliché deserves another), my choice would be Volume 2 (Aspekte 6.41360), for it also contains Bach's superb Sonata for Two Recorders and Bass Continuo, BWV 1039, a Naujot concerto, and a Telemann sonata from Der Ge- treue Musikmeister—all of which are available as parts of other full-price records. I would also opt for Volume 1 (Aspekte 6.41357), containing another Vivaldi concerto (in C Minor; again no number given, though it appears to be P. 440), the Corelli La Follia variations, works by Loeillet and Van Eyck, and the delectable Anthony Holborne Dances and airs. All of these, again, are available.

One could infer from the preceding citations that this first Aspekte release contains a lot of Baroque music, and one would be right. More than any reissue label seen thus far (and there are all reissues of material recorded mostly in the Sixties, even if some have not appeared in American catalogs before), Aspekte gets away from standard repertoire and offers us a lot of interesting unusual music.

There are two excellent organ recitals, one by Karl Richter (6.41350) of Bach's Chorale Variations on Sel Gegrüsst and the "Doritis" Toccata and Fugue, BWV 538; and the other by Michel Chapius, offering an excellent brief survey of works by Bach, Buxtehude, Daquin, Dandrieu, and Clerambault (6.41872). The latter seems to have been put together from three different records, but it makes a first-rate introduction to the genre. There is a disc by Peter Schreier of Dvořák's Zigeuner-melodien and fifteen of Brahms' Deutsche Volkslieder in which the tenor, though a bit monochromatic in sound, is unfailingly musical. German texts only are included with the record (6.42214). The same is true of another promising, but ultimately less interesting, are records of early Classical music by the Amsterdam Chamber Orchestra (6.41344), comprising a flute concerto by Quantz, the Concerto for Violin, Piano, and Strings by Haydn, and Dittersdorf's Sinfonia Concertante for Violas, Contrabass, and Orchestra; lasting 60 minutes by the handsomely packaged (6.42326) with the Haydn Concerto No. 1, a Rosetti Concerto in D Minor, and a most peculiar arrangement, for horn and organ, of a Handel concerto grosso. The music is, for the most part, pleasant enough on the ears, but in these performances it goes by without leaving a trace of anything in the memory.

Among the relatively standard items in the release are recordings of the Brahms Second Symphony and the Beethoven Seventh by the Berlin Philharmonic under Joseph Keilberth (6.42323 and 6.42120, respectively). Keilberth, who died in 1968, was not terribly well known in America, but he was a fine symphonic conductor, and these performances have much to recommend them. Also recommendable is a disc by the Alban Berg Quartet (6.4228) of Mozart's Quartet No. 14, in G Major, K. 387, and Haydn's Op. 74, No. 3. Both performances, incidentally, are available with different couplings etc., etc.

Not all the discs advertised as making up the first release were submitted for review, but among those that were, two remain to be mentioned. There is a recital by the pianist Rudolf Buchbinder—Haydn's big Sonata No. 62 and a group of smaller Beethoven pieces—about which I just cannot really make up my mind (6.42265). And there is a performance of Bach's Goldberg Variations by Karl Richter (6.41337) about which I have made up my mind and the answer is "no."

All of the Aspekte material is very decently recorded, and the pressings have been uniformly first-rate. The covers are pleasant enough, but the notes are definitely inadequate, sometimes dealing with the artist alone and sometimes not present at all. That there are musical bargains to be had in the series is unquestionable, but what an offhand way to launch a new label!
Right to the end, its Canadian spirit stands out from the crowd. What makes it such a popular choice? Super lightness. Superb taste. If that's what you've been searching for, set your course for Lord Calvert Canadian.

The unique spirit of Canada: We bottled it.
Chuck Berry, in a new classic Fifties pose, gets down with his trademark "duck walk." Some say that if he'd been white, he would have been bigger than Elvis.
Phyl Garland's

BASIC LIBRARY OF RHYTHM-AND-BLUES

Back during the early Fifties, when I was a teenager growing up in a Western Pennsylvania industrial town near Pittsburgh, the most exciting sounds to be heard were transmitted daily by a small, independently owned radio station that featured a form of black popular music called rhythm-and-blues. Each afternoon, shortly after the Gospel Hour, an inviting dark-brown voice (it belonged to a woman DJ named Mary Dee) would introduce to an eager pubescent audience all the latest hits just in from New York, Chicago, Cincinnati, Houston, Los Angeles, and other r-&#163; recording centers of the day. Her listeners would devour these offerings, memorizing every fragment of melody and snatch of lyric, so that the song could be retained in the mind just the way it had been sung by the Drifters, the Orieles, the Clovers, Joe Turner, or Ruth Brown.

Less intellectually demanding than jazz and toned down considerably from the intense emotional entreaties of the blues, r-&#163; was still far more spirited and realistic in its treatment of familiar subjects than a belligerently crooning Perry Como or Patti Page singing about doggies in the window. To black teenagers, and even our parents, it was "our" music, a sound sufficiently fundamental in its musical and thematic essence for mass appeal. Though some considered it new, r-&#163; was only the latest mutation of basic black musical styles that had been around for ages. Restricted as it was in that era of racial segregation (r-&#163; discs were then called "race" records), it seemed destined to remain within the boundaries of the subculture that had produced it.

Then something happened.

As early as 1952, tradesmen began to report that white teenagers in the South were beginning to pick up on rhythm-and-blues as good dance music. As the demand became more apparent, previously conservative radio stations in that part of the country began to move into r-&#163; programming. The new sound grew stronger, setting up a national reverberation; popular white artists began to record songs that had been hits in the black underground. Peggy Lee, who had managed to straddle the worlds of jazz and pop, came out with a hit rendition of "Fever," a favorite among blacks in its original version by Little Willie John. Similarly, Georgia Gibbs did a cover of LaVern Baker's hits "Tweedle Dee" and "Jim Dandy." Though it is now common for artists to dip into various musical genres for good tunes, it was then unusual for white popular singers to borrow directly from black artists. And even odder when at times they emulate the black style of performance. The wave of the future began to be apparent when a white group, Bill Haley and the Comets, climbed to the top of the charts with their version of Joe Turner's hit "Shake, Rattle and Roll," a song quite familiar to me and those of my peers who used to tune in to that radio station near Pittsburgh. Yet the wave did not achieve tidal proportions until a handsome, dark-haired, former truck driver from Memphis, Tennessee, revolutionized mainstream popular music with a blockbuster version of "Big Mama" Willie Mae Thornton's earthy ditty, "You Ain't Nothin' but a Hound Dog." The young man was, of course, Elvis Presley. From that hit on, there was no looking back.

Presley hadn't, as it may have seemed, come out of nowhere. He drew on the rich streams of black music that flowed into Memphis, especially the blues, which had reached one of its higher levels of development just to the south in Mississippi. These inspirations have been well documented, as has Presley's own influence on those who shaped the rock explosion of the Sixties: the Beatles, the Rolling Stones, and Bob Dylan, to mention only some of the giants. And these artists have openly credited not only Presley but also such black r-&#163; stars as Chuck Berry and "Little Richard" Penniman as major sources of inspiration.

There are, nonetheless, those who feel that the seminal role of black music is still too frequently overlooked by contemporary music lovers familiar only with its current fruits. Without the blues—a searingly honest music derived from field hollers and work songs, among the earliest forms of black music in this country—there could have been no rhythm-and-blues and thus no rock-and-roll or rock. Without jazz, another unique product of cultural fusion, the complex instrumental textures of current popular music would not have emerged. And without gospel music—still commonly neglected in surveys of the roots of popular music—the soul-scorching awe and wonder, the uninhibited "shouting" quality, and the close, antiphonal ensemble singing found in much of today's pop/rock might be missing.

In sum, rhythm-and-blues and the previous styles that contributed to it constitute a taproot of American popular music. Both some of the best and some of the worst of today's sounds (such as the tediously repetitious and calculated stuff that now passes for "soul" music and the rhythmically monotonous disco staples) stem from this greater source. Readers who wish to acquaint themselves with the historical details of these developments should consult the box on page 76 for some recommended books on the subject. But our main concern is with the aural evidence, and what follows should provide at least a starting point in tracking down the recordings typical of each stage of r-&#163;'s growth and continuing transformation. (Continued overleaf)
The Roots

- **BESSIE SMITH: The Empress.** Columbia CG 3018 two discs. Any one of the five superb double albums compiled by Stereo Review's Chris Albertson to document the work of Bessie Smith, the greatest blues singer of all time, should create a fresh appreciation of the blues as a major source of musical developments in America, but "The Empress" is particularly notable in that it also features the young cornetist Louis Armstrong. Other remarkable musicians such as James P. Johnson, Buster Bailey, Coleman Hawkins, and Fletcher Henderson appear merely as sidemen, though they helped shape the course of jazz as a whole. While Bessie Smith is considered emblematic of the classic blues period of "race" recordings, she is presented here in a context that makes clear the close developmental relationship between jazz and modern blues.

- **MCKINLEY MORGANFIELD: A.K.A. Muddy Waters.** Chess CH 60006 two discs. Muddy Waters was and is one of the greatest interpreters of urban blues, a music that grew out of the massive black migration to northern cities from the agricultural South, where men were rapidly being replaced by machines, particularly during the Forties. It is said that the Rolling Stones named their group after Waters' song of that title, which is included in this album. Waters' singing and playing are wonders in themselves, but no less remarkable is the work of Little Walter on harmonica and of Otis Spann, one of the greatest blues pianists who ever lived.

- **B. B. KING: Live at the Regal.** Pickwick SPC-3593. As has been said several times throughout the years, this recording most effectively captures the special relationship that exists between a blues or r-b performer and his or her audience. It dates from 1964, when King was still playing the "chitt'lin circuit." He was in his prime then, and in this recording he sets up an interplay between his voice and his guitar, Lucille, that is still one of the crowning achievements of urban blues. After King gained a broader popularity in the Seventies, he lost much of the spontaneity that highlights this album.

- **MAHALIA JACKSON: Bless This House.** Columbia CS 8761. No examination of the roots of r-b can exclude gospel music. An overwhelming number of black popular artists started out singing in church and freely adapted gospel styles to secular fare. As the queen of gospel music, Mahalia Jackson is perhaps the single most powerful influence on an entire generation of singers, although she held firmly to a religious course, refusing to sing the blues and touching jazz only once, in a historic recording of Duke Ellington's Black, Brown and Beige. This album captures some of Jackson's majesty. The only artist with whom one might dare compare her is Bessie Smith; the blues might never have been the same had Mahalia sung them!

- **THE RAVENS: The Greatest Group of Them All.** Savoy SJL 2227 two discs. The army of male singing groups that emerged starting in the Fifties drew inspiration from a long tradition of vocal quartets and other ensembles. Some of these groups had been associated with black religious music in the Forties, and others—such as the Delta Rhythm Boys, the Mills Brothers, and the Championaires—seem to have derived their styles from the barbershop quartet. The Ravens were the first of the famed "bird" groups. Their version of Ol' Man River, released by National Records in 1947, is said to have sold more than a million copies in Harlem alone, and it had great crossover appeal to white audiences (it is included in "The Roots of Rock 'n Roll," Savoy SJL 221, which also features choice early recordings by members of the old Johnny Otis road show, among them Little Esther, Big Maybelle, and Mel Walker). This album doesn't contain the best of the Ravens' work, since it features sides they cut for Savoy during a later, somewhat watered-down period. But it does give a good sense of their style, which was to be so influential, and it displays one of their hallmarks, the resounding bass voice of Jimmy Ricks.

The Golden Age

- **CHUCK BERRY: Golden Decade.** Chess 1514. The Fifties may well be called the Golden Age of rhythm-and-blues, since the period saw both a proliferation of popular genre groups and several individuals pioneering crossovers to the mainstream. As r-b based rock-and-roll became dominant among young white audiences, cover recordings of black r-b hits by white artists became more and more popular, and many black artists acquired considerable white followings of their own. Chuck Berry, whose hip-wiggling performing style was emulated by Elvis and many latter-day rockers, won a Billboard Triple Award for his 1955 recording of Maybellene, and his School Days from the same period is considered by many to be a fore-runner of the pop protest song (both are included in this anthology album).

- **LITTLE RICHARD: Greatest Hits.** Trip 8013 two discs. Fats Domino. United Artists UAS-9958 two discs. The outrageously flamboyant "Little Richard" Penniman sold thirty million records in two years, his outstanding hits being Tutti-Frutti and Good Golly Miss Molly. Fats Domino, a pianoplayer-plunker from New Orleans who sang in such a relaxed manner that it sometimes seemed he was about to fall asleep, also produced a string of top-sellers, among them Ain't That A Shame and the memorable Blueberry Hill. His piano style somewhat resembled the "rent party" genre associated with Harlem jazz.

- **SAM COOKE: This Is Sam Cooke.** RCA VPS-6027(e) two discs. Sam Cooke, a minister's son from Chicago, was an acclaimed gospel singer with a group called the Soul Stirrers. He was later lead singer with another gospel group, the Pilgrim Travelers, which was also to serve as an incubator for the young Lou Rawls. Cooke was an immediate hit when he began to do secular recordings, for their father's approval into the popular field in the late Fifties. He had a silken voice and polished manner that enabled him to become a major night-club attraction singing some of his best sellers, such as You Send Me, Everybody Likes to Cha-Cha-Cha, and, later, Chain Gang. Though he died in 1964 at the age of twenty-nine, reissues of his most notable songs still sell.

- **DINAH WASHINGTON: Greatest Hits.** Pickwick SPC-3356. Dinah Washington, called the Queen of the Blues, was a musical and personal force almost bigger than life. She was married seven times before she died of an overdose of barbiturates in 1963. Gifted with a salty-edged voice that had a rare penetrating quality, she was a profound influence on Aretha Franklin (who once told me, "There is only one queen—Dinah Washington"). Esther Phillips also credits Washington with shaping her style. Queen Dinah was versatile, as at home in jazz as in popular music, and she was heard to fine advantage on some of the blues recordings she made during the Forties and Fifties. Several of these, including Blow Top Blues, Salty Papa Blues, and Evil Gal Blues, have been reissued on this Pickwick disc. It is not an outstanding collection, however, for the mass audience is likely to be more familiar with her best-selling ballads, such as Unfor-gettable and This Bitter Earth.

Any recordings by these artists dating from the Fifties are treasurable, and if you can find the originals, hold onto them. They're collectors' items.

The Age of Soul

This is the period extending from the Sixties to the present, an era that brought sophisticated recording techniques and electronic effects to bear on what is basically the same music as before. The tempos have become quick-
er, the rhythms are more pronounced, and there has been more homogenization of styles. But certain individuals and groups still tower above the rest, and many of them did their finest work during the Sixties, when the quest for social change swept through black America was reflected in its music. Moreover, the Sixties saw the swift rise of Motown Records, a black-owned firm that specialized in urban r&b with mainstream offshoots.

- **THE SOUL YEARS.** ATLANTIC SD2-504 two discs. Before Motown there was Atlantic Records, probably the greatest producer of r&b hits during the Fifties and early Sixties. This set is said to cover Atlantic’s top soul hits from 1948 to 1973, and as a compact sampling of soul-side development during this period it’s well worth hunting for. It is especially notable for its several classic tracks from the company’s excellent eight-disc “History of Rhythm & Blues” issued in 1968 (later deleted). The real oldies here sound just as good today as when they were first released, and the sets are worth it for them even though some of the more recent selections are duplicated on other recommended albums. Some of the standouts are Tweedle Dee by LaVern Baker, One Mint Julep by the Clovers, Money Honey and There Goes My Baby by the Drifters, Shake, Rattle and Roll by Joe Turner, Mama, He Treats Your Daughter Mean in an unusual up-tempo performance by Ruth Brown, and the early hits I Got a Woman and What’d I Say by Ray Charles.

- **THE GENIUS OF RAY CHARLES.** ATLANTIC 1312. Ray Charles, whose vocal style is heavily laced with gospel inflections, was the vital bridge between Fifties r&b and the instrumentally more sophisticated soul music of the Sixties (indeed, it was he who popularized the term “soul music”). Though he is best represented on the now-deleted “Ray Charles in Person” (Atlantic R039), which captures the full fire of his performances, this album from a later period shows his effectiveness in fusing up standard popular songs.

- **JAMES BROWN: Sex Machine Live.** POLYDOR PD2-9004 two discs. Brown always had great appeal for the black mass audience, particularly the young during the late Sixties, when he was considered by many the king of r&b. His dancing and theatrics are as much a part of his act as the music, but this album is representative of his vocal style.

- **ARETHA FRANKLIN: I Never Loved a Man the Way I Love You.** ATLANTIC SD 8139. Amazing Grace. ATLANTIC SD2-906 two discs. The first album noted here represented Aretha Franklin’s emergence as the most influential female singer of the soul era. Her recording of Otis Redding’s Respect was the anthem of the black revolution of the Sixties, and her impact was felt by nearly every female soul artist who followed her. Her beginnings as a gospel singer are apparent in just about every note she sings, and the second album captures her journey back toward her roots together with gospel star James Cleveland.

- **THE BEST OF OTIS REDDING.** ATCO SD2-801 two discs. Redding died in a plane crash in 1967 at the age of 26, but he has recorded an exceptional amount of first-rate material during his short career. He was capable of moving from cool tenderness to passionate fury without becoming strident, in a style generously flavored with Memphis blues. Though several fine artists were produced by Stax Records back in the Sixties, Otis Redding is the one who most deserves immortality.

**RECOMMENDED READING**


- **NINA SIMONE: It Is Finished.** RCA APL-0241. Nina Simone cannot be conveniently placed in any one musical category. Her approach is a composite of blues, gospel, folk, and jazz as well as r&b. All alike, she has been the leading creator of black protest songs. Some of the latter, such as Four Women and Mississippi Goddam, were recorded during the Sixties on the Philips label and are now hard to find, but this record dating from 1974 is still an accurate summation of her art.

- **SLY AND THE FAMILY STONE: Greatest Hits.** EPC KE 30525. While the Sixties saw the tempestuous emergence of hard rock, Sly and the Stonettes continued to follow a separate course. A few artists tried to build a bridge between the two camps by combining the styles of both. Guitar virtuoso Jimi Hendrix finally crossed over completely to become one of the leading hard rockers, but Sylvester Stewart, known as Sly, managed to retain the lightness and melodict intent of r&b in his music while emulating the rockers in his flamboyant mode of presentation.

- **DIANA ROSS AND THE SUPREMES: Anthology.** MOTOWN M7-794A3 three discs.

- **SMOKEY ROBINSON AND THE MIRACLES: Anthology.** MOTOWN M7-793B3 three discs. THE TEMPTATIONS: Anthology. MOTOWN M9-782A3 three discs. Here are three jewels that Motown released during the Sixties and early Seventies when its pop-music crown shone brightest. These three ensembles were, quite simply, among the best selling groups ever. Wherever. The Supremes never recovered from losing Diana Ross, whose teasingly sensual lead highlights their three-record anthology. With his unique quality, distinctive tenor is still a joy to hear, is one of the best of the popular artists around. And in their early days the Temptations were the Rolls Royce of male singing groups.

- **MARVIN GAYE: What’s Goin’ On.** TAMLA TS310. A reconstructed gospel singer whose voice sometimes sounds like Sam Cooke’s. Marvin Gaye was a member of the early Motown crew, though overshadowed by some of the other luminaries in that constellation of talent. With the release of this brilliant concept album in 1971, Gaye emerged as a popular artist of the first order. The set combines an impelling spiritual with social protest, and it’s a tour de force of the singer’s art, with music and lyrics still capable of generating waves of aesthetic excitement.

- **STEVIE WONDER: Talking Book.** TAMLA T6-319. Intrusions. TAMLA T7-326. Fulfillingness’ First Finale. TAMLA T6-332. What can one say about Stevie Wonder except that he is the most gifted artist to reach maturity in the Seventies? His influence extends beyond soul to the whole of popular music. He has listened well to the electronic innovations of the rock movement and applied them to his own work with staggering effectiveness.

- **EARTH, WIND & FIRE: That’s the Way of the World.** COLUMBIA PC 33280. Led by the versatile Maurice White, Earth, Wind & Fire has been the leading exponent of progressive soul, which incorporates complex singing patterns with instrumental techniques borrowed from jazz.

All the albums listed are in the current catalog and should be readily available in stores or on order through your local dealer. In addition, the Oldies But Goodies label (distributed by mail through the Original Sound Sales Corp., 7120 Sunset Blvd., Los Angeles, Calif. 90046, and carried by some stores) has issued several volumes of rock hits by such artists as the Penguins, the Flamingos, the Dinos, Little Anthony and the Imperials, Jesse Belvin, Etta James, and many others. However, half the fun of collecting lies in going on the prowl for out-of-print discs. Bargain bins frequently yield rare items, and most cities and quite a few smaller towns now have “oldies” record shops. You’ll find that the deeper you dig, the more you’ll discover.
New shapes of sound from RTR
THE RHOMBUS SUBWOOFER...THE PYRAMIDAL SATELLITE

Now your speaker system can reproduce true bass. With the new RTR DAC/1 Rhombus Subwoofer, low frequency instruments and deep tones emerge with a degree of undistorted realism never before heard in a home system.

Rhombus, RTR engineers have created the only enclosure which combines advantages of both vented and acoustic suspension systems—without their shortcomings. This is the Differential Area Coupler* system, the first all-new enclosure design in a quarter century.

Rhombus delivers flat frequency response from 16 Hz to 150 Hz. Below 16 Hz, the system cuts off rapidly to eliminate modulation distortion. Bass peaks and resonances are wiped out by impedance leveling circuits and the DAC* format.

Pyramidal design yields an advanced small speaker. The RTR PS/1 pyramidal satellite loudspeaker solves most problems inherent in small speakers. Geometrically, pyramid form follows function better than rectangular enclosures. Space for a major woofer in a minimal package facilitates lower frequency response and higher, undistorted output levels. Non-parallel sides smooth bass reproduction and curtail internal resonance.

Capitalizing on this format, the RTR PS/1 Satellite incorporates an array of RTR components in a dynamic 3-way speaker system. A new total-immersion-damped woofer cone reduces sonic coloration and eliminates breakup. Carbon fiber impregnated soft dome midrange and soft dome tweeter offer superlative response with wide dispersion. All told, these are live performance audiophile speakers in a package destined to become classic.

New shapes combine into a formidable system. Match Rhombus Subwoofers and PS/1 Satellites. Be rewarded with hauntingly realistic sound reproduction. Attack and dynamics of actual performance reproduce with smoothness, accuracy and superb detail. This system defines new standards of performance for all sonic parameters. Equally startling, the price is well below other state-of-the-art contenders. Audition it soon at your RTR dealer...and believe your ears.

RTR Industries, 8116 Deering Avenue Canoga Park, CA 91304

Listen...you'll be hearing more from RTR.
Preamplifiers

The preamplifier is the heart of a system of component "separates," and the heart was beating strongly in Las Vegas in January (see this month's cover). Of late, preamplifier designers have been espousing two distinct philosophies. One leans toward complexity, outfitting the unit with features such as elaborate tone-control and equalization facilities, built-in test oscillators, digital readouts, computer-accessible control features, and switching facilities more than adequate for any array of associated components. The other philosophy, called the "less is more" school in a previous show report, stresses simplicity and purity of the signal path, and in some of these preamplifiers controls and switches are deliberately kept to a minimum.

At Las Vegas there were signs of a third approach, a fusion of these two positions. The new Yamaha C-2a preamplifier permits the user to switch-select the signal path to pass through all the front-panel controls or to bypass most of them and take the most direct possible route from phono inputs to main outputs. This feature made its debut on an integrated amplifier introduced by the company last year. The not-quite-so-new C-4 Yamaha preamp shown on the cover in-
LAS VEGAS AUDIO SHOW

Power Amplifiers

In power amplifiers, one of the most techni-
cally startling revelations of the show was
the latest Carver creation, the M-400. A 7-
inches weighing a bit over 12 pounds, it pro-
vides a continuous 200 watts per channel into
8 ohms and costs a little more than $300! Obvi-
souly, something out of the ordi-
nary is happening here, but that something
has not been fully described awaiting patent
protection. In brief, it appears to be a highly
efficient switching power supply that is am-
litude-modulated by the audio signal. De-
tails will be revealed when the patents come
through, but, in any case, this is certainly an
amplifier that works like no other ever used
in high-fidelity reproduction.

Another interesting power amplifier
comes from Sherber Sonics, a unit whose
novel design is said to make it virtually un-
clippable. But comparatively conventional
power amplifiers still hold sway, and some
of them are even becoming more austere on
the outside as they become more ingenious
on the inside. The Infinity “Class A Hy-
brid” power amplifier has an almost feature-
less front panel that conceals transistorized
output stages and vacuum-tube driver stages.
It is rated at 150 watts per channel, and it
costs a bit more or less than $4,000,
depending on how far from its California
birthplace it has to be shipped.

Totally-vacuum-tube power amplifiers
continue to appear as well, some of the lat-
test being the Michaelson & Austin TVA se-
ries from England. For $1,890 you can have
90 watts per channel, $1,290 will give you 50
watts, and a preamplifier sells for $750, all
units with essentially class-A operation.

As a companion to its new preamplifier,
Yamaha introduced the Model M-2 power
amplifier. And Marantz also presented a
new power amplifier, the SM-7, which has
dual power supplies and input stages that
combine FET’s and bipolar transistors. A
150-watt power amplifier, said to operate ex-
clusively in class A, was previewed by JVC.

It is so new that it doesn’t yet have a model
number, much less a price.

Crown, whose front panels were once
rather lean and spare but are now becoming
enlivened with LED’s and other features,
had been studying protective circuits used in
high-power amplifiers. The result is the 220-
Watt SA2, containing proprietary logic cir-
cuity that more realistically monitors the
operation of the output transistors before
activating the protective circuits. In proto-
type form, the SA2 has delivered 900 watts
cal per channel into 4-ohm loads.

Uni-Sync, a BSR subsidiary, intends to
serve the home and recording studio with
three stereo power amplifiers, the Models
50, 100, and 350, the numbers giving approx-
imate rated continuous power into 8-ohm
loads. The David Hafler Company, known
for its preamplifier, now has the DH-200
power-amplifier (under $300) to go with it.
Conservatively rated at 100 watts per
channel, the amplifier is sold in kit form (one
evening will suffice for assembly), and is said
to have been designed with due con-
sideration given to alleviating every distor-
tion-producing circuit problem known.

The Metron division of Cerwin-Vega has
enlarged its line of separates considerably,
and now offers a 150-watt-per-channel pow-
er amplifier employing FET output devices
along with a frequency-synthesizing tuner
for both FM and AM functions. Supex,
long known as a headphone manufacturer,
has announced that a new division, Audio
Scientific, is in the making, with a high quali-
ity power amplifier soon to come.

Integrated Amplifiers

Much of the rest of the “separates” story
belongs to the new integrated amplifiers,
which appeared at Las Vegas in consider-
able numbers. The most conspicuous trend
in this product category is the “high-speed”
race: the competition to achieve the fastest
“slewing” (rate of change of an amplifier’s
output signal for an input with a theoretical-

mal stereo signals in such a way as to en-
}
INTEGRATED AMPLIFIERS

Sansui seems to lead the way at the moment, with 260 volts per microsecond for 160 watts per channel in the new AU-X1 ($1,450), edging out the recently introduced $1,000 Kenwood KA-907, with its 230 volts per microsecond and 150 watts per channel of power. The KA-907 heads a roster of three new high-speed models from this company, descending in power to 80 watts per channel and in price to $450.

Marantz does not emphasize slew rate in its literature on the new PM-7 integrated amplifier, an uncompromising combination of the SC-7 power amplifier and SM-7 preamplifier for a power output of 150 watts per channel. Technics takes another tack by explaining that its five new integrated amplifiers have been evaluated by an instrument that directly compares the input and the output waveforms on music signals and were not found wanting. The amplifiers are the SU-8099, 8088, 8077, 8055, and 8044; their power outputs range from 115 to 38 watts and their prices from $1,600 to $260.

Pioneer has adopted the terminology "nonswitching" to refer to a circuit design said to reduce notch distortion greatly in its three latest integrated amplifiers, the 100-watt SA-9800 ($750), 80-watt SA-8800 ($550), and 65-watt SA-7800 ($450). And Rotel states that its new RA-2040 (120 watts) and RA-2030 (80 watts) offer the greatest amount of performance available from integrated amplifiers at their respective prices of $880 and $680. NAD's new Model 3020 (under $200) is rated at 20 watts per channel, but a switch-selectable "soft-clipping" operational mode minimizes audible distortion problems when it is operated close to the clipping point. A companion FM tuner, the 4020, is similarly priced.

Lux has one of the few integrated amplifiers, the 100-watt L-11, to lack tone controls in the familiar configuration, although there is a knob to tilt treble response up or down and a pushbutton to introduce a bass boost. Sherwood says that the 60-watt S-702 ($320) and the 35-watt S-402 ($225) are the only integrated amplifiers in their price class that can surpass the performance of the company's receivers. Aiwa's 75-watt AA-8700 U integrated amplifier is brand new, as is the 22-watt Sharp SM-1144. Both have companion tuners, the Aiwa AT-9700 U and the Sharp ST-1144.

