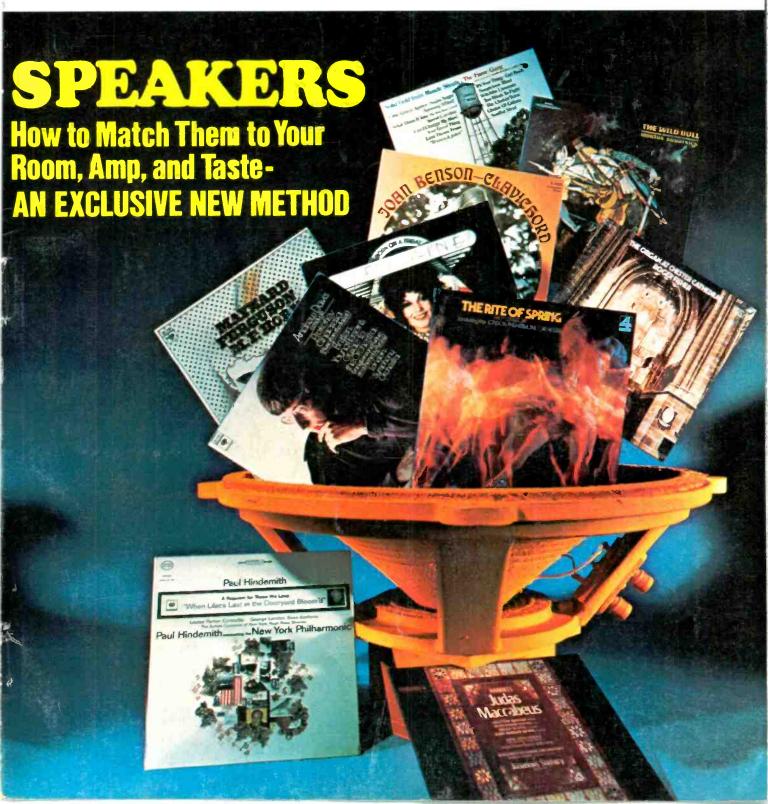
TEN RECORDS TO JUDGE SPEAKERS BY

JUNE 1976 \$1.00 FINAL PROPERTY OF THE PROPERT



Pioneer HPM-200 5-way 5-driver system

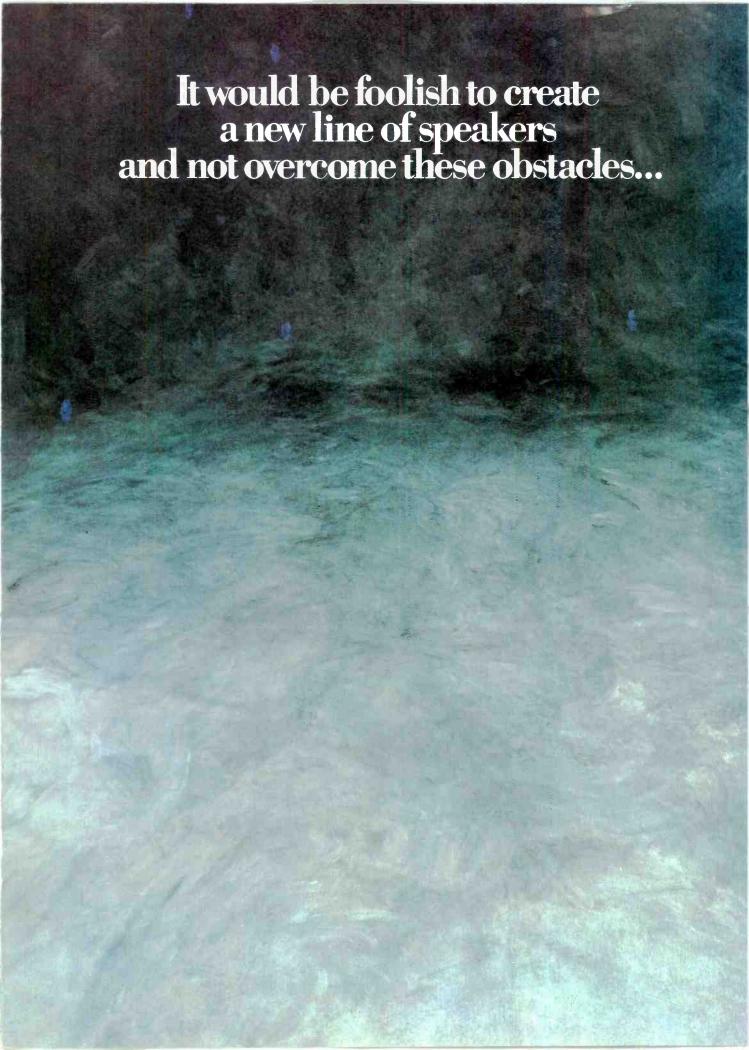
> Pioneer HPM-100 4-way 4-driver system

Pioneer HPM-60 Lway 4-driver system

OPIONEERAnyone can hear the difference.

Pioneer HPM-40 3-way 3-driver system

CIRCLE 27 ON READER-SERVICE CARD



The HPM series.

Four radically new speaker systems specifically designed to beat the best.

You can't beat JBL, Advent, Bose and AR with me-too ideas. They're really good speakers.

So, instead of just trying to make better conventional speakers, we knew we had to come up with a totally different and superior design

concept.

After years of research and development, our engineers found the answer. They created a whole new technology based on the electrical properties of High Polymer Molecular film. The result is a sound that's louder, clearer, more natural, lower in distortion than you ever expected to hear out of a speaker system.

HPM film technology requires no magnet, no coil, no cone or dome, no moving parts at all. The amplified signal is converted into sound waves directly at the surface of a thin, light membrane. And the entire structure housing the membrane can be curved for the best possible sound dispersion.

Pioneer's new HPM drivers combine high efficiency with amazingly accurate transient response. Distortion is virtually nonexistent even at very high sound-pressure levels. The principle was evolved mainly for tweeters, although a giant HPM woofer is at least a theoretical possibility.

In each of the new Pioneer models shown here, regardless of price, the top end of the audio spectrum is reproduced by an HPM driver. In the big HPM-200 system, so is the upper midrange.

The woofers used in the HPM series are almost as unconventional, even though they still have cones. But what cones! They combine low mass and high rigidity to an unprecedented degree, thanks to an exclusive method of reinforcement with carbon fibers. As a result, they move as true pistons, without any of the smearing of bass frequencies experienced with ordinary cones.

Of course, the proof of a new speaker technology isn't in the telling

but in the listening.

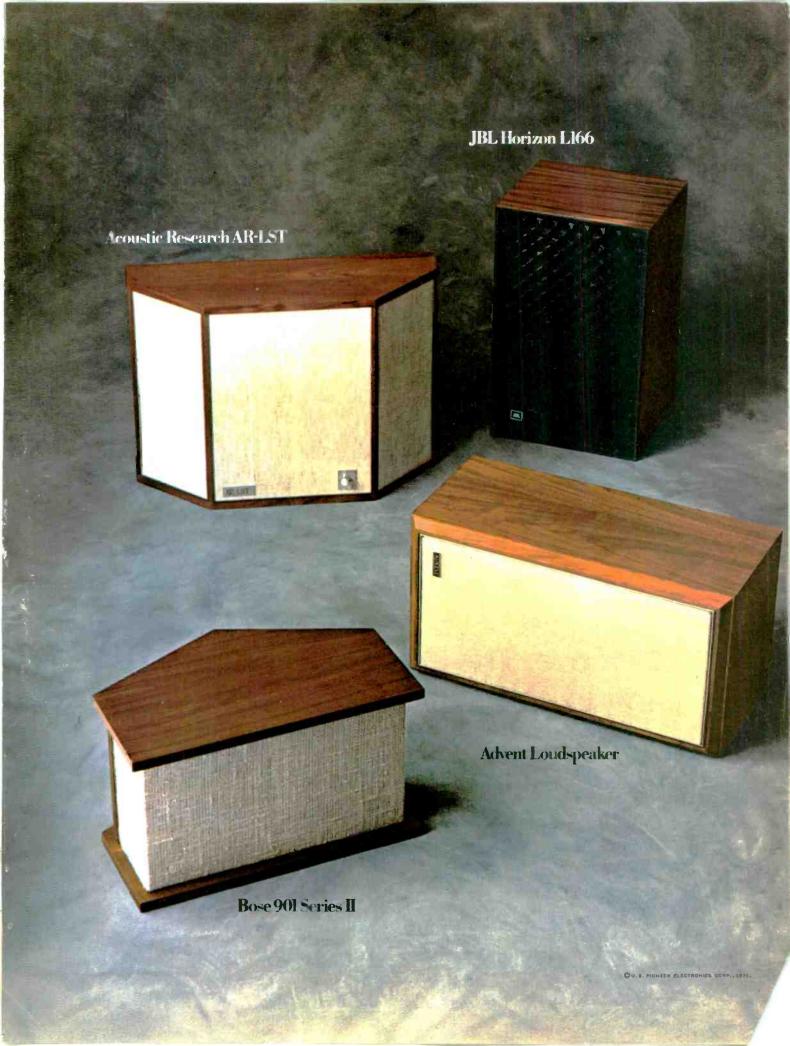
If the new HPM speakers didn't have audibly more impact, more detail, more transparency than the best previous speakers at comparable prices, our engineering effort would have been a meaningless exercise. There are certainly enough speakers on the market today.

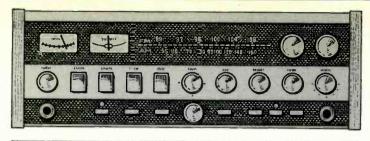
So we invite you to listen and compare very carefully. Match the HPM in the price range of your choice against the corresponding speaker on the far right, or anything else in your dealer's showroom.

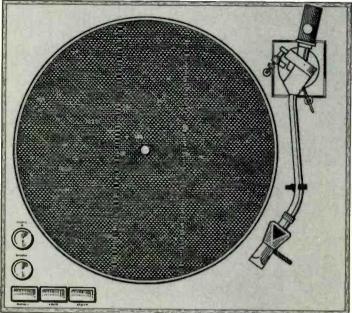
We think you'll end up agreeing that a good new idea beats a good

old idea every time.

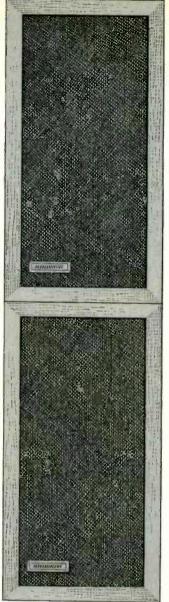
U.S. Pioneer Electronics Corp., 75 Oxford Drive, Moonachie, New Jersey 07074.











Discover The Fourth Component!

What is your First component? Is it your receiver? Your turntable? Your speakers? Or is it your phono cartridge?

We have become convinced that it really is your phono cartridge, even though we have been modestly advertising it for the past few years as your Fourth.

Let's face it, the cartridge is that important first point where the music begins, and if the stylus cannot follow its path accurately, no amount of expensive equipment . . . speakers, turntable or receiver . . . can make up the distortion it can produce. That is why you need a cartridge you can depend on. One that's the best your money can buy. Specifically, a Pickering:

Because a Pickering cartridge has the superior ability to "move in the groove", from side to side and up and down, without shattering the sound of your music on your records.

Because a Pickering cartridge possesses low frequency tracking ability and high frequency tracing ability (which Plainview, N.Y. 11803

Pickering calls $\underline{\textit{troceAbility}}$ $^{\text{IM}}$). It picks up the highest highs and the lowest lows of musical tones to reveal the distinctive quality of each instrument.

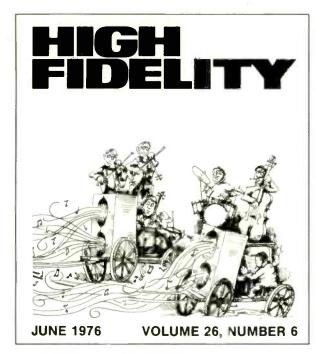
Because Pickering offers a broad range of cartridges to meet any application whether you have an automatic record changer, or a high quality manual turntable, a stereo, or a 4-channel sound system. Your Hi-Fi dealer will be able to recommend a Pickering cartridge that is just right for your

Your stereo cartridge is the First part of your music system. It is too important to overlook, and so is a Pickering.