Receivers

Receivers are the infantry of the high-fidelity industry, the components that have, during the last decade or so, consistently managed to capture and hold the greatest amount of ground in the market, although separates have recently challenged their primacy. The fact that not many new receivers were introduced in Las Vegas undoubtedly means not that receivers are falling from favor, but that this year's horde are being held back for the major onslaught on Chicago in June.

The highlight of this show's receivers was certainly the Bose "Spatial Control" receiver, which has been specifically designed with the latest versions of the Bose 901 speaker systems in mind. It contains two amplifiers for each of the speaker systems, which, of course, have terminals to match. With the control facilities of the Bose receiver it is possible to either broaden or narrow the stereo "stage" at the user's option. The Spatial Control receiver can also be used to drive conventional stereo speaker installations when the two pairs of power amplifiers are bridged, giving a maximum output of 100 watts per channel. A smaller Bose receiver, the 40-watt-per-channel Model 550, was also introduced at the show.

A truly handsome receiver, with clean lines of rectangular pushbuttons below an understated digital readout for tuning frequency, was introduced by Toshiba. The tuner section is frequency-synthesizing for both FM and AM, continuing the trend toward high-performance AM that has recently emerged, perhaps in anticipation of stereo AM. The Toshiba SA-850 is expected to cost around $520.

Sansui's G-4500 and G-3500 are continuations of the established G series; they are priced at $320 and $270, respectively, and rated at 40 and 26 watts per channel. Rotel has brought a digital frequency readout, a tuning dial, and vast numbers of LED's into the Model RX-2002 ($800) at 90 watts per channel, and it is backed up by the $720 RX-2001 (75 watts). This manufacturer also showed a well-integrated minisystem (vertical-format receiver plus two small speakers of equivalent size) that attracted much attention both for its attractiveness and its price of $310.

To Nikko goes the honor of introducing the greatest number of new receivers; five in all, and all with complex yet tastefully styled front panels. Power outputs range from 20 to 100 watts per channel; prices were not disclosed at press time. Optonica's price for its new 125-watt receiver is $800, which is certainly reasonable for a unit with conspicuously good specifications and a front panel that will astonish you with its diversity. The panel is especially representative of what is being called "aerial-styling" - -controls and indicators mounted at various "human-engineering" angles so they can be reached and observed conveniently by an operator sitting in a single fixed position.

(Continued overleaf)
LAS VEGAS AUDIO SHOW

Signal Sources

A few of the latest tuners were mentioned in previous sections, but there are others that merit closer examination. The most innovative designs to appear recently are probably three Kenwood models, well represented by the top-of-the-line KT-917 we reported on in March. Rotel also has a "super tuner," the RT-2100, with a conventional tuning dial, a digital frequency readout, and superb specifications, for $640. The Model ST-7 from Marantz is in the tradition of that company's no-holds-barred tuner design, having a 2-inch oscilloscope for a tuning indicator and, like the Rotel, built-in Dolby noise reduction. Price: $835.

Pioneer's newest AM/FM tuners, at $450 and $350, offer, at lower prices, features similar to those found in the company's finest tuner. An automatic circuit activated when the tuning knob is released seeks and locks onto the precise channel center of the tuned station. Model numbers are TX-9800 and TX-7800. The Technics AM/FM Model ST-8077 ($300) also locks onto the channel TX-7800. Onkyo has entered the cartridge business with the MC-100, a moving-coil design that has cast magnesium-alloy elements in its body structure and a stylus cantilever fashioned of duralumin and carbon fiber. And NAD also turned up with a surprise cartridge entry, the moving-coil Model 9000 (under $200), which has sufficient output to drive conventional phono inputs directly.

As for more conventional "moving-field" designs, Empire made a major introduction with its EDR-9, a handsome black-bodied unit with a tuned damping system and a new "large-area-contact" stylus shape. Shure's latest cartridge, at about $90, is the M95HE, which makes use of the company's hyperelliptical stylus shape developed for the V 15 Type IV. Pickering's XSV/3000 ($100) has all that manufacturer's latest features at a price that is getting to be the mid-point rather than the high-water mark for phono cartridges. And Nagatronics, expanding its line downward, has added the $70 344DE. Finally, Sumiko, U.S. distributor of much phono exotica, has announced the availability of a new stylus shape in the premier series of Grace models. Viewed from the point of the stylus, the contour resembles a sharpened figure-eight—a shape that is said to improve tracing and reduce effective mass.

New turntables were plentiful at the Las Vegas show but, as anticipated, most of the highly esoteric record players noted by Peter Mitchell in his review of the Japan Audio Fair last month were absent (with the exception of a striking brass-and-glass creation by Marantz). Technics has built its quartz-locked direct-drive scheme into a four-model line priced from $240 to $340, the last being a multiplay model, the 5350. Garrard's new direct-drive motor is said to be free of any variations in torque and therefore of speed irregularities; it is available in the Models DD131 and DD132, both of which cost less than $200. Onkyo's CP-1010A is a belt-drive machine; the CP-1020F employs direct drive. There are numerous new direct-drive machines from Sony, the top model of which, the PS-X70, has a separate motor to cycle the tone arm and special wire for the cartridge leads.

Last year ADC brought out several belt-and-direct-drive record players, all using a unique antiresonant base. This year a new direct-drive model, the 1750 DD, has been added that comes without a tone arm. It will accept arms from Shure/SME, Infinity, and Grace, among others, as well as the ADC tone arm. The latest from Thorens are the TD-104 and TC-105, both having the Thorens TP-22 tone arm with plug-in arm shafts along with belt drive. Of Kenwood's new record players, the belt-drive KD-1300 costs $120, while two new quartz-lock direct-drive machines come with tone arms (KD-650, $400) and without (KD-600, $335). Visonik has a new "straight" tone arm...
available on five models, and Mitsubishi has a new arm that comes with machines priced at $400 and $520. Osawa now offers the UltraCraft 3000MKII tone arm, constructed of anodized brass, and the Ariston turntable.

Tape Machines

As anticipated, the Winter CES brought significant new introductions of cassette hardware capable of handling pure-metal-particle tape, together with appearances of such tapes from Fujl, TDK, and of course 3M. Many of the pure-metal-ready cassette decks are still being held in Japan, either for further development or to await the emergence of pure-metal standards. But an ample number of machines joined the previously announced models from Nakamichi and Tandberg to make the metal revolution seem imminent.

B.I.C. displayed its most elaborate two-speed (1 7/8 and 3 3/4 ips) model to date, the T-4. It has three heads, dual capstans, and pure-metal-tape capability. B.I.C. also augmented its two-speed offerings with an automobile cassette player, the C1, which will play pure-metal-particle tapes (although it will not record, of course).

Eumig’s FL-1000, besides being pure-metal-capable, is a technological tour de force with three heads, a multifunction fluorescent metering system, oscillators to test head azimuth, bias, and sensitivity for all tape types, microprocessor-controlled tape-search functions, and the Eumig opto-electronic capstan drive. Price was not available, but it is likely to be rather high.

Technics’ pure-metal machine is the RS-M95 (again, price pending), and it is as elaborate in its special way as the Eumig, providing comparable metering facilities, three heads, two direct-drive motors for the capstans, and variable bias for all tape types. There were also three other new Technics decks priced from $300 to $400. Luxman was among those showing the pure-metal decks, the K-12 and the de luxe three-head, dual-capstan 5K50. Luxman also introduced something of a novelty: a new cassette shell with integral skew adjustment, an improved tape-guidance system, and an optical device that permits precise tape-motion sensing when used with either of the aforementioned cassette decks. It can be purchased loaded with a variety of tape types.

For an additional expenditure of $150, your Teac C-l cassette deck can become a pure-metal-compatible machine. The necessary modifications will be made by any Teac service station, and the retrofit program should have been put into effect by the time you read this.

The KD-A8 ($750) is JVC’s pure-metal machine, and it incorporates the automatic bias, equalization, and sensitivity-setting circuits the company has recently introduced. Similar facilities are offered on the pure-metal-capable Onkyo TA-2080 and the less elaborate TA-2010. An Aiwa pure-metal-tape cassette deck, the AD-6700, joined three other new models on display in Las Vegas. And Sanyo presented two pure-metal models, the RD5372 and RD5370, both with two motors and three heads plus numerous other features, at the surprising prices of $550 and $400, respectively. There were also two lesser Sanyo models costing $230 and $130. And at least one other manufacturer had a metal-tape deck on hand but said it was too early to disclose details.

Other new cassette decks included the Pioneer CT-F800 ($540), a step-down model from the CT-F900 brought out last year, with a three-head transport and fluorescent metering system, three popular Sansui models that have been restyled to blend with the appearance of that company’s “G” series of receivers; and the $325 front-loading KX-650 from Kenwood. Teac has a new three-head model, the A-300 ($429) with double Dolby circuits for off-the-tape monitoring, as well as what is called the Model 124 Syncaset ($449), which can record on its two channels independently for sound-on-sound functions and even synchronize a recording with a track that has already been laid down. Rotel came to the show with two new models, the RD-2000 ($430) and RD-25 F ($340), with very similar styling and continuously variable bias adjustments.

Fisher has again introduced a combination cassette and eight-track recorder, the ERB55, this one with a wireless remote-control accessory to switch the pause function. Simultaneous recording on both transports is possible, as is dubbing between the two. Akai continues to stress automatic reverse in cassette decks, adding two models, the GXC-735D and CS-732D, that record and play in either direction. Prices are $550 and $400, respectively. Sharp has a new low-price model, the $190 RT-1144, that will rack-mount. And Mitsubishi has announced the $630 DT-30, with three heads and dual capstans, plus a less elaborate two-head machine, the $370 DT-10.

As for open-reel, the Teac/Tascam series has been enlarged by the 35-2, which takes reels of up to 10 1/2 inches, has a separate electronics module, speeds of up to 15 ips, capability for half-track record and play plus quarter-track playback, optional plug-in dix noise reduction, and a price of $1,000. Akai’s GX-635D has six heads grouped around a centrally located capstan for recording and playback in both tape directions, three motors, and solenoid switching ($995). With double Dolby noise reduc-
LAS VEGAS AUDIO SHOW

Marantz's de luxe open-reel machine (noted in last month's Japan Audio Fair summary) was reported on display in Las Vegas but actually seen by few. Price is said to be $2,500. Philips' N4520, the first 10½-inch reel deck from this manufacturer, was also on display.

Speakers

Speaker systems, the basic sound sources of an audio system, are introduced in huge numbers at every electronics show, and as usual we have space only for the highlights. First billing at Las Vegas should probably go to the latest of the British imports. B & W has created its most ambitious design yet, the Model 801, a large floor-standing unit intended to be capable of uncompromised performance at sound-pressure levels exceeding 106 dB. Few details are available except for the price, which is expected to be approximately $1,200.

Celestion, another English company vigorously wooing the U.S. market, has a trio of new three-way systems using three enclosure types: passive-radiator (in the top-of-the-line Ditton 662), ported, and sealed. All systems are sold in mirror-image pairs for optimum stereo imaging.

Infinity has developed a film-diaphragm midrange driver to complement their "EMIT" tweeter and has also introduced a polypropylene-film woofer cone. Put together in an enclosure about 5½ feet high and combined with a control unit that permits blamping and adjustment of all drivers' output levels, the result is the Reference Standard 4.5, expected to cost $3,000 per stereo pair. Another large system, the Altec Lansing Model 14, offers high-efficiency, exceptionally wide dispersion for a design with a large midrange/tweeter horn, and what is-called the most sophisticated driver-protection circuit available, which acts to limit the power going to the drivers when there is danger of overload instead of interrupting it completely.

A third large new system, the Jensen B ($490), is basically a four-way design that can tilt backward within its oak veneer, U-shaped support bracket and has front- and rear-firing tweeters.

The original Technics "Linear Phase" speaker systems have been superseded by a new line. Like their predecessors, the new SB-7070 and SB-6060 have stepped-back-up-per-frequency drivers in sub-enclosures to promote equal arrival times at the ear for all drivers' outputs. Prices are $450 and $350.

Advent has also replaced a popular existing model, the Smaller Advent Loudspeaker, with the Advent/1; its drivers are identical to those in the New Advent Loudspeaker.

Several speaker systems seen only as prototypes last year are now becoming available, among them the Marantz Series 7 Model F7 and the Ohm I. The Marantz system has a built-in 150-watt amplifier to power its 12-inch woofer ($2,300 the pair). The Ohm I (about $600), employing front- and upward-firing drivers in a narrow truncated-pyramid enclosure, is designed for high sensitivity and power-handling ability. And RTR has developed the backward-canted Model 800D as a state-of-the-art four-way design, plus the two-way Models G-200 and G-10 as back-up designs in more conventional columnar and box-type enclosures.

Meanwhile, ESS has established five complete lines of speaker systems with models too numerous to mention. The latest line, called "Targa," is said to utilize some of the principles of the automotive turbo-charged gasoline engine!

Leak is highly enthusiastic about the $870 Model 3090, a four-way design with a swiveling upper sub-enclosure that houses the three higher-frequency drivers. Kenwood's LS-1200 and LS-404B are three- and two-way systems at prices of $350 and $135. The Design Acoustics D-4A is probably one of the handsomest columnar designs available, with five drivers installed in a multidirectional configuration. Audioanalyist is as yet offering little information on its new "XL" speaker series except to say that improved power-handling ability has been the goal and that prices of the three models range from $100 to $300. Sherwin Sonics was showing the prototype Dan Queen speaker system whose performance is said to approach the theoretically preferred pulsating-sphere sound source.

Ultradine is one of the companies assembling three-piece speaker systems around a common-bass subwoofer, in this case the Model S-1. A second is Chartwell, which has recently introduced the SW-135 ($400), and a third is Mesa, whose Environ-Mesa subwoofer is disguised as a coffee table. All of these models can be mated with minispeakers from their respective manufacturers for full-range reproduction. Visonic has also begun to specialize in such systems and has four newly introduced minispeakers priced from $115 to $300. Burhce and Jennings also showed satellite/subwoofer systems, and Onkyo revealed the SL-1, an interesting variation on the subwoofer scheme, with a built-in 60-watt amplifier.

Minispeakers are available for other applications as well. Sansui's J-33's (with ebony piano-lacquer finish) are recommended as full-range systems and sell for $450 the pair. Audio Pulse now has a smallish floor-standing system, the APS-2, intended to work as rear/side systems with time-delay devices. An Arizona firm, General Sound, introduced three minispeakers, all available in a variety of stylist wood finishes. H. H. Scott unveiled the Model 166, a small two-way design in a sealed cabinet. And Genesis showed the Model 1-14, somewhat larger than a true minispeaker: at $190 and with compact dimensions, it is a useful alternative in many installations.

In the realm of the exotic, there was the first Strathern Audio speaker system. The original design, first seen in the form of an artist's rendering some years ago, called for mid- and high-frequency film-diaphragm radiators that faced the listener edge-on! From recent reports it appears this configuration has been altered somewhat, but the results still seem quite interesting. No less interesting is the Hill Type-I Plasma system from Plasmatronics, first seen at this show last year and now significantly—and audibly—improved. At $7,000 the pair it is not for everyone, and since each system requires replacement of a tank of helium about every 300 hours of listening time, it is certainly not the most convenient approach to high fidelity.

If you've wondered how good high fidelity can be, though, a listen to these may answer some of your questions. But don't look; visually they are downright ugly.

Manufacturers of esoteric goods can also make a downscale move when it suits them. For example, both Dahlquist and Pyramid are now offering automobile speaker systems. The Dahlquist ALS 3 is a two-way system in a black aluminum cabinet selling for $250 per pair. No details on the Pyramid system could be obtained at the show.

Fried's latest are the Super Monitor, a four-piece system with a subwoofer and pyramidal "satellite" system for each channel, and the Model W, which is a relatively small three-way system. BES has created the Sound Module II series consisting of five models incorporating that manufacturer's planar drivers in attractive new enclosures.

BTM, a new California company, demonstrated a line of four hybrid dynamic-electrostatic speakers ranging in price from $139 to $490. Polk's $350 R.T.A. 12 stands on a tall pedestal and reproduces recognizable square waves. And Superex has come out with an add-on tweeter array employing two 1-inch dome drivers. (Continued on page 86)
CASSETTE DECKS

- Onkyo TA-2080
- Sansui SG-3100G
- Fisher ER-8155 with remote unit
- JVC KD-A8
- Sanyo RD5372
- Akai GXC-735D
- Teac Model 124

SPEAKERS

- BES SM600
- Polk R.T.A. 12
- Audioanalyst BassMatrix subwoofer and matching bookshelf high-range unit
- RTR 800D
- Celestion Ditton 662
- Ohm Model I
Accessories

The ways in which you can accessorize your music system are expanding in every conceivable direction. Since we do not have infinite space and you lack infinite patience, this section will have to be rather limited in scope.

The ultimate audio accessory is certainly a complete new system, custom selected and assembled. You can negotiate for such a thing with the principals of Cizek and DB Systems. The Cizek Centurii-Mark 1 consists of a Denon record-playing system, DB Systems electronics, and a pair of large Cizek two-piece (two-driver subwoofers and satellite, upper-frequency sections) loudspeakers. At this time the price is not fixed, but $8,500 is the estimate.

Last month's story on the Japan Audio Fair noted a new type of accessory, the "equanalyzer," a combination multiband equalizer and LED real-time analyzer. It was expected that Japan would introduce at least one such device in Las Vegas, but the state of Washington beat them to it. The Audio Control Spectrum Analyzer/Equalizer reads out levels in ten bands on a ninety-nine, LED display and lets you adjust those levels independently. The company also makes a variety of other equalizers. Crown was showing their latest—a rack-mount ensemble that includes a separate scope (not LED) analyzer and equalizer.

Japan showed its first time-delay synthesizer, the ATD-1 from Nikko. It has controls generally equivalent to those found on units developed in the U.S., and it is reportedly an analog unit. Price was not available at press time.

Sansui has formed a professional division to market specialized preamplifiers, power amplifiers, and accessories. The Model P-1 is their four-band-per-channel parametric equalizer that will fit right into a rack-mounted installation. The Sansui E-1 is what is called a "phono equalizer," with inputs for no less than six phono cartridges (three moving-coil, three moving-magnet) and every conceivable adjustment for optimizing their performance. Among other equalizers, Supercex now has a five-band graphic model, the GEM-1, with an external power supply to keep noise at a minimum.

Encouraged by the success of its Model 3BX, dbx is expanding its playback-only dynamic-range expanders with a single-band model (the 1BX, $245) and a two-bander (the 2BX, $450). Meanwhile, the three-band 3BX gets a remote controller, the 3BX-R.

You didn't really think four-channel sound was dead, did you? Phoenix-like, it is rising again in the form of various improved decoders from the fertile mind of Peter Scheiber (who was showing his limited-production $3,000 spatial decoder) and from the manufacturing facilities of Fosgate, a car-stereo company that is going to ride the fabulous and elusive Tate SQ decoder right into your living room. At this show Fosgate introduced "Tetrasound," based on the Tate system, in a form suitable for use in automobiles, and promised to present a decoder/preamplifier for home use in the near future. Another Tate licensee, Audionics, is readying a decoder/synthesizer for the home that will give state-of-the-art performance and cost between $500 and $600.

A lapel button widely seen around the show read "The only good turntable is a dead turntable." It was being distributed by the Mitchell A. Cotter Company, and it reflected the irrepressible Mr. Cotter's belief that record players should have no resonances. The final production version of the company's B-1 turntable base, which can be factory-fitted with a variety of turntables and arms, very probably is dead. So might you be if you have a heart condition and try to wrestle one of these things upstairs; it weighs 130 pounds.

Record-care products have become among the most popular of accessories. The $20 "Hands-Free" Lencomatic cleaning and destaticizing system is one of the most elaborate, employing a straight-line-trackingvacuum record brush and a variety of other things on the underside of the dust cover, a metallic leaf spring that comes down to contact the spindle and conduct charges away from the brush, and a conductive foil pad to go between the record and the turntable platter.

Decswasher has four new products, including a special pad to clean Decswasher cleaners, a record sleeve intended to give maximum protection to valued recordings, a new record-storage rack, and an ingenious lighting system for illumination of rear-panel connectors, tape heads, record surfaces, and the like. What have you. RNS/Metronsound is the latest on the market with an adhesive roller for cleaning record surfaces, the $17 "Supercling." And Elpa Marketing now distributes the AudioMate line of record accessories, including an antistatic pistol, an arm-mounted record brush, and a way to flatten warped records as they are played.

Elpa also offers another accessory that will be treasured by anyone who has eagerly sought such a thing. It's a little thirty-two-page book called Tape Editing, written by Joel Tall, who practically invented the art, and it is the finest text on the subject I have ever seen. Only $2 buys it from Elpa Marketing, Thorens and Atlantic Avenues, New Hyde Park, N.Y. 11040.

Closing

The curtain falls, and behind it you can hear the stagehands trundling the goodies off to their next destination. Car stereo, one of the fastest-growing areas in the audio industry, has been barely touched on, but it will be the subject of an in-depth treatment in the July issue, after we've all had a chance to sit down and collect our breaths. A new, even bigger show, the Summer CES, is coming up (it will be covered in the September issue), at which the products discussed above (or such of them as survive the passage from prototype to production version) will be seen again, together with many new ones.

Until then, the usual caveats apply. The products described in this article have projected delivery dates—delivery to your local dealer, that is—hanging from about the time you read this to midsummer. And some will never be delivered at all. As much as we would like to answer your letters requesting further information on specific models, we have neither the time nor the necessary detailed information to do so. The manufacturer involved will prove a much better source.

For those of you who have read this article seeking information on digital audio (PCM discs and the like), we can only note that these various systems, which will ultimately make a significant impact on the high-fidelity industry, were not much in evidence at this show aside from a laser-disc player from Teac and a new PCM exhibition by Sony. We suspect that things will be much different in this respect at the summer show in Chicago—a tantalizing prospect.
Your choice between these new LUX turntables depends on how you feel about bearing arms.

Although these two turntables are being introduced simultaneously, the PD-272 (with integrated tonearm) was actually designed and produced first. Its operation is purely manual—no automatic assist whatever. So if you believe that any amount of automation implies compromise, the PD-272 should appeal to you.

The performance will certainly appeal to purists. The servo-controlled direct-drive brushless DC motor, with its trueable design, is totally free of the cogging pulsing that plagues many other direct-drive motors.

The straight, statically-balanced tonearm has several important design features. For example, the vertical pivots extend through the arm rather than simply suspending it from the outside. This minimizes lateral play and assures that the stylus will always remain perpendicular to the record. Also, the arm's nested tube construction and internal damping deal very effectively with resonance.

For those audiophiles who like to go their separate ways, we produced the PD-270 (like the PD-272 but less tonearm) and the TA-1 (separate tonearm). With TA-1, you change cartridges by changing the entire tonearm tube. This system is much better than changing headshells since it minimizes mass at the critical point of the tonearm. The TA-1 also has a built-in stabilizer below the arm base which damps out vibration.

This additional flexibility justifies its price. The PD-270 drive system is $285; the TA-1 tonearm $25. The complete PD-272 is $345. (And for either tonearm, the new 115-C moving coil cartridge, $195.)

As you can see, you have to decide how likely you are to want interchangeable tonearms in the future. Think about it on your way to your LUX dealer. If it's still a problem when you get there, he'll help you bear up under it.

LUX Audio of America, Ltd.

160 Duper Street, Plainview New York 11803 - In Canada: White Electronics Development Corp., Ontario

PD-272. Effective tonearm length: 240mm. Tracking force calibrated 5-3 grams. Accepts cartridges from 4-11 grams. Anti-skating, viscous damped cueing, adjustable headshell. Blurred strobe, pitch variable +/-%. Wow and flutter less than 0.03% (WRMS). Rumble more than 40 dB. Some drive system specifications apply to PD-270. Both include removable dust cover.

Sadao Harada, Kikue Ikeda, Koichiro Harada, Kazuhide Isomura

A Visit with the Tokyo Quartet

by Allan Kozinn
I f you have any doubts about how small this world has become in the last century or so, consider this: when Haydn entertained his aristocratic patrons in 1755 with the works we now think of as the first string quartets, Japan was still a mysterious, isolationist country ruled by a dynasty of warlords who dealt with the West only at a distance. Such was still the case in 1790, when Mozart made the last of his personal modifications to Haydn's quartet form, and so it remained as Beethoven revolutionized the medium. Brahms composed his first quartets in 1873—just twenty years after Commodore Perry steamed into Uraga.

In 1970, barely more than a century after the West established a foothold in Japan, the first performing string quartet to be born, raised, and, for the most part, trained there came to international prominence by outplaying its European and American counterparts in two major chamber-music competitions. Since then, the ensemble—the Tokyo Quartet—has come to be regarded as one of the finest young chamber groups around, particularly in the music of Haydn and Mozart.

Of course, you might argue that a century is plenty of time for a country to develop one good string quartet, and if you can think of a European or American ensemble that performs Japanese traditional music to as great acclaim in Japan as the Tokyo Quartet receives here, then you're so entitled. But if you keep in mind that until the late nineteenth century the greatest Western influence on Japan was the odd translation of a Dutch book; that Western music was entirely alien to the thriving culture Japan had developed in her isolation; and that Japan's first major music conservatory, the Toho Gakuen, was not established until after World War II, then that century shrinks considerably.

T he Toho Gakuen (Seiji Ozawa was in its first graduating class) is an important focal point in the development of the Tokyo Quartet. The four players met there as teenagers, played in several levels of string orchestra together, and went through the same rigid training in the fundamentals of musicianship at the school. Their first contact with Western classical music, however, was not at Toho but at home.

"We had a good phonograph and many records," recalls first violinist Koichiro Harada, now thirty-three. "I used to listen to a lot of opera—I still do. My favorite, back then, was Carmen." Harada's mother was a pianist, and it was at her insistence that he took up the violin at age six. Why violin?

"Because," he says, "she thought violins were cheaper than pianos."

Koichiro Harada is the only member of the quartet who is not actually a native of Tokyo. Because his home town, Fukuoka, was comparatively rural, he was not able to attend many concerts. Cellist Sadao Harada (no relation), now thirty-four, was given a wider perspective on the musical world. The son of a cellist in the NHK Symphony, Sadao Harada was taken to orchestra and opera performances regularly from the time he was five years old.

Second violinist Kikuei Ikeda, at thirty-one the youngest member of the quartet (and also the most recent: he replaced Yoshiko Nakura in 1974), was also taken to concerts as a child. His father was especially fond of the violin, having heard the great violinists of the era during their frequent post-war recital tours of Japan. The Ikeda family record collection consisted primarily of discs by Fritz Kreisler, Jascha Heifetz, Mischa Elman, and Joseph Szigeti, all formidable influences on young Kikuei.

Of the four members of the quartet, only thirty-two-year-old violist Kazuhide Isomura had any grounding in traditional Japanese music. But from the time he was six years old, Isomura (who is also said to be a judo expert) had a divided musical life: in school, he studied the violin and listened to Western music; at home, he heard the sounds of the koto, the samisen, and the shakuhachi.

"It's funny," cellist Harada explains, "but when we lived in Japan we were not very interested in Japanese music. I used to hear it when I was young because I had a neighbor who taught samisen. But I didn't care for it. I was much more interested in Mozart and Brahms. Now that we live in the States, though, we're beginning to realize that there are some beautiful Japanese pieces."

Of the four members of the quartet, only thirty-two-year-old violist Kazuhide Isomura had any grounding in traditional Japanese music. But from the time he was six years old, Isomura (who is also said to be a judo expert) had a divided musical life: in school, he studied the violin and listened to Western music; at home, he heard the sounds of the koto, the samisen, and the shakuhachi.

"It's funny," cellist Harada explains, "but when we lived in Japan we were not very interested in Japanese music. I used to hear it when I was young because I had a neighbor who taught samisen. But I didn't care for it. I was much more interested in Mozart and Brahms. Now that we live in the States, though, we're beginning to realize that there are some beautiful Japanese pieces. We try to see the Kabuki when it comes here."

At the Toho school, the four musicians came under the influence of cellist Hideo Saito, who was, until his death a few years ago, the guiding light of the Tokyo Symphony when he went to Nikko. "For me," says the cellist, "the decision to play chamber music had a lot to do with the literature. There are only a handful of major concertos for solo cello. The quartet repertoire, however, consists of hundreds of fantastic works—the Beethoven quartets, the Haydn, the Bartók. There was no comparison."

Sadao Harada had just graduated from Toho and was already a member of the Tokyo Symphony when he went to Nikko. "For me," says the cellist, "the decision to play chamber music had a lot to do with the literature. There are only a handful of major concertos for solo cello. The quartet repertoire, however, consists of hundreds of fantastic works—the Beethoven quartets, the Haydn, the Bartók. There was no comparison."