For further information, see reader service card

or write to Pickering & Co., Inc. Dept.HF, 101 Sunnyside Blvd.,





MUSIC AND MUSICIANS

4 After Many a Summer

Leonard Marcus There's more to Schwann's Artist Issue than listings

16 The Advantages of Disorder

John Culshaw All about the migratory ways of records

22 Andy Russell

Gene Lees "I don't like to stay up late"

59 The Multiple Lives of John Hammond

John McDonough A remarkable record-producing career surveyed

66 Behind the Scenes

Louise at last
☐ One-man Eroica ☐ Berman

68 Haydn-And Now the Operas

Andrew Porter Philips' Fedeltà premiata kicks off a series

70 American Music's Hand-Me-Down Habit

Robert P. Morgdh New discs show up our musical borrowing

AUDIO AND VIDEO

- 24 Too Hot to Handle
- 26 News and Views Bucket brigade High-end pique ADC's Accutrac 4000
- 28 Equipment in the News
- 35 Equipment Reports

BIC Venturi Formula 1 speaker system Epicure Model 11 speaker system Genesis Model I speaker system IBL L-166 Horizon speaker system Sonab Model OA-14 speaker system

42 High Fidelity Pathfinders

Norman Eisenberg VII: Henry Kloss

44 How Loud Are Your Speakers?

Norman Eisenberg Power vs. efficiency vs. room size

50 Meet the dBW

Announcing a new mode of expressing power

52 Using Records to Judge Loudspeakers

Harold A. Rodgers How to pick your own-and ten recommendations

54 The Great A&P No-Compromise Loudspeaker William Warriner

An epistolary case history

RECORD REVIEWS

68 Essay Reviews

American music | Fedeltà premiata [See Music and Musicians]

75 Classical

Philips' Bayreuth Lohengrin | Böhm's Bruckner Fourth

- 76 Critics' Choice-Classical
- 97 The Tape Deck

R. D. Darrell

101 Lighter Side

Nick Holmes Dory Previn Vicki Sue Robinson

- 102 Critics' Choice-Pops
- 108 Theater and Film

Raintree County Great British Film Scores

109 lazz

Count Basie and Zoot Sims T Fats Navarro

ET CETERA

11 Letters

Criticizing the critics

Elusive recordings

- 32 HiFi-Crostic
- 18, 99 Product Information

An at-home shopping service

98 Advertising Index

High Fidelity is published monthly by ABC Leisure Magazines, Inc., The Publishing House, Great Barrington, Mass. 01230, a subsidiary of American Broadcasting Companies, Inc. Copyright \$1976 by ABC Leisure Magazines, Inc. The design and contents are fully protected by copyright and must not be reproduced in any manner, Second-class postage paid at New York, New York, and at additional malling offices. Authorized as second-class mail by the Post Office Department, Ottawa, and for payment of postage in cash. Yearly subscription in U.S.A., Possessions, and Canada \$7.95, in Pan-American Union \$8.95, elsewhere \$9.95. Single copies \$1.00. Subscribers; Send subscribtions, inquirious, inqui in U.S.A., Possessions, and Canada 37.9, in Pain-American Union 36.30, ease-where \$9.95. Single copies \$1.00. Subscribers: Send subscriptions, inquiries, and address changes to High Fidelity, 1 Sound Ave., Marion, Ohio 43302. Change of address: Give old and new addresses, including ZIP code. Enclose address label from last issue and allow live weeks for change to become effective. Postmaster: Send Form 3579 to High Fidelity, 1 Sound Ave., Marion, Ohio 43302.

After Many a Summer

I don't know about you, but I have sorely missed having an up-to-date Schwann Artist Issue, which recently made its first appearance since 1970. It is an invaluable reference, with many more uses than finding out what the Southern Baptist Theological Seminary Choir has recorded. Since it is catalogued by instrument (including baton and voice) and relates to the monthly Schwann more or less as Roget and Theodore Bernstein combined relate to Webster, it can resolve any number of questions, solve any number of arguments. For instance:

What was that marimba thing I heard last month?

How many recordings are available of David and Igor Oistrakh playing together?

Sure, it's Mignon Dunn, but what's the first name of that soprano Dunne, with an e?

Who conducts I Solisti Veneti?

Is Dixie Stewart a soprano or a mezzo?

What recording can I get that will let me know what a chitarrone sounds like?

Has Maurice Abravanel recorded with any groups besides the Utah Symphony?

Who's that tuba virtuoso again?

Because some two-thirds of the recordings listed in 1970 are no longer available today, the two issues complement each other. Soprano Sara Mae Endich, who appears on only three current recordings, had ten listings in 1970; violinist Jean Fournier, who had three listings then, isn't included at all today. You'd better avoid arguments about them unless you still have the earlier edition.

In fact, a complete set of all eight Artist Issues would resolve most questions about who recorded what-at least on LPs. You'd still have holes where a recording appeared after one edition but had been cut out before the following one, and these gaps have widened with time. To illustrate, in the initial June 1953 issue (when pianist Ray Lev-remember?-who hasn't been represented since the beginning of the Sixties, had five listings) was the following notice: "Approximately every six months an Artist Listing Issue will replace the regular composer listing issue." But the next edition didn't come out until 1956, when it became a biennial; after 1960, a triennial; finally, a quadrennial; and now the six months have become six years, all the result of the economics (or lack of it) of publishing. And the price increases over the years have reflected the situation: no cost in the early years (except friendliness with your local record dealer); 35¢ by 1956; 95¢ by 1963; \$1.75 for the 1970 issue: \$3.95 for the current edition-and still worth

As with any special issue, Schwann sent along a statistically oriented press sheet to us. For your interest, there are listed 1,012 conductors (down 87 from 1970): 641 pianists (the Brendel listing beats Rubinstein 64 to 63!); 247 violinists (Heifetz 57, Oistrakh 47); 120 harpsichordists (Leonhardt 37); and 50 other instruments represented. Fischer-Dieskau leads 1,268 singers with "106 records under his name," and the Philadelphia Orchestra under Ormandy comes in at 297. Note the "under his name," though. These figures are just lines in Schwann. Heifetz' 5-disc Beethoven sonatas set counts as one, as does each of the six 4-disc albums in "The Heifetz Collection"; Fischer-Dieskau's 6-disc Götterdämmerung gets one point, as does each of two 19-disc Ring cycles, of which Götterdämmerung is a part-but whereas something like his Das Lied von der Erde, which appears both singly and in a set. counts as one because both listings are on the same line, every "excerpts of above" following an opera rings up another point.

See what sorts of things one spends time on when a new Schwann Artist Issue comes out?

Leonard Marcus



Cover Photo: Roy Lindstrom

LEONARD MARCUS Editor ROBERT S. CLARK

Executive Editor

KENNETH FURIE Music Editor

ROBERT LONG Audio-Video Editor

HAROLD A. RODGERS Associate Audio-Video Editor

SHIRLEY FLEMING Editor, Musical America Section

WAYNE ARMENTROUT **Director of Production**

REBECCA ABBOTT Copy Editor

LYNDA CARLOTTA CYNTHIA PEASE Assistant Editors

GAIL KOOKOOLIS **Editorial Assistant**

BOY LINDSTROM Graphics Director

EDWARD GREENFIELD European Editor

MORGAN AMES ROYAL S. BROWN R. D. DARRELL PETER G. DAVIS HENRY EDWARDS NORMAN EISENBERG ALFRED FRANKENSTEIN HARRIS GOLDSMITH DAVID HAMILTON DALE HARRIS MIKE JAHN PAUL HENRY LANG GENE LEES ROBERT C. MARSH H. C. ROBBINS LANDON Contributing Editors

MILTON GORBULEW Senior Circulation Director

DAVID LEE Circulation Manager

WARREN B. SYER Publisher

Elegant Protection

Record wear . . .

has two primary causes. One is surface indentation caused by micro-dust which gets welded into vinyl. The other is adhesive contaminants on the stylus which grind away record grooves.

For record longevity, there is no substitute for a properly adjusted arm and cartridge—and regular audio hygiene.

Powerful scientific research has produced the Discwasher System and the only Stylus Cleaner—the starting point for record preservation on a daily basis.

SC-1

- a. Calculated density cleaning fibers.
- b. Magnifying viewing mirror.

Discwasher System.

- a. Unique slanted fibers which pick up dust.
- b. Capillary absorbancy.
- c. Non-extracting fluid.



ONKYO SERVO LOCKED



Receiver offers audio tolerances that will satisfy the most intolerant.

The Onkyo Servo-Locked Stereo Receiver was engineered for the audio purist. Judge the features for yourself.

The new Servo-Locked circuitry automatically zeros-out drift and cancels out distortion to a degree that surpasses the requisites of the most demanding audiophile.

There are still more refinements. Multiple tape inputs to dub your own program material. A solidly built large flywheel tuning knob makes the tuning needle glide effortlessly over a wide, 8-inch linear precision divided tuning panel. Aluminum and brush aluminum panels and easy to operate controls for every function.

The TX-2500 provides superb performance. Tested according to precise FTC standards, the TX-2500 delivers 27 watts per

channel, minimum RMS, both channels driven at 8 ohms, from 40Hz to 20kHz with no more than 0.5% total harmonic distortion.

The wide frequency response main amplifier provides exceptional transient response. Dual oscilloscope traces, with a 50Hz square wave fed through, have shown less than a 5% tilt (sag) as opposed to a 25-50% tilt (sag) found in conventional amplifiers tested under the same conditions.

Compare the Onkyo Servo-Locked Stereo Receiver on any basis, including value, and you see why audiophiles choose Onkyo.

For more information and the name of your nearest dealer where you can see a demonstration of the TX-2500, write to Onkyo today.

ONKYO

Onkyo U.S.A. Corporation

Eastern Office: 25-19 43rd Ave., Long Island City, N.Y. 11101, 212-729-2323
Midwest Office: 935 Sivert Drive, Wood Dale, Ill. 60191, 312-595-2970

Canada: Sole Distributor, Tri-Tel Associates Ltd., 105 Sparks Ave. Willowdale, Ontario, Canada M2H 2S5, 416-499-5044



Coming Next Month

In July we add our voice to the general chorus of "Happy Birthday" for our nation. Irving Lowens' Music in 1776 is a colorful and panoramic view of the Colonies' thriving concert life and the effect the Revolution had on it. Albert Fuller examines Thomas Jefferson as Musician and Ben Franklin will be heard from in an unusual role: music critic. Three major Bicentennial Recording Projects that range widely through American music will be described by men close to them. And if you plan to travel to Bicentennial events, you will want to read Ivan Berger's Car Stereo Goes the Component Route. Among the new recordings in review will be Scott Joplin's Treemonisha; regulars Gene Lees and John Culshaw will offer their customary insight and wit; our High Fidelity Pathfinder is Norman Pickering; and there will be more.

SOLUTION TO HIFI-CROSTIC NO. 12

WALTER SORELL, The Dancer's Image The ideal dance music will make you hear the dance and see the sound. With the umbilical cord of mutual inspiration and mushy emotionalism cut, both enjoy their freedom. Instead of having a marriage of convenience, they go steady, each doing his own thing.

ADVERTISING

Main Office: Ramon Rustia, Director of Advertising Sales. Leonard Levine, Advertising Promotion Manager. The Publishing House, Great Barrington, Mass. 01230, Telephone: 413-528-1300.

New York: ABC Leisure Magazines, Inc., 130 E. 59th St., 15th floor, New York, N.Y. 10022, Telephone: 212-838-5710. Seymour Resnick, Eastern Advertising Man-

New England: The Publishing House, Great Barrington, Mass. 01230. Telephone: 413-528-1300. G. F. Jerry Harris

Midwest: ABC Lelsure Magazines, Inc., The Publishing House, Great Barrington, Mass. 01230. Telephone: 413-528-1300. Leonard Levine, Midwest Advertising Manager

Los Angeles: ABC Leisure Magazines, Inc., ABC Entertainment Center, 2040 Avenue of the Stars, Suite 270, Century City, Calif. 90067. Telephone: 213-553-5648. Andrew Spanberger, Western Advertising Man-

Tokyo: Japan Advertising Communications, Inc., New Ginza Bldg., 7-3-13 Ginza, Chou-ku, Tokyo 104, Japan. Telephone: (03) 571-8748, Shigery Kobayashi, President.

High Fidelity and High Fidelity/Musical America are published monthly by ABC Leisure Magazines, Inc., a subsidiary of American Broadçasting Companies, Inc., Warren B. Syer, President, I. Martin Pompadur, Chalirman of the Board, Herbert Keppler, Vice President, Photographic Publishing Division, Milton Gorbulew, Vice President, Chicalitation, Cathlieen Aloisi, Assistant to the Presigent Member Audit Bureau of Circulation, Indexed in Reader's Guide to Periodical Literature. Current and back copies of High Fidelity Amchilias, Pridelity Mysical America are available on microfilm figni University Microfilms, Ann Arbor, Mich. 48106 Microfichie copies of these magazines (1973 forward) are available through Belli & Howell Micro Photo Division. Old Mansheld Road. Wooster. O. 44691.

Editorial correspondence should be addressed to The Editor, High Fi-delity, Great Barrington, Mass. 01230, Editorial contributions will be well-comed, and payment for ancies accepted will be arranged prior to publi-cation. Unsolicited manuscripts should be accompanied by return

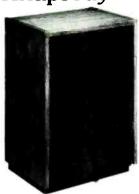
Three Compacts

Bozak quality sound for modest-sized room:

It's a fact of physics that the larger the loudspeaker enclosure, the more realistic the bass reproduction.

Yet, room size and amplifier power limitations sometimes dictate the use of smaller-than-optimum loudspeakers. For these applications, Bozak, whose reputation for providing the truest possible bass spans more than a quarter century, has developed three compact speaker systems, each of which offers fidelity in bass response far beyond what might be expected from an enclosure of its size.

Rhapsody



The ideal loudspeaker for a medium-size room. the Rhapsody is a three-way system providing a full spectrum of true sound from natural bass through clear midtones to the highest shrill-free treble. Waterproof finish lets the Rhapsody double as an end table without fear of spotting. A threeposition brightness control permits matching the speaker system to room acoustics. Sculptured foam grille enhances the true walnut surfaces.

Tempo III Bozak's smallest three-way system has been acoustically designed to reproduce currently popular music with its emphasized bass. A ducted

enclosure helps bring discotheque sound into the living room. Cabinet finish is waterproof, so there's no fear of ordinary liquids marring the surface. Grille is of modern acoustical fabric. Available in free-standing or bookshelf models



Sonora



Although the smallest Bozak speaker, the Sonora caused Popular Science magazine to say "you can get really good sound from an under-\$ 100 speaker . . . While no speaker is perfect in reproducing lows, it was exactly this solid, rich sound that made the ... Bozak speakers stand out." To which we add, the crystal clarity of its highs are equally important to the success of this finest of compact bookshelf speakers.

If you buy any compact speaker, regardless of your room size or budget, without first listening to the Bozak compacts, you'll be doing your music system an injustice. We'll gladly send you the names of dealers in your area where you can hear them for yourself.



Bozak, Inc., Box 1166, Darien, Connecticut 06820

You're looking at our attitude about cassette decks. The HK2000.

harman/kardon

We make only one cassette deck. We certainly are capable of making more. Perhaps some day we will. But it's unlikely — unless there are compelling mechanical or sonic reasons for doing so.

We have an attitude about high fidelity instruments: to give the finest expression to every function of music reproduction. And wherever we feel we have something to contribute, to do so without compromise. The HK2000 (with Dolby*, of course), represents our attitude about cassette decks.

Its predecessor (the HK1000), was evaluated by High Fidelity Magazine as, "the best so far." When our engineering explorations suggested that improvements were feasible, we replaced it. With the HK2000.

We consider that the cassette deck has a definite and honorable utility as a means of conveniently capturing, retaining and reproducing material from phonograph records, tapes or radio broadcasts.

With one major caveat. It must perform on a level equivalent to the source.

The HK2000's specifications offer measurable evidence of its quality. For example: wow and flutter levels of 0.07%.

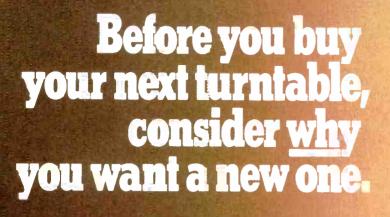
But performance specifications are only one influence on sound quality. Just as in all Harman Kardon amplifiers and receivers, the wide-band design characteristic of the HK2000 produces sound quality that transcends its impressive specifications.

It utilizes narrow gap, hard-faced, permalloy metal heads (the only heads used in professional studio tape machines) for extended frequency response and low distortion. Low frequency response is so linear that the HK2000 required the incorporation of a subsonic filter control that can be used to remove signals issued by warped discs.

These few factors, not individually dec sive in themselves, indicate the attitude with which we conceived, designed and built the HK2000—the only cassette deck we make.

There is, of course, a good deal more to say. Please write *directly* to us. We'll respond with information in full detail: Harman Kardon, 55 Ames Court, Plainview, New York 11803.







In letters and warranty cards from new Dual owners, we find that some had owned manual turntables and came to prefer the convenience and safety of automatic start and stop. Others also wanted to be able to play records in uninterrupted sequence. And a few gave reasons that modesty makes us hesitate to quote: "I wanted the best! or "Everyone recommends Dual."

Whatever your reason may be for wanting a new turntable, consider your purchase carefully. Your record collection probably represents a bigger investment than all your other components combined. And your turntable is the only component that handles your records.

Although the overall appearance and feel of a turntable's controls can tell you something about its quality, appearances can be deceptive. For example, curved tonearms may appear interesting, but their unnecessary mass and increased resonance can only detract from the quality of music reproduction. All Dual tonearms follow a straight line from pivot to cartridge holder for maximum rigidity and lowest mass.

Some tonearms apply stylus pressure by unbalancing the tonearm. This results in tracking which is adversely affected by record-warp conditions and turntable level. In every Dual, stylus pressure is applied around the vertical pivat via a long coiled spring. This maintains tonearm balance throughout play, and tracking is unaffected even if the turntable is tilted substantially.

Other Dual features and refinements include: cueing damped in both directions to prevent bounce; pitch-control; anti-skating separately calibrated for all three stylus types. And internally: motor rotors and drive pulleys individually machined and tested with precision instruments to assure perfect concentricity.

All the above contribute importantly to quality performance.

Now, while you should never compromise with quality, convenience is a matter of choice. Which is why Dual quality comes in a variety of models: semi-automatic, single-play; fully-automatic, single-play; single-play/multi-play. Seven models in all as described below.

Dual 1225. Fully automatic, single-play/multi-play. Viscous-damped cue-control, pitch-control. 10%" platter. Less than \$140, less base. Dual 1226, with cast platter, rotating single-play spindle. Less than \$170. Dual 1228 with gimballed tonearm, synchronous motor, illuminated strobe, variable tracking angle. Less than \$200.

Dual 1249. Fully automatic, single play/multi-play. Belt drive.

12" dynamically balanced platter. Less than \$280, less base. Full-size belt-drive models include: Dual 510 semi-automatic. Less than \$200; Dual 610, fully automatic. Less than \$250. (Dual CS601, with base and cover. Less than \$270.)

Dual C\$701. Fully automatic, single-play. D.C. brushless, electronic direct drive motor; tuned anti-resonance filters. Less than \$400, including base and cover.



United Audio Products, 120 So. Columbus Ave., Mt. Vernon, N.Y. 10553

Exclusive U.S. Distribution Agency for Duot



Bernie Taupin and Elton John (in the early '70s)-Kind words for the wordsmith.

Jahn vs. John

I find Mike Jahn's February review of Elton John's "Rock of the Westies" harsh and unfair. He says that the album "works musically, in spite of the lyrics," and I certainly agree that "John's melodies, singing, and ability to assemble one of the finest backup bands in rock" are all first-rate and that the LP is "among the best pop product to appear in months." But I strongly disagree that this is in spite of the lyrics. To even try to compare Bernie Taupin, one of the very best lyricists, and Paul Simon is really stupid. Bernie is so much better than Paul!

As to Elton's comment on the jacket ("Without Taupin, E. John would be serving pig swill to out-of-work cubmasters"), which Mike Jahn says is "not true, according to a close examination of the texts of the newest John/Taupin LP," it is true. Without Bernie, Elton wouldn't be where and what he is now-the wonderful person he is, one of the best rock pianists and singers there are, and among the top tock performers. The lyrics in "Rock of the Westies" and all of Elton and Bernie's other songs are brilliant.

> Mary Reilly San Marcos, Calif.

AR's Full Warranty

In your April issue, you describe one manufacturer's guarantee as "setting a precedent for the high fidelity industry." This judgment was apparently based on that manufacturer's having "implemented the first full warranty . . . that we know of on a consumer audio product."

If any guarantee can be fairly described as having set a precedent, it is the one that is offered by Acoustic Research. Since 1954 the AR guarantee has covered parts, labor. and shipping. It has also covered specifications, not just operation. Since 1961, it has run for five years on speakers. And since 1974, the five-year guarantee period has

been extended to the AR turntable as wellthe only such warranty on a mechanical device that we are aware of in any industry.

Naturally the AR guarantee is transferable from one owner to the next. And it applies regardless of where the product was bought or where it is used, anywhere in the world.

The fact is that the AR guarantee was not rewritten to conform to the requirements of the Magnuson-Moss Act. This wasn't necessary, since it had exceeded those requirements for twenty-two years. We challenge anyone to find a stronger precedent-setting policy than that!

lason Farrow Director of Public Relations Acoustic Research, Inc. Norwood, Mass.

We are happy to add that AR's warranty. in these sometimes confusing post-Magnuson-Moss times (see "News and Views," May), clearly carries the word "full."

D.S.H.: No "Objectivity"?

Dale Harris has done it again. He remains the only one of your critics who is consistently unable to distinguish objectivity from subjectivity-his subjectivity, that is. A case in point is his recent review of the Leontyne Price/Placido Domingo album of operatic duets (February). He finds all kinds of imaginary things wrong with Price's singing-and not only in this album, but any other recording she makes.

Whatever happened to High Fidelity's well-informed and objective critics, such as George Movshon? Why doesn't Alfred Frankenstein review more? His reviews are well written and very informative. Will we have to ask for the return of Conrad L. Osborne? Instead of reviews by men of their caliber we get one-sided and narrowminded reviews from the likes of Dale Harris and David Hamilton. Perhaps Mr. Harris should leave reviewing of recordings to those critics who are open-minded and perspicacious.

> Charles H. Penn Washington, D.C.

Whose subjectivity would Mr. Harris have, we wonder, if not his own? Yes, there is indeed an objective element in criticism; Mr. Harris is performing that function when he notes Ms. Price's "lack of weight at the bottom of the staff" (surely, by now, that is no revelation) or the sharpness of some of her high notes (with a specific instance cited)both objectively verifiable assertions. When criticism proceeds from description to evaluation, it is by definition subjective, and Mr. Harris carefully distinguishes the subjective when he writes of the duet disc that "most of all, I find myself [sic] disappointed by Price's lack of spontaneity, the absence of the dramatic conviction so apparent in Domingo's work. Price is conscientious and often sounds ravishingly beautiful, but for me [sic] she lacks the gift of imaginative identification with her roles."

Axenstein Rediscovered

Shortly after the war, I found myself in Switzerland with plenty of time to kill and happily killed a couple of weeks of it making a slow circuit of Lake Lucerne, then utterly bereft of tourists. One of my ports of call was the lakeside resort of Brunnen, and I well remember making an excursion to a nearby town perched high above the lake. It was a somnolent place, with a large hotel dating from la belle époque, a bit seedy, perhaps, but with that splendid spaciousness and solidity of nineteenth-century Swiss grand hotels. I thought it an absolutely ideal spot for escape from the hurlyburly-and so, evidently, did Artur Schnabel. The name of the town was Axenstein.

Imagine my astonishment, then, to learn from that fiend for facts, Nicolas Slonimsky, that "there is no such town as Axenstein in Switzerland (or elsewhere)" and that consequently Schnabel could not have died there ["1951: A Classical Scrapbook," April]. Mr. Slonimsky speaks with such authority that I began to wonder if I had fantasized the place. But no, Axenstein is there on the map, just above Brunnen, as I had remembered it.

Surely, Nicolas Slonimsky-and other potential revisionists-should think again before they ax Axenstein from the Schnabel necrology.

Roland Gelatt New York, N.Y.

Mr. Gelatt, former editor-in-chief of this magazine, is correct: There is an Axenstein in Canton Schwyz in Switzerland. Mr. Stonimsky concedes his error, but sticks by his guns on the place of Schnabel's death: the Hotel Axenstein in the nearby town of Morschach.

Elusive Recordings

As a longtime lover of Handel's organ concertos, I read Robert P. Morgan's March review of the Tachezi/Harnoncourt Telefunken set with great avidity-and will undoubtedly purchase it on his enthusiastic recommendation. I have the Biggs/Boult Columbia set, which is on six discs (D3S 777 and 778) and thus must be a later effort than the three-disc set (D3M 33716) just reissued. Also of slight interest is the Weinrich/Fiedler effort for RCA.

None of these matches my favorite—that of Eduard Müller, with August Wenzinger conducting the Schola Cantorum Basiliensis. It had been publicized in Deutsche Grammophon's seventy-fifth-anniversary catalogue as ARC 2714 001, not available in the U.S. or U.K. After lengthy efforts to find a copy domestically. I commissioned a friend who was going to Europe to get it for me. This was done with great difficulty (it was renumbered as ARC 2723 042) and at horrendous expense, the only locatable supply being in Switzerland!

All the superlatives applied to DG's pressings fit here. The lively and almost extemporaneous approach to the obbligato passages makes it well worth the high cost. It seems strange to me that DG would not have exported this set Stateside; there would undoubtedly be a large market for it, especially as a winner of a Grand Prix du Disque and the Edison Prize.

E. T. Merrick Washington, D.C.

Just to set the discography straight: 1) There is only one Biggs/Boult recording of the Handel organ concertos; that six-disc issue was an earlier reissue of the four-disc original. 2) The Müller/Wenzinger Archiv set was issued domestically, as SKL 917 in 1967; with the switch to the new DG num-

bering system, the set survived in Schwann as 2723 005 until 1971. Incidentally, it is possible for a DG set to exist simultaneously in one country with a 2714 prefix (i.e., a full-priced three-disc Archiv set) and in another country with a 2723 prefix (i.e., specially priced).

I am looking for an explanation of a very puzzling set of recordings. The matter involves my first recording of the venerable warhorse 1812 Overture by the Minneapolis Symphony Orchestra, Antal Dorati conducting, on Mercury MG 50054 and its reissue on the Mercury Golden Imports label, SRI 75001.

Each record has spoken commentary by Deems Taylor on how it was done, but the "how" of each is different. The first recording uses the bells of Yale University, and the second uses those of Riverside Church, New York City. The recording of the cannon for each disc is different also.

Were there two different recordings originally, or did the powers that be splice in some other recordings of cannons and bells for the reissue?

I am not complaining, mind you—just curious. I am, in fact, overjoyed to see these discs come back. Mercury is a great recording company in my book.

Stephen William Ross Glendale, Calif.

Mercury Records tells us that Mr. Ross's first guess is correct: Two separate recordings, the first (MG 50054) in mono and the second (SRI 75001) in stereo, were made in 1954 and 1958, respectively, using the same ensemble but different bells and cannon.

Coping with Distortion

In the February 1976 issue ["News and Views"] I see a reference to TIM (transient intermodulation distortion), phase distortion, and difference-frequency distortion. In the same issue there is a test report on the Beovox M-70 Uni-Phase loudspeaker system. Evidently the concern over phase shift and phase distortion is finally causing some action.

In 1961, I decided to assemble the best system I could afford. I first looked into the physiology of human hearing, in particular the ability to sense direction. References divided hearing into three regions: bass, the range of frequencies below about 300 Hz, in which we are unable to determine the direction of sound: midrange, about 300 to 1,500 Hz, where we determine direction by the phase difference as the sound reaches our ears: and treble, frequencies above about 1,500 Hz, where direction is determined by a difference in sound intensity at the ears as caused by the shape of the head.

This information would seem to suggest a three-way speaker system with crossover frequencies at 300 and 1,500 Hz. It also suggests that in the midrange, which carries a good deal of sound information, the phase relationship of sound reaching the ears is very important to the stereo effect.

Most recording companies not only use many microphones placed throughout a recording group, but tout it as a great technique for maximum channel separation—the Ping-Pong effect. This tends to place the listener between two groups of performers.

How to be an audio architect

Design exactly the hi-fi system you want. Build with Crown components to provide precise control, monitoring and selection for your ultimate listening pleasure. Let us send you the complete specifications.



Select 8 inputs. IMD .002%

IC-150A. The new, improved Crown stereo pre-amp. Inputs include front panel jacks. 31-step precision loudness control. Exclusive panorama control. ISO loudness compensation. THD below .05%, S/N down 105 dB, IHF "A" weighting.



Select crossover points.

VFX-2. In bi-amp systems, select and change crossover points to fit your speakers and listening area.



Meters show clipping level.