Ikeda did not attend the Nikko seminar, but he caught the chamber-music bug nonetheless. "There are basically three things you can do in music," he points out. "You can play in an orchestra, you can work on your own, or you can work on your own as a chamber ensemble. But then anything of an interpretative nature must come from the conductor. Even if the orchestra sounds good, it's not really your sound. If you're a soloist, you can lead the orchestra and do whatever you want. Chamber playing is between those two extremes, and for me it's more satisfying than either. Those moments where the four of us share the same musical ideas and feel the same excitement just don't happen in orchestral playing."

After Nikko, the future Tokyo Quartet's enthusiasm about chamber music was matched only by the Juilliard Quartet's enthusiasm about them. So when Harada, Isomura, and Harada told Raphael Hillyer (then violist with the Juilliard) of their desire to continue their studies in the United States and eventually to form a quartet of their own, the barriers between them and their dream began to fall. In 1967, Isomura and Sadao Harada were granted scholarships for a summer at Aspen, where they again studied with the Juilliard players. (Overleaf)
TOKYO QUARTET

"... people expect music by Japanese composers to sound 'Japanesey,' but it usually doesn't."

"Probably the most important things we learned from the Juilliard Quartet," says Isomura, "were a clean, controlled technique and a strict, tight ensemble. They taught us a lot about bowing together, for instance. We would have to play the same line in unison, making it sound like one instrument, not four. In orchestral playing, people don't worry about that so much. But in a quartet, everything is exposed. It must be more precise."

"We aren't quite as strict as the Juilliard," adds Sadao Harada. "We try to go to the manuscripts, and of course we always try to find the best scores. But we find that sometimes the directions in the original don't work for us. So we examine the scores, then we make our own decisions."

By the time they left Tokyo for Aspen, Isomura and Harada had decided that after Aspen they would try to land jobs in American orchestras, where they could save enough money for tuition at Juilliard. As it turned out, Harada and Isomura found themselves at Aspen in a quartet with the concertmaster of the Nashville Symphony, who informed them of two openings in his orchestra. They weren't just any positions, either; Isomura, who was still a violist, became assistant concertmaster; Sadao Harada signed on as solo cellist.

After one season in Nashville, Isomura enrolled in Juilliard. He was reunited there with Koichiro Harada, and those two formed a quartet with violist Yoshiko Nakura—it was then that Isomura switched to viola—and another Japanese cellist. In 1969, Sadao Harada joined his compatriots, and the original Tokyo Quartet was thus assembled.

Kikuei Ikeda essentially followed in the footsteps of his old Toho friends. He spent two years at Juilliard and another year performing in Japan before he was invited to join the Tokyo Quartet in 1974 to replace Yoshiko Nakura. According to cellist Harada, Miss Nakura always considered herself a temporary member, as she had solo ambitions which she is currently pursuing in Europe. (However, in a 1975 interview with the Associated Press, Juilliard Quartet violinist Robert Mann was quoted as saying, "They always had it in mind to get rid of their girl player. I told them it would be immoral to use her to establish themselves and get rid of her, but they eventually did.")

Until 1970, the group considered itself only a "study quartet." But that year things changed rather quickly. In April, the Tokyo String Quartet won First Prize at the Coleman String Quartet Competition in Pasadena, California. The judges were the members of the Amadeus Quartet. That summer, after an intensive eight-week practice period during which they worked eight to ten hours a day, the quartet entered the Munich International Chamber Music Competition.

Munich was the turning point. The quartet walked off with first prize, a guarantee of a hundred concerts, and a Deutsche Grammophon recording contract. The first product of the group's relationship with DG was a disc containing Haydn's Op. 76, No. 1, and Brahms' Op. 51, No. 2, which, despite its having won a Grand Prix du Disque at Montreux, has never been released in the U.S. The Haydn, however, has been rerecorded for Columbia and will be issued this year as part of an integral Op. 76 set. The quartet is reluctant to say which version they prefer.

"I noticed some differences between the two recordings," Sadao Harada claims, "but it's hard to tell exactly what the differences are. Recording is a funny thing: when you record in different studios, with different microphone placements, the sound is different. It could be that this time we knew the work better than we did the first time. Also, on the new recording we are using much better instruments. Of course, sometimes a great instrument will sound terrible on a recording, and sometimes a bad instrument will sound good. You can never tell."

On record, the Tokyo Quartet has gotten off to a fairly slow start. With the exception of the hard-to-find Brahms quartet mentioned above, a pair of Bartók quartets (Nos. 2 and 6), the Mendelssohn Octet (which they recorded, as guests of the Cleveland Quartet, for RCA), and a Debussy/Ravel set for 1979 release on Columbia, the group's entire discography is Haydn and Mozart. They have no plans to neglect that part of the repertoire in the near future—and considering the critical success they've had with Haydn and Mozart so far, there's no reason they should.

"People tend to think of us as Haydn specialists," Isomura complains, "but that's not really true. It's just that after we won first prize in Munich, we began to concertize widely in Europe, especially in Germany. Apparently, a lot of German people thought we did well with Haydn and Mozart, so when they asked us to give more concerts there, they also asked us to do more Haydn and Mozart. What else could we do? We couldn't refuse. Besides, we like the music. But we didn't mean to specialize in anything."

"For the past few years," Sadao Harada says, "we've been so busy working on Haydn, Mozart, Bartók, Beethoven, and all the standard literature that we haven't had time to do as much contemporary music as we'd like. We do play Schoenberg and Webern a lot, and we enjoy them. More recent music, though, requires special techniques which take time to learn.

"People often ask us why we don't play much contemporary Japanese music," he adds, "the problem is that in the U.S. and in Europe, people expect music by Japanese composers to sound very 'Japanesey,' but it usually doesn't. We used to play a piece by Akira Miyoshi, written in a very Western, contemporary idiom. And the audiences were nearly always disappointed—not because the piece was bad, but because they expected it to sound Oriental. Maybe now people don't expect that any more. It would be nice to be able to play some Japanese quartet music for our anniversary. It would be nice to start recording some, too."

Allan Kozinn is a New York-based free-lance writer and observer of the musical scene. He is also a composer and classical guitarist.
Cranmere...

most popular Kirsch Shelving year after year

It's free-standing... easily assembled... and the Kirsch exclusive Ring Lock® design assures stability.

A twist of the wrist begins a complete entertainment center for any home.

A new twist in Kirsch Shelving.

Glenwood...

new contemporary styling with twist-together ease

All the convenience of Kirsch Shelving is now available in the new walnut finish Glenwood collection. No tools, no glue, no finishing, no mess. Kits twist together in minutes for a new casual look from Kirsch.

For folder or more information, write Kirsch Co., Dept. DR-579, Sturgis, Michigan 49091.
What premium gasoline can do for your car, premium tape can do for your car stereo. And there's no finer premium tape than Maxell.

Every type of Maxell tape is designed to give you the widest frequency response, the highest possible signal-to-noise ratio and virtually no distortion. All of which results in high octane sound.

And to make sure our cassettes don't run out of gas somewhere down the road, we've constructed them to tolerances as much as 60% higher than industry standards. We use the finest high-impact styrene, precision pins, polyester and screws.

Because of this, we believe Maxell makes the world's finest cassettes.

And every year, hundreds of thousands of people who own car stereos are driven to the same conclusion.
When twenty-three-year-old Youri Egorov played in New York for the first time (January of last year) he simply, according to New York Times critic Harold Schonberg, "ate up the piano." The young Russian had fallen out of the running in the finals of the Van Cliburn International Piano Competition in Fort Worth, but a number of enthusiasts who felt he should have won a prize got together and funded his New York debut, which was something of a sensation.

Egorov has yet to be represented on records here, but a disc he made last year for EMI in Holland, where he now lives, has turned up on the import lists, and it gives a very good idea of what all the shouting was about. The music is by Schumann: a large-scale, expansive performance of the Kreisleriana, which spills over to side two, and similarly framed ones of the first and last of the eight Noveletten of Op. 21.

I must say straightaway that Egorov's is the most compelling performance of the Kreisleriana I have ever heard, on records or otherwise. His approach is a very personal one—but what other way, after all, to approach Schumann, of all composers? The slow sections are extremely slow and dreamy, with what may strike some listeners (but not this one) as an overgenerous use of pedal; the fast ones are very energetic—by which I don't mean especially fast (tempos tend to be rather broad), but simply bursting with a vitality that does not depend on speed to make itself felt. His sound is enormous—and gorgeous. The sweep and
spontaneity are breathtaking, the articulation incredible. Nowhere is there a hint of hysteria or the slightest lapse in taste; everywhere deep conviction and no little poetry. Musically and emotionally, this performance yields up more of the visionary feeling Schumann put into the music than any other presentation I can recall. Comparisons may be odious, but after living with this record for some time I felt that Arrau, Kempff, and even Ashkenazy had left a bit unsaid on the subject of the Kreisleriana; Egorov, though, with great subtlety as well as great flair, makes us feel an exceptional commitment, nothing less than a total identification with the music, and a relationship to it in terms of the vessel through which it passes rather than the virtuoso exhibiting his own personality. But Egorov does show plenty of that, too—and, contradictory as it may seem, it is just that quality that brings this fantastic work to life so fully and irresistibly.

If my remarks appear too inflamed, too generalized and/or lacking in objectivity, I can only urge the reader to hear the record and see if he can avoid complete surrender within the first few bars. The two Noveletten are invested with the same sort of magic, leading, on reflection, to the frustrating thought that Egorov might have given us a shorter work in full as filler to his Kreisleriana so that the complete Noveletten might be offered on a subsequent disc. If that is a valid complaint, it is surely the only one I can think of. The sound is wide open, with plenty of unexaggerated presence, and the surfaces are exemplary. It is only the end of January as I write this, but I don’t expect to hear a more exciting piano release this year.

—Richard Freed


Renata Scotto and Placido Domingo: Imaginative Programming Plus Vocal Radiance

"RENATA SCOTTO and Placido Domingo Sing Romantic Opera Duets"—and for once we are spared another program of utter predictability. The love scenes from Massenet’s Manon and Gounod’s Romeo et Juliette are well known but seldom show up on records; Giordano’s Fedora is something of a rarity, and Mascagni’s I Rantzau is a first recording.

Not surprisingly, the singers sound more idiomatic in the Italian scenes, but they seem to shine with a brighter vocal radiance in the Gounod and Massenet excerpts, which is of course where they find the better music. Their well-blended voices exchange tender vows in the Gounod and soar passionately in the Massenet under Kurt Herbert Adler’s sensitive and knowing (if a shade unassertive) direction. Giordano’s high-tension declamation results in some harshness on Miss Scotto’s part, but she makes the most of such lyrical moments as the scene allows. As for Mascagni’s I Rantzau (1892), which followed Cavalleria Rusticana and L’Amico Fritz almost immediately and sounds somewhat reminiscent of both, we must be thankful that the first recording of the opera’s duet has reached us through the artistry of these expert, attractive, and congenial singers.

—George Jellinek


Dire Straits’ Irresistible Music: Intelligent and Subtly Original

DIRE STRAITS was the only non-New Wave band in England to debut to across-the-board raves in 1978, and it’s not hard to figure out why: they’re so good it’s scary. But the speed with which they’ve caught on in this country (as of this writing, Sultans of Swing, the single, looks to be headed for the Top 10, which in this era of terminal disco approaches the miraculous) has me a little worried. Granted, the Straits are quite subtly original (if not totally innovative), and for sheer musicality, in the every-note-is-there-for-a-reason
sense, there isn't a New Wave band in the world that can touch them. Still, they are not likely to offend the sensibilities of anybody who thinks that, say, Kenny Loggins is God, and I am a little uncomfortable right now about endorsing the music of any group that will go down so easily amidst the utter pap that FM radio revels in. But I'd be the first to admit that that's unfair, and I should add that in live performance the band has turned out to be pleasingly rawer than the recorded model, so I'll stop complaining.

The Straits' music, an understated, gorgeous amalgam of Southern r & b styles tempered with a Dylanesque lyrical bent, amazingly atmospheric playing, and a near architectural grasp of song structure, is by and large irresistible. Leader Mark Knopfler has got to be the most quietly riveting guitar stylist to have emerged in the Seventies, and the band as a whole plays with such loose-limbed precision and soul that one overlooks the occasional pettiness of some of the lyrics (In the Gallery, which is one of the strongest cuts musically, is a rather simplistic attack on the Art Establishment). The intelligence involved is what will ultimately win you over—at least, it's what's won me over. Hey, wait a minute, maybe Dire Straits is more subversive than I thought: how many bands have you heard on the radio lately to which the word "intelligent" could accurately be applied?

—Steve Simels

**Dire Straits.** Mark Knopfler (guitar, vocals); Dave Knopfler (guitar); John Illsley (bass); Pick Withers (drums). Down to the Waterline; Water of Love; Setting Me Up; Six Blade Knife; Southbound Again; Sultans of Swing; In the Gallery; Wild West End; Lions. WARNER BROS. BSK 3266 $7.98, © M8 3266 $7.98, © M5 3266 $7.98.

**June Christy:**

She Can Make Musical History With a Phrase

What becomes a legend most? Not klieg-lighted premières, gossip-column items, and talk-show gigs, but performance. And performance—in glorious vocal technicolor and on the grand scale you would expect from a legend in her own time—is exactly what you get from June Christy in her new album "Impromptu" on Interplay Records. Surrounded by some of the finest instrumentalists now working in pop or jazz, she lives up to every nice thing ever said about her in the thirty or so years she's been illuminating the American music scene.

Who else could brush so lightly against My Shining Hour, almost absent-mindedly murmuring the lyrics, and yet total you out with her utter sincerity? Who else could take Show Me, Eliza's temper tantrum from My Fair Lady, and turn it into a little gem of near-perfect jazz singing as she does here? And who but the unique artist she is could lay down three absolutely drop-dead, classic tracks in one album? If you hear, now or in the foreseeable future, anything more perfectly wrought than her performances of Angel Eyes, I'll Remember April, and The Trouble with Hello Is Goodbye, let me know and I'll take you to lunch at the Palace.

Christy put down her roots in a time when there was a lot of pretentious guff being written about a lot of jazz and jazz artists. But the fads and the fashions have been swept away, and she has persevered. She does not, in other words, sing out of any particular time frame; you do not need to know who she was to enjoy her now, for excellence knows no time limit. She's what honest, affectionate, real singing has always been about, a more effective means of communication—for certain messages—than talking or writing can ever be. Let her show you how a mar-

---

**JUNE CHRISTY: communicative performance**

---

**SCOTTO AND DOMINGO: expert artistry**

---

**MAY 1979**
velous singer, working with first-rate material, can make musical history with a phrase.

—Peter Reilly

JUNE CHRISTY: Impromptu. June Christy (vocals); Lou Levy (piano); Bob Daugherty (bass); Shelly Manne (drums); Bob Cooper (tenor saxophone, flute); Frank Rosolino (trombone); Jack Sheldon (trumpet). My Shining Hour; Once Upon a Summertime; Show Me; Everything Must Change; Willow Weep for Me; I'll Remember April; The Trouble with Hello Is Goodbye; Autumn Serenade; Sometime Ago; Angel Eyes. INTERPLAY IP-7710 $7.98 (from Interplay Records, P.O. Box 93, Calabasas, Calif. 91302).

Chef Tchaikovsky’s Best Musical Pancakes, with Syrup and Without

A St. Petersburg magazine called Nuvellist wrote to Tchaikovsky in 1875 asking him if he’d like to write a piano piece for every month in the year, which they would publish, one per issue. He agreed, but he had a terrible time filling the assignment. His servant Sofranov had to remind him every month, “Peter Ilyich, it’s about time to send something off to St. Petersburg,” and he complained in a letter to a friend, “I am engaged in making musical pancakes.” Pancakes they may be, but they most certainly are among the most exquisite of his short works.

The set of twelve pieces was subsequently published under the (Russian-equivalent) title The Months, which somehow got translated into English as The Seasons, thus permitting absentminds to confuse it in later years with Haydn’s and Glazounov’s and Vivaldi’s ditto. If these Tchaikovsky miniatures are salon music, as they used disparingly to be called, they are some of the loveliest salon pieces ever penned. The barcarolle called June, for example, is unforgettably haunting; April’s Snowdrop would be completely at home amid the lovely divertissement music of the Nutcracker; the irresistibly melancholy Autumn Song that limply mourns the end of summer (October) is a three-part andante suggestive of a vocalist; and the Sleigh Ride troika that marks November is like a musical etching out of Currier and Ivanovich. The suite is affecting enough as played in its original serene piano version by Alexei Cherkassov in a new Columbia/Melodiya release, but one longs to hear it eloquently scored for orchestra in the Russian manner—and, in this bargain two-record set, that is precisely what we get. For a time Columbia made available an interesting kind of concerto-for-piano-and-orchestra treatment of these works by Morton Gould, but the orchestral transcription here (by Vassilyevitch Gauk), especially as conducted by Yevgeny Svetlanov (one wishes they would release his recording of Glazounov’s The Seasons too on this side of the Atlantic) is a real dazzler. Tchaikovsky himself, who was seldom pleased with anything, would perhaps not have minded having his pancakes served up with so delicious a syrup.

—Paul Kresh


Milestone Jazzstars: They Don’t Have to Cross Over To Get Over

With Sonny Rollins, McCoy Tyner, and Ron Carter—three major leaders, not a follower in the bunch—involved, the Milestone Jazzstars had a short life expectancy from the time it was born, on the White House lawn, at last summer’s successful celebration of the Newport Jazz Festival’s twenty-fifth anniversary. A good two months after that event, the Jazzstars spent a month and a half on the road, giving twenty successful concerts from coast to coast and proving that jazz need not be souped-up or in any way bastardized to attract crowds. In New York the quartet’s appearance at the Beacon Theatre was not only sold out in advance, but there were people outside trying to buy tickets at the kind of prices that are usually reserved for rock supergroups.

The quartet—completed by drummer Al Foster—was disband at the end of October, as planned, but its music is well represented for posterity in a double album of performances recorded during concerts in California, Wisconsin, and Connecticut. It is the distillation of a tour that may well have helped shape the future of jazz by introducing the beauty and excitement of high-proof acoustic interplay to a generation raised on diluted derivatives. The earlier tours of V.S.O.P. drew crowds who came to hear such fusion stars as Herbie Hancock, Wayne Shorter, and Tony Williams; many heard these men as they had never heard them before, playing straightforward bop without electronic frills. Though some fans undoubtedly found this disappointing, others greeted the music with genuine enthusiasm. “I was a Hancock fan,” a fellow dinner guest once told me, “but until I went to the V.S.O.P. concert I never knew he could really play the piano—now I look for his old records in the stores.” The impact V.S.O.P. had on fusion fans could account for some of the success experienced by the Jazzstars, but it is also possible that the promoters who hesitate to stage concerts by Messrs. Rollins, Tyner, and Carter as individual leaders are underestimating the public’s taste for unadulterated jazz.

Let’s hope the V.S.O.P. and Jazzstars tours turned some budding musicians down the jazz path and showed them that you don’t have to cross over to get over, and if those concerts eluded them, there is always this album of close to an hour and a half skimmed off the top. When performers of the stature of Rollins, Tyner, and Carter are brought together on an equal footing in a leaderless group, one might reasonably expect egos to clash, but mutual respect and admiration permeate the Jazzstars’ music. The program, as well

Young Tchaikovsky
balanced on the record as it was when I caught the group in concert, affords each star ample opportunity to shine: Continuum, A Little Pianissimo, and Willow Weep for Me are unaccompanied solos by Rollins, Tyner, and Carter, respectively, wonderful solos that reflect three quite different approaches to the music. Disparate though their styles are, however, the three giants of contemporary jazz have no difficulty communicating as a unit or in various combinations with each other, as they are presented here. Rollins and Tyner engage in outstanding interplay on the Ellington favorite In a Sentimental Mood; Tyner and Carter offer a memorable version of Alone Together; and when drummer Al Foster joins Rollins and Carter for a trio rendition of Don't Stop the Carnival, it becomes obvious why he was chosen to complete and complement the star-studded quartet. There is not a bad moment on either disc. "In Concert" ought to stay in the catalog permanently.

—Chris Albertson

MILESTONE JAZZSTARS: In Concert. Sonny Rollins (soprano and tenor saxophones); McCoy Tyner (piano); Ron Carter (bass); Al Foster (drums). The Cutting Edge; N.O. Blues; Nubia; Don't Stop the Carnival; In a Sentimental Mood; Alone Together; Continuum; Willow Weep for Me; A Little Pianissimo. MILESTONE M-55006 two discs $9.98, © 8161-55006T $9.98.

David Bromberg:
Your Front Porch
Never Had It So Good

SIMPLIFY, SIMPLIFY, Thoreau said. David Bromberg has done it and made "My Own House," his best album in years. As the title suggests, it sounds handmade; it is one of the rare albums that sound truly "organic" while showing off excellent musicianship. The program is folk, black and white, and the instrumentation is acoustic and basic, but enough. The music, as David says in his notes about the melody of the title song, takes a proud stance. Sometimes accompanied only by his guitar, Bromberg takes you back to music as fresh now as when Blind Blake wrote it or when Alan Lomax collected it (or, in the case of Spanish Johnny, when Paul Siebel rewrote it). To keep things in perspective, he throws in a quiet version of Phil Spector's To Know Her Is to Love Her and an instrumental (lifted off a Mike Auldridge album) of Georgia on My Mind. There are eerie two- and three-part fiddle tunes, gutsy old blues numbers you may not have heard yet, tasty finger-picking, and, in Don't Let Your Deal Go Down, some excellent flat-picking.

Mostly, though, there's this front-porch atmosphere. It is a break from the eclectic jumble of styles and sounds Bromberg's full band attends to nowadays, and it is just as well played as it is straightforward and direct. We should all have front porches that sound so good.

—Noel Coppage

DAVID BROMBERG: My Own House. David Bromberg (vocals, guitar, fiddle); George Kindler (fiddle, mandolin); Dick Fegy (fiddle, mandolin, banjo). My Own House; Don't Let Your Deal Go Down (Roanoke/Possum Up a Gum Stump/Mississippi Sawyer); Early This Morning; Sheebeg and Sheemore; Cocaine Blues; To Know Her Is to Love Her; Georgia on My Mind; Chump Man Blues; Kitchen Girl; Spanish Johnny; Black and Tan; Lower Left Hand Corner of the Night. FANTASY F-9572 $7.98.
BELLINI: Opera Arias (see Collections—Maria Callas)


Performance: Lush
Recording: Good

Leonard Sorkin, long the first violinist of the Fine Arts Quartet, has evidently embarked on a series of duo-sonata recordings. Both the works here are lyrical expressions strongly rooted in Brahms' idiom. Sorkin and his keyboard partner, James Tocco, play with fine musicianship and great feeling—for my taste, a little too much feeling in the violin, underlined, moreover, by a rather heavy vibrato. My own preference is still for the somewhat leaner, sharper lines of the Szeryng/Rubinstein recording on RCA. D.H.


Performance: Capable
Recording: Lacks body

In comparison with Karajan, Haitink, and Walter, Kurt Masur takes a rather brisk and light-handed view of the Bruckner Fourth, generating an atmosphere somewhat akin to Beethoven's Pastoral. That impression is reinforced by what appears to be a back-of-the-hall microphone placement, which tends to deprive the sonic texture of the body needed to do justice to the massive climaxes in the end movements, not to mention the coloristic subtleties in the many quieter episodes. The orchestral playing, particularly by the woodwinds and horns, is splendid. With better recording this disc would have been a good choice for those preferring Bruckner's Fourth to his more cyclopean works. D.H.

DELLA JOIO: Fantasies on a Theme by Haydn; From Every Horizon; Concertante; Colonial Ballads; Satiric Dances. West Texas State University Symphonic Band, Gary Garner cond. Golden Crest ATH 5054 $7.98.

Performance: Earnest
Recording: Good

Norman Dello Joio has always taken a strong interest in the training of young musicians; he has involved himself in a number of educational projects, he has been for several years dean of Boston University's School for the Arts, and he has composed a number of works especially for various school ensembles—among them the first and third of the works listed above. According to the liner information, these five works were recorded under his supervision, so one infers that the performances have his blessing. Having long been accustomed to the standards set on records by the Eastman Wind Ensemble, I have to admit that the level of execution here struck me as earnest and competent rather than highly polished, but (and this is said without sarcasm) there is a certain charm in the awareness that the players are not seasoned professionals and are compensating with enthusiasm for what they lack in finesse. In any event, the playing is tidy enough and always allows the music to make its point.

The Fantasies on a Theme by Haydn would appear to be the original version of the orchestral Homage to Haydn (recorded by the Louisville Orchestra under Leonard Slatkin on Louisville LS-742), though there is no information on this in the pithy annotation; it is somewhat shorter than the orchestral work, but contains more or less the same material. The Satiric Dances, commissioned by the town of Concord, Massachusetts, for its bicentenary, were taken from an orchestral score, the incidental music Dello Joio wrote in 1974 for an unidentified comedy by Aristophanes. I would like to hear the original version, which I suspect would make an effective concert piece. Colonial Ballads, again, would appear to be a band version of the orchestral Colonial Variants (on the theme In Dulci Jubilo) introduced by Eugene Ormandy and the Philadelphia Orchestra in 1976. From Every Horizon is a brief mood picture of New York, drawn from music for a film shown at the World's Fair in that city in 1965, and the Concertante is a bright two-movement piece commissioned by a high-school band. I do wish the notes offered more information, but all the music is engaging, and the performance is well recorded. R.F.

FALLA: Nights in the Gardens of Spain; Harpsichord Concerto; Harpsichord Concerto, Piano Version. Joaquin Achúcarro (piano, harpsichord); London Symphony Orchestra, Eduardo Mata cond. RCA ARLI-1-3004 $7.98.

Performance: Idiomatic
Recording: Excellent

Anyone who has ever listened to a recording of Manuel de Falla's Nights in the Gardens of Spain outdoors on a balmy, starry night knows how overpowering that perfumed music can be. Much of its sensuality was borrowed by its Andalusian-born composer from the palette of the French impressionists, for he was in Paris in 1909 when he began work on it. He didn't finish it until 1915, after the success of his opera La Vida Breve and the curious failure of his ballet El Amor Brujo. All three works are now beloved throughout the world. Nights in the Gardens in particular has been given such affectionate performances on records by pianists of the stature of Arthur Rubenstein, Gonzalo Soriano, and Alicia de Larrocha that it must take a self-
confident soloist indeed to tackle it. Joaquín Achúcarro has the advantage of a precise idiomatic understanding of the work's musical language, and he couldn't ask for more impassioned accompaniment than he gets from Eduardo Mata with the London Symphony.

The Harpsichord Concerto, inspired by Wanda Landowska (who stopped playing it when she heard the composer was concertizing with it himself), is a more cerebral work, retaining a crystalline transparency of structure with a sense of utter inevitability. But when she heard the composer was concertizing accompaniment than he gets from Eduardo Mata with the London Symphony.

Achticarro has the advantage of a precise idiomatic understanding of the work's musical language, and he couldn't ask for more impassioned accompaniment than he gets from Eduardo Mata with the London Symphony. The Harpsichord Concerto, inspired by Wanda Landowska (who stopped playing it when she heard the composer was concertizing with it himself), is a more cerebral work, retaining a crystalline transparency of structure with a sense of utter inevitability. But when she heard the composer was concertizing accompaniment than he gets from Eduardo Mata with the London Symphony.

Several of his solo works have been recorded too, many of them by Pepe Romero, who now offers this very attractive program of solo pieces. The subject of the Handel Variations is The Harmonious Blacksmith (which Giuliani's contemporary Spohr gave a more intriguing workout in one of his octets), and the Op. 49 set is based on an Austrian folk song about a young cabbage farmer. La Melanconia is the penultimate one of eight pieces in an apparently valedictory collection called La Giulianite. The Gran Sonata Erotica is in a single expansive movement, and the Grande Ouverture is more or less in the style of an orchestral piece. All five works show considerable imagination in their treatment of the thematic material, especially in their coloring, and Pepe Romero does them all to a turn. Not memorable stuff, perhaps, but certainly highly enjoyable—as well as illuminating about the guitar and its music in the early part of the nineteenth century. Hardly less illuminating than the music itself are Igor Kipnis's concise yet meaningful notes. The recorded sound is just about perfect in its vividness and warmth.

R.F.

HUMPERDINCK: Hansel and Gretel. Brigitte Fassbaender (mezzo-soprano), Hansel; Lucia Popp (soprano), Gretel; Walter Berry (baritone), Peter; Julia Hamari (mezzo-soprano), Gertrud; Anny Schlemm (mezzo-soprano), the Witch; Norma Burrowes (soprano), the Sandman; Edita Gruberova (soprano), the Dew Fairy; Vienna Choir Boys; Vienna Philharmonic Orchestra, Sir Georg Solti cond. LONDON OSA 12112 two discs $15.96. Performance: Good Recording: Over-reverberant

Hansel and Gretel ranks among the highest achievements of German operatic art. The exquisite beauty of this opera seldom emerges from staged performances, often routinely cast, but there have been some excellent recordings of it. The long-deleted Angel 3506 (mono, Karajan-directed, newly reissued in England) was such a performance some twenty-five years ago; more recently RCA ARL-02637 gathered well-deserved praise in these pages from James Goodfriend (Novem­ber 1974).

Though it is a distinguished achievement, the new London set falls somewhat short of these exalted standards. The Vienna Philharmonic plays glowingly, but I think Sir Georg Solti makes rather too much of Humperdinck's evident indebtedness to Wagner. The opera unfolds here in a manner that is splendidly but somewhat rigidly Wagnerian, without the enlivening elements of humor and charm that may have eluded the master but not the disciple.

The singing is variable but never less than competent. It reaches excellence in Lucia Popp's outstanding Gretel, Edita Gruberova's charming and secure Dew Fairy, and the work of the Vienna Choir Boys. Brigitte Fassbaender's Hansel is expertly sung but in rich mezzo tones that convey no suggestion of "boy-

Stunning Monteverdi

MONTEVERDI's Combattimento di Tancred and Clorinda is perhaps the most dramatic Italian monody ever written, a verismo scene contrasting brutality and tenderness so starkly that its first hearers are said to have been "moved to tears." The new recording of it by the Clemencic Consort on the HNH label exploits every nuance of emotion in this remarkable work and leaves one all but stunned.

Tenor-countertenor Zeger Vandersteen is superb as the narrator. His diction is impeccable, his sense of pacing is thrilling, and his talent for word coloring vividly projects the wide range of rapidly changing emotions. In the comparatively short title parts, soprano Ana Higueras Aragon as Clorinda and tenor Kurt Spanier as Tancred perfectly sustain the drama.

This is a hard act to follow, and I turned rather gingerly to the madrigal Lettera Amorevole that opens the second side of the record. But bass-baritone Pedro Liendo does not let us down one whit. His passionate adoration of his mistress' golden hair and lovely breasts ("paths of snow to a heart of fire") projects the image of a physical act as nearly as seems decent on records.

The concluding Ballo, a five-voice madrigal that was a stylized tribute to the Emperor Ferdinand III, is all elegance and grace, and the Clemencic Consort's performance strikes a delicate balance between ceremonial gesture and lilting dance. The final chorus is a miracle of virtuoso ensemble ornamentation; each voice indulges in elaborate melisma, but all blend in a sparkling metallic texture. Nor should the instrumental work be overlooked. The continuo playing is tasteful and imaginative, the sound of the antique stringed instruments is effective, and ornamentation is furnished where appropriate. In short, the album is a complete success that will please listeners of many musical tastes and is a must for collectors interested in the period.

MONTEVERDI: IL Combattimento di Tancred e Clorinda: Lettera Amorevosa; Introduzione al Ballo; Ballo. Clemencic Consort, René Clemencic cond. HNH 4006 $7.98.

--Stoddard Lincoln
WERE Chopin’s waltzes meant to be danced to? Probably not, but the question is not entirely academic. Dance music needs a steady pulse; if you change tempo every other bar, someone is going to break a leg. Krystian Zimerman is a brilliant young Polish pianist with all the right credentials (including a Chopin Competition first prize in 1975), but in his new Deutsche Grammophon recording of the waltzes he does change tempo every other measure—sometimes even in the middle of a bar.

But isn’t that rubato? You’re supposed to play Chopin with rubato, right? The truth is that there are two kinds of rubato. In the original sense of the term, the pulse was kept even and the time was “stolen” (the literal meaning of “rubato” in Italian) from one bar and added to another. This kind of rubato—which, by the way, is quite similar to that used in American popular music—was still very much in use in Chopin’s time. The free rubato we generally hear today, on the other hand, came into vogue much later in the nineteenth century. Anyway, whether or not anyone is going to get out on the dance floor, a waltz should dance.

Vladimir Ashkenazy does not really hold a completely firm tempo either in the ninth volume of his Chopin cycle for London (there are many great classical performers who would never get hired as session musicians), but his version of the Grande Valse Brillante in A-flat Major dances up a storm. In fact, everything on the album—which includes the wonderful Second Ballade and all twenty-four Op. 28 preludes—whirls, dances, pulses, sings, and generally tugs at the heart. This is very exciting, emotional playing, but always under superb control. Ashkenazy’s is still just about the best Chopin around.

Nelson Freire’s Chopin—on a Telefunken release of the four scherzos, three écossaises, and a later prelude—is something else again. The opening here of the First Scherzo is one of the most extraordinary virtuoso blast-offs in the history of recording, and the remainder is not far behind. Freire really has it all in hand, and even at the elevated tempos he uses you can actually hear all the notes, not in any smudge of flying fingers but as a veritable crystalline rain—or, perhaps, hailstorm. Spectacular as it is, however, nuances are lost; the speed is just too fast for even Freire to make all the articulations. But he is an artist as well as a super technician, and the rest of the album belies the impression left by the First Scherzo of a pianist carried away by his own prowess. It is all highly poetic, with the other three scherzos full of fantasy and the three écossaises and one prelude a charming bonus.

As a pianist, Ruth Stenzynska was a child prodigy of Mozartean dimensions. When she grew up she disappeared from public view for a time, but, unlike many prodigies whose promise goes unfulfilled, she was later able to resume her career. In recent years she has concertized and recorded a fair bit, and in her third Chopin recording for the Musical Heritage Society—as in her second—she features a set of the études. Unfortunately, the playing lacks subtlety. In spite of their force and difficulty, Chopin’s études are full of details of dynamics, articulation, phrasing, and so on that are missed, glossed over, or contradicted in this recording.

—Eric Salzman


KABALEVSKY: Twenty-two Pieces for Children, Op. 27 (see PROKOFIEV)

LEONCAVALLO: Pagliacci (see MASCAGNI)

LISZT: Hungarian Fantasia for Piano and Orchestra (see TCHAIKOVSKY)

LOCKE: Incidental Music to “The Tempest”: Music for His Majesty’s Sackbutts and Cornets. Academy of Ancient Music, Christo-

pher Hogwood cond. L’OISEAU-LYRE DSLO 507 $8.98.

Performance: Charming

Recording: Vivid

The so-called operas of the Restoration period in England were really grand, hodgepodge stage spectacles rather than the drama per musica that we associate with the word. For example, Shakespeare’s The Tempest was produced in 1674 in a tattered-up version by one Thomas Shadwell, who himself expanded a revision by Sir William Davenant and John Dryden. Not only were entirely new characters introduced, but major song-and-dance scenes with music by several composers were (Continued on page 102)
6 records have never been lowered, lifted, programmed and played like this before. Even remotely.

You touch a few buttons. A record lowers gently on to the platter. The tonearm lifts, glides silently over the record. Past the first track, the second track, the third track, and lowers to play the fourth track. The music you wanted to hear first.

The quality of the sound is something you've never experienced before. Suddenly, with the Accutrac® +6, you enter a whole new world of music enjoyment.

Because when you're at the computerized feather touch controls of the Accutrac +6 you'll realize it's more than just a turntable. It's an experience. Its features go far beyond your imagination. A computerized track selector lets you hear the tracks you like, in any order you like, even skip the tracks you don't like, on all six records. The Accuglide® Spindle is like a record elevator. It doesn't drop your records, so there's "no plop." It even raises all six back up when you're through playing.

And the Accutrac +6 is available with a remote transmitter which lets you control everything from across the room. On some models, there's even remote volume control. The specs are also remarkable. Rumble is better than -66dB (Din 45539B). Wow and flutter are less than .04% WRMS.

With the computer technology of the Accutrac +6, the operation of a turntable has never been easier. And the micro-electronics eliminates hundreds of mechanical parts to achieve new levels of reliability and performance.

Experience the Accutrac +6 at your Accutrac dealer. You're not going to believe your ears or your eyes.

ADC Accutrac® +6 It plays on your emotions.
added. The front of this record reads, "Mathew Locke—Incidental Music to The Tempest." In fact, Locke's contributions are only the instrumentals. The vocal numbers, scenes, and songs—in the style we associate with Purcell—are by Locke's contemporaries: Pelham Humfrey, Pietro Reggio, John Banister, and Janis de Focque. Locke's music—-including a reconstruction of some sonorous brass pieces he wrote for King Charles II (possibly even for his coronation procession in 1661)—makes by far the deepest impression here. Judging by the beauties captured on this disc, Locke was a composer in Purcell's class; listen to the Curtain Tune from side one for a sample of the healthy state of English music before Handel.

What a pity that Locke wasn't given a chance to compose the whole score for The Tempest! The vocal music recorded here is much lighter and less unified in effect, although there are many pleasures to be found. I particularly like James Hart's very traditional English version of Adieu to the Pleasures and Pelham Humfrey's Where the Bee Sacks.

The Academy of Ancient Music performs, as might be expected, on ancient, authentic instruments, and very well, too, under the direction of harpsichordist Christopher Hog...the singing, which is quite charming but a bit wan—delicate and tasteful pre-Raphaelite rather than lusty, robust Restoration. E.S.

RECORDING OF SPECIAL MERIT

MASCAGNI: Cavalleria Rusticana. Julia Varady (soprano), Santuzza; Luciano Pavarotti (tenor), Turiddu; Ida Bormida (contralto), Nedda; Piero Cappuccilli (baritone), Alfio; Carmen Gonzalez (mezzo-soprano), Lola. London Voices; National Philharmonic Orchestra, Gianandrea Gavazzeni cond. LEONCAVALLO: Pagliacci. Luciano Pavarotti (tenor), Canio; Mirella Freni (soprano), Santuzza; Ida Bormida (contralto), Angelina; Vincenzo Bello (tenor), Beppe; others. London Voices; National Philharmonic Orchestra, Giuseppe Patané cond. LONDON OSAD 13125 three discs $23.94.

Performance: Outstanding Pagliacci
Recording: Excellent

It is a safe bet that by the time this review appears, this album—the first combined release of the familiar verismo twins to appear in about a dozen years—will be riding high among the bestsellers. Pavarotti is, of course, the main drawing card here, and I imagine that there will be some debate about whether such roles as Turiddu and Canio are good for the popular tenor's essentially lyric voice. Such discussions, however, are rather pointless since, first, Pavarotti evidently wants to sing these roles, and, second, his public can hardly wait to hear his interpretations. Furthermore, such predecessors as Gigli, Bjoerling, and Bergonzi—all lyric tenors—mastered the very same roles at an even earlier stage of their careers. What matters now is that Pavarotti sings both parts magnificently, combining passion with generous and always beautiful tone and musical phrasing. There are urgency and commitment in his singing, and he projects his lines with admirably pointed articulation. There are other praiseworthy elements in the set, but Pavarotti alone amply justifies its acquisition.

Giuseppe Patané's superior conducting makes Pagliacci the more attractive of the two. In a very few instances he favors broader tempos than is customary, but he never fails to get effective results. He supports his singers admirably in an intent and vividly theatrical performance. And the Pagliacci cast is excellent. Mirella Freni departs from the overly slutish characterization of Nedda that is currently in vogue to emphasize the girl's vulnerability and tragic helplessness. Vocally she is exquisite, absolutely radiant in the Tragedian's madrigal, "Tutto in questo mondo sovrano." That latter role is impeccable sung by Lorenzo Saccamoni, who is little known here but quite eminent in Italy. Vincenzo Bello's Beppe is also first-rate, as is the Tonio of Ingvar Wixell—vocally solid, forceful and vibrant in character. If only his tones were more purely focused!

In comparison with this outstanding Pagliacci, the Cavalleria suffers from conductor Gianandrea Gavazzeni's rather prosaic direction, which permits some unfocused orchestral playing and rough choral work as well. In an opera that tempts many conductors to dawdle, Gavazzeni's is de luxe. But as an ensemble, and he does propel the music excitingly to its conclusion, but he does not match the sustained momentum and theatrical intensity of Patané's Pagliacci. Nor is Gavazzeni's cast on the same level. Piero Cappuccilli is a good, average Alfio, not entirely comfortable with the tricky rhythms of his "Il cavallone saltaporta." Julia Varady seems a surprising choice for Santuzza, adhering neither to the Simionato/Cossotto mezzo prototype nor to the Milanese/Tebaldi "luscious soprano" one. This Santuzza has a limp tone, phrases tastefully and expressively, and radiates contained passion. I enjoyed her musicality and pure intonation but missed a certain element of earthiness in her singing. The Lola and Lucia, artists heretofore unknown to me, are good. The recorded sound in both operas is above reproach.

G.J.


Performance: Fluent
Recording: Good

This "madrigal fable" by Gian Carlo Menotti centers about a poet, known to the people of his town as "the Man in the Castle," who doesn't take part in any community or social functions but is seen one Sunday afternoon with a pet unicorn. Immediately the townspeople, prompted by the countess who serves as social arbiter, get unicorns for themselves. But the next Sunday the poet is seen with a gorgon; so the townspeople kill their unicorns and get themselves gorgons. The next Sunday the poet appears with a manticore, a beast which "often as if in jest inadvertently kills the people he loves best," and the process is repeated. Finally there comes a Sunday on which the poet fails to appear at all. Urged on by the countess, the people rush to his castle to punish him for what he has evidently done to his own pets and "made" them do to theirs—but they find him on his deathbed, in the company of all three grieving pets.

"Oh foolish people who feign to feel what other men have suffered," he tells them.
"You, not I, are the indifferent killers of the poet's dreams. How could I destroy the pain-wrought children of my fancy?"

The work, which calls for a small chorus, ten dancers, and an "orchestra" of nine, was an immediate success when it was introduced at the Library of Congress in the fall of 1956, and it was recorded not long after that under Thomas Schippers. I have hoped for years that the deleted Schippers recording would be reissued, and I still hope so, but this stereo version under Paul Hill (whose forces are based in the city in which the work's première was given) is attractive in its own right, and I still hope so, but this stereo version under Paul Hill (whose forces are based in the city in which the work's première was given) is attractive in its own right, and the appearance of so satisfying a second recording serves to underscore the accessibility of the work-to performers as well as audiences. Some may have felt that the abrupt transition from the vignettes of social ambi-}

MOZART: Flute Concerto No. 1, in G Major (K. 313); Flute Concerto No. 2, in D Major (K. 314); Concerto for Flute, Harp, and Orchestra in C Major (K. 299); Andante for Flute in C Major (K. 315); Rondo in D Major (K. Anh. 184, K. 373). Frans Vester (flute); Edward Wibben, (harp) in K. 299); Mozart Ensemble Amsterdam. Frans Bridgman cond. ABC/SEON AX-67040/2 two discs $15.96.

Performance: On the sleepy side Recording: Generally good

MOZART: Quartets for Flute and Strings in D Major (K. 285), G Major (K. 285a), C Major (K. 285b), and A Major (K. 298). Paul Meisen (flute); members of the Kreuzberg String Quartet. TELEFUNKEN 6.42172AW $8.98, © 4.42172 $8.98.

Performance: Lithe Recording: Very good

Mozart is said to have hated the flute, but flutists certainly love their Mozart. Each of his concertos and quartets for the instrument may be sampled in a dozen or more recordings at present, and not one of them is really less than pleasing. Because there are so many to choose from, though, one can afford to be very selective, and I'm afraid the appeal of ABC's two-disc concerto collection rests almost entirely in the use of "original instruments" and the convenience of having all these works together in one package—neither of which consideration counts for very much in my opinion. The two concertos (the second, of course, being a transcription of the Oboe Concerto) and the Flute Andante are even more conveniently packaged on numerous single LP's on which they are performed by the likes of Jean-Pierre Rampal and James Galway, among others. The Flute and Harp Concerto, however, spread over a side and a half, fits snugly on a single side in a dozen other instances, in most of which the companion material is such substantial fare as the Clarinet Concerto or the Sinfonia Concertante for wind quartet. And the Rondo in D Major (actually Anton Hoffmeister's transcription of Mozart's Rondo in C Major for violin and
orchestra, K. 373) should be heard, if at all, as Rampal plays it (MHS 900 or RCA ARL 1-2091). All the genuine flute pieces in this set get more lively performances in nearly all the respective alternative recordings; the timbre of the "original instruments" is not in itself that intriguing and does not offset the rather sleepy quality of the playing. The sound is generally good, but the horns in the finale of K. 290 are muffled.

It is curious that a performing quartet would make its recording debut in music calling for only three of its members, but the Kreuzberg String Quartet players, with flutist Paul Meisen instead of their second-violin colleague, make a fine showing in the four quartets for flute and strings. Their way with the music may strike some listeners as brisk and unloving, but I find it agreeably lithe, with sensible tempos, unfussy phrasing, and always extremely good balance. This is a most enjoyable release, and I can't imagine anyone's being unhappy with it. I have to add, though, that William Bennett and the Grumiaux Trio exhibit a ripeness of tone and an elegance of style that set their similar package apart from all others; if I were investing anything like $8.98 it is the Philips disc I would choose.  

R.F.


DEUTSCHE GRAMMOPHON 2707 107 two discs $17.96. © 3370 027 $17.96.

Performance: Excellent
Recording: Excellent

It takes a consummate technician to come to terms with Paganini's Caprices, and Salvatore Accardo has technique to spare—his staccato, especially, is phenomenal. But he is also a suave violinist who is unwilling to compromise tone quality for showmanship, and responds to the charm and lyricism inherent to some of these dazzling inspirations. The result is an admirably musical and expressive account of these supercharged (high-strung?) pieces, taken at sensible tempos which satisfy the virtuosic demand without impairing articulation or intonation.

Violinists are naturally drawn to this monumental compendium of fiendish challenges. But for the benefit of listeners who may flinch at the prospect of sitting through the entire sequence, I will point out that side three is the one to savor. This contains Caprices Nos. 13-22, all brief, varied, and marvelously imaginative. Others in the set (such as Nos. 4, 6, and 7) go on much too long for their musical substance, particularly since Accardo is quite generous with his repeats.

Of the three bonus pieces on side four, outstanding is the brief Duo Mervelle, which calls for simultaneous bowing and left-hand pizzicato. I find the Paisiello Variations very long and wearisome. As for God Save the King, I heretofore felt that if a violinist could coax sounds that were 50 per cent musical from Paganini's virtually unplayable writing, he was ahead. Salvatore Accardo does much better than that. It's worth noting the deplorable absence of separating bands; listeners cannot find a particular piece without time-consuming trial and error. The record surfaces, however, are immaculate.

G.J.

RECORDING OF SPECIAL MERIT

PALESTRINA: Missa Hostis Christus Natus Est; Hostis Christus Navigat in Lapidem; Ave Maria; Tui Sunt Caeli; Jubilate Deo. O Magnum Mysterium. Choir of King's College, Cambridge, Philip Ledger cond. ANGEL S-37514 $7.98.

Performance: Luminous
Recording: Vibrant

Like Raphael and Botticelli, Palestrina projected his most profound thoughts in clear forms and luminous colors. Today, when profundity is most often represented by ambiguous forms and murky coloration, we are all too apt to dismiss Palestrina as a mere technician, with little content. Indeed, on first listening to this record one may be so struck by the voluptuous triadic sound, the opulent contrasts of upper and lower ranges, the exquisitely contoured melodies, and the tantalizing mixture of modal and functional harmonic progression as to forget the content and think only of the technique. But follow the texts and think of Raphael and Botticelli.

The Choir of King's College, Cambridge, does full justice to Palestrina's music. The sound of the boy singers and the rich reverberation of the chapel, caught perfectly in this recording, re-create the Palestrinian ideal at its highest. At the same time, moreover, clarity of line is preserved through careful diction and articulation. This disc embodies a delicate Renaissance balance of neo-pagan voluptuousness and Christian purity.

S.L.

PROKOFIEV: The Love for Three Oranges, Suite, Op. 35a (see STRAVINSKY)


Performance: Light-fingered
Recording: Very good

Sergei Prokofiev's Music for Children is eminently simple and four-square but never patronizes the children for whom it was intended. Many of these pieces can be heard to good advantage on records as transcribed for orchestra in the Summer Day Suite, but on the piano—and Canadian pianist Richard Gresko is just the sort of light-fingered interpreter they need—each of the cameos, some lasting only a minute or so, stands out with even

(Continued on page 106)
Do you drive a lot where it rains or snows? Well, then, the 1980 Skylark's front-wheel-drive traction could come in very handy.

Do you like the comforts of life? We thought so. That's why Skylark was designed to handle irregular road surfaces with an aplomb you might expect from larger, heavier machines.

Do you like nice, quiet, roomy, luxurious places? The Skylark Limited's Body by Fisher gives you room for 5, and a feeling of luxury like the Electra.

Do you like the idea of owning a Buick? Then you'll love this one. Like the Riviera, it has front-wheel drive. The interior of the Skylark Limited offers luxury like the Electra, as well as good looks like the Regal, and the common sense Skylarks have always had. With all of that going for you, it just might be...well, perfect.

Do you think a car this nice costs a bundle? Then you've got another thing coming. In fact, Skylark's price could make the notion of buying or leasing one positively irresistible.

Does the thought of good economy make you happy? Then so will Skylark. It offers an EPA estimated mileage of 14/24 miles per gallon, estimated 38 for highway.

Remember: Compare this estimate to the "estimated MPG" of other cars. You may get different mileage depending on your speed, trip length and weather. Your actual highway mileage will probably be less than the estimated highway fuel economy. Estimates lower in California. The Skylark is equipped with GM-built engines produced by various divisions. Your dealer has details.

Do you hate holding the luggage on your lap? Rejoice. The 1980 Skylark Sedan gives you even more usable trunk space than last year's model.
greater clarity and charm. Particularly intriguing are the jumpy parade of grasshoppers, the energy of the tarantella, the tonal color of the episode called "Rain and Rainbow," and the lively propulsion of "Tag" and the march that follows it, which is much like the famous one from the opera The Love for Three Oranges...

Prokofiev wrote a dozen such pieces. Dmitri Kabalevsky wrote twenty-two, and while few of them exhibit the mastery of his countryman's efforts, all are tuneful fun, and a few, such as Dark Forest, Moonlight on the River, and Dancing on the Lawn, are exceptional in their ability to evoke an atmosphere. 

Despite certain reservations about both the sound and the interpretation, as a whole this reading of the "Russian Eroica" strikes me as movingly eloquent, and I don't remember when I've heard the finale done with such felicitous attention to detail, especially in bringing out the wealth of birdcall-like echo effects. Only in his choice of tempo for the slow movement do I part company with Maa- zel— as I have also with Ormandy, Bernstein, and some others. The slow pacing makes the whole business altogether too ponderous and results in loss of the big line; Prokofiev is not Bruckner, after all. Comparison with the recordings by Koussevitzky, Rodzinski, Stokowski, Oistrakh, and Rozhdestvensky, all of whom use a more urgent pacing, confirms to my satisfaction the need to keep this music flowing steadily at all costs—as does the suggested timing in the published score (forty to forty-two minutes for the entire work).

Except for somewhat overweighted bass, which can be corrected with minor tone-control or equalizer adjustment, the London sonorics are most impressive, with the scherzo and finale faring best. As an interpretation of the Prokofiev Fifth, the Rozhdestvensky version on Melodiya Angel, muzzy sound and all, is my choice. But if one wants something approaching the best available combination of sound and interpretation, Maaazel has the edge, even with the reservations noted.

D.H.

PUCCINI: Turandot. Montserrat Caballé (soprano), Turandot; Mirella Freni (soprano), Liu; Jose Carreras (tenor), Calaf; Paolo Plushka (bass), Timur; Michel Sénéchal (tenor), the Emperor; Vincent Sardinero (baritone), Ping; Remy Corazza (tenor), Pang; Ricardo Cassinelli (tenor), Pong; Eduard Tumagean (baritone), the Mandarin; others. Chorus of the Opera du Rhin; Strasbourg Philharmonic Orchestra, Alain Lombard cond. ANGEL SCLX-3857 three discs $24.98. @ 4X3X-3875 $24.98.

Performance: Good, in part
Recording: Good

This is not the Turandot of one's dreams. Fortunately, there are enough excellent versions available to be consoled with, among the many a previous Angel set (SC-3671) with Birgit Nilsson and Franco Corelli. The problems with this new version begin with the orchestral playing. The orchestra is simply not first-class, and conductor Alain Lombard is unable to make the kind of impact others (particularly Zubin Mehta on London 13108) have achieved with Puccini's massive sonorities and sharp rhythms. Certain scenes in Act I in particular fall flat without the required pomp and emphasis, and the Riddle Scene in Act II lacks excitement. Moreover, the chorus sounds neither savage nor very precise and the children's chorus is downright inferior.

The assumption of the title role by Montserrat Caballé is another problem. All the great Turandots of the past (Raisa, Cigna, Nemeth, Nilsson) were dramatic sopranos with powerful voices. On records, Joan Sutherland has proved to be their equal because the timbre of her voice is right and because she commands sufficient power without committing all her reserves. But Caballé, who was perfectly cast as Liu in the London set, cannot supply the iciness the role explicitly calls for. She softens the character with sensitive phrasing and delicate (at times unwritten) pianissimos, and she thereby falsifies the image. From time to time she allows an imperious or severe inflection to invade her honeyed phrases, but for the most part she does what

The Interaudio® 1.
It shows the European appreciation for performance in a compact size.

The Interaudio® 1 speaker has been one of the best-selling speakers in Europe. Why?

Because Europeans truly appreciate the speaker's outstanding performance, as well as its very compact size.

The Interaudio I fits just about anywhere. On a small bookshelf, the wall or in your van. But no matter where you put it, the Interaudio I delivers a deep, powerful bass and crisp clean highs.

The key to this tremendous sound in such a small speaker is the careful integration of woofer, tweeter, and crossover by the same engineers who developed the famous Bose® 901® Direct/Reflecting® speakers.

Not every stereo dealer carries the Interaudio® I. But then again, you can't buy a BMW at every car lot, either.

Interaudio®
Bose Corporation
Framingham, Massachusetts
she does best: sing with warmth, lyric expression, and delicacy. Alas, all that is misplaced here.

Everybody at least sings well. It may be too early in José Carreras' career for him to take on Calaf, and there are some signs of strain, yet his singing is ardent, sensuous, constantly appealing. Mirèlla Freni is an outstanding Liu and Paul Plishka, despite some woolly tendencies, a sonorous and effective Timur. Spearheaded by the excellent Vicente Sardínero, the three Ministers acquit themselves well, but their scene does not emerge with the sparkle and vitality Mehta captured in the rival London set.


Performance: Good
Recording: Needs more presence

Not the least of the many merits of the Musical Heritage Society recording program has been the willingness to provide exposure for talented younger performers not necessarily headed for big-time international careers. This disc of sensitive, intelligent performances by Connecticut-born Karen Shaw, now chairing the piano department at the Indiana University School of Music, is a fine example. Sergei Rachmaninoff's seventeen Études-Tableaux are probably the most digitally and interpretively demanding of all Rachmaninoff's piano works other than the Third Concerto and the Second Sonata, and they contain marvelous things: the sternly granitic F Minor piece that opens the Op. 33 set; the tender modal-melodic A Minor work of the set of two discovered after the composer's death; the wonderful No. 2 from Op. 39, with its Dies irae figuration; the scary "Red Riding Hood and the Wolf" piece, No. 6 of Op. 39, which anticipates the cinematic manner of Prokofiev and Shostakovich; and the movingly evocative funeral scene of Op. 39, No. 7.

I had high praise some two years ago for Jean-Philippe Collard's beautifully played and recorded traversal of the complete Études-Tableaux on Connoisseur Society, and I would still put that recording at the top of my list. Though Ms. Shaw's readings measure up to Collard's, the Musical Heritage Society recording misses, apparently through overdimensioning of microphone placement that deprives some of the bigger pieces of their proper impact. The fierceness of Shaw's Op. 39, No.3, for example, seems sadly diluted when heard next to Collard's. Conceivably, a remastering could remedy the matter somewhat, but for the present the overall verdict is E for effort.

D.H.


Performance: Superficial
Recording: Good

Having enjoyed Agustín Anievas' recordings of Brahms, Chopin, and Rachmaninoff, I would have thought him well suited to realizing the poetry, charm, and pathos of Schubert's extraordinary impromptus. While his love for the three other composers is apparent, however, he seems curiously uninvolved in the expressive world of Schubert's art.

The performances are competent but not more than that. With but one exception, Op. 142, No. 1, the sound is too far away, the recording too distant, the sensitivity too far removed from the imaginative concerns of Schubert. The lower strings are as flat as a pancake, the pianistic range of the left hand as limited as the imagination of the pianist. This is the result of a compromise required to achieve reasonable cabinet size and efficiency.

It is a good compromise, because there isn't much music in that range. And what is there is often lost in the recording process.

Despite this, some people go to extraordinary lengths to achieve bottom-octave reproduction. A pair of subwoofer systems, with an electronic crossover and the extra power amplifier to drive them, can easily cost over $2,000 and will occupy a lot of space.

Most sensible people would agree that flat response in the bottom octaves is worth something, but probably not that much. Now there is an alternative choice: The Electronic Subwoofer™ filter and bass equalizer system.

Some full-range speaker systems, including those made by Allison, have woofers with as much cone area and as much linear excursion capability as a subwoofer. With the proper equalization these systems can produce flat power output down to 20 Hz. The Electronic Subwoofer system provides that equalization, and it also provides cut-off filters operating at 18 dB per octave below 20 Hz and above 20 kHz. Its price ($290) and size (1½ by 4½ by 1½ inches) make it a uniquely practical investment in lowest-octave bass restoration.