OC-150A. The Crown stereo output control. Peak-reading or peak-sample-and-hold meters show precise clipping levels. Switch three pairs of speakers with front panel push-buttons. Two headphone jacks.

Fast playback coupon

When listening becomes an art,

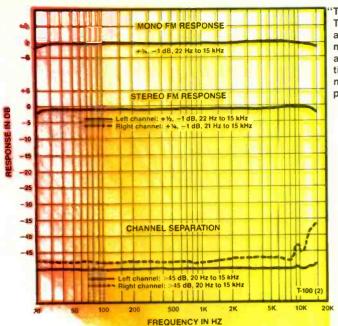
Send directly to Crown for specs on control centers.

Name__

ECOUN Box 1000, Elkhart IN 46514

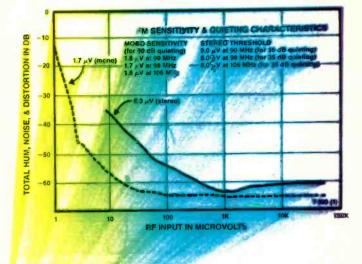
HF-3

CIRCLE 6 ON READER-SERVICE CARD



The ultimate distortion of the T-100's FM section was unevocally the lowest we have ever measured. To this can be added a really first-rate AM tuner section, the likes of which we have never before encountered in a product of this type."*

"There is no doubt that its stereo channel separation and distortion characteristics surpass anything in our previous experience. Its AM frequency response was not only, by far, the flattest and widest we have ever measured on an AM tuner, it is sufficiently free of distortion and noise to make it a truly useful program source even for high fidelity listening."*





Spending more won't buy a better tuner.

The uncompromising quality of Accuphase makes the T-100 AM/FM Stereo Tuner one of the finest available. At any price. No qualifications.

From its unprecedented excellence in performance to its unusually effective multipath meter, the T-100 is truly superb.

Prove it yourself. We've assembled a free 36-page booklet of independent laboratory reports attesting to the superior performance of Accuphase. It's very convincing. But the best way to be convinced is to audition the T-100 yourself. Then you'll understand why the critical acclaim has been as impressive as the product itself.



The new Sansui LM Loudspeakers that set the AES



Convention on its ears.

At the Convention of the Audio Engineering Society in Los Angeles last May, Sansui demonstrated a new concept in loudspeaker design.

The reception from these experts - chief engineers of radio and TV stations, record producers, recording engineers and sales executives of audio companies – was even more sensational than we ourselves expected.

And these are the reasons:

Unlike conventional speakers, the LM design incorporates a multi-radiational tweeter device. High frequencies instead of being lost through encapsulation, are diverted through three special exponential horns and recovered into sound energy that

adds a breathtaking sense of ambience, and realism. The LM speakers also display extremely stable and well-defined stereo images. At the same

time, both the transient response and efficiency of the system are greatly increased. An extra large woofer assembly gives exceptionally strong bass response ordinarily available only in much larger and more expensive speakers.

Hear the LM 110s at \$250.00/pr*, the LM 220s at \$340.00/pr.* and the LM 330s at \$400.00/pr* at your nearest Sansui franchised dealer. You never heard music so alive before.

*The value shown is for Informational purposes only. The actual resale price will be set by the individual Sansul dealer at his option.

Cabinets finished in simulated walnut grain.



SANSUI ELECTRONICS CORP.



LM 220 LM 110

LM 330

Woodside, New York 11377 • Gardena, California 90247 SANSUI ELECTRIC CO., LTD., Tokyo, Japan • SANSUI AUDIO EUROPE S.A. Antwerp, Belgium • ELECTRONIC DISTRIBUTORS (Canada) Vancouver 9, B.C. clustered about the two speakers. The recording engineer tries to compensate for this by cross-mixing, but in the midrange the phase relationships required are lost. Mercury Records' use of only two microphones, which places the listener in the audience at the microphone location, appears more desirable.

Assuming a recording technique that captures the proper phase relationships, another problem is to maintain the effect through reproduction until the sound reaches the listener's ears. In building my system fifteen years ago, I incorporated a midrange speaker in a housing that—through use of shielding and a hard, curved sound-reflecting surface—provides an equal sound-path length to any listener seated anywhere within a reasonable area. The system never ceases to amaze me when I play a properly recorded disc.

Most of the phase-distortion problem occurs during recording. I have only two ears. Get the recording companies to use only two (four for quadriphonic) microphones, one for each recording track, and then the speaker manufacturer can go to a single midrange speaker per channel, covering the natural range between 300 and 1,500 Hz and achieve realism!

O. K. Peterson

Wilmington, N.C.

Polish Recordings

I read the March article "Polish Classical Recordings Stage a Boomlet" with a great deal of interest. However, I believe your readers, especially those on the East Coast, might be interested in knowing that there is another excellent source for Polish recordings, here in New York City. In fact, Qualiton Records Ltd. (65-37 Austin St., Rego Park, N.Y. 11374) now distributes the entire Muza, Pronit, and Veriton classical catalogues, as well as Qualiton of Hungary. Supraphon and Panton of Czechoslovakia, and the Pearl Records catalogue from England.

Otto Quittner, the director of Qualiton, has informed me that he would be happy to supply catalogues and other information to interested individuals and dealers. I have been dealing with Mr. Quittner for some years now, and he has always been obliging and cooperative in filling all my record needs in connection with the above-mentioned labels.

Romeo J. Mannarino Staten Island, N.Y.

Tracking Down the Lone Ranger

For almost thirty years I have tried without success to track down the source and titles of all the musical background on the old Lone Ranger.radio and television programs. I wrote the late George W. Trendle, creator and producer of the show, several times, but right up until his death a few years ago he refused to divulge any information about the music. He claimed it was one of the secrets of the program's success (as indeed it was), and then, after he had sold the rights to The Lone Ranger to the Wrather Corporation, he would reveal nothing for ethical reasons.

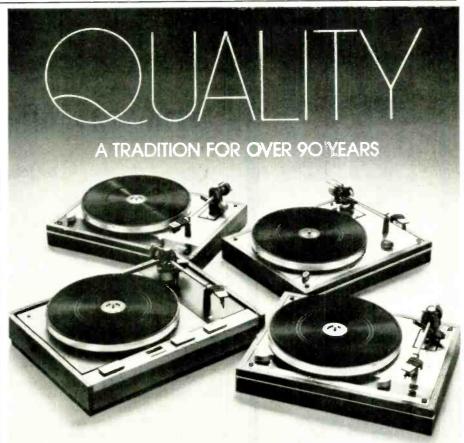
I have seen a number of old Republic Pic-

tures films (including a series of westerns featuring a group called "The Three Mesquiteers" and even a nonwestern 1937 serial called SOS Coast Guard) in which much of the unknown background music from The Lone Ranger is heard. Inquiries to Republic before its demise as a movie studio revealed only that the music used in its films was original and unpublished. Since Republic produced the serial Lone Ranger in 1938 and a sequel. The Lone Ranger Rides Again, in 1939. I have to assume that Trendle obtained these musical soundtracks and used them on his radio program, along with selected classical music excerpts, most of which I had already identi-

Can any HF reader confirm my assump-

tions or shed new light on this quest? (I recall reading in the 1950s, for example, that Fritz Loewe-of Lerner and Loewe-admitted having written musical scores for Republic in the 1930s; might he have had anything to do with The Lone Ranger?) Is there a chance that Elmer Bernstein's Film Music Collection would consider recording music from the two Republic Lone Ranger serials? It may not be Herrmann, Waxman, Steiner, or Korngold, but it is memorable music and deserves to be available to the public. Or, even better, could Wrather be persuaded to release the original recordings of the background music used on radio? I am sure there is a market for this bit of nostalgia.

Richard C. Thibodeau Detroit, Mich.



It all started in 1883 in St. Croix, Switzerland where Herman Thorens began production of what was to become the world's renowned Thorens Music Boxes.

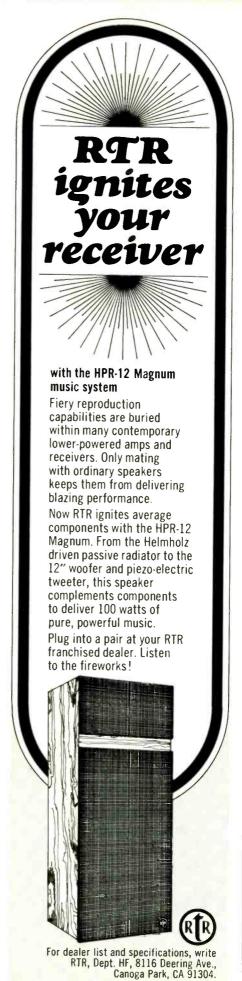
For almost a century Thorens has pioneered in many phases of sound reproduction. Thorens introduced a number of industry firsts, a direct drive turntable in 1929, and turntable standards, such as the famed Thorens TD 124 Model.

Over its long history Thorens has learned that an exceptional turntable requires a blend of precision, refined strength, and sensitivity. Such qualities are abundantly present in all five Thorens Transcription Turntables. Speaking of quality, with Thorens it's the last thing you have to think about. At Thorens it's always been their first consideration. So if owning the ultimate in a manual turntable is important to you, then owning a Thorens, is inevitable.

ELPA MARKETING INDUSTRIES, INC.

EAST: New Hyde Park, New York 11040 WEST: 7301 E. Evans Rd., Scottsdale, Arizona 85260 THORENS The Accent is on Quality

PICTURED ABOVE: lower left—TD-125 AB MARK II. (Also available without tone arm TD-125 B MARK II) lower right—T0-145 C • top left—T0-160 C • top right—T0-165 C.





The Advantages of Disorder

by John Culshaw

I HAVE TO ADMIT something that all my friends would confirm: When it comes to records I am not the tidiest of people. Books, yes: They are under very firm control, so it never takes me more than a few seconds to find a book or a score, or to discover that I have lent it to someone whose name I have forgotten, despite the fact that my books inhabit three rooms on three floors whereas my records are supposed to be confined to one.

Supposed is the operative word, because I am convinced that recordsor at least my records-are incurably nomadic. When they are not under constant scrutiny they wander about. probably at some ghastly hour like 4:47 a.m., and engage in a silent ritual of reshuffling, so that Joan Sutherland singing Noël Coward appears not under C for Coward or S for Sutherland, but in the middle of an unboxed set of Ivan Susanin. I am also convinced that this subversive activity happens at particular times of the year, that it is rather like the migratory habits of birds. It is at its most tiresome in the winter, when one is likely to be using records even more than usual, and in the early fall, when all the big new releases vie for accommodation on the shelves. Will Tebaldi and Karajan in Aida move over to make room for Caballé and Muti? Like hell they will.

By dint of much research and observation I have discovered that records have a hibernation period, roughly

between May and August, so this is the time to put your collection in order with at least a fair chance that it will stay that way for a month or two. There are a few sets that stay in a state of permanent hibernation simply because they are too big or too grand to indulge in the frivolity of wandering about: for example, The Ring and the complete symphonies of Haydn. At the other end of the scale, the worst wanderers by far are the 45s, of which mercifully I have few and which I never attempt to put in order.

Yet there are advantages in this disorder. The very act of running down strays and putting them back where they belong (in alphabetical order according to composer or, in recital format, according to artist) can unearth some splendid forgotten treasures. Thus in my most recent attempt to impose discipline on the wanderers I came across what must have been the first LP set of The Mikado, which-although it is of minor interest except for a brilliantly laconic performance by Martyn Green as Ko-Ko-instantly transported me back to Decca/London's studio No. 1 in West Hampstead almost a quarter of a century ago. It turned up next to, of all things, a single pirated record of Leonard Bernstein conducting excerpts from Tristan und Isolde with Eileen Farrell and Jess Thomas (which, despite the awful quality of the sound and the atrocious cuts, made me long

TDK SA. WE DEFY ANYONE TO MATCH OUR VITAL STATISTICS.

		MAGAZ	MAGAZINE B			
Manufacturer	Brand	S/N Ratio Weighted in dB	Output @ 3% THD	S/N in dB (re: 3% THD)	THD at O dB (%)	
TDK	SA	66.5	+4.2	66.0	0.9	
AMPEX	20:20+	56.4	+1.9	_	_	
FUJI	FX	60.0	+2.3	_	-	
MAXELL	UD		_	58.5	1.1	
MAXELL	UDXL	62.5	+2.7	-	_	
NAKAMICHI	EX	60.0	+2.3	55.0	1.1	
SCOTCH	CHROME	-	_	64.0	1.3	
SCOTCH	CLASSIC	62.5	+2.0		_	
SONY	FERRICHROME	64.0	+2.1	64.0	1.8	

Decks used for tests: Magazine A, Pioneer CT-F9191 (cross-checked on DUAL 901, TEAC 450); Magazine B, NAKAMICHI 1000

Two leading hi-fi magazines working independently tested a wide variety of cassettes. In both tests, TDK SA clearly outperformed the other premium priced cassettes.

The statistics speak for themselves. TDK SA provides a greater S/N ratio (66.5 dB weighted and 66.0 dB @ 3% THD), greater output sensitivity (+4.2 dB @ 3% THD), and less distortion (THD 0.9%) than these tapes.

When you convert these statistics into sound, TDK SA allows you to play back more of the original signal with less distortion and noise.

Put these facts and figures together and TDK SA adds up to the State of the Art because it provides greater dynamic range. This means cleaner,

clearer, crisper recordings, plain and simple. Sound for sound, there isn't a cassette that can match its vital statistics.

Statistics may be the gospel of the audiophile, but the ultimate judge is your own ear. Record a piece of music with the tape you're using now. Then record that same music at the same levels using TDK SA. You'll hear why TDK SA defies anyone to match its sound.

Or its vital statistics.

TDK Electronics Corp., 755 Eastgate Boulevard, Garden City, New York 11530. Also available in Canada.



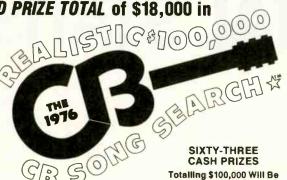


Wait till you hear what you've been missing.

Radio Shack is awarding \$ 1000,0000 in cash prizes

YOU Could Win \$1000...\$3000...\$8000...\$13,000 ... or the GRAND PRIZE TOTAL of \$18,000 in

63 cash prizes! Plus, the 10 winning semi-finalist entries will be professionally arranged and recorded by Radio Shack . . . this could help further your musical career . . . enter today!



The 1976 Realistic \$100,000 CB Song Search is sponsored by Radio Shack, a leader in CB since 1960, and is open to any U.S. or Canadian resident*. It's a contest for the best original music and lyrics on any phase of CB activity, real or imagined. To enter, just record your song on a blank cassette tape. You may even have someone perform the song for you, but it must be your own creation. Submit any number of songs, but only one song per tape per entry form. Entry forms and rules are at your nearby participating Radio Shack. But hurry, all entries must be postmarked or delivered to a participating Radio Shack store or Dealer no later than August 31, 1976. Act NOW!

Totalling \$100,000 Will Be Awarded as Follows:

Preliminary Playoff \$1000 Each to the Top Fifty Winning Entries.

Semi-Final Playoff \$2000 Each to the Top Ten Winning Entries.

Final Playoff

\$5000 to 3rd place winner. \$10,000 to 2nd place winner. \$15,000 to 1st place winner.

* Except employees of Radio Shack, Tandy Corporation, their affiliated companies, suppliers, judges, or their Immediate families.

Void Where Prohibited by Law

The Avid 103.

Few people would expect more in a loudspeaker.



For most people, the Avid Model 103 really is the ultimate speaker.

Not that you can't pay more for a speaker. You can. A lot more.

But, for most audio enthuslasts any difference between the Avid 103 and more expensive speakers just isn't going to justify the added cost. As it is, the 103 clearly outperforms speakers costing up to twice their price.

The Avid 103.

You owe it to yourself to find out why it is rapidly becoming the popular new reference standard for 3-way systems. For your nearest Avid dealer, please write:

CORPORATION

10 Tripps Lane, East Prov., R.I. 02914

Sound products for Avid listeners.

CIRCLE 4 ON READER-SERVICE CARD

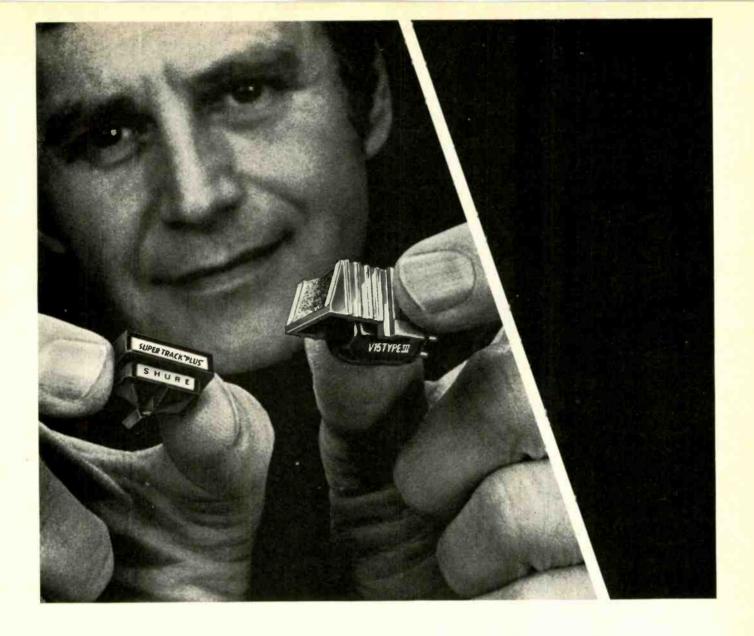
to hear him conduct a complete performance). It was a strange coincidence that these recordings should be together, for when I was producing Rosenkavalier with Bernstein for CBS some years ago he suddenly revealed over dinner one night not just an enthusiasm for The Mikado, but also an ability to quote its words and music flawlessly and at length. Maybe he should record that as well.

Another stray was Pierre Monteux's version of Elgar's Enigma Variations, recorded in London around 1960, which somehow got itself inside a rather elaborate Edith Piaf album. I remember thinking highly of it at the time, but now that I have heard it again (and again and again), I'm convinced that it's the best performance of Enigma I have ever heard and probably shall ever hear. The actual sound (at least on the original pressing, which is the one that had been hiding) is magnificent, even though it was recorded without Dolby and directly on two tracks with less than half the number of microphones that would be used today. There is probably a lesson in that, and I may return to it on another occasion.

Yet not all discoveries are beautiful. and some can be downright horrible. It is when you come to the miscellaneous section that you should approach with caution, on the principle that, while there are few things more honeyed than a ripe banana taken from the tree, there may be a tarantula hidden in the bunch. Thus, in the banana category, I was delighted to find a long-lost student performance of Wagner's Das Liebesverbot, which had chosen, aptly enough, to take up residence right next to "The Complete Anna Russell"; and then there was the original LP of Candide, strayed from B for Bernstein to live next to the soundtrack of South Pacific, which might not altogether please Mr. B. There were also inexplicable things, like several LPs of Greek folksongs, which I do not care for and would have neither bought nor borrowed.

Do records wander the streets as well in their search for a welcoming shelf? Do they, like ghosts, pass through unopened doors? Which brings me to my horrors, and I wish they would go away. Do you recall that sudden mania for joke records about the Kennedy family in the early Sixties? Well, they are still lurking, and they must by now be the most utterly unplayable of all records. Coming across them quite ruined what I called the advantages of disorder, and I shall do no more sorting this year in case my good efforts turn up something even more dreadful.

20



Tune-up Time.



Your intricate stereo stylus assembly is like a high-performance sports car—it needs a little routine care to keep it in top operating condition. Your Shure dealer will professionally inspect your stylus and clean it. Then, if your stylus tip is worn, he will select the correct genuine Shure replacement stylus to restore your cartridge to its original specifications. For more information, see your dealer or (next best), write for our booklet, "Visit to the Small World of a Stylus."

Shure Brothers Inc. 222 Hartrey Ave., Evanston, IL 60204 In Canada: A. C. Simmonds & Sons Limited



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





Andy Russell:

"I Don't Like to Stay Up Late"

by Gene Lees

DURING WORLD WAR II, several new singers of popular music emerged and became the idols of adolescents. They soon supplanted in popularity the bands in which they had been nurtured and trained. The bands all but faded away.

Dick Haymes was one of them, Perry Como another. The biggest, of course, the archetypal singing idol, was Frank Sinatra, and the hysterical enthusiasm of bobby-soxers made him a legend.

Just as big, at one point, was Andy Russell, a young man with a friendly mien, a dazzling smile, and an exceptional clear voice whose career followed closely behind that of Sinatra's. There was, for example, a similar shrill opening at the Paramount in New York. And in 1946, he took over the Lucky Strike Hit Parade radio show from Sinatra.

Russell had a string of hits about the time of the war's end-"Besame Mucho," "Amor," "Mam'selle," "Without You," "Time Was," and "Magic Is the Moonlight." He was a very big star.

And then, suddenly, a few years later, he disappeared. By the late 1950s, Sinatra's career was in trouble. He fought his way back to fame, of course, and has never lost it. (Como continued on his casual way.) Haymes's career also faded. Russell just calmly took a walk. Right out of the country.

Word filtered back that he was in Mexico, that he had become as big a star in the Spanish-speaking world as he ever was here. That seemed strange, unless you knew he was born Andres Rabago in the barrio of East Los Angeles. His parents were born in Mexico.

"I didn't have to learn Spanish when I went to Mexico," Andy said recently, "but I had to improve it. The tragedy with Mexican-Americans is that they don't get a chance to learn to speak English properly or Spanish properly."

Despite his parentage, Andy experienced a measure of cultural shock when he made the move: "The American world does not know what is going on in the Latin world. There are so many big stars, not only in Mexico, but in Argentina, Chile, Colombia.

"I'll never forget when I arrived in Mexico, in 1954. I had finished at the Cocoanut Grove, and my life did a complete turnabout from English to Spanish. I arrived in Mexico City, and they asked, 'Andy, how do you feel about working with Augustine Lara, Maria Victoria, and Pedro Vargas at the Teatro Lyrico?' And I said, 'Who are they?'"

That was like asking an American who Bing Crosby and Frank Sinatra

Andy moved back to California after fourteen years in Mexico. He lives in Encino with his wife, Ginny (who

was an interviewer on a Texas TV station when he met her), their 13-yearold son, Craig, and her son by a previous marriage.

I don't know how old he is—probably a little younger than Sinatra. The catch is that he looks about forty-two or forty-three. It is uncanny.

"Well, Ginny is an expert on nutrition," he explained. "And we are very strong on vitamins. And then there's exercise, too."

"You know," Russell continued, "I was the big square of the music business. I've always been a nonsmoker and a nondrinker. When I was with the bands, the musicians used to say, 'Andy, you're never going to make it. You've got to go out more with the guys.' But I never did. I saw one of them recently, and he said, 'Andy, you were right, I've had three heart attacks, and I've given up everything.'"

That may make Andy Russell sound stuffy, but it was said with laughter. He's a health nut, that's all. And he's the best argument for the healthy life I've ever seen.

I remember with amusement running into Andy during an engagement at the Chateau Madrid in New York about seven years ago. He had a hot record on Capitol, had just played Las Vegas, and appeared to be on the verge of a big U.S. comeback. I asked him if he intended to pursue it. He said he didn't think he would. "Well," he replied to my amazed reaction, "you know, I don't like to stay up late."

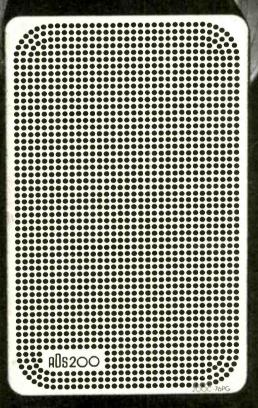
Today he does concerts in Mexico City, Buenos Aires, Madrid. And in Southern California. Recently he played to a crowd of 10,000 at the Ventura County Fair and went from there to Disneyland, then on to the Hollywood Palladium. He's still a star to a lot of Americans. But they happen to speak Spanish, and perhaps few of them know that he first sang in English. Indeed, the younger among them think he is a new performer.

Andy—who, incidentally, began not as a singer, but as a drummer with Gus Arnheim, Alvino Ray, Johnny Richards, and Stan Kenton—still records. In Spanish, of course. The U.S. labels apparently aren't interested. Which bothers Andy not in the least.

His voice is in remarkable condition. It is as clear and strong as ever—better by far, in fact, than it was in the days of his early fame.

"People have asked me," he said, "how long I'll stay in this thing. I'm such a proud guy. I haven't lowered the keys of my songs. My register has stayed up. So the answer is, 'Until this voice, this instrument, starts to fail on me.'"

INSIBLE SOUND, INCREDIBLY SIVALL.



(AD\$ 200 and 12" record shown in proper proportion.)

ADS200

A new state of the art: To you it may be a dream machine.

To us it's the world's first miniature studio quality speaker system.

For more information see your ADS Dealer or write to:

ADS, Analog & Digital Systems, Inc.

64 Industrial Way Wilmington, MA. 01887



In headphone listening, I find hiss and high-frequency noise much more noticeable and annoying than in listening through speakers. This is most noticeable on FM but also occurs in listening to records. I have noticed this on more than one pair of phones and set of speakers (Sennheiser HD-414 and Koss Pro-4AA phones, AR-6 and Advent speakers). Can you explain?—David Hoekema, Princeton, N.J.

We too have observed this effect. The principal cause, as far as we can determine, is that when the high frequency response of a system is set correctly for loudspeakers it is too "hot" for headphones. The loudspeakers have to work into an environment that is far more absorptive at high frequencies than is the inside of one's ears. A judicious treble cut should solve matters nicely.

I am planning to replace my 1962 vintage monaural hi-fi with modern stereo. I like the convenience and economy of integrated units (changer, tuner, amplifier, and tape) but am concerned with quality and output power. My present system consists of a Rek-O-Kut Rondine Jr. L-34 turntable with ESL arm and Shure M-3D pickup, Dynakit preamp and Mk. IV 40-watt amplifier, and AR-2 speaker with the "AH" electrostatic tweeter.

I believe the AR-2ax would match my speaker for the left channel, and a Garrard 770 changer with Shure M-91ED cartridge would fit my needs. My question comes in the electronics of the system. The Dynaco PAT-4 preamp, Stereo 120 amp, and FM-5 tuner probably would be fine. Are separate preamp and amp as desirable in solid-state equipment as in the old tube-type? Would the Dynaco SCA-80 do just as well as the Stereo 120, practically speaking, at a saving of \$85? Is there a fully integrated unit with tuner. changer, tape cassette, and amplifier that can power the AR speakers? If not, could a lower powered unit be coupled with an additional power amplifier?-Robin K. Ransone, Charlottesville, Va.

Although solid-state technology—by alleviating the problems of heat and packing density—has made it easier to assemble the electronics of a playback system on a single chassis than it was with tubes, separates still have advantages in flexibility and, usually, in the performance standards to which they are designed. While the per-channel difference between the SCA-80 at 16 dBW (40 watts) and the Stereo 120 at 17¾ dBW (60 watts) is negligible at 1¾ dB, using separates allows you to start with a cheaper alternative and

upgrade if and as you want—for more power, more preamp features, or whatever.

We would recommend, however, that you use matching speakers for both channels. As we see it, you would be better off selling your AR-2 and add-on tweeter and buying two AR-2ax speakers. In any event, we wouldn't recommend trying to drive the speakers with coupled amps. Nor would we expect an all-inone product to match either the performance or the features of the system you propose to assemble.