Complete descriptions and specifications for Allison® loudspeaker systems and The Electronic Subwoofer system are available on request.

ALLISON ACOUSTICS INC.
7 Tech Circle, Natick, Massachusetts 01760

CIRCLE NO. 74 ON READER SERVICE CARD

MAY 1979
A new coupling of Aaron Copland’s Appalachian Spring and Charles Ives’ Three Places in New England might not seem to be the most necessary release right now, but the recording of the St. Paul Chamber Orchestra from Sound 80 in Minneapolis, mastered using the 3M digital recording system, is a real zinger!

The Copland music is done with its original instrumentation, for thirteen players, but it is the concert suite rather than the complete ballet score (the latter is conducted by Copland himself with similar forces on a Columbia disc). The Ives triptych is done in the chamber version the composer prepared in 1930 for Nicolas Slonimsky’s ensemble, which took the piece on tour to astonished audiences in Los Angeles, Havana, and Paris.

Appalachian Spring comes off here as wonderfully lean and lithe, although some of the solo instruments, the flute especially, sound a bit larger than life. It is the Ives Three Places that is the real prize, not only because of conductor Dennis Russell Davies’ intensely poetic and rhythmically vital interpretation, but even more by virtue of the textural details that are brought out by the superbly clean recording, which was done in acoustic surroundings ideal for the music. The middle “Putnam’s Camp” episode is the most spectacular-sounding, but the finale, “The House at Stockbridge,” achieves a special ecstatic poignancy. Davies’ pulse is sure and steady for the opening “Black March,” as Ives sometimes called the movement known as “Boston Common” (inspired by the statue there commemorating “Colonel Shaw and his colored regiment”). As always when listening to this music, I was moved to have at hand for reading Ives’ own preface poem and Robert Lowell’s For the Union Dead on the same subject.

—David Hall


with these eminently lovable pieces; whether he conceived the performances by way of reaction against interpretive excess or he has simply not yet digested the music, his approach is disappointingly superficial. What is most conspicuously missing is a sense of expansiveness, but so is any real tension. The No. 4 Impromptu (in A-flat) of Op. 90, my personal favorite among the eight pieces, is taken so fast that any thought of reprise or reflection is out of the question; the music skitters along the surface, and the middle section (in C-sharp Minor), robbed of its poignancy, seems just so much padding until the opening material returns. The second of the same set, in E-flat, seems willfully undemonstrative—a pointless scamper through the notes. Aniess is more successful in the Op. 142 set, but here again he seems too impatient to concern himself with such niceties as dynamic shading or rhythmic flexibility and reluctant to settle into the mood of the music. The overall impression is not one of knowing restraint, but simply of blandness, and too often of breathless-
ness as well. I would be interested in hearing Aniévás play this music five or ten years from now.

R. F.

SCHUMANN: Kreisleriana, Op. 16; Two Noveletten, Op. 21 (see Best of the Month, page 93)

SCHUMANN: Piano Concerto in A Minor, Op. 54 (see GRIEG)

RECORDING OF SPECIAL MERIT


Performance: Very good
Recording: Very good


Performance: Solo pieces superb
Recording: Variable

Vladimir Ashkenazy's recording of the Schumann piano concerto is a strong competitor for the classic 1971 Stephen Bishop/Colin Davis collaboration. Just a touch more rhythmic lift in the finale added to the already richer recorded sound would definitely have made the Ashkenazy/Segal version my first choice. On side two Ashkenazy as pianist-conductor gives us Schumann's relatively little-known Op. 92 Introduction and Allegro, followed by the even less-known Op. 134 piece of the same title, this time with Segal conducting. Both pieces are primarily lyrical, and Op. 134 is dominated by an oddly haunting sequence that remains in the mind long after hearing it.

The Sviatoslav Richter reissue, of 1959 vintage, is a mixed bag on all counts. Only in the finale of the concerto does Richter really show his mettle, but even there he is hampered by indifferent orchestral collaboration and cramped sonics. The override is better. If the recorded sound is a bit too bright and resonant, it at least does justice to the performances, and the orchestral back-up for Op. 92 is much more effective than for the concerto. Richter and Wislocki bring a lot more impetuosity and drive to the Allegro of Op. 92 than Ashkenazy does, but the real prize of the disc is Richter's pianism in the Novellette—a superb study in Schumannian contrast—and the devilishly demanding Toccata in C Major.

D. H.

RECORDING OF SPECIAL MERIT


Performance: Radiant
Recording: Excellent

The Fitzwilliam Quartet's superb Shostakovich cycle continues with this fifth install-

Most components just provide recreation

MXR provides Creation

Create with MXR's two newest equalizers, the Stereo Fifteen Band Eq and the One-Third Octave Eq. Two great new eqs that not only put you in complete control of your acoustic environment but provide even more creative contour of your music as well.

The Stereo Fifteen Band Eq is an expanded version of our popular ten band Stereo Graphic Eq. With two channels each having fifteen bands spaced 2/3 of an octave apart, you have even more creative power for bending, shaping, enhancing the sound. No matter how fine your home component system is, problems such as poor room acoustics or program quality may occur. The Stereo Fifteen Band Eq gives you the control to create the exact sound you desire.

The One-Third Octave Eq goes even further in providing precision control over your system's sound. A single channel unit, its thirty-one frequency bands are spaced 1/3 of an octave apart to give you the most creative power available at any price.

Both units feature a range of -12 to +12 decibels on each band, high slew rate (7V/microsecond) and incredibly wide dynamic range (better than 100 dB). The eqs feature walnut side panels (rack mounting hardware also included) and are built with rugged, reliable MXR quality.

Hear them perform at a fine audio dealer near you, or write MXR Innovations, Inc., 247 N. Goodman St., Rochester, N.Y. 14607.

In all of creation, MXR keeps providing.
A free safe deposit box for your Silver and Gold.

Audio buffs looking for a sound investment put their money into Maxell Silver and Gold.

Maxell Silver (UD-XL I) is the most highly valued tape for normal bias. And Maxell Gold (UD-XL II) is equally valued for chrome biasing.

We realize the world’s finest tape is worth a lot. So when you buy three, we’ll give you something to protect your investment. A free cassette storage case that holds up to 12 cassettes.

The way we figure it, once you hear the sound of Silver and Gold, you’ll find the dividends far greater than the investment.
THE SPARKOMATIC SOUND.
CAR STEREO FOR THE TRAVELIN' MAN WHO IS IN TOUCH WITH THE CHANGING TIMES.

Like time, the travelin' man and his music do not stand still. Curiously, car high fidelity has failed to keep pace. The equipment in the auto was ill-equipped to reproduce any level of sophisticated sound.

Sparkomatic's new High Power Car Stereo series has changed all that. Truly machines of the times. Driving enormously spacious sound throughout the elegantly understated space they occupy.

Tuners with exceptional FM sensitivity, superb separation and efficient multipath signal rejection; integrated Cassette or 8-Track that's a breakthrough in disciplined distortion and wow and flutter; separate bass/treble and balance/fader controls to command the performance.

The power: a bone shaking 45 watts.

This Sparkomatic SR 2400 High Power Digital 8-Track AM/FM Stereo with Clock (or SR 3400 Cassette alternative) is a prime example of these components-like advancements. Feather touch control's send electronic impulses to activate all major fidelity functions. And the integrated tape player performs to the highest fidelity standards.

The timepiece itself is a statement in state-of-the-art digital accuracy.

Synchronize one of 20 models to your time and space. Sparkomatic High Fidelity Speakers add ye: another dimension to your car sound. Visit a Sparkomatic dealer for a demonstration.

SPARKOMATIC
For the Travelin' Man™

For our free catalogs on Car High Fidelity write: "For The Travelin' Man", Dept. SR, Sparkomatic Corporation, Milford, PA 18337

CIRCLE NO. 63 ON READER SERVICE CARD
<table>
<thead>
<tr>
<th>Magazine</th>
<th>Issues</th>
<th>Reg. Rate</th>
<th>Special Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apartment Life</td>
<td>24</td>
<td>$7.97</td>
<td>$5.97</td>
</tr>
<tr>
<td>Field &amp; Stream</td>
<td>18</td>
<td>$5.97</td>
<td>$4.97</td>
</tr>
<tr>
<td>Popular Electronics</td>
<td>12</td>
<td>$8.97</td>
<td>$6.97</td>
</tr>
<tr>
<td>Sports Illustrated</td>
<td>24</td>
<td>$12.77 (Reg. Rate)</td>
<td>$9.97</td>
</tr>
<tr>
<td>Back Pack</td>
<td>6</td>
<td>$7.87</td>
<td>$5.97</td>
</tr>
<tr>
<td>FISHerman</td>
<td>7</td>
<td>$9.97</td>
<td>$7.97</td>
</tr>
<tr>
<td>Photography</td>
<td>12</td>
<td>$6.99</td>
<td>$4.99</td>
</tr>
<tr>
<td>Better Homes</td>
<td>12</td>
<td>$10.00</td>
<td>$7.97</td>
</tr>
<tr>
<td>Fortune</td>
<td>12</td>
<td>$16.75</td>
<td>$12.95</td>
</tr>
<tr>
<td>Prevention</td>
<td>12</td>
<td>$6.97</td>
<td>$4.99</td>
</tr>
<tr>
<td>TIME</td>
<td>24</td>
<td>$14.97</td>
<td>$9.97</td>
</tr>
<tr>
<td>Boating</td>
<td>12</td>
<td>$5.99</td>
<td>$4.99</td>
</tr>
<tr>
<td>House Beautiful</td>
<td>12</td>
<td>$7.97</td>
<td>$5.97</td>
</tr>
<tr>
<td>Psychology Today</td>
<td>12</td>
<td>$6.97</td>
<td>$4.99</td>
</tr>
<tr>
<td>TIME Guide</td>
<td>12</td>
<td>$3.98</td>
<td>$2.99</td>
</tr>
<tr>
<td>Cars &amp; Driver</td>
<td>12</td>
<td>$5.99</td>
<td>$4.99</td>
</tr>
<tr>
<td>Life</td>
<td>12</td>
<td>$14.97</td>
<td>$11.93</td>
</tr>
<tr>
<td>Redbook</td>
<td>12</td>
<td>$11.93</td>
<td>$9.97</td>
</tr>
<tr>
<td>Mechanix Illustrated</td>
<td>12</td>
<td>$5.96</td>
<td>$4.99</td>
</tr>
<tr>
<td>Rolling Stone</td>
<td>29</td>
<td>$12.00</td>
<td>$9.97</td>
</tr>
<tr>
<td>Ms.</td>
<td>12</td>
<td>$5.97</td>
<td>$4.99</td>
</tr>
<tr>
<td>Skiing</td>
<td>7</td>
<td>$5.99</td>
<td>$4.99</td>
</tr>
<tr>
<td>U.S. News &amp; World Report</td>
<td>29</td>
<td>$9.97</td>
<td>$7.97</td>
</tr>
<tr>
<td>Esquire</td>
<td>12</td>
<td>$10.00</td>
<td>$7.97</td>
</tr>
<tr>
<td>Newsweek</td>
<td>23</td>
<td>$13.25</td>
<td>$10.25</td>
</tr>
<tr>
<td>SPORT Diver</td>
<td>4</td>
<td>$9.97</td>
<td>$7.97</td>
</tr>
<tr>
<td>Woman</td>
<td>12</td>
<td>$7.50</td>
<td>$5.97</td>
</tr>
</tbody>
</table>

Call Magazines at Discount and SAVE up to 50%

Here's your chance for a real bargain bonanza on your favorite magazines. You may select as many as five of these titles at the special introductory rates shown — up to 50% off! To order, mail card or call — Toll-Free 800-247-2160

In Iowa, call toll-free 1-800-362-2860.

Magazines At Discount,
A division of Ziff-Davis Publishing Co., P.O. Box 601, Broomall, Pennsylvania 19008.
Just as it used to be assumed that Carl Nielsen's music could not be performed by anyone but the Danes, it is even now largely assumed that American music is to be performed only by Americans—or, at least, only in America. American music has been recorded all over the world, of course, but this has been more a reflection of the expense of recording the material at home than of any abundance of actual concert performances abroad. Except for Gershwin's big numbers, the one American piece that has really taken has recorded on two new Unicorn releases. Barber's powerful one-movement First Symphony has never received a more compelling performance on records, and even more surely it has never received so lifelike a recording. Measham's brilliant version with the London Symphony must make us wonder anew why the work is so little heard in our concert halls. The Essay for Orchestra No. 2 (there are three of them now) has been getting a good deal of exposure in the last few seasons, but the more concise and forceful First Essay hasn't been heard in years. Measham's is its first stereo recording, and the first as well for Night Flight, which was originally the slow movement of the Second Symphony and the only portion of the work Barber cared to salvage after withdrawing the score some twenty years ago. The disc on which these four titles are collected must be regarded as basic for any serious collection of American music—or, for that matter, of music of our century.

The second Unicorn disc, recorded in Australia, is a good one too, and it is especially valuable for the remarkably sympathetic performance of Barber's Music for a Scene from Shelley, with its brooding Sibelian under- tones. In the other two works, however, the competition is formidable. Ronald Thomas is an accomplished and tasteful violinist, but in the Barber Violin Concerto he is up against Isaac Stern, who is a great violinist and makes us feel that he really loves the work (Columbia MS 6713). Similarly, Measham has a most agreeable voice and a convincingly innocent approach in Knoxville: Summer of 1915, but she lacks the assurance—the firmness at both the high and low ends of her range—to present a serious challenge to the classic version recorded by Eleanor Steber (Odyssey 32 16 0230) or the affecting one by Leontyne Price (RCA LSC-3062). Those interested in the Music for a Scene from Shelley alone will probably opt for the older recording under Vladimir Golschmann, which brings with it three otherwise unavailable Barber titles (Vanguard VSD-2083), but Measham is so extraordinarily effective in this piece that I would take all the duplications involved in order to have his version.

Cellists who lament the scarcity of concertos for their instrument somehow seem to overlook the fine one Barber composed in 1945, in which his expressive lyricism and his sense of color are both at their most directly appealing. It was one of the works he recorded as conductor for London nearly thirty years ago; Zara Nelsova was soloist in that long-deleted version, but it was Raya Garbousova who introduced the concerto in 1946, and the performance she recorded with Frederic Waldman twenty years later is a most eloquent one. This is one of the most praiseworthy of Varèse Sarabande's reissues from the archives of American Decca, and it has been remastered with loving care, yielding a sound quality possibly superior to that of the original release. The overside Britten Serenade for Tenor, Horn, and Strings is also done very beautifully by Charles Bressler and Ralph Froelich. If their fine performance does not quite match the uniquely authoritative one by Peter Pears and Barry Tuckwell with Britten conducting (London OS 26161), it comes close enough to demonstrate that this work should not remain in the exclusive domain of English performers any more than those of Barber are to be entrusted exclusively to Americans.

A Little Barber Festival

Barber’s Adagio for Strings, and now it appears that Barber has found a dedicated champion in the person of conductor David Measham. One of those versatile young musicians active on many fronts, Measham conducted the second recording of the Who’s rock opera Tommy, has been involved in rock and pop for years, and played violin in the London Symphony Orchestra before conducting it. Since 1974 he has been conductor of the West Australian Symphony Orchestra in Perth—a fine ensemble, to judge from the recorded evidence. His understanding of Barber’s idiom seems complete, and he is certainly a persuasive spokesman for the works he


Barber: Concerto for Cello and Orchestra, Op. 22. BRITTEN: Serenade for Tenor, Horn, and Strings, Op. 31. Raya Garbousova (cello, in Barber); Charles Bressler (tenor, in Britten); Ralph Froelich (horn, in Britten); Musica Aeterna Orchestra, Frederic Waldman cond. VARESE SARABANDE VC 81057 $7.98.


A Little Barber Festival
Records by the new music director of the Detroit Symphony? The existence of the Civil War cannon (placement of shots and all) and of the carillon (National Cathedral, Washington, D.C.) notwithstanding, what really impresses me here is the musicality that Dorati brings to pieces that have been vulgarized to the point of inanity both on and off records. If the performances of 1812 and Capriccio Italian lack something of the raw energy of the 1954 session (or, for that matter, of the later stereo remakes), this may be because the splendidly live and spacious acoustics of the Detroit recording locale (an erstwhile movie theater) do not require the amount of muscle and lung power necessary in the dead-sounding Minnesota auditorium we had to use. This Detroit recording presents a very deep stereo perspective, and the microphones seem to have been placed to capture the tonality of the orchestra as a whole. In fact, I'm not sure it wouldn't have been better to focus in just a shade more closely. Anyway, it's a good, warm sound that brings out the mellifluousness of the orchestra's string body. Further, acoustic judgments on the new London/Detroit Symphony affiliation will have to await additional recordings, but this is certainly an auspicious beginning. D.H.

RECORDING OF SPECIAL MERIT

TCHAIKOVSKY: Piano Concerto No. 1, in E-flat Minor, Op. 23
LISZT: Hungarian Fantasia for Piano and Orchestra

STEREO REVIEW

The ADS 200C mighty miniatures

...Their sound is ear boggling...*

If genuine Hi Fi sound in your car is what you are looking for, then the tiny ADS 200C is your answer. This mini speaker measuring only 4.5 x 7 x 4.5 inches is one of the outstanding (and award winning) accomplishments in audio engineering in recent years.

In fact, our mighty miniatures are so good, they have become one of the most imitated new speaker systems today. But beware - if you are looking for the best, then listen to what experts have to say about the ADS 200C, the original and the world's first mini Hi Fi loudspeakers. Van & Truck Magazine reported recently: "The sound of the ADS 200C was so good it was almost... well, suiting. The amazing small size... allowed us to even hide it beneath the seats. Their sound is ear boggling! The loco on... resulted in gut rumbling bass."

We believe the ADS 200C is today's most advanced loudspeaker for car use. (It's usable at home, too.) Its musical qualities are unsurpassed and its performance level so astounding that High Fidelity Magazine reported: "The frequency response of the ADS 200C between 100 Hz and 10 kHz is flat (+1.5 dB) and that of any speaker we can recall."

There is a skilled ADS dealer near you who will proudly demonstrate the ADS 200C or its larger brothers to you. Driven will never be the same once you own these marvelous engineering, the ADS 200C Mighty Miniatures. ADS 200C review quote from Van & Truck Magazine.

For more information and complete relay reports, write ADS, Dept. OB, or call 1-804-824-7888. (California 1-800-862-7727) all free and ask for Operator 483.

The two scenes from La Sonnambula capture the vintage Callas of 1955. She is in sovereign control over the range up to a flawless E-flat; the dynamics are beautifully shaded; chromatic runs, trills, and embellishments are all that should be. But the lengthy final scene is not fully effective without the tenor and chorus, and, after all, Callas did record the complete opera soon thereafter.

Performance: Of highest distinction
Recording: Good late-Forties mono

Solomon was one of the finest musician-virtuosos in the pianistic world, and the abrupt ending of his career at its peak by a stroke was a tragic loss for us all. Fortunately, most of his recordings seem to have been reissued over the past decade, and in this instance it is by no means too much of a good thing.

Thanks to the ministrations of EMI's transfer engineer Anthony Griffith, this Turnabout disc of the Tchaikovsky B-flat Minor Concerto and the Liszt Hungarian Fantasia is a thoroughgoing success. The Liszt recording was something of a spectacular in 1948 not only because of Solomon's razzle-dazzle performance, but also for a quality of solo piano recording far in advance of its time. The still-excellent sound of the original 78's has been retained almost entirely in the microgroove transfer. In partnership with one of the best Russian conductors of his generation, Issay Dobrowen, Solomon brings off a reading of the Tchaikovsky concerto that strikes an ideal balance between the virtuosic and musically substantial elements of the score. The studio ambience and the multiple miking of the orchestra (the solo woodwinds are unnaturally prominent) are quite evident, but these flaws are not enough to take the edge off the pleasure of listening to such a richly satisfying performance. D.H.

TCHAIKOVSKY: The Seasons (see Best of the Month, page 96)

VERDI: Arias (see Collections—Maria Callas)

COLLECTIONS

MARIA CALLAS: The Legend—The Unreleased Recordings. Verdi: Il Corsaro: Non so le torte immagini (Romanza di Medora); Vola talor dal carcere (Cavatina di Gulnara). Il Trovatore: Tacea la notte... Di tal amor. Un Ballo in Maschera: Morro, ma prima... Bellini: La Sonnambula: Come per me sereno; Oh, se una volta sola... Ah, non credea mirarti. Maria Callas (soprano); Orchestra of Teatro alla Scala, Milan, Tullio Serafin cond.; Paris Opera and Concerts du Conservatoire Orchestras, Nicolai Rescigno cond. ANGEL S-37537 $7.98.

Performance: Variable, but never dull
Recording: Good

These are recordings Maria Callas did not approve for release during her lifetime. Circulating them now for obvious commercial advantage raises an issue that is at the very least debatable. On the other hand, rarities of this kind would eventually emerge via pirate routes anyway, so perhaps it is better to receive them "legitimately."

The two scenes from La Sonnambula capture the vintage Callas of 1955. She is in sovereign control over the range up to a flawless E-flat; the dynamics are beautifully shaded; chromatic runs, trills, and embellishments are all that should be. But the lengthy final scene is not fully effective without the tenor and chorus, and, after all, Callas did record the complete opera soon thereafter.
The Ballo and Trovatore arias date from 1964, a vocally less fortunate period. Yet the former is excellent by any standards, and the latter, without quite matching the form Callas displayed in the complete recording (1956), is certainly acceptable. The two arias from Il Corsaro, however, are more like run-throughs for a Callas performance than the real thing. These date from 1969 and reveal tones that lack fullness, too much "covering" at the expense of verbal clarity, and some tentative attacks. Even here she is never "bad," and certainly never uninteresting, but our memory of her ill-served by adding these imperfect takes to her recorded legacy.

Callas is ably backed by her longtime mentor Tullio Serafin and her frequent, gifted collaborator Nicola Rescigno, and the recorded sound is fine. For the Callas collector, the disc takes to her recorded legacy.

For a discussion of several recordings that have been released on Aspekte, a new mid-price label, see "Going on Record," page 70.
No one—but no one—laughed when he sat down at the piano. That's because the pianist was the indefatigable EUBIE BLAKE, and the audience consisted of cast members of the Broadway revue Eubie, united to celebrate the release of the original-cast album (Warner Bros. HS 3267). Rumors that the ninety-six-year-old Blake performed ‘I’m Just Wild About Jerry’ Wexler have not been confirmed.

A vision of hell, perhaps, as chronicled in ALICE COOPER's latest album, “From the Inside” (Warner Bros. BSK 3263)? No, merely the Coop surrounded by some of his co-stars during a recent appearance on The Muppet Show. It’s enough to drive a girl to drink.

Ever wonder where the next generation of rock stars is coming from? Well, joining Peppi Marchello of the GOOD RATS during the recording of their new album, “Birth Comes to Us All” (Passport 9830), is none other than Peppi's ten-year-old son Gene. Little Gene may not turn out to be the Next Big Thing, but at least no one can call him a Boring Old Fart—yet.
No, that's not Cleavon Little in an outtake from *Blazing Water Skis*, but rather George Clinton, mastermind of the PARLIAMENT/FUNKADELIC empire (Parliament's latest is "Motor Booty Affair," Casablanca NBLP 7125), answering a burning show-biz trivia question: whatever happened to Flipper?

New Wave Hep Cats Wow Good Old Boys! Yes, that's ROBERT GORDON and band, backstage at New York's hard-core c&w honky-tonk, the Lone Star Cafe, where they knocked the audience for a loop with a performance also broadcast live on country station WHN. (Note bassist Tony "Last of the Beatniks" Garnier stage center.) Robert's latest, of course, is "Rockilly Boogie" (RCA AFL1-3294), reviewed in this issue.

Give 'em enough rope department: synthesizer wizard ISAO TOMITA contemplates the beauty of the common patch cord during the recording of his latest electronic epic, "The Bermuda Triangle" (RCA ARL1-2885), in his Tokyo studio.

What the well-dressed recording artist will (sometimes) wear: A&M's DAVID SPINOZZA ("Spinozza," 4677) shows RCA's FRANK WEBER ("As the Time Flies," AFL1-2963) the proper use of stereophones during a germ-warfare attack.

What Becomes a Rock Legend Most? Why, a tour with an up-and-coming legend. Seen backstage after their New York City debut are English Punk standard bearers the CLASH in the company of founding-father BO DIDDLEY, all of whom seem to share the same tailor. Bo's between labels, but the Clash can be heard on "Give 'Em Enough Rope" (Epic FE 35543).

He may be a whiz in the studio, but BOSTON's Tom Scholz is a trifle butterfingered on the court. Still, he led his band to a 35-29 victory over a team from Washington, D.C.'s FM station WWDC in a contest that raised over $7,000 for the District of Columbia's Special Olympics Fund. Boston's "Don't Look Back" (Epic FE 35050), however, had at last report earned somewhat more.
ALLEY & THE SOUL SNEEKERS. Alley & the Soul Sneekers (vocals and instrumentals). Love Breakdown; I'm Coming Down with a Thrill; Cheater's Honeymoon; Understand Your Man; Over the Airwaves; and five others. CAPITOL SW-11913 $7.98. © SWX-11913 $7.98. © 4WX-11913 $7.98.

Performance: Misfire
Recording: Good

Alan Gordon ("Alley") made his mark as a craftsman songwriter during the late Sixties with Happy Together and She'd Rather Be with Me, both recorded by the Turtles, and more recently wrote My Heart Belongs to Me, recorded by La Streisand. Gordon and Carl Hall, the current leading man in the New York stage production of The Wiz, originally teamed up so that Hall could sing demonstration versions of Gordon's songs. Then someone suggested that they form a group, and... Alas, the songs, the delivery, and the arrangements (by Jack Nitzsche, a fine pro who also produced this album) amount to little more than a Sixties retrospective that just doesn't work. The album comes off sounding like an expensive demonstration record made about ten years ago. J.V.

THE BABYS: Head First. The Babys (vocals and instrumentals). Love Don't Prove I'm Right; Every Time I Think of You; I Was One; and six others. CHRYSALIS CHR 1195 $7.98. © 8CH 1195 $7.98. © CCH 1195 $7.98.

Performance: Good
Recording: Good

Last album out I didn't like the Babys, finding them too cute and gooey. This time they come on harder. Although the lyrics won't ever be inscribed on bronze, the group—which is down to a trio from a quartet—attempts to deal with real emotions instead of smug commercial sugar and white. This is a surprisingly cohesive and frank album. Other groups might complain about or denounce a confusing world, but the Babys have the honesty to say they're merely bewildered. They deserve an honorable mention for admitting it. J.V.

SHIRLEY BASSEY: The Magic Is You. Shirley Bassey (vocals); orchestra. This Is My Life; Night Moves; The Magic Is You; and eight others. UNITED ARTISTS UA-LA926-H $7.98. © EA-926-H $7.98. © CA926-H $7.98.

Performance: Mellow
Recording: Good

Shirley Bassey's pace here is considerably less fevered than her usual knock-'em-dead wont. Even her disco track, This Is My Life, has an uncharacteristic reticence. How Intensive goes instead of runs, and the title song is almost crooned. High drama is represented by Don't Cry for Me Argentina, from the musical Evita, in which Bassey sounds a lot more like Mexicali Rose leaning against the door of the cantina than like Eva Peron explaining herself to her countrymen. All the songs rock and some are downright jazzy. I think he's trying for credence with some of those people who’ve been turned off—trying a little too hard at times. Including a raucous version of Johnny B. Goode is going a little overboard, and the sound behind him is a little too insistently hard, with a harmonica used here and there to no apparent purpose other than to add to the volume. But a brand-new model is expected to have a few bugs in it, and the album is surprisingly good despite those. Transition albums aren’t supposed to be this good to listen to. I think the sound Denver wants will just naturally evolve if he keeps working with these kinds of musicians. The only thing I would consciously make a point of, if I were him, is replacing those granny glasses with the restrained assertiveness of wire-rimmed aviator specs.

DESMOND CHILD & ROUGE. Desmond Child and Rouge (vocals); instrumental accompaniment. Westside Pow Wow; Our Love Is Insane; Lovin' Your Love; The Flight; Main Man; and four others. CAPITOL ST-11908

Explanation of symbols:
① = reel-to-reel stereo tape
② = eight-track stereo cartridge
③ = stereo cassette
④ = quadraphonic disc
⑤ = digital-master recording
⑥ = direct-to-disc recording

Monophonic recordings are indicated by the symbol @

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

RECORDING OF SPECIAL MERIT

JOHN DENVER. John Denver (vocals, guitar); Hal Blaine (drums); James Burton (guitar); Emory Gordy (bass); Glen D. Hardin (keyboards); Jim Horn (reeds); other musicians. Downhill Stuff; Sweet Melinda; What's on Your Mind; Joseph & Joe; Life Is So Good; and six others. RCA AQL1-3075 $8.98. © AQST-3075 $8.98. © AKQ1-3075 $8.98.

Performance: JD goes electric
Recording: Good

When he was almost as dear to the mass heart as the Bee Gees are now, John Denver lacked the credence with some people who are naturally suspicious of apparent sweetness and naiveté and with some who are naturally suspicious of apparent nice guys. And his lyrics, at least, didn't tend to cloy. In the album just before this he toughened up his act considerably, and now he is with electric backing from Memphis—and I swear when I saw him on the tube the other night his face looked less rounded and almost, almost lined. Aging becomes him. He has written some rather neat songs for this album, and the lyrics don't cloy; some of the songs rock and some are downright jazzy. I think he's trying for credence with some people who’ve been turned off—trying a little too hard at times. Including a raucous version of Johnny B. Goode is going a little overboard, and the sound behind him is a little too insistently hard, with a harmonica used here and there to no apparent purpose other than to add to the volume. But a brand-new model is expected to have a few bugs in it, and the album is surprisingly good despite those. Transition albums aren’t supposed to be this good to listen to. I think the sound Denver wants will just naturally evolve if he keeps working with these kinds of musicians. The only thing I would consciously make a point of, if I were him, is replacing those granny glasses with the restrained assertiveness of wire-rimmed aviator specs.

N.C.
The production on this one is smooth and clean, and the performances have a sharp, cynical verve. The musical format is supposedly rhythm-and-blues, but the group is far too worldly to make anyone but an urban hick believe it's real "black" music, or even commercial black music. Desmond Child & Rouge are cabaret artists, and cabaret music has simply never found a large audience in this country. But if you are a member of that small audience that appreciates the bitter contours of broken dreams and lost belief typical of cabaret, you can listen to Desmond Child and Rouge and admire their sass. J.V.

DIRE STRAITS (see Best of the Month, page 94)

FABULOUS POODLES: Mirror Stars. Fabulous Poodles (vocals and instrumentals). Mirror Star; Work Shy; Chicago Boxcars; Oh Cheryl; and six others. Epic JE 35666 $7.98, © JET 35666 $7.98.

Performance: Bent straight rock
Recording: Harsh

It's been done before, of course, but it ain't watcha do, etc. The Fabulous Poodles, here released in America for the first time, synthesized several hard-rock sounds and attitudes from the past. They play like the rock groups of the golden era—Epic is fond of likening them to the early Who—and they write like... well, a little like Frank Zappa, whence cometh their name, or like a childish styling of the Kinks. There's a kind of "us dumb kids" attitude about the music, however satirical it purports to be. They are what would once have been mainstream but is now cultish in post-punk England. But no matter; they're on their way up anyway. Four of these tracks appeared earlier in England in an album produced by John Entwistle, but the sound of all of it is the main thing that bothers me. I don't like mixes that have the drums this much louder than the bass (not to mention everything else), and when your thing is clever lyrics, I don't see any sense in mixing the voices together so that only one is heard most of the time. Rats (vocals and instrumentals). Rat Trap; Me and Howard Hughes; (I Never Loved) Eva Braun; Living in the Cold for a Long Time, and now that things are warming up for them professionally, they seem a bit less tense. J.V.

HOT CHOCOLATE: Every I's a Winner. Hot Chocolate (vocals and instrumentals). Every I's a Winner; Confetti Day; Love Is the Answer; One More Time; So You Win Again; and five others. INFINITY INF-9002 $7.98.

Performance: Confusing
Recording: Okay

I'm not sure how to describe Hot Chocolate's music. It's not reggae, for the beat is too straight, devoid of that easygoing boom-da-

W H A T E V E R the collective musical accomplishments of the English New Wavers, any thinking person must admit that we owe them a tremendous debt of gratitude for restoring to currency a truth that has been almost totally neglected and out of fashion since the halcyon days of Haight Ashbury. To wit: the major record companies are, as Lester Bangs put it, "the most crucial enemy of the music and the people who try to perform it honestly."

Now the Boomtown Rats, an Irish band marginally associated with the New Wave, have their second album out. It's somewhat different from their debut opus, which was an exhilarating r- &- b raunch-out in the tradition of the early Stones/ Kinks. It's less angry and more of a "pop" record, if your definition of pop includes the likes of Elvis Costello. It's also shamelessly trendy (with songs about Eva Braun, Howard Hughes, and some utter-ly transparent Bruce Springsteen street-romance pastiches), but you won't mind that because the Rats have more for-the-hell-of-it flair than just about any mainstream rock act now working. The songs, with their infectious little choruses and deft production touches (I defy anyone to resist the bass guitar and finger snapping that opens Rat Trap), are put together like charms, and carving about "influences" or "lack of commitment" is beside the point. Rock-and-roll, as they practice it, is about immediacy, and "A Tonic for the Troops," for all its pop shallowness, is the grabbiest grabber of an album I've heard so far this year. It has HIT written all over it.

Which is really kind of amazing, for the Rats share the same healthy contempt for the Music Biz that their punkier New Wave colleagues display. So, by way of closing, let me quote from lead singer Bob Geldof's address to the CBS National Convention (a function, you should understand, at which the assembled execs decide the depth of their commitment to new acts in direct proportion to the amount of derriere-kissing the acts are willing to engage in). Saith Geldof, as reported by Melody Maker: "You've been told over the last three days that CBS is a real family, full of warm and wonderful human beings. Frankly, I didn't know there were that many warm and wonderful human beings in the entire world, let alone in one record company. I think you all know you're really just a bunch of bastards. But as long as you're selling the album it doesn't matter."

I think you'll have to agree that, even forgetting their delightful music, a band with an attitude like that must be encouraged at all costs.

—Steve Simels

THE BOOMTOWN RATS: A Tonic for the Troops. The Boomtown Rats (vocals and instrumentals). Rat Trap; Me and Howard Hughes; (I Never Loved) Eva Braun; Living in an Island; Like Clockwork; Blind Date; Mary of the 4th Form; Don't Believe What You Read; She's So Modern; Joey's on the Street Again. COLUMBIA JC 35750 $7.98, © JCA 35750 $7.98, © JCT 35750 $7.98.
On the inside cover of Marvin Gaye's new double-disc Tamla album "Here, My Dear," there are some notes apparently designed to nudge the prospective listener into an attitude of awe. They state that Gaye, "a creative genius," produced "this masterpiece," which is "most assuredly a collector's item." These extravagant claims serve no purpose, for although the album certainly cuts through the wads of aural chewing gum abounding these days, it is hardly on the same level as his real masterpiece, "What's Going On." That record is the sort of milestone work any artist should be proud to produce—if only once in a lifetime. Its searing social comments were shaped in the climate of 1971; the times have changed, and Gaye, in a parallel move, has shifted his work from social commentary to a celebration of sensuality. The raptures of intimacy have been woven with mesmeric insistence into all his subsequent albums, and this latest set compares favorably with his last two concept albums, "Let's Get It On" and "I Want You." If there is one besetting flaw, it is excessive length. Rambling over four sides, "Here, My Dear" seems to last longer than many marriages (the third side is particularly weak). The song When Did You Stop Loving Me, When Did I Stop Loving You is repeated three times, for a total of thirteen minutes, but rather than building to a climax, it seems to diminish in impact each time it returns.

Phyl Garland

MARVIN GAYE: Here, My Dear. Marvin Gaye (vocals); instrumental accompaniment. Here, My Dear; I Met a Little Girl; When Did You Stop Loving Me, When Did I Stop Loving You; Anger; Is That Enough; Everybody Needs Love; Time to Get It Together; Sparrow; Anna's Song; A Funky Space Reincarnation; You Can Leave, but It's Going to Cost You; Falling in Love Again. TAMLA T 364 LP2 two discs $13.98, © T S 364 $13.98, © T75 364 $13.98.
Even competitors agree.

When competitive companies agree on a basic concept, it must be sound. That's why the standards for measuring high fidelity components developed by the Institute of High Fidelity are so widely used by manufacturers. These helpful guidelines enable manufacturers to present their product specifications in a uniform way. As a result, you can rapidly compare hi-fi components because everyone's "audio watts," "microvolts," and "dBs" mean the same thing. They help you and your audio dealer talk on the same wavelength when you're discussing the difference between hi-fi and not so hi-fi products.

IHF measurement standards are now in effect for tuners, amplifiers, and headsets. Additional standards are now being developed for speakers, tape recorders, turntables and cartridges. Look for them in manufacturers' literature and in retail advertising. Then you can buy real high fidelity with complete confidence. Institute of High Fidelity, Inc.,
489 Fifth Avenue,
New York, N.Y. 10017

Shown above are just a few of the many manufacturers using IHF measurement standards.

CIRCLE NO. 33 ON READER SERVICE CARD
"Briefcase Full of Blues" is an album whose impact will far exceed any intrinsic aesthetic worth. John Belushi and Dan Ackroyd (a.k.a. Jake and Elwood Blues) obviously love this music as much as, say, Paul Butterfield, and their stage characterizations are inspired, but as a singer and a harp player they are at best inept to amateur. Fortunately for them, their band is brilliant, and the overall effect, if you’re listening to the record in a room full of good-humored drunks, is listenable party music. I agree it’s sad that this affectionate tribute is commercially successful while Sam and Dave, for example, can’t get arrested, but it’s hardly the Brothers’ fault, and anyway Muddy Waters loves the thing, so let’s not hear any of that “Can White Men Sing the Blues?” business.

So this isn’t a particularly good record, but it’s an important one just the same. I’ve been saying for several years now that a massive rediscovery of Sixties blues and r&b was inevitable as a reaction against FM-oriented rock mush on the one hand and disco on the other; there was a need for something recognizably human that reggae and punk have only partially filled. This album, which by all indications will go multi-platinum by the time you read this, proves I was right: the only surprising thing to me is that two comedians should have provided the impetus like church music. The only slim clue to what all this might add up to is that the album was recorded in England. It does seem to be commercially successful

Still, all those bright middle-class teenagers who are buying the record because they love Saturday Night Live are getting an education from it, as they are to a lesser degree from Southside Johnny, Robert Gordon, Eddie Money, George Thorogood, and Mink DeVille, to name just a few, and it’s going to lead somewhere. The last time a generation got hooked on this kind of music the result was a rock-and-roll explosion that brought us at least two groups you might just remember: the Beatles and the Rolling Stones. Want to venture a guess as to what the pop cataclysm of the next decade is going to sound like? If you do, I suggest you buy a copy of “Briefcase Full of Blues” and keep it safely shrink-wrapped; it just may turn out to be the most influential record of the late Eighties.

—Steve Simels

THE BLUES BROTHERS: Briefcase Full of Blues. John Belushi (vocals); Dan Ackroyd (harp; vocals); Steve Cropper (guitar); Duck Dunn (bass); other musicians. I Can’t Turn You Loose; Hey Bartender; Messin’ with the Kid; (I Got Everything I Need) Almost; Rubber Biscuit; Shot Gun Blues; Groove Me; I Don’t Know; Soul Man; ‘B’ Movie Box Car Blues; Flip, Flop and Fly; I Can’t Turn You Loose. ATLANTIC SD 19217 $7.98, © TP 19217 $7.98, © CS 19217 $7.98.
Strange; Soon Come Again; and five others.
Arista AB 4202 $7.98, © 8T 4202 $7.98, © CT 4202 $7.98.

Performance: Moving on up
Recording: Good

Long before she released her first album last year, Phyllis Hyman had become something of an underground legend. She had a following among well-known jazz and pop artists, and it was even rumored that she belonged to that rarest of breeds, the true jazz singer. Furthermore, she was as lovely to see as to hear. Unfortunately, her debut album on Buddah was a somewhat misbegotten affair. Not only did it carefully skirt anything that might be even vaguely construed as jazz, but it was lumberingly commercial in conception, full of songs with only meager possibilities for development. Its only attractions were Hyman's enormous voice and exuberant delivery.

Hyman's new album places her on much firmer ground. While this set is certainly not jazz, it is high-quality popular fare. Her rendition of the title song (co-produced by Barry Manilow) might by itself do more to further her career than her years of playing the bistro circuit. It's the sort of song that should still delight a year or more from now. Yet this is not a one-song album. There are heavy doses of disco, too, and one item, So Strange, has enough bounce and appeal to charm even disco haters.

The range of tempos is admirable. Hyman is unusually adept with slow numbers, and her own composition, Gonna Make Changes, indicates that she has creative talent. But the real bonus here is the final selection, which is presented in naked beauty after all the fancy percussion back-up has been set aside. Accompanied only by Monty Alexander on piano, Hyman sings the evergreen Here's That Rainy Day with a thrilling tone and sensitive expression. This must be the Phyllis Hyman that Roberta Flack and George Benson were raving about. I'd rave too.

P.G.

THE JAM: All Mod Cons. The Jam (vocals and instrumentals). All Mod Cons; To Be Someone (Didn't We Have a Nice Time); Mr. Clean; David Watts; English Rose; and seven others. Polydor PD-1-6188 $7.98, © 8T-1-6188 $7.98, © CT-1-6188 $7.98.

Performance: Second-rate nostalgia
Recording: Clean

The nicest thing you can say about the Jam after this, their third album, is that they're the Raspberries of the New Wave. Or, to put it bluntly, they haven't an original musical idea in their collective heads and seem more than content to blithely ape the raunchier mid-Sixties English bands. Unfortunately, the Jam lacks even an iota of the Raspberries' melodic flair (Carmen may not have been particularly original, but God knows he had the tunes), and Jam leader Paul Weller's vocals are barely serviceable at best. The group tips their hand most blatantly this time out with a remake of David Watts, one of the Kinks' most infectious pieces of social criticism, a note-for-note copy lacking only the quirky poignancy of Ray Davies' singing on the original (which, of course, was 90 per cent of what made it great). As for their own material, even on the relatively insightful Down in the Tube Station at Midnight, the Jam come across as nothing more than a reasonably slick garage

(Continued on page 127)
Pierre-Alain Dahan, Sylvia Mason, Slim Pazin, Marc Chantereau

Voyage: “Fly Away”

ONLY rarely does a record come along that is as impressive all around as Voyage’s new “Fly Away” on Marlin. Everything about it is right: the music, the engineering, the performances, and, especially, the timing. In popular music, timing is a key factor in success; you make an impression by doing what’s in fashion, but doing it just enough better than anyone else that you become a leader instead of a follower. A little less and you’re ordinary, too much better and nobody knows what you’re talking about.

“Fly Away” rides the disco wave right at its crest. Consider, for instance, the nonstop structure of the disc, with no breaks between tracks. Unlike many other disco groups, who often turn their best dance numbers into watered-down disco “style” songs when they reissue them on LP’s, Voyage has made this record for their true fans: the dancers. But at the same time, the group knows that making a record for disco dancing does not necessarily mean that musical values have to be sacrificed. Every number here is a successful musical evocation of a mood or a place. Voyage wants us to fly away, all right, but they don’t expect us to leave taste and discrimination behind.

Eastern Trip and Tahiti, Tahiti, with their exotic instrumentals and South Sea Islands chanting, are good examples of what I mean. But the group’s super hit, Souvenirs, is also a perfect match of song and sound: romantic, but with just the right touch of sad remembrance. Let’s Fly Away evokes entirely different feelings and images: adventure, billowing clouds, soaring, soaring jets—like the best airline commercial ever. And when the drumming, strumming guitars of Golden Eldorado come pouring out of the speakers, every dancer in the room feels like a conquistador.

Good material and good musicianship are, however, only part of the story. Impressive disco must be impressively engineered as well, and here too Voyage scores a bull’s eye. The sound is heavily layered, with long, slow melodies in the strings mixed with driving dance beats in the guitars and bass (this is especially exciting in the last few minutes of Golden Eldorado) or a straight rock sound thrillingly shifting into a spacy electronic trip. The album’s last number, Gone with the Music, slips at its close into a heavily chorded repeat of the “let’s keep on movin’” rideout from the opener, Souvenirs, and it’s quite simply the most effective disco maneuver I’ve ever heard.

In Gone with the Music Voyage tells us that there are “no more strangers in the night when there’s music,” and the group clearly believes in the erotic power of disco. More important, they know that disco dancers also believe in it. That conviction, I think, is at the root of Voyage’s enormous success, and it may be the ultimate reason why I find “Fly Away” so very, very impressive.

—Edward Buxbaum

VOYAGE: Fly Away. Voyage (vocals and instrumentals). Souvenirs; Kechak Fantasy; Eastern Trip; Tahiti, Tahiti; Let’s Fly Away; Golden Eldorado; Gone with the Music. MARLIN MA 2225 $7.98, © 8T 2225 $7.98, © CT 2225 $7.98.

STEREO REVIEW
band without the zotz to stake out a style of their own.

S.S.

Kris and Rita usually sound like they're singing those duets while lying flat on their backs. This time they sound like they're sitting up, maybe even standing occasionally. It's a bit more of a rocker, in spots, than previous ones, has more of an edge on its sound and—although this is not saying much—gets more energy out of its principal performers. Still, the songs range from slightly above average pleasantries to congenial junk, and Kris still is a relatively horrendous harmony singer. They still seem to be avoiding what they do best, singing a pretty song in Rita's case and writing one in Kris'. He's represented here by three of his fairly early pieces, and if he would take a little time off from the movies, I think he could still write like that—indeed, the writing in his last solo album, while different, was interesting. But what we have here is a matter of priorities, and albums like this aren't at the top of his list. And they sound like it. This one (I hope the exertion didn't exhaust them) sounds a little less like it than most, but it still sounds like it.

N.C.

Lulu is still a relatively big deal in England, probably more because of her TV work there than her recent albums, which are as safely MOR as a Piccadilly traffic island. Over here she never really hit (although her version of the title song from To Sir with Love was pretty popular), but—who knows?—she might make it yet. Certainly she's an ingratiating performer with a lot of warmth and vitality, and her singing emphasizes the small gesture, the intimate phrasing, and the seemingly minimal effort that picks up on camera. On recordings she seems pleasant and tremendously professional. She's especially good here in Bye Bye Now My Sweet Love, and she demurely works over Elton John's Nice and Slow exactly the way the title suggests. Lulu's future probably lies on the tube, where, in time, she could become the British Dinah Shore.

P.R.

Eddie Money is an average white pop-soul shouter who's had a couple of hits and, with
careful management, should have a couple more—but not if he continues to make the mistakes made on this album. Like a lot of successful average performers in the music business, Money takes his popularity as a sign that he is a Serious Artist, with spiritual crises that his audience would—may, should—want to hear about. As a result, side one of this album contains five self-conscious crash-boom cuts dealing with Money’s attitude toward life, which isn’t particularly interesting. Side two, however, comprises five cuts with strictly commercial material, arrangements, and performances—that is, after all, how Money makes his money. This should have been side one; it’s an elementary mistake in programming that his label should not have allowed him to make. Money should stick to what he knows—commercial pop with a growl—and stop trying to be a philosopher.

J. V.

RECORDING OF SPECIAL MERIT

ANNE MURRAY: New Kind of Feeling. Anne Murray (vocals); instrumental and vocal accompaniment. Shadows in the Moonlight; For No Reason At All; That’s Why I Love You; Heaven Is Here; and four others. CAPITOL SW-11849 $7.98, ® 8XW-11849 $7.98, © 4XW-11849 $7.98.

Performance: Excellent
Recording: Clean

For my money, Anne Murray’s the best female singer around; she sings like a mature woman who can handle any situation. Where-as Linda Ronstadt is an expert at portraying lost waifs, Murray always sounds as though she has the patience to bear and defeat sorrow—and the wisdom to recognize and accept love. Ronstadt may be the songstress of losers, but Murray, with her cool, purring middle register, is the balladeer of winners.

As is usual with Murray albums, the selections here are by a variety of writers, and the material is carefully selected to fit her style. The arrangements are light and tasteful, the vocals calm and authoritative. My favorites are Shadows in the Moonlight, Yucatan Cafe, the Motown oldie You’ve Got What It Takes (which Murray sings with a delicious rasp on the chorus), Heaven Is Here by Gene McClellan (who also wrote Snowbird, one of Murray’s earlier hits), and the Boudleaux and Felize Bryant ballad Rainin’ In My Heart. This last is especially interesting if you imagine Ronstadt singing it. She’d do a fine job, of course, but the overall effect would be of someone who accepts defeat permanently; with Murray, you know the heartbreak is only a temporary setback. ‘Atta girl, Annie!’

J. V.

TRACY NELSON: Homemade Songs. Tracy Nelson (vocals); instrumental accompaniment. God’s Song; I’ve Been There Before; Ice Man; The Summer of the Silver Comet; Tightrope; Suddenly; and four others. FLYING FISH FF-052 $7.98, ® FLF-8359-052(H) $7.95, © FLF-5359-052(H) $7.95.

Performance: Good
 Recording: Excellent

I like style a little more, usually, than the next person, but I’m beginning to think Tracy Nelson takes it too far. It bothers me most here in the first song, Randy Newman’s God’s Song, where one needs to hear clearly and cogitate upon the words. It isn’t that Tracy slurs them too much but that she puts her blues-gospel vibrato between you and them; you have to listen to the singer so much you don’t get to listen to the song. The same thing happens in the rest of the album, although most of the other songs don’t have that much to offer.

HOW TO INSTALL DAHLQUISTS IN YOUR CAR.

Dahlquist DQ-10 loudspeakers will never fit in an automobile, but the new Dahlquist ALS 3 Auto/Home Loudspeakers fit beautifully. And they deliver the kind of clarity and definition that earned the DQ-10 its legendary reputation.

The new ALS 3 is an example of Dahlquist’s forward-thinking approach to design—a three-way system with the drivers mounted on a special anti-diffraction baffle plate; switchable EQ to optimize either auto or home use; and a mass-loaded woofer for deeper, cleaner bass. (The ALS 3 tweeter is the identical unit used in the DQ-10.)

The ALS 3’s are furnished in black, heat-resistant, pressure-cast aluminum cases, with removable 90° rotatable mounting brackets, and no-solder connecting cables—at a price below anything approaching their quality.

Don’t be impressed by anyone comparing their car speakers to their home speakers until you find out how good their home speakers are.

Dahlquist DQ-10

FOR FREE ALS 3 MANUAL WRITE TO: DAHLQUIST
601 Old Willets Path, Hauppauge, N.Y. 11787

CIRCLE NO. 13 ON READER SERVICE CARD
They say you gotta have a gimmick. Well, the
4753 $7.98.
5258

Down So Low, which is best appreciated as

thing Tracy Nelson has done is the writing of

good. And I

me that Flying Fish albums usually sound

and a clean, quiet background, and it reminds

a highly stylized singing job. The most re-

to Move a Mountain, by Jim Rushing and

Rich can't make a good album, or at least an

Goes On; and four others. A&M SP

4753 $7.98, © AAM 4753 $7.98, © AAM

4753 $7.98.

Performance: Classic

Recording: Excellent

They say ya gotta have a gimmick. Well, the

Police have one, and it's so good that it's sort

of a shock no one thought of it before. What

they do is to construct (most of) their songs

with intros and verses in modified white-kid

reggae rhythm, then abruptly shift gears into a

standard rock beat mated with the harmonic

feel of the mid-Sixties pop groups, complete

with the captivating vocal harmonies of the

period. "Hooks," as they say, abound, as do

some interesting lyrical variations on some

otherwise mundane New Wave themes such as
teen romance and suicide.

They also have another gimmick, which is

that they're the freshest, toughest young

rock-and-roll (not punk, not pop) band I've

heard in ages. They have first-rate singing,

a sense of structural sophistication well beyond

their years, and rock (!) solid instrumental

work that manages to accomplish something

I'd thought well-nigh impossible: making the

quality of a shock no one thought of it before. What

they do is to construct (most of) their songs

with intros and verses in modified white-kid

reggae rhythm, then abruptly shift gears into a

standard rock beat mated with the harmonic

feel of the mid-Sixties pop groups, complete

with the captivating vocal harmonies of the

period. "Hooks," as they say, abound, as do

some interesting lyrical variations on some

otherwise mundane New Wave themes such as
teen romance and suicide.

Although I'm not drawing any actual musi-
cal parallel, this album somehow suggests

the making. Needless to say, I suggest you be

fused to the concept of the power trio vailable and interest-

again. Add to this a splendid production
job that maintains a basically "live" feel, and

you have an exciting mix.

Although I'm not drawing any actual musi-
cal parallel, this album somehow suggests

what it must have been like to hear the fledg-

ling Who thrash out the beginnings of their

style in some divey London pub fifteen years

ago; it has that palpable aura of history in the

making. Needless to say, I suggest you be

the first on your block to see if I'm not onto

something.

S.S.

CHARLIE RICH: The Fool Strikes Again.

Charlie Rich (vocals, piano); Jerry Carrigan

(drums); Jerry Shook (吉他); Pig Robbins

(piano); Bob Moore (bass); other musicians.

The Fool Strikes Again: I'd Even Let You Go;

"I LOST MI Heart; Born to Love Me; Lady

He Goes On; and four others. United Artists

U.A.-L925-H $7.98, © U.A.-E925-H $7.98,
© U.C-A925-H $7.98.

Performance: So much product

Recording: Good

How come someone as talented as Charlie

Rich can't make a good album, or at least an

interesting one? After his single with Janie

Fricke, On My Knees, I met this one with re-

CIRCLE NO. 62 ON READER SERVICE CARD

YES, KITS!

Choose from the World's Largest Selection of Speaker
Kits, including SATIN, Dalesford Export, Janzen
Electrostats & SEAS

Here's just one example:

DALESFORD

EXPORT

SYSTEM 110

$185 each

complete kit

($275 ea., if pre-assembled)

Dalesford low-coloration Birch/Maple drivers are world-
renowned and used in many highly praised systems.

The System 110 uses the Dalesford 10" Birch/Mape
blown horn unit combined with the famous 1" Audax
low mass soft cone tweeter. Response is -3 dB from
40Hz to 20kHz. An advanced multi-element compen-
sating crossover is used and the specially-designed
cabinet is damped with bituminous felt and Aus-

tralian long-fiber wool. Power handling: 20-100 Watts

RMS/Ch. Prices subject to change without notice.

We're open to your good other components, you

won't hear high definition sound if your speakers

can't reproduce it!

FREE MINI-CATALOG - OR SEND $1 FOR

NEW SPEAKER MANUAL/COMPLETE CATALOG

($1 Refunded with Purchase)

CIRCLE NO. 61 ON READER SERVICE CARD
newed hope, but here I sit, bored as hell again, knee-deep in mushy orchestration and lifeless songs. It is, of course, the nature of the songs and the approach taken rather than the singer that's the problem. For a while, even after Nashville embraced him, Rich liked to think of himself as a blues singer, and maybe we'd all be better off if he'd acted accordingly. At least the blues are real. This stuff, more nearly country technically, is mostly patently artificial. Somebody presumably went through the motions of songwriting to grind them out, and they satisfy the dictionary definition of songs, but they aren't songs. I Loved You All the Way may be a song under all the instrumental gloop, but the presentation drags it down near the level of the others. I suppose Charlie Rich could coast on like this forever, but what a waste.

N.C.

RECORDING OF SPECIAL MERIT

TOM ROBINSON BAND: TRB Two. Tom Robinson (vocals and bass); Danny Kustow (guitars), other musicians. Alright All Night; Why Should I Mind; Black Angel; Let My People Be; Blue Murder; Bully for You; and five others. CAPITOL ST-11930 $7.98, © 8XT-11930, © 4XT-11930 $7.98.

Performance: Exhilarating
Recording: Excellent

There are no real surprises on Tom Robinson's second album, unless you're surprised that Todd Rundgren resisted the temptation to do a Meat Loaf and overproduce the thing out of recognition, or that nothing here is as instantly memorable and incisive (in the hit-single sense) as the last album's Motorway or Glad to Be Gay. Rather, we get the usual synthesis of infectious hard rock and English music-hall styles Robinson shares with his ex-mentor Ray Davies, this time with a lot less of what Bob Dylan once called "finger-pointing songs." Robinson has apparently taken to heart the criticisms of those who called his earlier numbers too direct in their approaches to social outrage, and while he hasn't exactly pulled his punches here (Sorry, Mr. Harris and Blue Murder are pretty specific in their indictments of the English system of justice), he's more inclined to let you read between the lines, which seems a sensible approach.

But this is still dangerous, incendiary stuff, mainly because musically it's so gut-level compelling; the band sounds, to these ears, more and more like a politicized, amped-up version of the old Spencer Davis Group, and Robinson's vocals remain as gutsy and theatrically effective as ever. Perhaps there's just less to rail about in England since he first came to prominence on the crest of the New Wave, but if this is indeed just a marking-time effort, it's an extraordinarily effective and entertaining one. Recommended.

S.S.

DUSTY SPRINGFIELD: Living Without Your Love. Dusty Springfield (vocals); instrumental accompaniment. You Can Do It; Be Somebody; Dream On; Save Me, Save Me; Get Yourself to Love; and five others. UNITED ARTISTS UA-LA936-H $7.98, © EA936-H $7.98, © CA936-H $7.98.

Performance: Stylish
Recording: Very good

Dusty Springfield is a very, very good singer. Technically, at least, she's among the best.