I am considering the purchase of a Sony TA-5650 integrated amplifier with FET output, rated at 50 watts per channel. My dealer claims that Sony has rated the unit very conservatively and that he has measured 80 watts per channel from some samples. Is this credible, or is the dealer trying to pull a fast one?—Stephen J. Bell, Palo Alto, Calif.

The dealer is probably correct, but Sony is not being as conservative as all that. The preconditioning required by the FTC before the power of an amp is rated heats up the output devices a good deal more than does music reproduction, even at high levels. Unlike bipofar transistors, V-FETs deliver less current for a given input signal as they approach their maximum operating temperature. This makes them not so dependent on protection circuitry, but it forces the designer to leave generous margins to be sure the product meets its specs. Allow a bit more to take care of manufacturing tolerances (your dealer was lucky to get a unit with that much reserve), and the figure measured does not seem at all outlandish. And of course the practical difference between 50 watts (17 dBW) and 80 watts (19 dBW) is small-just 2 dB in ultimate sound level.

The cones of my speakers (Utah 15-inch Musical Instrument drivers in bass-reflex enclosures) move in and out visibly, slightly at low volume but through a considerable distance when the control is set halfway. Turning the bass control to FLAT reduces the movement but does not eliminate it. The problem has persisted through several changes of equipment, including electronics from Kenwood, Sherwood, and Electro-Voice, turntables from Garrard, Benjamin, and BIC, and cartridges from Empire and Shure. I have even switched to sealed speaker enclosures without any improvement. What can possibly be wrong?—Tom McKnight, New Castle, Pa.

Your problem is likely to be either low-frequency oscillation in the electronics or turn-

table (or recorded) rumble. Since it seems unlikely that three different amplifiers would oscillate in this way and you appear to be a bass freak (we assume you are turning the bass control to FLAT from BOOST, not CUT), rumble—or even record warps—may be the culprit. The high gain that your system has at low frequencies probably will require the use of a subsonic filter. Electronics with filters that effectively reduce rumble without cutting out bass tend to be rather expensive, however. So, depending on your budget, you may want to use whatever low filter you have available or even back off somewhat on the bass control.

After seeing an ad for Sound Guard, a new record preservative, in your March 1976 issue, I have a few questions about its use. Will the Discwasher record cleaner (and D-II fluid) remove this preservative? Would you recommend the use of Discwasher and Sound Guard together? Finally, will Sound Guard last indefinitely after one application, or do records need repeated applications?—Christopher M. Long, Framingham, Mass.

Since the manufacturer says that Sound Guard is removable only by detergent (and then with some difficulty) and the Discwasher fluid contains no detergent, the latter probably would have little effect on the Sound Guard. It does not last indefinitely—only for about 40 to 50 plays (again by the manufacturer's own reckoning). The two products seem, on the face of things, to be compatible.

I've read in your magazine several complaints about RCA's "prewarped" Dynaflex discs, but I've never seen a word about the atrocious quality to which Deutsche Grammophon—apparently the darling of the industry as far as commentators are concerned—has descended. The discs are so noisy that I won't buy them any more. Why the conspiracy of silence?—Mark J. de Marco, Evanston, III.

Like other readers we've heard from, you seem to feel betrayed by a company that once had a reputation for offering the quietest discs of any major company in the field. We too have noted more clicks and pops in recent DG pressings, but DG claims that it has no problem and that the only reason for the greater number of defective copies these days is the greater number of discs it is producing. The percentage of defects, it says, remains the same as always. Translated from the official, this means that you shouldn't expect things to change in the near future.

LUX offers three good reasons for the growing movement toward separate amplifiers and tuners.

Possibly the highest acclaim a receiver can be awarded is to have one or more of its elements compared favorably with its equivalent in a separate tuner, preamplifier, or power amplifier. Nevertheless, for most music lovers, a good receiver more than fulfills their requirements. But for a growing number of dedicated audiophiles, who are seeking the ultimate in music reproduction, nothing but separates

They know what kind of power it takes to reproduce music's original wide dynamic range and high levels without peak clipping or distortion. (A barely detectable 3-dB increase in output level requires double the amplifier power.) A very powerful amplifier must have massive power-supply components to be able to deliver the large amounts of current demanded by high-level output circuits. The size and weight of the power transformers alone means receivers must leave off well below where really high power begins.

For those who want to hear their music at realistic sound levels. LUX audiophile/engineers have designed products such as the M-4000 power amplifier. This unit is capable of 180 watts per channel. minimum continuous average power, and even with both channels driven simultaneously to full output into 8-ohm loads, each channel has no more than 0.05% total harmonic distortion at any frequency from 20 to 20,000 Hz.

Sophisticated protection circuits react to the electronically-subtle differences between normal

high-level audio signals and abnormal voltage/current conditions. Hence the M-4000 won't be fooled into producing unpredictable and audible distortions when operating with certain reactive

loudspeaker loads. Each of the stages—Class-B output and Class-A drive - has independent powersupply sections to minimize intermodulation effects. And fully independent power-supplies for each channel maintain full wattage potential under large-

signal drive conditions.

Similar considerations went into the design of the C-1000 preamplifier. Every parameter that contributes to sonic differences, subtle as well as obvious, was examined anew. Among them: phase linearity, rise time and small-signal overload. One result: the magnetic-phono input circuits are virtually overload-proof—accepting almost half a volt at 1000 Hz! Another: the phono-preamplifier circuits have astonishingly low distortion of 0.006%, and the rest of the preamplifier circuits add only 0.001% more.

The Luxman T-310 AM/FM stereo tuner has everything from calibrated Dolby circuits for decoding Dolbyized FM broadcast and tapes to variable AM muting. Among its typical specifications: an IHFratio sensitivity of 1.7 microvolts and an exceptional 2.2 microvolts for 50 dB of guieting. And special five-pole phase-compensating filters in the IF section contribute to a 1.5-dB capture ratio and exceptionally low distortion levels (0.1% mono, 0.12% in stereo).

Of course, it takes some technical knowledge to fully appreciate the design approaches described above. But only your ears are required to hear the end result. In either case, you may soon be among those who own one or more of the thirteen LUX power amplifiers, preamplifiers, integrated amplifiers or tuners. You'll

find them at a select number of dealers who are dedicated audiophiles themselves.

Luxman M-4000 Power Amplifer,

> Luxman T-310 AM/FM Tuner,

Dolby is a trademark of Dolby Laboratories, Inc.

Luxman C-1000 Preamplifier

\$895

LUX Audio of America, Ltd.



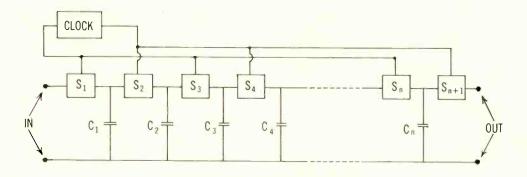
Is There a Bucket Brigade in Your Future?

No, it's not a federally mandated safety device that will put out fires in an overheated power amp. It is, rather, a clever little mechanism (an integrated circuit, in fact) developed by Matsushita Electric of Japan that is capable of accepting a signal at its input terminals and delivering substantially the same signal at its output a little later in time. In short, it is a time-delay unit, and its formal name is charge-coupled device. But everybody in the audio industry is talking about the "bucket brigade," and if you want to appear au courant you should know what it is.

An electric current (such as an audio signal) is really a flow of charge. And any waveform can be replicated from a series of discrete samples, provided that the highest frequency component of the wave is sampled at least twice in each cycle. In the accompanying diagram, let's assume that the "clock" (a high-speed master oscillator) turns the odd switches (S_1 , S_3 . . .) on and the even switches (S_2 , S_4 . . .) off with one pulse and reverses things with the next pulse. Now if a signal is present at the "in" terminals when S_1 goes on, the capacitor C_1 charges up to some value, which

will depend on the momentary voltage of the incoming signal. When S_1 goes off and S_2 goes on, the charge in C_1 is "dumped" into C_2 . If the signal remains present at the input and the odd- and even-numbered switches keep alternating, a series of "packets" of charge representing the input signal travels down the line (that's where the term "bucket brigade" comes from) and eventually arrives at the output. If the clock frequency is at least double the highest frequency in the input signal (a clock faster than that is needed in practice), the output theoretically will be the same as the input, only a little bit later. The "switches" used actually are transistors, and they do not switch perfectly; similarly the capacitors leak somewhat. But despite some consequent noise and distortion, the device works.

What is this relatively simple and inexpensive integrated circuit being used for? Well, we know of at least one reverberation unit based on bucket brigades, and Technics by Panasonic (a Matsushita Company) has developed an ambience circuit for headphone listening based on the same device. More applications are in the works.



High-End Pique

We recently had a discouraging conversation with a gentleman from one of the major tape-deck manufacturers. Citing the psychoacoustic "fact" that "brighter sounds better," he opined that some of his competitors had been able to win customers away from his product on the sales floor because their cassette decks exhibit a slight peak in response toward the high end and therefore sound "higher fi" in A/B comparisons than his flatter-responding decks. Apparent conclusion: In order to win customers, you must play games with their ears.

The cassette medium has progressed enormously in the last few years. In particular, its high-frequency limits have

been pushed upward from those comparable to cheap table radios to those comparable to open-reel tapes. The steps by which this has been achieved have, mostly, been lilliputian, but they add up to a brobdingnagian stride—a stride that lengthens all the time.

Perhaps equipment buyers, mindful of past (and worst) cassette decks, are hypercritical of the high end. But the cassette medium got where it is today by intense concentration on precision—mechanical, magnetic, and electronic. And we think it will continue to progress only if it cherishes and builds on the precision already achieved. Our motto is: Flat is beautiful.



Ask a friend to introduce you to a legend.

If you're thinking about stereo equipment, probably the single most important influence on your buying decisions will be the recommendations of friends whose judgement you respect.

Please talk to someone who owns the Bose 901® loudspeaker system. He or she is probably serious about music and can give you a serious opinion, along with a somewhat technical discussion of the unique qualities of the 901. (Bose owners tend to be a little passionate about their speakers.) And, loyalty aside, it's probably worth a few minutes of your time to listen to the story, because the Bose 901 is so drastically different from conventional speakers.

First of all, the 901 is far smaller than its performance, reputation, or price would lead you to believe.
Then, the speakers are pentagonshaped, and are set up a foot or two from the wall of the listening room, pointing at the wall, not at the listener. This is a critical difference between the 901 and conventional speakers. The 901 is a Direct/Reflecting loudspeaker. It reflects most sound off back and side walls and then into the center of a room, surrounding the listener with the proper proportion of reflected and

direct sound, all frequencies in balance, almost anywhere in the room. The result is an extraordinarily open, spacious sound that very effectively reproduces the feeling of a live, concert-hall performance. This is in sharp contrast to conventional direct radiating speakers, which tend to beam sound (especially high frequencies), limiting optimum listening to a relatively small area in front of the speakers, and producing the somewhat harsh sound often associated with high fidelity.

There are more dramatic differences inside the 901: it has no conventional woofers or tweeters, just nine identical, 4½-inch, full-range drivers.

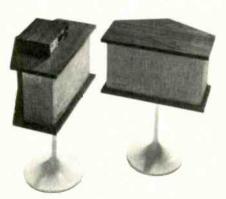
The nine drivers are acoustically coupled inside that very compact 901 cabinet. Coupling tends to cancel out, across all nine drivers, the small imperfections found in any sound reproduction device (ours included). What you will hear is an incredibly smooth, life-like sound, practically free of distortion.

Besides two speakers, the 901 system includes a third part: the Active Equalizer. The 901 uses the Active Equalizer to automatically boost power at the frequencies where it's needed. The result is

consistent sound output up and down the frequency range, with full, steady high notes and solid, powerful low notes.

Now that you've heard the story behind the 901, we invite you to go to a Bose dealer and listen. Compare the 901 to any other speaker, regardless of size or price. Then you'll know why the Bose 901 has become something more than a loudspeaker system for thousands of music lovers all over the world.

For a full-color brochure on the 901 loudspeaker system, write: Bose, Dept. HF6, The Mountain, Framingham, Mass. 01701.
Patents issued and pending.



The Mauritin

The Mountain, Framingham, Mass. 01701

Getting the Best of "The Best of . . ."

Automated record playing has a new virtuoso performer. Audio Dynamics Corporation, a division of BSR (U.S.A.) Ltd., has come up with a turntable-cartridge-arm combination that keeps track of the bands on a disc and plays just the ones you want, skipping all the rest and shutting itself off at the end of the disc. If your musical taste displays meterological variability, Accutrac 4000, which is what this interesting gadget is called, comes complete with a wireless remote-control unit that allows you to exercise your caprice with the flick of a finger.

Unlike the ill-fated quasi-jukebox system introduced by Seeberg some years ago, Accutrac involves no sacrifices in basic performance—the turntable, arm, and cartridge are designed to be competitive with state-of-the-art gear. An infrared emitting diode in the cartridge beams onto the record. Its radiation is scattered by recorded areas and reflected back to a detector (also in the cartridge) as the arm passes over the spiraling between cuts. The detector output allows the system to count bands and play only those you have programmed by means of the array of buttons on the turntable (or on the remote controller).

The system, which can handle discs with up to thirteen cuts, can store as many as twenty-four commands. Selec-



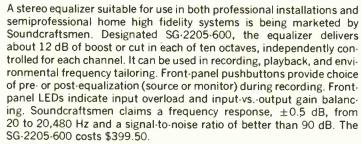
The ADC Accutrac 4000 with its outboard components. The remote-control transmitter is the rectangular box; the associated receiver is the spherical unit at the right.

tions can be played in any order, repeated, cued, rejected—all without laying a finger on the tone arm. (You can do that, too, if you really want to.) For about \$500—or less, according to ADC, in future models—you can turn the tables on record producers who insist on putting dross in among their goldies. Sounds like fun.

CIRCLE 143 ON READER-SERVICE CARD



New equalizer available from Soundcraftsmen



CIRCLE 136 ON READER-SERVICE CARD



Kenwood speaker line makes its debut

Kenwood has announced the addition of the LS series of speakers to its product line, including the LS-406, LS-405, and LS-403. A new material made from pulp from the Daphne, a shrub found in Japan, is used for the speakers' diaphragms, and Kenwood claims that it contributes to flat response in the midrange and high frequencies. Possessing high elasticity and great strength, though light in weight, the Daphne fiber is said to have a favorable damping characteristic. Also used is a lumber-core baffle board, which Kenwood says gives the speakers a rich tonal quality. The LS-406s cost \$149.95 each; LS-405s, \$119.95 each; and LS-403s, \$169.95 per pair.

CIRCLE 137 ON READER-SERVICE CARD



The new Sherwood S9910. Everything you hear is true.

It has all the power you need [at the lowest achievable level of distortion]: 100 watts per channel [minimum RMS at 8 ohms from 20-20,000 Hz] with no more than 0.1% Total Harmonic Distortion. The componentry used to achieve this rating features exceptional stability characteristics: a paralleled OCL direct-coupled output configuration... twin 15,000 µf filter capacitors... and a zener regulated secondary power supply.

It has all the controls you need for fully flexible centralized operation: 5-position Mode switch, 6-position Selector switch, 8-position Speaker switch. Two Tape Monitor circuits [with a two-way, inter-deck dubbing capability). Front-panel Mic Input and Mixing, with a frequency response suitable for use with a professional caliber microphone. And a Main-In/Pre-Out switch, which allows independent usage of the main amplifier section. The S9910 can accommodate three speaker groupings, two turntables, three tape decks and any auxiliary equipment.

It has State-of-the-Art tuner specs: an IHF FM Sensitivity rating of 9.84 dBf

 $[1.7\mu V]$. A four-ganged tuning capacitor and dual-gate MOS FET's provide superior image rejection and spurious response rejection with minimal cross modulation. The newly developed digital detector system utilizes no tuned circuits and never requires alignment.

The Ceramic FM IF Filters are matched for optimal phase linearity. The Phase Lock Loop integrated circuitry in the multiplex decoder improves separation and SCA rejection, while limiting distortion.

It has all the features you need for the purest sound: Loudness
Compensation, Hi-Filter and Subsonic Filter; precision detented
Bass, Midrange and Treble controls
[each with exceptional variance characteristics]; and a master Tone
Defeat switch, for instant reference to flat response. Switchable FM
Stereo Only and FM Muting. Dual Tuning Meters. And a Positune™ Indicator LED, which visually signals perfect tuning.

It has switchable FM Deemphasis [25µsec. and 75µsec.], to accommodate an outboard noise reduction unit. A built-in Ambience Retrieval System [A.R.S.] which recovers and

bient material found in conventional utilizes the frequently "hidden" amstereo recordings and derives an effective 4-channel sound from any stereo source

It has plug-in driver boards [to facilitate servicing], which feature an I.C. differential amplifier input for stable operation.

It has relay speaker protection circuitry which automatically disengages, your speakers if a potentially damaging situation arises.

It has everything we've mentioned.
It has some features we haven't mentioned.

Best of all, it has a price of less than \$700.*

Sherwood Electronic Laboratories, Inc. 4300 North California Avenue Chicago, Illinois 60618



•The value shown is for informational purposes only The actual resale price will be set by the individual Sherwood Dealer at his option. The cabinet shown is constructed of select plywood with a walnut veneer covering.





Beyer's latest headphones

The DT-440, a high velocity type, is the newest stereo headphone from Beyer Dynamic. According to the manufacturer, the model provides full and clean bass response with great clarity of the highs and accuracy in the midrange. Beyer claims up to 116 dB of acoustic output and very low distortion. Finished in brushed aluminum and mat black, the DT-440 weighs only 9.6 oz. The price is \$55.

CIRCLE 138 ON READER-SERVICE CARD

New top receiver from JVC

JVC America has introduced a new flagship, JR-S600, for its receiver line. Rated at 110 watts (20.4 dBW) per channel into 8 ohms, 20 Hz to 20 kHz with THD not over 0.1%, the model features slide controls for volume and balance, as well as for the integral five-band SEA graphic equalizer. Twin panel meters display output wattage, and a low-distortion FM quadrature detector, phase-lock multiplex circuitry, and Dolby noise reduction are combined for what JVC considers state-of-the-art FM reception. The striking JR-S600 retails for about \$750. Other models in the line range down to \$200.



CIRCLE 139 ON READER-SERVICE CARD



Sidereal Akustic makes debut with Model One

Appropriately enough, the first product from Sidereal Akustic, a West Coast company, is the Model One loudspeaker. The three-way system uses two 10-inch woofers, a 1½-inch dome midrange radiator, and two piezoceramic supertweeters. The manufacturer claims a 4-ohm impedance rating and an unusually flat impedance curve, the result of mounting the woofers in a resistive reflex enclosure. The tweeters are said to have a frequency range from 10 to 23 kHz. The Model One, which features a particleboard enclosure, is fuse-protected and, according to Sidereal Akustic, can handle the output of any commercially available amplifier. The price of the system is \$499.

CIRCLE 150 ON READER-SERVICE CARD

Tube components de Lux

Lux Audio has introduced a tubed mono power amp, the MB-3045, and stereo preamp, the CL-35 111. The tubes, according to Lux, are responsible for "soft" clipping and less distortion when the amplifier is driven beyond rated power. The MB-3045 features a triode tube developed jointly by Lux and NEC. Lux claims a frequency response from 10 Hz to 40 kHz ± 1 dB for the amplifier, with a power rating of 50 watts (17 dBW) continuous into 4, 8, or 16 ohms. The preamp features high and low noise filters and six selectable turnover frequencies. Rated frequency response is 2 Hz to 80 kHz, ± 0 , ± 0.5 dB. Suggested price for the MB-3045 is \$445 and \$745 for the CL-35 111.



CIRCLE 140 ON READER-SERVICE CARD



Record-care product from Canyon

DiscProtec, from Canyon Products, is designed to protect records from wear and to preserve their tone quality. Thomas J. Loran, president of Canyon Products and inventor of DiscProtec, says that the product, when properly applied, will reduce stylus wear with no audio distortion or loss of fidelity. The dry solution, sprayed onto the record surface, leaves a thin water- and oil-repelling material on which the stylus will then glide instead of on the plastic of the record. According to Canyon Products, DiscProtec will neither evaporate nor turn gummy, and it prevents dust buildup. Both sides of approximately 29 LPs may be treated with one bottle at a suggested selling price of \$6.95.

CIRCLE 141 ON READER-SERVICE CARD

Say music enthusiasts

my Pink Floyd and Frank Zappa albums because I realize now I never really heard them before. Freaks me right out! 99

About accuracy

66 Elton John sounds like Elton John and not Wayne Newton with a sinus condition. All kinds of music sound great, from Percy Faith to Led Zepplin. 99

GRANT HOWES, MICHIGAN

You can play it loud

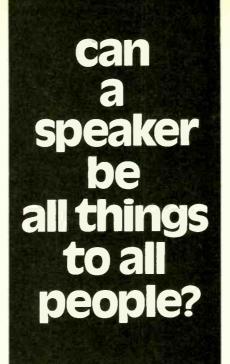
66 I once read it was not possible to have a rock concert in your home, but with the B·I·C VENTURI™ it is possible. 99

RICHARD KNES. ILLINOIS

Or play it low

thank someone that realizes there are a few of us who don't like our stereo and quad up blasting our eardrums. These Formula are great at any volume. 99

MRS. GAIL McAULOF, CALIFORNIA



From professionals

66 I am a disc jockey and work with some of the finest sound equipment available...I purchased a set of your Formula 4's after a year of shopping around... In my opinion none sounded better at any price. 99

DAVID FOOR, FLORIDA

And audio engineers

66 I'm an audio engineer at (AM, FM, TV broadcast station) ... An excellent speaker and a great design concept. 99 PHIL JONES, SOUTH CAROLINA

Even people who sell audio

66 You've really got the product...my recommendation 9 times out of 10 is B·I·C VENTURI. 99

DAVID WILLIAMS, TEXAS (DEALER)

And those who've lived with it

66 Nearly a year ago I purchased a pair of Formula 6...the performance has substantiated my original beliefs. 99

JERRY GRETZINGER, MICHIGAN

So join this fellow who says

of I could not be more pleased with the performance of your product, nor with myself for having the good sense to have chosen them! 99 RONALD BERTHEL, N.Y.

Because you can believe

I was somewhat skeptical about the claims in your advertisements... I purchased a pair of Formula 6... Your speakers surpass all

the claims made...They are fantastic! 99

RANDOLPH L. KRUMM, N.J.

Find out why all these people are saying such nice things about the B·I·C VENTURI Speaker System. Send for our free 20-



page "Consumer's Guide to Loudspeaker Performance." Simply write to: B·I·C VENTURI, Westbury, N.Y.11590.

Canadian inquiries to C.W. Pointon, Ontario. B-FC, B-FC VENTURI and British Industries Company. Division of Avnet, Inc.

BIC VENTURI

K	1	Y	2	P	3	XX	4			М	5		111	W	6	Z	7	ww	8	K	9	D	10			Н	11	J	12	0	1
YY	14	1	15	К	16	С	17	ZZ	18	Р	19	S	20			xx	21	F	22	T	23	Е	24	К	25	L	26	D	27		1
		R	28	YY	29	Q	30	35 TA		Y	31	WW	/ 32	0	33	V	34	D	35	Z	36	A	37	M	38			ZZ	39	ı	4
Y	41	К	42	С	43	В	44	X	45	Т	46			E	47	Р	48	XX	49	1	200	ww	50	S	51	ZZ	52	G	53		
Q	54	М	55	Y	56			R	57	L	58			D	59	XX	60	Z	61	100		U	62	WW	63	X	64	A	65	1	66
Y	67			YY	68	М	69		1 611	В	70	К	71	Р	72	F	73	N	74	Z	75	Q	76	R	77			X	78	7,	-
J	79	xx	80	М	81	н	82	0	83			U	84	E	85		· wallilland	ZZ	86	Y	87	Т	88	S	89			8	90	WV	/ 9
W	92	65		Z	93	G	94			L	95	1	96	М	97	S	98		a	ww	99	ZZ	100	D	101	Y	102	Р	103	R	10-
н	105	II.		F	106	E	107	A	108	К	109	Z	110			С	111	YY	112	Т	113			Y	114	V	115	М	116		H
0	117	В	118	w	119	G	120	ZZ	121	XX	122		2	A	123	E	124	С	125			К	126	ww	127	н	128	2	129	A	130
YY	131	В	132	G	133			ww	/134	D	135	ZZ	136	€	137			u	138	К	139	YY	140	М	141	0	142	Y	143	wv	V 1 6
L	145	V	146		M	Z	147	М	148	С	149	A	150			XX	151			М	152	N	153	J	154			YY	155	В	15
М	157	Р	158	W	159	К	160	€	161	Z	162	G	163	D	164	1	51	XX	165	WW	/166	Y	167	X	168			0	169	YY	170
		xx	171	17	TY :	Q	172	A	173	М	174	Y	175	P	176	R	127	Z	178	В	179	XX	180	-		L	181	К	182	J	183
νw	184	1	185	u	186	F	187	Q	188	X	189								H						7						

DIRECTIONS

To solve these puzzles—and they aren't as tough as they first seem — supply as many of the Output words as you can in the numbered dashes following the linput. Unless otherwise specified in the linput, the Output consists of one English word. 'Comp.' means compound, or hyphenated, word.

Transfer each letter to the square in the diagram that bears the corresponding number. After only a few correct guesses you should begin to see words and phrases emerging in the diagram, which when filled in will contain a quotation related to music, recordings, or audio.

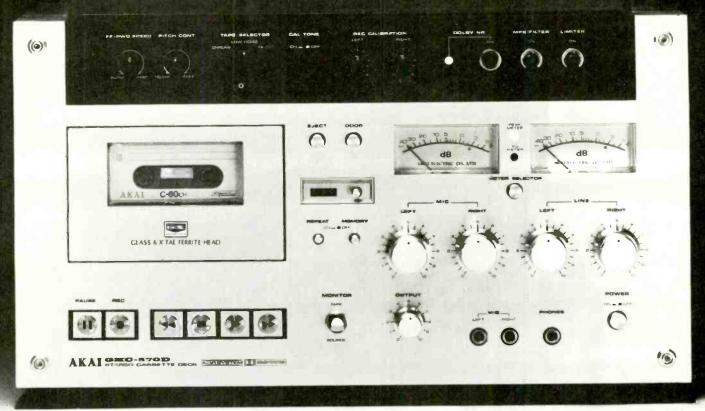
The words in the quotation are separated by darkened squares and do not necessarily end at the end of a row.

Try to guess at these words and transfer each newly decoded letter back to its appropriate dash in the Output. This will supply you with further clues.