(Continued on page 133)
This newest album is another almost perfect job of dotting the musical i's and crossing the lyrical t's, and nowhere on it are her performances ever less than sleekly stylish and clear-voiced and appealing. So why don't I urge you to run right out and get it? Because Springfield still seems content to loll around making pretty sounds. By scrupulously avoiding emotion, she blocks herself from full communication with her listeners. Now, by emotion I don't mean hysteria or gross overacting or frenetic little tricks—Springfield is far too good and intelligent a singer to indulge in any of that nonsense. But perhaps in her efforts to avoid grandstand plays she's forgotten that audiences really do respond to genuine, active attempts to engage their feelings. She also denies emotion on another level by refusing to share any strong, personal views that she may have about her material. No matter how good she sounds—and she sounds very good, even in such clinkers as Melissa Manchester's Be Somebody or Barry Gibb's livelier Save Me, Save Me—listening to Dusty Springfield is like talking to someone whose eyes, you gradually realize, have no pupils. . . .

RECORDING OF SPECIAL MERIT

THE YANKEES: High 'n Inside. The Yankees (vocals and instrumentals); vocal and instrumental accompaniment. Take It Like a Man; Everyday I Have to Cry; Bad Boy; Lovesick; (Can't Stop) Talkin' 'bout My Baby; and seven others. Big Sound BSLP-037 $7.98.

Performance: World Series caliber
Recording: Excellent

Now here's an album that's a triumphant exception to an old rule: rock critics are lousy music critics, and their records are generally the pits. The Yankees, you see, are the brainchild of Jon Tiven, a former critic and now head honcho of the feisty, independent Big Sound label. Surprise, surprise: his band is terrific, and so is their debut album.

As might have been surmised, "High 'n Inside" is sort of a pop revival effort: Jon has soaked up all the Sixties influences one would expect from an avowed Small Faces freak, and his choice of cover material—a midperiod Motown classic, Larry Williams' Bad Boy (more familiar from the Beatles version), and an unfamiliar, excellent tune by r-&-b cult figure Arthur Alexander—is indicative of his excellent taste. But this is not a revivalist nostalgia piece; in fact, there's real originality and freshness here. The production, in particular, is in an extremely modern-sounding neo-psychadelic vein rather than the Rundgrenesque purist Power Pop style one might anticipate. Further, Jon's singing is disarmingly unaffected, his guitar work combines flash with substance, and his songs, especially Take It Like a Man and Boys' Night Out, have as much sass and melodic winsomeness as anything churned out by his idols—plus some unidentified something of their own that I find irresistible.

The wrap-up is that the Yankees make Dwight Twilley, say, or Pezband sound positively effete in comparison. This is an extraordinarily auspicious first effort (to borrow a baseball metaphor) debut, and, as they used to say back in the Bronx, just wait till next year.
So long out of practice with this level of artistry, and therefore not completely trusting what I heard with my own ears, I played "As Time Goes By" for a young couple, just into their thirties, with tastes formed by rock but now trying mightily to get their heads around to "advanced" c&w. She, after a few guilty glances at him, slowly assumed the dreamy, abstracted look that indicates someone has left the room and joined the singer on the recording. He, trendiest of the trendies, with a most abstracted look that indicates someone has been talking to his parents or Dylan. Finally, with a burst of anger, he said, "Look, what do you expect from me? Nobody ever told me about this. Nobody ever told me about Dick Haymes, all I ever heard was Sinatra—and my parents liked him!" I suppose exposure to real excellence just might trigger that kind of frustration if you suddenly discover you've been swimming for years in a sea of mediocrity.

Of the cruellest, and perhaps truest, comment made about America lately is that we passed from barbarism to decadence without any significant pause for civilization. But not quite true. We did have a "golden age" of pop music as civilized and sophisticated as anything ever produced by any Western country, and for about forty years it was probably the most popular and universally identifiable American cultural export. One sign of decadence throughout history has been that people are no longer able to repair and maintain their own monuments because they've lost the skills to do the work. At the moment the most popular singing groups in America are the ones by Lennox, McGlohon Trio and the production fit Haymes like a second, glistening skin.

Another thought: Sinatra recently scheduled a recording session and then backed out, leading one to believe that he's finally faced what everyone else has known for some time, that his voice has become a very worn and ragged instrument. Yet his diehard fans are probably not even aware that Dick Haymes is recording, and recording superbly, much of the repertoire that Sinatra is no longer able to handle.

So, if you miss Dick Haymes' "As Time Goes By," don't say nobody ever told you about him, because I just did. And don't ever pass up anything merely because your parents liked it: hell, they probably liked you too.

—Peter Reilly

DICK HAYMES: As Time Goes By. Dick Haymes (vocals); Lennox McGlohon (piano); Jim Lackey (drums); Rusty Gidley (bass). That's All; As Time Goes By; I'M Glad There Is You; While We Were Young; Emily; This Masquerade; Somewhere in the Night; Last Night When We Were Young; I Love You Samantha; Here's That Rainy Day; The Way We Were; But Beautiful. Ballad DISC 5548 (from Ballad Records, c/o Roger L. Dooner, 2951 Tyler Street, N.E., Minneapolis, Minn. 55418).
RECORDING OF SPECIAL MERIT

GEORGE AND IRA GERSHWIN: Songs. Joan Morris (mezzo-soprano); William Bolcom (piano). I'll Build a Stairway to Paradise; Love Walked In; How Long Has This Been Going On?: My Cousin in Milwaukee; Nice Work If You Can Get It; The Man I Love; and eight others. NONESUCH H-71358 $6.98.

Performance: Winsome and witty
Recording: Very good

As those of us who have been enjoying William Bolcom's Nonesuch record of George Gershwin's piano music already know, there isn't a pianist alive today who understands that idiom better or interprets it with more contagious verve. Meanwhile, Bolcom's wife, Joan Morris, has been gaining an ever-widening public with her arch, subtly mocking treatments of turn-of-the-century popular songs. And how have they fared in pooling their talents for a go at the songs of the Gershwin brothers? It couldn't have worked out better.

Morris, who sings all the introductory verses as well as the refrains, applies her crystal-clear mezzo voice with humor and intelligence to Ira Gershwin's lyrics. She is at her best when there's some wit to be projected (By Strauss, The Lorelei, They All Laughed, My Cousin in Milwaukee), but she also has a way of seizing hold of a serious number such as The Man I Love or Love Walked In, or even the helpless-little-girl sentiments of Someone to Watch Over Me, and making it seem moving without ever working herself up into an interpretive frenzy. Bolcom is right in there with her all the time, giving precisely the necessary lift to the rhythm of Just Another Rhumba, the sparkle of Fascinating Rhythm, and the bluesy lilt of How Long Has This Been Going On? It's a paradox: by singing and playing these songs just as they were written, with no attempt to change the beats or bring the lyrics up to date, Morris and Bolcom make every one of these old favorites sound brand new. To add to the fun, a text of the lyrics is enclosed.

GENE KELLY: Song and Dance Man. Gene Kelly (vocals); various orchestras. Ida, Sweet As Apple Cider; Moonlight Bay; Doin' the New Low-Down; The Daughter of Rosie O'Grady; and six others. DRG/STET DS 15010 $8.98, © DS-C 15010 $8.98 (plus $1.25 postage and handling from DRG Records, 200 West 57th Street, New York, N. Y. 10019).

Performance: For old-movie fans
Recording: Okay

Gene Kelly and Fred Astaire were the only men to rise to star rank as dancers in an era when any man who lifted his leg higher than stirrup level was considered effeminate.

(Continued overleaf)
While Astaire had snake-like speed and throwaway elegance, Kelly always made sure to hit the floor hard. His balletic movements had a macho, muscular flex and perspiring quality to them that seemed as at home in a gymnasium as on a sound stage.

"Song and Dance Man" is a collection of Kelly's vocal performances from various films, though not from the most memorable ones like *On the Town*, *An American in Paris*, and his masterpiece, *Singing in the Rain*. It makes a nice enough souvenir, but it won't seem like much unless you've seen the man dance. In contrast to Astaire, who makes lyrics dance for him and whose feather-light voice can do small miracles with anything he touches, Kelly brings overwhelming intensity and gritting concentration to bear on even such lighthearted songs as *My Baby Just Cares For Me and Ida*, *Sweet as Apple Cider*, with the result that they cry uncle long before the end of the first chorus. The best track here is *Long Ago and Far Away* from *Cover Girl*, a film Kelly did with Rita Hayworth. His raspy, whipsey attack and his intensity make beautifully with this lovely Jerome Kern/Ira Gershwin ballad. This album is worth having if you're an old-movie freak like me. — P.R.

**RECORDING OF SPECIAL MERIT**

**LEAVE IT TO JANE** (Jerome Kern—Guy Bolton-P.G. Wodehouse). Kathleen Murray, Dorothy Greener, George Segal, Jeanne Allen, Art Matthews, Angelo Mango, Ray Tudor (vocals); chorus and orchestra, Joseph Stecko cond. DRG/Stet DS 15002 $8.98 (plus $1.25 postage and handling from DRG Records, 200 West 57th Street, New York, N.Y. 10019).

**Performance:** Delightful

**Recording:** Excellent

Jerome Kern wrote the score of *Leave It to Jane* (book by Guy Bolton and lyrics by P.G. Wodehouse) back in 1917. It was based on *The College Widow*, a play by George Ade. In 1958 I was one of those lucky people who caught the revival of it—here recorded—at the minuscule Sheridan Square Playhouse in Greenwich Village. *Leave It to Jane* was the great grandfather of all those musicals about college football teams. For the revival George Segal, in his first stage appearance, played the inordinately enthusiastic sophomore Ollie Mitchell; Kathleen Murray was the president's daughter, Jane Witherspoon (the one thing can be safely left to); Art Matthews was Billy Bolton, who eventually wins for Atwater; and Dorothy Greener of blessed memory was Flora Wiggins, who helps her mother run a boarding house.

Kern wrote such an exuberant score for *Leave It to Jane* and the revival cast was so talented that the evening was a pure delight, and DRG Records deserves a hug for deciding to reissue the album. Just hearing Dorothy Greener sing *Georgette* makes the whole thing worth owning, and her *Poor Prune* in Act II is a close runner-up. Then there's Just You Watch My Step, The Siren's Song, the title song, The Crickets Are Calling, I'm Going to Find a Girl, and Sir Galahad. It's all as marvelous as it was twenty years ago. — P.K.

**KEITH BARROW: Physical Attraction.** Keith Barrow (vocals); vocal and instrumental accompaniment. *Turn Me Up*; *Physical Attraction*; *Joyful Music*; *Garden of Love*; and four others. **Columbia JC 35597** $7.98, **JCP 35597** $7.98, **JCT 35597** $7.98.

**Performance:** Merely pleasant

**Recording:** Fine

There's no denying Keith Barrow's musicality. He can float his falsetto on top of gliding strings, whisper his way through the sound of a full orchestra, effortlessly sing through even the most complex rhythms. Furthermore, the disco-flavored arrangements here give him all the help a vocalist could ask for.

But Barrow's voice just doesn't have enough range and variety to carry a whole LP. I found myself more involved, for example, with the long orchestral conclusion to *Turn Me Up* and the crisp background vocals (credited to someone called Brandy) in *You Know That You Want to Be Loved* than with the...
Only in two songs did I get even part-way involved with Barrow’s vocal performance: the definitely mainstream pop song *Overnight Success* and the lovely ballad *If It’s Love That You’re Looking For*, where his voice nestles beautifully in a very warm, string-drenched arrangement. “Physical Attraction” is pleasant, but it’s just not physical enough.

**E.B.**

**THE BLACKBYRDS: Night Grooves.** The Blackbyrds (vocals and instrumentals). Happy Music; Gut Level; Walking in Rhythm; and four others. FANTASY F-9570 $7.98, ® 8160-9570H $7.95, © 5160-9570H $7.95.

Performance: Poor
Recording: Good

The selections here are, as the advertisements proclaim, not just “greatest hits” but disco versions of popular Blackbyrds material. The disco variants fall into two categories: either they never get off the ground or they have no beginning, start from the middle, and seem like they’ll never end. This is thin disco and a poor excuse for an album.

**J.V.**

**CHARO: Ole, Ole.** Charo (vocals, guitar); instrumental and vocal accompaniment. Ole, Ole; Stay with Me; Love Boat Theme; and two others. SALSOUL SA 8515 $7.98, ® S8 8515 $7.98, © SC 8515 $7.98.

Performance: Too elegant
Recording: Ditto

Surprisingly, the “Cuchi-Cuchi” girl’s second disco effort (pressed in pink vinyl and packaged in a pink album cover) is elegantly understated. Charo’s breathy voice practically whispers its way through these typically solid Tom Moulton mixes. She’s so sweet, pink, and unobtrusive—even when she’s crooning, in the title song, “When you’re lying next to me/You make the music sing”—that the vocals seem almost like afterthoughts. The album’s musical high point is the wonderful interplay in *Ole, Ole* between acoustic guitar and what sounds like either an electric guitar or a synthesizer, culminating in an excitingly virtuoso guitar solo backed by the disco beat. My other favorite track is the purely instru-
In George Lucas' *American Graffiti* there's a scene in which the coolest greaser in town is cruising the strip in the company, much to his dismay, of a fourteen-year-old buddy-soxer he has accidentally been saddled with. The radio is on, and suddenly there're the Beach Boys doing one of their early hits. The greaser missed as hopelessly old-fashioned (think, for example, of earnest, academic old John Mayall, who for twenty years has been churning out earnest, academic imitations of black urban blues), but it is certainly the most committed revivalist currently working any style you could name. Next to him, in fact, the Forties-swing pastiches of even as skillful an outfit as the Widespread Depression Orchestra sound like the work of studio cats on a busman's holiday. For Gordon, rockabilly is not merely a minor, obscure sub-genre of early rock-and-roll; it is, for all intents and purposes, a religion, and his career is nothing less than missionary work.

I know that sounds, at least on paper, positively deadly, and, in truth, a lot of Gordon's recorded output up till now has been just that. Sure, he knows the stuff cold and obviously loves it, but so does Sha Na Na, and nobody in his right mind has ever accused them of being more than a pale carbon of the Fifties masters they emulate. Gordon's problem was actually a lot bigger since, unlike Sha Na Na, he maintained not the slightest ironic camp distance from the music. Which means, as Billy Altman has observed, that whereas the rockabilly rebels who created this stuff spent most of their careers unconsciously trying to work the rawness out of their material, Gordon, with his note-for-note remakes, was consciously struggling to work it back in.

But not any more, because "Rock Billy Boogie" is the first of his albums to strike these ears as totally natural and convincing. Why now? Maybe it's simply a question of focus; guitar whiz Chris Spedding seems finally to have whipped the band into shape in a way the departed Link Wray, for all his First Generation credentials, never did. Maybe it's simply that the initial shock of hearing Gordon re-create this stuff so singlemindedly has worn off enough that we can listen to it on its own terms without the ghosts of Billy Lee Riley and Charlie Feathers hovering over our shoulders. Or maybe it's just that he's inspired (need I tell you why?) by being on the RCA label. Who knows? I do know, though, that this album raves ferociously from start to finish and that it positively jumps out of the radio, which is the acid test for really vital rock-and-roll.

Perhaps it's a fluke, a one-shot, secondhand masterpiece comparable to the single brilliant blues album John Mayall did with Eric Clapton years ago. Or perhaps it's the beginning of a new rock-and-roll legend that will ultimately outstrip those of Gordon's influences. Frankly, I don't care either way, and neither should you. Rather, you should grab a copy of "Rock Billy Boogie" immediately, and, in the words of Elvis' *Millie Blues*, "get real, real gone for a change." You'll be better for it.

ROBERT GORDON: *Rock Billy Boogie*. Robert Gordon (vocals); Chris Spedding (guitar); Rob Stoner (bass); other musicians, *Rock Billy Boogie*; *Love My Baby*; *I Just Found Out*; *All By Myself*; *Black Slacks*; *The Catman*; *It's Only Make Believe*; *Wheel of Fortune*; *Am I Blue*; *Walk On By*; *I Just Met a Memory*; *Blue Christmas*. RCA AFL-13294 $7.98, ® AFST-13294 $7.98, ® AKFL-13294 $7.98.

RECORDING OF SPECIAL MERIT

LEMON. Lemon (vocals and instrumental). A-Freak-A; *Hot Bodies; Chance to Dance; Inside My Heart*; and two others. PRELUDE PRL 12162 $7.98, © PRL8 12162 $7.98, © PRL9 12162 $7.98.

Performance: Topflight MOR disco

Recording: Fine

At first this sounded like it was going to be the record of the year. A-Freak-A and the first half of *Hot Bodies* are very upbeat and lots of fun. Too soon, however, a sameness settles into the sound and Lemon commands attention only at moments. But those moments are important, for they are uncommonly musical for disco. The vocal whoops in Freak-On, the almost-Dixieland cantina-band sound in Hot Bodies, and especially, the intricate rippings of vocals that lead into Lemon's big hit, *Chance to Dance*, are simply wonderful. In a way, this album could be educational for serious pop-music fans who still believe that disco...
cannot be musically rich. Lemon's six members all sing, and they play a variety of instruments (flute, tuba, conga, vibes, and banjo), but the results are not ambitious, even innovative. This is middle-of-the-road disco of the highest order.

E.B.

RECORDING OF SPECIAL MERIT

MIDNIGHT RHYTHM. Midnight Rhythm (vocals and instrumentals). Workin' & Slavin' ('I Need Love'); Midnight Rhythm: Climbing Rushin' to Meet You. ATLANTIC SD 19214 $7.98, © TP 19214 $7.98, © CS 19214 $7.98.

Performance: Heavy disco

Recording: Fine

This is the album to play when you want Aunt Tillie from Philly to hear what it's like in the top discs at 3:30 in the morning. Workin' & Slavin', which pits male voices and a piling driving beat against a female chorus repeating "I need love," sets up the album's dynamics. This is very heavy, unrelenting disco music, designed for the kind of dancing that comes from the gut. The same dynamic tension carries through all of Workin' & Slavin's nine mostly instrumental minutes. Sometimes it's carried by a picked-guitar brightness against the bass, or a smooth violin line against the driving beat, or, finally, a crashing piano competing with the stomping tempo. When all of this dissolves back into the vocal at the end, the release is powerful.

Side two is an unbroken fifteen-minute medley. Again, the tempo is back-breaking fast. I'm sure that Richie Rivera, the disco-jockey who is credited with the mix, has introduced some other material in the middle when he plays it at Flamingo, or else the patrons would collapse from exhaustion. There's a limit to how much reaching for the ultimate you can do, even with voices constantly exhorting you to "climb...climb...climb." Midnight Rhythm makes excellent manic disco, and they have used virtually every trick of the disco art for this debut album. Don't start an evening with it, but by all means work it in when your party is at white heat.

E.B.

PHREEK. Phreek (vocals and instrumentals). Weekend; May My Love Be with You; Much Too Much; and three others. ATLANTIC SD 19213 $7.98, © TP 19213 $7.98, © CS 19213 $7.98.

Performance: Music A, dance C

Recording: The best

I like disco recorded like this: shiny bright, with every quiver of the violins, every brush on the cymbals, every background piano chord, and even the words up front all as sharp as a tack. Wait for the Waitin' for the Weekend ("This time it's party time") to see how much music can be gotten onto one LP... and how much fun the result can be for listening. Atlantic's engineers have done themselves proud.

But high as Phreek's debut album's musical and engineering values are, as dance music it loses some points. I loved listening to the solo vocalizing of Leroy Burgess and Venus Dodson and to the dynamite synthesized piano work in Everybody Loves a Good Thing, but the complexities make it hard to concentrate on dancing. Similarly, the monologue in May My Love Be with You would leave a lot of dancers shuffling from foot to foot. The best
Cleaning your records is only half the battle.

What do you suppose happens when the hardest substance found in nature—diamond—is dragged through the soft, intricate vinyl canyons of a phonograph record at a force which produces acceleration that exceeds 1000 G's?

Friction and wear.

From the very first time you play a record, a process of decay takes place. The delicate high frequency sounds are the first to be impaired. Then the midrange. With every play, details are lost and noise becomes more pronounced, eventually rising to be impaired. Then the midrange. With every play, details are lost and noise becomes more pronounced, eventually rising to be impaired.

Regular cleaning of your records is important and necessary—to remove the dust and oily films that can further mar performance—but it's simply not enough. The best way to preserve the music on your records is Sound Guard® Record Preservative.

Sound Guard is a revolutionary dry lubricant that virtually eliminates record wear. It's so thin that it will not affect the sound of a new record. It's so effective that a treated record may be played 100 times with no audible degradation of performance or increase in surface noise.

A built-in anti-static property helps keep dust off your records between cleanings.

It's true that it requires a little extra effort and expense to protect your records with Sound Guard. But when you add up the investment you've made in your stereo system and record collection, you really can't afford not to do it.

Sound Guard. Everything else is a lot of noise.

Sound Guard® Total Record Care System

Sound Guard is Ball Corporation's registered trademark.

CIRCLE NO. 6 ON READER SERVICE CARD

CARLA BLEY: Musique Mécanique. Carla Bley (organ, piano); the Carla Bley Band, 440; Jesus Maria and Other Spanish Strains; Musique Mécanique I; Musique Mécanique II (At Midnight); Musique Mécanique III. Watt

Recording of Special Merit

CARLA BLEY: Musique Mécanique. Carla Bley (organ, piano); the Carla Bley Band, 440; Jesus Maria and Other Spanish Strains; Musique Mécanique I; Musique Mécanique II (At Midnight); Musique Mécanique III. Watt

Recording: Very good

Performance: Images

Recording: Very good

Performance: Further reflections

Recording: Very good

Ran Blake has always been a highly original composer and pianist, so it is not surprising to find him also pioneering a totally new album concept: two simultaneous releases containing different interpretations of the same program. In other words, "Take Two" features second takes of the eleven selections heard on "Take One"; since they're on separate discs, the two versions of each can be enjoyed without having to hear one right after the other. This concept would not work for everyone, but Blake's fertile musical mind has here created what amounts to two quite diverse albums. Typically for Blake, the repertoire covers a broad spectrum: from Silent Night (yes, that one) to Sherman Myers' 1926 hit Moonlight on the Ganges, Kern's Ol' Man River, and scores of less familiar themes, including four Blake originals. Originals? Well, even the oldest warhorse takes on new meaning as Ran Blake, in his slightly Thelonious Monkish way, gives it a surrealistic touch. Of course I am recommending both releases, though I do find the total of thirty minutes of music per disc rather low considering the $7.98 price.

C.A.
WATT/9 $7.98 (from New Music Distribution Service, 6 West 95th Street, New York, N.Y. 10025).

Performance: Excellent
Recording: Very good

So eclectic is Carla Bley's music that it really defies classification. She is generally associated with jazz, as are a number of musicians who regularly work with her, but her palette holds a veritable rainbow of colors that she mixes freely and, at times, boldly. Thus this newest offering, "Musique Ménagère," contains shades of Kurt Weill's Berlins, ChucK Berry's Memphis, and Stan Kenton's Hermosa Beach applied to a broad canvas to form—with sardonic wit—what I suppose is ultimately a portrait of Carla Bley. Except for trombonist Roswell Rudd's vocal on Musique Ménagère II (At Midnight), I love the way this album moves body and soul, and if you have liked Carla Bley's previous Watt releases, it's a safe bet that this, too, will appeal to you.

JUNE CHRISTY: Improv a. (see Best of the Month, page 95)

RECORDING OF SPECIAL MERIT

JIMMY GIUFFRE/LEE KONITZ/BILL CONNORS/PAUL BLEY: IAI Festival. Jimmy Giuffre (flutes, clarinet, soprano and tenor saxophones); Lee Konitz (alto saxophone); Bill Connors (guitar); Paul Bley (piano). Blues in the Closet; Spanish Flames; The Sad Time; With Nothing in your Pocket; Rags in the Closet; Ellington's Creole Rambler; Take Five; Konitz; Fantasia; The Great Dictator. OZ; Manganese; Smoke Gets in Your Eyes; The Last Time I Saw Paris; The Street Cries; Another Day, Another Dream. Milestone Jazzstars: In Concert. These recordings were made for the French Swing label in Paris on June 7, 1954. Monk had already made numerous recordings on his own (for Blue Note and Prestige), but this was his first solo effort, an interesting, revealing study of a piano style about which controversy raged at the time. What sounded eccentric in 1954 has long since become extremely accessible, however, and Monk was later to make more successful solo excursions on Riverside and Columbia. This is nevertheless a worthy addition to anyone's Monk collection, though the packaging and poor technical quality does not do the music justice.

First there is the disc itself, which is thick and unnecessarily noisy. The sleeve—which, like the label, misspells Monk's name and two of the titles—has notes that not only are pasted up crookedly, but also seem to have been acquired that way. They refer to numerous Monk albums, but avoid any mention of this one. Why? Because they (the notes) have been photographed and lifted directly from a recently published book, The Illustrated Encyclopedia of Jazz by Brian Case and Stan Britt (Harmony Books, New York, 1978), with no source credits. It's a shame that Monk's fine music should come in such a shoddy package.

C.A.

DAVID "FATHEAD" NEWMAN: Keep the Dream Alive. David "Fathead" Newman (flute, saxophone); vocal and instrumental accompaniment. Keep the Dream Alive; Desi- ny; Silver Morning; Funky Beat; Good As Good As (Continued on page 144)

JUNE CHRISTY: Improv a. (see Best of the Month, page 95)

RECORDING OF SPECIAL MERIT

JIMMY GIUFFRE/LEE KONITZ/BILL CONNORS/PAUL BLEY: IAI Festival. Jimmy Giuffre (flutes, clarinet, soprano and tenor saxophones); Lee Konitz (alto saxophone); Bill Connors (guitar); Paul Bley (piano). Blues in the Closet; Spanish Flames; The Sad Time; With Nothing in your Pocket; Rags in the Closet; Ellington's Creole Rambler; Take Five; Konitz; Fantasia; The Great Dictator. OZ; Manganese; Smoke Gets in Your Eyes; The Last Time I saw Paris; The Street Cries; Another Day, Another Dream. Milestone Jazzstars: In Concert. These recordings were made for the French Swing label in Paris on June 7, 1954. Monk had already made numerous recordings on his own (for Blue Note and Prestige), but this was his first solo effort, an interesting, revealing study of a piano style about which controversy raged at the time. What sounded eccentric in 1954 has long since become extremely accessible, however, and Monk was later to make more successful solo excursions on Riverside and Columbia. This is nevertheless a worthy addition to anyone's Monk collection, though the packaging and poor technical quality does not do the music justice.

First there is the disc itself, which is thick and unnecessarily noisy. The sleeve—which, like the label, misspells Monk's name and two of the titles—has notes that not only are pasted up crookedly, but also seem to have been acquired that way. They refer to numerous Monk albums, but avoid any mention of this one. Why? Because they (the notes) have been photographed and lifted directly from a recently published book, The Illustrated Encyclopedia of Jazz by Brian Case and Stan Britt (Harmony Books, New York, 1978), with no source credits. It's a shame that Monk's fine music should come in such a shoddy package.

C.A.

DAVID "FATHEAD" NEWMAN: Keep the Dream Alive. David "Fathead" Newman (flute, saxophone); vocal and instrumental accompaniment. Keep the Dream Alive; Desi-

ny; Silver Morning; Funky Beat; Good As Good As (Continued on page 144)
It’s disturbing to realize that a generation of people now in their twenties have only vaguely heard of Louis "Satchmo" Armstrong (1900-1971). His titanic contributions to jazz and the warmth of his personality as an entertainer made him a national institution during most of his lifetime. Whether his reputation will survive and his memory be revered by others besides jazz aficionados depends on how extensively this new generation is exposed to his recordings.

Two important retrospective albums were issued after his death: "The Genius of Louis Armstrong: 1923-1933" (Columbia G 30416) and "Young Louis Armstrong: 1932-1933" (RCA Bluebird AXM2-5519), both covering sides. Overall, though, the package is most impressive, and I earnestly hope it will have what you leave out is almost as important as what you put in, especially with the Hot Five sessions. The selections were made by a committee of jazz scholars, and, as is usual in such cases, individual listeners may differ with some of their choices (with Armstrong what you leave out is almost as important as what you put in, especially with the Hot Five sides). Overall, though, the package is most impressive, and I earnestly hope it will have substantial school and library sales so future generations can hear who Armstrong was.

If any youngsters happen to be reading this and are wondering what all the fuss is about, it should be stated unequivocally that Louis Armstrong was the single greatest instrumentalist in the history of jazz, bar none, and he is so recognized by jazz musicians of all generations. If a "genius" is someone who creates something so original that all subsequent efforts in the same field by anyone else must be judged against it, then Armstrong was surely a genius. Miles Davis said it simpler and better: "You can’t play anything on a horn that Louis hasn’t played."

Louis Armstrong was born in New Orleans on July 4, 1900, and by 1923 he was in Chicago playing second cornet in the Creole Jazz Band led by his idol and surrogate father Joe "King" Oliver. Within three years every jazz musician of the day recognized him as the greatest musical talent the genre had produced or was likely to produce.

Armstrong had enormous lung and lip power, immense stamina, and the ability to casually toss off F’s and G’s just for the hell of it, though he thought the "prettiest notes" were in the middle register. His imagination was limitless and astonishing, and the combination of his sensitivity and technique was overwhelming. His artistic judgment on what a tune needed—or deserved—was infallible. Give him a so-so number, and he would transform it with his virtuosity—and his generosity; he had a lot to give, and he always gave it. Of course, he relished superior melodies, especially ballads, which he stroked and embellished with his horn and his voice. And while it was his artistic business to take liberties with a tune, he never betrayed one, for he had a conscience. He was a gentleman.

He was also a revolutionary. By the time of the Hot Five sessions (1925-1928) Armstrong had destroyed the old concept of ensemble playing by creating a new and commanding role for the soloist; in doing so he liberated all future generations of jazz musicians, not only trumpeters. His only real artistic competition came from Bix Beiderbecke, whose classical tone and romantic, introspective ideas contrasted with Armstrong’s bravura approach. But they respected, even adored each other. In his reminiscences, Armstrong spoke at length about only two other horn players: Joe Oliver, whom he surpassed, and "my boy Bix." (At a rehearsal of the Paul Whiteman orchestra, which featured him, a joyful Bix told arranger Bill Challis: "I was at this club last night and Louis saw me and said, 'Hello, King.' ")

Armstrong’s career lasted until he died. He was a furious worker, unhappy when he wasn’t on the road and playing for people, and he remained popular until the very end. In 1965, at the age when most men retire, he knocked the Beatles out of the number-one slot on the charts with his vocal rendition of "Hello, Dolly!" That was typical of "Satchmo." He was a genius, and what could one do but accept him, marvel at him, and—most of all—enjoy him?

But, institution that he was, he was also very much a down-to-earth, honest man who led a rather adventurous life. His first wife
was a razor-slinging whore, and he once spent ten days in a Los Angeles lock-up for possession of marijuana (in later years he opposed the U.S.'s stiff anti-pot laws, though his own smoking days were long past and he never played while high). He took off on a quick tour of the South in the Thirties, after Dixie gangsters pulled guns on him and told him to take his band to New York. He canceled a 1954 State Department-sponsored goodwill tour overseas to protest the Little Rock school-desegregation fracas, saying, "If the government won't back up my people, the government can go to hell." He scandalized the jazz world by announcing that he admired Guy Lombardo's sax section, and he used—and recommended—a laxative powerful enough to make lesser souls and alimentary canals shudder.

Man and genius, his life was music. For both the new and the already familiar listener there are dozens of treats in the "Giants of Jazz" collection, some of them rare, such as the 1925 Cake Walking Babies from Home and two examples of the furtive 1934 Paris session, On the Sunny Side of the Street and Song of the Vipers. And I would wager that no one, young or old, could be unexcited or unmoved by the many Armstrong classics included here: Willie the Weeper, West End Blues, Tight Like This, Potato Head Blues, Mahogany Hall Stomp, Some Sweet Day, Pennies from Heaven, . . . well, enough talking. It's time to listen.

Buyers of this set, by the way, also receive a copy of Who's Who of Jazz by the British trumpeter and historian John Chilton, in a new edition that does not contain the splendid photograph section of the 1972 original. This "Time-Life Records Special Edition," dated 1978, does contain new material, but it's set in small type that may give the reader squint-eye. However, it's great fun to check the entries on the many brilliant musicians who played with Armstrong on the recordings in this set. Louis himself would have had a good time looking up old friends and bandstand mates, reading and chuckling, "Yeah, man." —Joel Vance

GIANTS OF JAZZ: Louis Armstrong. Louis Armstrong (cornet, trumpet, vocals); other musicians: Dippermouth Blues; Copenhagen; Cake Walking Babies from Home; Cold in Hand Blues; My Heart; Gut Bucket Blues; Heebie Jeebies; Cornet Chop Suey; Static Strut; Georgia Bo Bo; Willie the Weeper; Wild Man Blues; Potato Head Blues; Ory's Creole Trombone; I'm Not Rough; Savoy Blues; West End Blues; Muggles; Tight Like This; Knockin' a Jug; Mahogany Hall Stomp; Ain't Misbehavin'; Black and Blue; That Rhythm Man; Some of These Days; Dallas Blues; My Sweet; Sweethearts on Parade; When It's Sleepy-Time Down South; Blue Again; Star Dust; Some Sweet Day; On the Sunny Side of the Street; Song of the Vipers; Jubilee; When the Saints Go Marching In; Marie; 2:19 Blues; Pennies from Heaven; That's for Me. TIME-LIFE STL-J01 three discs $19.95, @ RUAAQ7 $21.95, @ RVAQQ6 $21.95 (plus $2.00 handling charge from Time-Life Records, Time & Life Building, Chicago, I1. 60611).

One for your head.

"An Evening with Herbie Hancock and Chick Corea." Simply, it was a night when two gifted artists (and close friends) sat down at two grand pianos. But what came out was more than just great music. It was magic. And it's captured forever on this extraordinary two-record set.

One for your feet.

"Feets Don't Fail Me Now." Herbie Hancock's new solo album marks a timely change in his musical direction. His fiery keyboard rhythms and electrifying vocoder vocals drive a contagious beat down to your feet. Uncontrollable dancing pleasure. An unbelievable listening experience.

Herbie Hancock. He's got you covered from top to bottom.
On Columbia Records and Tapes.

"Columbia," are trademarks of CBS Inc. © 1979 CBS inc.
You Are; and two others. Prestige P-10106 $7.98.

Performance: Faking it
Recording: Good

David "Fathead" Newman walks through this pop-jazz session playing safe solos, but every once in a while he slips in the kind of masterly phrase that says, "That's what I'd do all the time if I didn't have to earn a living." The album opens with the drummer playing a disco beat, and Newman's flute solo is indistinguishable from Herbie Mann's comfortable mediocrity. However, Newman sometimes fleetingly declares his independence from the dull proceedings, and those are moments worth hearing. Too bad there are so few of them.

J.V.

DAVE PELL: Dave Pell's Free Conference. Dave Pell, Bob Cooper, Gordon Brisker (tenor saxophones); Harry "Sweets" Edison (trumpet); Bill Hood (baritone saxophone); Arnold Ross (piano); Al Henrickson (guitar); Frank De La Rosa (bass); Bill Bradley Jr. (drums). I Never Knew; One O'Clock Jump; Taxi War Dance; Lester Leaps In; Just You, Just Me; and five others. GNP/Crescendo GNP 2122 $7.98.

Performance: Son of Supersax
Recording: Very good

This is an album of Lester Young solos multiplied by four. Turning improvised individual statements into ensemble charts is not a new idea; well-known solos have crept into orchestral arrangements from time to time over the years, and Supersax—the group that emerged on Capitol in 1972—was based entirely on the concept of harmonizing Charlie Parker solos. It is a technique that can work beautifully when used in moderation as part of an otherwise fresh arrangement, but it quickly wears thin as a main ingredient.

Here Dave Pell takes some familiar Lester Young solos, combines them with lesser-known ones, and with his colleagues turns them all into smooth ensemble exercises with every note in its proper order but without the tone and character that lent such distinction to Young's originals. This is not the fault of arranger Bill Holman but simply the nature of the beast. A solid Basie-ish rhythm section arranger Bill Holman but simply the nature of the Basie-ish rhythm section and occasional comments by trumpeter Harry "Sweets" Edison (who served in Basie's band with Young) make this a very pleasant way to experience a good deal of a good record. Overall, a melodic, enjoyable, and well-recorded album.

Recording: Good
Performance: Rough romp
Recording: Good

You would think the liner notes for this album had been translated from the Bulgarian by a monoglot. Okay, so who reads the things anyway? Even the most horrendous notes can't spoil the pleasure of an album if the music inside is good. I'm sorry to say that is not the case here: trumpeters Dizzy Reece and Ted Curson are a terrible mismatch.
STereo Review MARKet place

REGULAR CLASSIFIED: COMMERCIAL RATES: For firms or individuals offering commercial products or services, $2.50 per word. Minimum order $37.50.

EXPAND-AD CLASSIFIED RATE: $3.75 per word. Minimum $56.25. Frequency discount: 5% for 6 months; 10% for 12 months paid in advance. PERSONAL RATE: For individuals with a personal item to buy or sell, $1.50 per word. No minimum! DISPLAY CLASSIFIED: $1.00 per word. All display ads are acknowledged. Payment must accompany copy except when ads are to be billed on credit cards - American Express, Diners Club, Master Charge, Visa.

GENERAL INFORMATION: Ad copy must be typewritten or clearly printed. Payment must accompany copy except when ads are to be billed on credit cards - American Express, Diners Club, Master Charge, Visa. Phone: 212-725-3924.

---

STereo TV

The TE TELESCOPE easily connects to any TV and stereo system. Using only common 300-ohm speaker cords, you can enjoy full stereo sound from your existing TV. Send $3.00 for full information. With the optional 300-ohm output transformer, you can use the TE TELESCOPE in any TV set, even tube models. No equipment changes required! Send $3.00 for full information.

---

Get QUALITY HIFI with PROFESSIONAL ADVISE call the Pros at Audio Concepts

Franchised Dealers For JBL, AR, TECHNICS, PRO, GREAT AMERICAN SOUND, MORDAUNT-SEIB, BOSE, DALGLISH, AUDIOPHILE, ADMIRAL, KENWOOD, E.S., MAXELL, DISCWASHER, MOD, YAMAHA, ONKYO, OPTICON, SATIN ADC, CUPHASE, PHASE LINEAR, TANDBERG, AKG, DBX, WM LABS, SANSUIS, MORD ACoustics, HAYBRAND, KARDON, AudioPulse, STAX, DENON, HAEFFLER, G.A.S., OTHERS.

Free freight on most orders. Call us TOLL FREE. It's worth it!!!

(800) 423-4170

Audio Concepts

1127 W. Huntington Dr., Arcadia, CA 91006
(213) 445-3663

SAVE 50%. Build your own speaker system. Write: McGee Radio Electronics, 1901 McGee Street, Kansas City, Missouri 64106.

AUDIOPHILES: HIGH FIDELITY COMPONENTS! Bose, Tandberg, Revex, Nakamichi, Yamaha, Crown, Lux, Infinity, Adient. SAE, AKI, AR, JVC, others. Six time-delay systems. Low, low, low! Price America (Virginia) 804-753-3820. Hours: 10AM - 6PM. Call today for literature and low prices!

LOWEST PRICES! Bose, SAE, DBX, Nakamichi, and more. Dynamic Sound, Box 168A, Starkville, MS 39759. (601) 323-0750 MF 1-9.

WE'VE SPENT more than two years designing and developing the best cabinets and racks for housing stereo components. Send in your name and address and we will send you a FREE catalog.

Cass, 8450 Marsh, Algonia, MI 48001. ALL NEW FOR '79? AW's buyers guide consisting of thousands of stereo components, their descriptions, suggested retail prices and the confidential dealer costs. We guarantee the edge that can save you hundreds, possibly thousands. As an added value, you can order top name components thru us at drastically reduced prices. Send $5.00 today to Audio World Research, Box 29025, Thornton, CO 80229.

---

THE UKITS! Speaker kits that...

■ Don't LOOK like kits!
■ Don't Sound like kits!
■ Just SAVE like kits!

Build your own speakers - Save 50% or more. No soldering required!
■ FREE KIT BROCHURE - I'm interested - send me your free 8-page brochure (kits under $55.00 each).

■ $1.00 Catalog/Manual - Give me all the details - send me your comprehensive manual on speaker kits, crossover, basic components and engineering data with "How-to-do-it" article by noted speaker designer John Hoge. $1.00 enclosed.

■ Comprehensive test report MSR INTEGREX, Box 747, Haverford, PA 19083.

■ ALL HIGH FIDELITY ENTHUSIASTS. Send self addressed, stamped envelope to: AWR, Box 29025, Thornton, CO 80229.

CERTIFIED AUDIO CONSULTANT Home Study Hi-Fi Course Available. Send $5.00 for information. Includes plenty of audio technical yearbook, 29 sample lessons and application for membership in Society of Audio Consultants. Write: SAC, P.O. Box 552, Dept. SR, Beverly Hills, CA 90213.

---

SANSUI and PICKERING! Below mail order prices! Send to: GSH Super Sound, P.O. Box 86, Eden, N.C. 27728.

SANSUI and PICKERING! Below mail order prices! Send to: GSH Super Sound, P.O. Box 86, Eden, N.C. 27728.

---

WRITE US and WE'LL SEND YOU THE BEST CATALOG YOU EVER READ!

No kidding. Speakerlab's catalog took longer to write than some of our competitors have been in business. In fact, we created an industry by building great loudspeakers for people who want to afford great speakers. Our catalog is an invaluable manual to help you understand loudspeaker function and design. And, it will introduce you to the finest speaker systems made anywhere... with the strongest warranty guarantees. Find out for yourself. FREE, that is. Write now. Right now.

Speakerlab
Dept. C-SR, 725 North Northlake Way Seattle, WA 98103

SANSUI and PICKERING! Below mail order prices! Send to: GSH Super Sound, P.O. Box 86, Eden, N.C. 27728.

SANSUI and PICKERING! Below mail order prices! Send to: GSH Super Sound, P.O. Box 86, Eden, N.C. 27728.

---

The SPLOTTER 2 easily connects to any TV and stereo system. Using only common 300-ohm speaker cords, you can enjoy full stereo sound from your existing TV. Send $3.00 for full information. With the optional 300-ohm output transformer, you can use the SPLOTTER in any TV set, even tube models. No equipment changes required! Send $3.00 for full information.

---

NEEDLE IN A HAYSTACK specializes in stereo styli and cartridges, accessories and special albums. All major brands and many hard-to-find replacements available. Free catalog. Dept. S., P.O. Box 17435, Washington, D.C. 20041.

BARCLAY RECORDING & ELECTRONICS - Send $2.00 for equipment catalog and component evaluation manual. 233 East Lancaster Avenue, Wynnewood, PA 19096. (215) 667-3048 or 649-2065.

---

EQUIPMENT

STereo TV

The TE TELESCOPE easily connects to any TV and stereo system. Using only common 300-ohm speaker cords, you can enjoy full stereo sound from your existing TV. Send $3.00 for full information. With the optional 300-ohm output transformer, you can use the TE TELESCOPE in any TV set, even tube models. No equipment changes required! Send $3.00 for full information.

---

SANSUI and PICKERING! Below mail order prices! Send to: GSH Super Sound, P.O. Box 86, Eden, N.C. 27728.

SANSUI and PICKERING! Below mail order prices! Send to: GSH Super Sound, P.O. Box 86, Eden, N.C. 27728.

---

WRITE US and WE'LL SEND YOU THE BEST CATALOG YOU EVER READ!

No kidding. Speakerlab's catalog took longer to write than some of our competitors have been in business. In fact, we created an industry by building great loudspeakers for people who want to afford great speakers. Our catalog is an invaluable manual to help you understand loudspeaker function and design. And, it will introduce you to the finest speaker systems made anywhere... with the strongest warranty guarantees. Find out for yourself. FREE, that is. Write now. Right now.

Speakerlab
Dept. C-SR, 725 North Northlake Way Seattle, WA 98103
SUPER BASS!!


AMERICA'S LOWEST PRICES! Your audio and video needs cannot be served better ANYWHERE. We have a stunning selection, featuring numerous incredibly discounted brands.

STELLAR SOUND, 6260 Melody Lane, Suite 1024, Dallas, TX 75231. (214) 368-7197.

TAPE AND RECORDERs

GOLDEN AGE RADIO—Your source for radio tapes.

Free catalog. Box 25215-TA, Portland, Oregon 97225.

OPERA CLASSICAL MUSIC: Open Reels. Rare mostly live performances.

Catalog $1.00. 5 Valley View, STEAD, East Garden City, NY 11595.

TDK, BASF, Maxell, cassette, reels, 8-tracks. Lowest prices, now guaranteed. S&S Audio, P.O. Box 56039. Harwood Heights, Il 60036.

SCOTCH TAPE, EXCLUSIVE; TDK. All new, lowest prices. BASF, Memorex, Maxell, cassettes, reels. Free catalog...

TDK-ADC-90

TDK-ADC-60

TDK-ADC-180

FREE CATALOG!

TAPE AND RECORDERs

Yonkers, NY 10710.

OLD RADIO WAREHOUSE - Tapes of old radio shows; fan-club listings. MGM catalogue $1.50.

THOUSANDS of like new LPs and prerecorded tapes catalogued. 400-1, Box 8212, Columbus, Ohio 43201.


VIENNESE LIGHT MUSIC SOCIETY — Strauss, Larner, etc.

on Doby Cassettes. KC Company, Box 793, Augusta, Maine 04330.

EASTBAY DISC EXTRAVAGANZA ... Sensational disc dance music magically mixed on cassettes. Details: Smuthe-SR, 111-24 197th St., N.Y.C. 11412.


TAPEALES. TDKSCASCO $3.07, MAXEL2DUXII $3.30, TKADOCCO $2.42, SONYLNCHII $1.49, many others. $2.50 shipping. Tapeking, 864 East 7 Street, Brooklyn, N.Y. 11230.

FREE CLASSICAL CASSETTE with every two purchases. Free catalog... EKR Classics, GPO Box 1977SE, NYC 10001.


PROTECT your LP's—Poly sleeves for jackets 9 cents; Round Bottom Inner Sleeves 8 cents; Square Bottom 6 cents; Poly lined paper 15 cents; white jackets 35 cents. Postage $1.50. Record House, Hillburn, N.Y. 10931.

COLLECTORS' Soundtracks, NTSC, PAL. List 50 cents (refundable). Jemm's, P.O. Box 157, Glenville, Ia. 50145.

OLDIES oldies. 45 rpm. Also current hits. Free Catalog. Corry's Record Shop. Box 166XH Mason, Oh. 45040.

PROTECT YOUR ALBUM. White cardboard replacement jackets 35 cents. Poly lined sleeves 15 cents. Postage $1.25. Opera Boxes, 78 sleeves. Free Catalog. CABCO, 400-1, Box 612, Columbus, Oh. 43201.

THOUSANDS of like new LPs and prerecorded tapes catalogued. $1.50. Records, Hillburn, New York 10931.

RARE ORIGINAL RECORDS, all kinds, mostly mint. 5000 listings. Catalog $1.50. Records, Hillburn, New York 10931.

BUYING? LP's! DISContinued Records, 216 North Rose, Seattle, WA 98109.

SEARCHING? LP's! DISContinued Records, 216 North Rose, Burbank, California 91505.

SUPERS! TAPES! All types. Catalog $1. Cosmic Chords, P.O. Box 4873, Boulder, Colorado 80306.

RECORDS AND TAPES at wholesale prices. All artists and labels available. For information write: International Record and Tape Association, Box 1555, Oregon 11403.

WANTED TO BUY: 78 rpm music LP'S. Send $2 for our current list. Buy Large brochure cataloguing hundreds of old and recent, domestic and imported albums. No quantity too small. CINESOUND, Dept. 2, PO Box 483, Etobicoke, ON M9J 4A4.

RARE JAZZ LP's sold by auction. Free facts. Leavin, L.O. P.O. Box 36035, Los Angeles, CA 90046.


INSTRUCTION


MUSICAL INSTRUMENTS

PLAYER PIANOS. Pipe Organs, Music Boxes, etc. Big Band LP's, records of LP and records, $2.00 (refundable). Vestal Press, Box 97, Vestal, NY 13850.

WANTED


HYPNOTISM

FREE Hypnotism, Self-Hypnosis, Sleep Learning Catalog! Drawer H100, Ruidoso, New Mexico 88345.

RUBBER STAMPS

RUBBER ADDRESS STAMPS, BUSINESS CDS. Free Catalog — Fast Service: Jackson's, Brownsporte Road-E-101, Mt. Vernon, Ill. 62864.

BUSINESS OPPORTUNITIES

STEREO REPRESENTATIVES WANTED!! Lowest Possible Prices!! Over 100 Brands!! Kraus-Rep, 999 Orange Ave., West Haven, Conn. 06516.

NEW LUXURY Car without cost. Free Details! Codex-ZZ, Box 6073, Toledo, Ohio 43614.
Reece came to the U.S. in 1959 from Jamaica by way of Europe; that same year, Curson left Charles Mingus to join Eric Dolphy. Though both men were favorably received by critics and fans in the early Sixties, they seemed but all forgotten by the end of the decade. I don’t know what Reece has been doing lately, although the notes say he “has written & arranged for a 12 piece Big Band, of which, will be recorded.” Judging by this album, Dizzy Reece does not seem to have advanced musically since I first heard him twenty years ago. His playing is extremely unpollished throughout, and he is responsible for some of the sloppiest ensemble work I have heard in a long time.

Curson spent much of his time in Europe during the late Sixties and early Seventies. He has been quite active on the New York jazz scene in the past couple of years, and it looks as if a new generation of Americans is discovering his talent. Unfortunately, we get only glimpses of that talent in this sloppily produced, ill-conceived set of recordings made the last summer.

ARCHIE SHEPP: Archie Shepp in Europe, Volume 1. Archie Shepp (tenor saxophone); Don Cherry (cornet); John Tchicai (alto saxophone); Don Moore (bass); J. C. Moses (drums). Cissum; Crepuscule with Nellie; When Will the Blues Leave; and three others. DELMARK DL 409 $7.98.

Performance: Import of little import

Recording: Good remote

In the early Sixties, some of New York’s avant-garde jazz musicians tried to set up a united front. Their efforts to organize against what was seen (with some justification) as a tone-deaf, racially prejudiced musical establishment never went beyond a series of tempestuous meetings. On the scene at that time, and caught up in the movement’s unpolluted political discourse, was alto saxophonist John Tchicai, a Dane of African descent, whose outré musical ideas had caused a great deal of controversy in his homeland. In December 1962, Tchicai left Denmark for the U.S., and after a few months on the New York scene he was able to secure a booking for himself and four American musicians at Copenhagen’s Jazzhus Montmartre club in the early fall of 1963. It was this booking that led to the formation of the New York Contempoary Five, the group heard in this rerelease of an album originally introduced to American catalogs in 1967.

By 1967, Archie Shepp’s had become the most bankable name in free jazz, dominating the small but tireless jazz scene in the past couple of years, and it looks as if a new generation of Americans is discovering his talent. Unfortunately, we get only glimpses of that talent in this sloppily produced, ill-conceived set of recordings made last summer.

C.A.
Simels Contemplates TheGrammys

1. What can you say about a twenty-one-year-old music-awards presentation that refuses to die? Here are some phrases that spring immediately to mind: Incurably lame. Unblushingly crass. Leisure-suited. Spectacularly corrupt. Totally irrelevant.

2. Q: Why are the Grammys named after the archaic gramophone? A: Because it would be too embarrassingly appropriate to name them after the contemporary phonograph.

3. 1978 was the year albums sales of more than ten million units became commonplace, and yet fewer records cracked the weekly top ten than ever before. It was the year in which it dawned on people that 80 per cent of all the recording artists in the world were signed to either Warner Bros. (and its affiliates) or CBS, the year that any rock musician with even a modicum of sensitivity realized that having a record on the charts was suddenly, for the first time in pop-music history, a less-than-honorable ambition (what doth it profit a man, after all, to go multi-platinum and yet lose his soul?). It was also the year that disco, Bee Gees style, swept the Grammy awards.

4. For ages, the thing that has confused me most about the Grammys is that although sales, by and large, seemed to be the only criterion that counted, rock-and-roll was invariably snubbed. Strange, since whatever you think of rock as music, it does sell; in fact, the first albums to shatter the multi-platinum barrier (“Frampton Comes Alive” and “Fleetwood Mac”) were rock records, if relatively “safe” ones. This year, however, the reason has become clear to me: after sales, the next factor that means anything to most voting members of the Recording Academy is “recognition.” (Translation: any music that is on TV a lot or gets played at said members’ sons’ bar mitzvahs.) This explains the triumph of the Brothers Gibb (five awards) and why the only non-disco smasheroo to win in 1978 was Billy Joel’s “Just the Way You Are,” a mushy ballad that has replaced (woe, woe) Feelings in the repertoires of the Merv Griffins of this world. It also explains why a classical record that did not receive a single favorable review from a serious critic—Horowitz’s Rachmaninoff Third Concerto—cleaned up at the Grammy Awards, thanks to the Jimmy Carter Live From the White House show, was a Public Broadcasting celebrity.

But where the truth of this theory really becomes apparent is in the Best New Artist competition. In 1976 the nod went to the Starland Vocal Band (remember them?), because they’d had one big single and their own TV show, rather than to Boston, whose album sales at last count were in the neighborhood of twelve million copies. In 1977 Debby Boone, who has yet to duplicate the fuke success of You Light Up My Life, beat out Foreigner (who have now had two multi-platinum albums and five consecutive hit singles) simply because she sang the damned song on every prime-time TV variety special over a six-month period. This year, similarly, Boogie Oogie Oogie, guaranteed to be the only non-Australian disco song recognizable to middle-aged matrons from Scarsdale, enabled its creators, A Taste of Honey (gimme their real names, quick!), to triumph over both the Cars and Elvis Costello. This is ludicrous on the face of it—except when you consider that there isn’t a bar-mitzvah band in the land that has yet learned Moving in Stereo and that, despite Linda Ronstadt, Mike Douglas has yet to essay Alison.

5. Rona Barrett, who is, granted, hardly a critic to be mentioned in the same breath as, say, James Agee, took notice of this year’s Academy Award nominations, marveled at the three top money-making pictures (Grease, Animal House, and Superman) were up for relatively few honors, and announced with some satisfaction that this proved that “Oscar has finally come of age.” Assuming that’s true (which is doubtful, given the nine nominations for Heaven Can Wait), one must remember that Oscar is, after all, fifty-one. What are the odds against anyone’s making a similar claim for the Grammy three years hence?

6. Woody Allen to Diane Keaton in award-winning Annie Hall: “All they do in Los Angeles is give awards. Best Fascist Dictator: Adolf Hitler.” —Steve Simels
THE LUMBER-CORE BAFFLE BOARD: REDUCES SPEAKER DISTORTION.

The baffle board in any speaker system is what transfers the acoustic energy (sound waves) to the air and to your ears.

In fact, it's the most critical part of cabinet construction. Like the sounding board in a grand piano, the wood used in a speaker can seriously affect the way music sounds.

To get the music sounding best, Kenwood laminates five layers of wood around a Shina lumber-core. The result is a very rigid baffle board that produces no vibration of its own to interfere with the music. That means less speaker distortion.

You'll hear the difference as music that sounds more accurate. With a solid, tight bass. A midrange without coloration. And high frequencies that are crisp and clear right up to the highest violin overtones.

That's because every part of every Kenwood LS-Series B speaker is designed from scratch—from the composition of the rigid, lightweight speaker cones, to the unitized tweeter construction, to the exclusive lumber-core baffle board.

Since speaker systems are the most personal of any high fidelity component, you should really hear them for yourself. Your Kenwood dealer has a complete line of LS-Series B speakers to match your specific listening requirements.

After all, if you want your speaker’s performance to be as good as your receiver’s, choose the speaker with a reputation as good as your receiver’s.

KENWOOD

For the dealer nearest you, see your Yellow Pages, or write Kenwood, P.O. Box 6213, Carson, CA 90749.
In Canada: Magnasonic Canada, Ltd.
Our theory sounds fantastic.

In an industry where trial and error methods are common, the Koss Theory of loudspeaker design may seem out of place. But once you hear the unmatched Sound of Koss in the new CM 1020 loudspeaker, you'll know our computerized theory helped make the optimum 3 bandpass speaker a reality.

The Koss Theory eliminates the guesswork in speaker design by selecting parameters for the best possible performance. That's why every part of the CM 1020 works superbly both alone and as part of the whole.

The dual ports, for example, enhance the woofer's front sound waves and dampen excessive woofer movement. There are two ports instead of one because two allow for improved cabinet tuning and greater structural stability. This added stability keeps the cabinet walls from beginning to flex causing unwanted soundwaves.

The port-augmented 10-inch woofer is a special design that provides a 3 dB gain in electrical efficiency and a 3 dB down point of 31 Hz while offering maximally flat response over the low bandpass. To capture all the presence and musical energy from 300 Hz to 3.5 kHz, the CM 1020 features a performance synthesized 4 1/2-inch midrange driver. Handling the high bandpass is a 1-inch dome tweeter linked to a unique acoustic transformer. This Koss tweeter produces the highest energy output and lowest distortion of any 1-inch direct radiator tweeter on the market. Finally, to unite all these outstanding elements, Koss developed a unique, seamless crossover network.

Though we've tried to describe the superiority of the Koss CM 1020, nothing can match the thrill of a live performance. Ask your Audio Dealer for a demonstration, or write to Fred Forbes c/o the Koss Corporation for a free brochure of Koss CM loudspeakers. After experiencing the CM 1020, you'll agree: hearing is believing.

KOSS CM 1020 SPEAKER SYSTEM

KOSS CORPORATION, 4129 N. Port Washington Ave., Milwaukee, Wisconsin 53212

CIRCLE NO. 39 ON READER SERVICE CARD