A final clue: The source of the quotation — the author and his work — will be spelled out by the first letters in the Output, reading down

The answer to HiFi-Crostic No.13 will appear in next month's issue of High Fidelity

INPUT	ОИТРИТ		INPUT	ОПТРИТ	
A Italian-American composer (b. 1911): Sebastian	150 37 108	173 130 123 65	Q. With Word I., 1931 musical, music by Arthur Schwartz	188 172 30 76	54 129 117
B. Of sound, between rough- ly 15 and 15,000 Hertz	156 118 70	44 90 179 132	Dancing in the Dark (2 wds.) R. British organist, choral	177 77 104 00	
C. Medieval string instrument without a fingerboard	17 149 111	43 125	conductor, and prime min- ister	177 77 104 28	57
D. Got a fly	101 59 135	10 35 164 27	S. loelandic epic, basis of Peter Cornellus opera Gunlod	98 20 89 51	
E. Russian-American violinist (b. 1901); among the works he has commis-	124 107 161	85 24 47 137	T. One who fawningly Imitates his superiors	46 88 113 23	
sioned is a concerto by William Waltorf F. With Word XX., a masque			U. Professional name of Pat Boone's younger brother; both have recorded for	62 84 186 138	
by Handel	22 73 187	106	Dot label		
G. Wagner's father-in-law	163 120 133	53 94	V. Form of poetry, from the Greek "I sing"	115 146 34	
H. Abandoned	105 128 11	82	W, for one	119 159 6 92	
I. See Word Q.	40 96 15	185 66	X Belgian violinist (1858- 1931)	189 168 78 64	45
In-place dance, derivative from the twist	79 154 12 1	83	Y. Pulitzer Prize-winning Gershwin musical (4 wds.)	143 114 167 2	41 56 102 175
K. Schoenberg's Composition with (2 wds.)	126 1 71 2	25 160 139 9 182			87 31 67
		42 16 109	Z. Irish music festival, held annually since its Inception	147 36 93 61	7 110 178 75
L. Person who superintends the forms of a public occa- sion (stang)	145 95 181 2	26 58	in 1897 (2 Gael. wds.)		162
M. With Word ZZ., the correct title of Weber's Op. 65,	81 174 152	5 69 116 97 141	WW. Negro folksong, popular- ized in 1830s by T. D. Rice.	134 91 184 144	50 32 99 166
often mistranslated in English (Ger.)		148 157 38 55	famous black minstrel (3 wds.)		63 8 127
N. The note D in the normen- clature of France and Italy	74 153		XX. See Word F. (2 wds.)	165 4 180 122	60 21 151 80
Paul Czech-American muslcologist long a profes- sor at Indiana University	33 83 13 1	69 142			49 171
(b. 1889)	۔ نیا سا ہے		YY. Soviet composer (b. 1904); two operas. The Year 1919	14 29 131 155	112 68 170 140
P. Important collection of 15th-century German songs	72 103 48	3 158 176 19	zz. See Word M. (2 Ger. wds.)	52 100 86 39	18 121 136



I INTRODUCES ITS

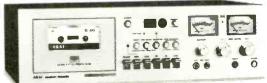
The new Akai GXC-570D is our top-of-the-line stereo cassette deck. And it's loaded. It utilizes a 3 head recording system – a GX glass and crystal combination head so you

can source monitor when recording and, if you don't like what you've got, an erase head.

It has a closed loop dual capstan drive system which not only pulls, but feeds the tape across the heads, smoothly.

That's the best drive system there is.

GXC-39D. GX glass and crystal head. Dolby memory It has Akai's exclusive Sensi-touch® control system so you can go from one mode to another without ever pushing a button. You just touch them, lightly.



GXC-710D. GX glass and crystal head. Dolby" memory rewind full

It has 3 motors, dual process Dolby,* remote control (optional) and as many switches and features as cassette decks costing a lot more. Plus something brand new – an electrically operated control panel cover. Just so you can impress people.

Plug in our GXC-570D and you'll know you're playing with a loaded deck. That's the strength of the Akai line. Quality. Performance. Loaded. From top to bottom.

After all, nobody should be playing with half a deck.

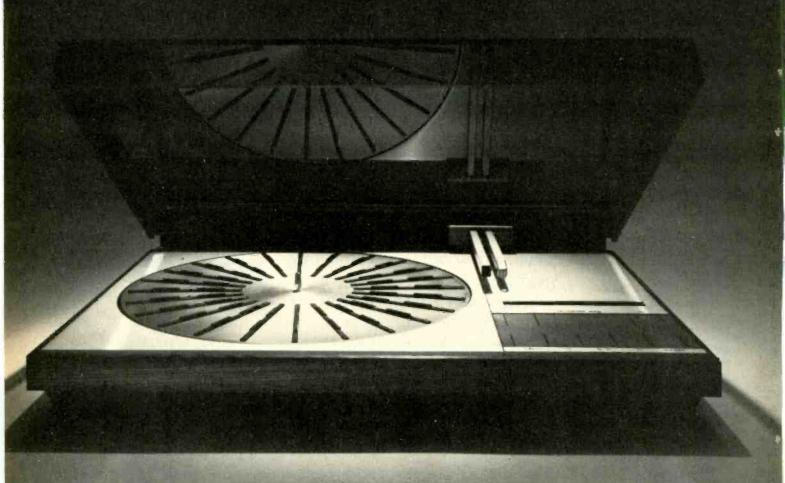
The Beogram 4002. If music in your home is important to you, it should begin here.

The Beogram 4002 is a fully automatic turntable which exhibits a level of creativity and engineering skill unequalled in the field of audio components. Its tangential tracking permits the record to be played back in exactly the same manner that the original performance was recorded. Electronic logic circuits, activated

by a single light touch on the control panel, automatically cue the stylus, select the correct speed and record size, and turn off the unit when the selection is finished. Furnished with Bang & Olufsen's finest cartridge, in itself an acknowledged masterpiece of audio engineering.

A full color brochure presenting all of Bang & Olufsen's audio components is available upon request.

Rarely has technology served music so well.



Bang & Olufsen

Eang & Olufsen of America, Inc., 515 Busse Road, Elk Grove Village, Illinois 60007



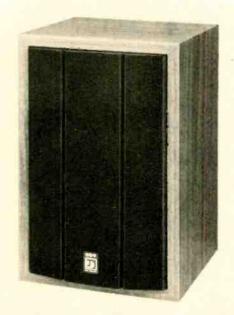
BIC's Newest Venturi: Big Sound in a Little Box

The Equipment: BIC Venturi Formula 1, a loudspeaker system in wood enclosure with simulated wood-grain finish; foam grille available in choice of four colors. Dimensions: 16½ by 10% by 10 inches. Price: \$74.95. Warranty: "limited," five years parts and labor. Manufacturer: British Industries Co. (Division of Avnet, Inc.), Westbury, N.Y. 11590.

Comment: The Formula 1 is the baby brother of the Venturi line that BIC has been building for the last few years. Like its siblings, it uses a form of ducted-port loading for the woofer with a slotted port and an internal configuration that is said to increase the velocity of the air passing through it by constricting the passage (à la the Venturi principle) to achieve exceptional deep-bass response for the enclosure size. The tweeter in the Formula 1 is a Biconex (combined conical and exponential, with equal flare in both horizontal and vertical planes) horn design that is used in other Venturi models.

This speaker does not have one feature common to all the older models: Automatic Dynamic Tonal Balance Compensation, a built-in and switchable signal-controlled loudness compensation circuit. But it does have (on the back panel, together with a pair of spring-loaded connectors engineered for bared-wire leads) the manual control, a continuously adjustable knob marked ROCK & POP/BRIGHT toward the extreme clockwise rotation, CLASSICAL/LINEAR in the central region, and BACKGROUND LEVEL/MELLOW for almost half of its range in the counterclockwise direction. The lab set this control at its midpoint (near the bottom of the LINEAR range) for the anechoic measurements shown here. We found this a good setting for most purposes, though higher (brighter) settings are preferred by some listeners.

Tests in the CBS anechoic chamber show that the control influences response significantly above approximately 3.5 kHz, giving up to about 5 dB of boost and 3 dB of reduction, with respect to the midpoint setting, at its ex-



tremes of rotation. The omnidirectional response measured at the midpoint falls gradually as frequency rises from 100 Hz to beyond the test range, making numerical characterization somewhat problematical. The spread is $\pm 6 \%$ dB from about 60 Hz to 8 kHz; it is ± 9 dB from 50 Hz to beyond 16 kHz. Even at this setting test tones remain audible to at least 16 kHz.

Listening tests also confirm that deep bass falls off precipitately. Doubling takes over by about 40 Hz, though some fundamental can still be detected. (BIC claims "effective response" to 35 Hz; in our test room this was the approximate limit of fundamental audibility.) Pink-noise tests show very little coloration and good balance, if not the utmost in "open" quality. Both pink noise and sine waves confirm good high-frequency dispersion with little audible change to 60 degrees off axis in any direction, exactly confirming BIC's spec of 120-degree dispersion both horizontally and vertically.

REPORT POLICY Equipment reports are based on laboratory measurements and controlled listening tests. Unless otherwise noted, test data and measurements are obtained by CBS Technology Center, Stamford, Connecticut, a division of Columbia Broadcasting System, Inc., one of the nation's leading research organizations. The choice of equipment to be tested rests with the editors of High FideLITY. Manufacturers are not permitted to read reports in advance of publication, and no report, or portion thereof, may be reproduced for any purpose or in any form without written permission of the publisher. All reports should be construed as applying to the specific samples tested, neither High FideLITY nor CBS Technology Center assumes responsibility for product performance or quality.

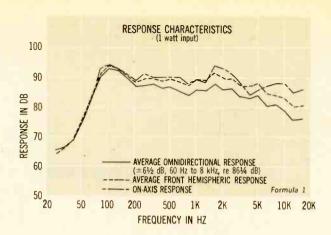
JUNE 1976

But the Formula 1 does best when it is given musical signals to work with. Details of transients and instrumental colors are nicely handled, voices are convincingly reproduced without the intrusive colorations that are commonplace in this price class, stereo imaging is firm and detailed. Complex orchestral tuttis are not as transparent as in some speakers we have heard, but the system can hardly be faulted seriously in this respect. The lab's pulse test at 3 kHz does show some evidence of ringing, but—the aforementioned loss of orchestral clarity aside—we could find no real evidence of it in listening to music.

The inherently low cost of the speaker is further enhanced by its ability to deliver plenty of sound with relatively low input power. The average sound pressure level (250 Hz to 6 kHz) delivered for a 0-dBW* (1 watt) input is 89.6 dB. Signs of overload appear with steady 300-Hz tones only at 106 dB SPL, which requires an input of 6.1 dBW (a hair over 40 watts). In pulse tests at this frequency the Formula 1 can make it to 115 dB SPL (from a peak power of over 25 dBW or close to 340 watts) before distortion reaches normal limits. In other words, it is a relatively efficient speaker with a good dynamic range that, in addition, will handle instantaneous "overloads" very gracefully. It will also handle paralleling well; impedance drops only slightly below the manufacturer's 8-ohm rating (CBS measures the nominal impedance as 7.3 ohms at about 150 Hz) and exceeds it from about 350 Hz up. The impedance curve is, moreover, unusually smooth.

All this adds up to an exceptionally attractive speaker for less-than-lavish systems. It does nicely in smaller rooms, where it needs only a modest amplifier to function well to high listening levels. It will handle heftier amplifiers—certainly to 17 dBW (50 watts)—with no discomfort, and it will fill larger rooms if you want it to. And it really will fit on a bookshelf.

CIRCLE 135 ON READER-SERVICE CARD

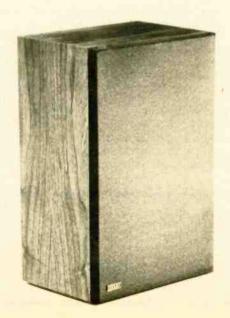


BIC Venturi Formula 1 Harmonic Distortion*

Output		Frequ	iency	
Level	80	Hz	300	Hz
(dB)	% 2nd	% 3rd	% 2nd	% 3rd
70	0.16	0.55	0.22	0.26
75	0.16	0.50	0.19	0.24
80	0.16	0.55	0.21	0.27
85	0.16	1.3	0.37	0.28
90	0.16	2.3	0.83	0.33
95	0.20	2.7	1.5	0.43
100	0.40	2.2	2.8	0.60
105			4.5	1.0
106			5.5	1.2

*Distortion data are taken on all tested speakers until distortion exceeds the 10% level or the speaker produces the spurious output known as buzzing, whichever occurs first.

Epicure 11: Big Sound in a Plain Brown Wrapper



The Equipment: Epicure Model 11 loudspeaker with walnut-vender enclosure. Dimensions: 13½ by 21½ by 9½ inches. Price: \$134. Warranty: "limited," ten years parts and labor. Manufacturer: Epicure Products, Inc., 1 Charles St., Newburyport, Mass. 01950.

Comment: Considering the constraints that operate to keep loudspeakers very similar in their basic appearance, the wide divergence observed in their visual personalities is well nigh amazing. There are some that leave an indelible mark on the decor of a room; some fit right in; some are hardly noticed at all. The Epicure 11 belongs in the last category: It could almost be called a tour de force in understatement. But once connected to an amplifier (the manufacturer recommends 15 to 80 watts—12 to 19 dBW—of continuous power per channel, and we tend to favor the upper part of that range), the system is capable of fine performance.

Epicure Model 11 is of dimensions—and of weight—that make it very suitable for bookshelf mounting. On its rear panel are a pair of color-coded, spring-loaded terminals that accept bared wires (although, for safety and convenience, tinning the wires is a good idea). Near the terminals is a three-position switch (labeled NORMAL/MEDIUM/LOW) that controls the tweeter output level, with NORMAL the "brightest" of the settings. MEDIUM lowers output at 10

^{*}For an explanation of this term, see page 50.

kHz by about 3 dB and Low by another 3 dB. Following the manufacturer's advice, CBS ran most of the tests with the setting on MEDIUM.

The omnidirectional frequency response measures ±5 dB, 31.5 Hz to 12.5 kHz (with respect to a sound pressure level of 77½ dB). Perhaps more important, the curve falls off with a slope that is nearly constant from 100 Hz to the upper limit of response (16 kHz or so, for practical purposes). Adjusting the control to NORMAL lessens this decline, of course, and Low will make it yet steeper. Below 100 Hz anechoic response falls off smoothly at about 6 dB per octave.

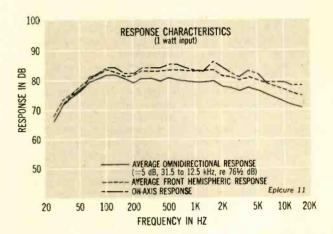
The lab data for power handling are not overly impressive, but reproduced sounds are "bigger" than this data would suggest. With an input of 16 dBW (40 watts), Model 11 produces an output SPL of 100 dB (at 1 meter) without excessive distortion. From pulse power at the same 300-Hz test frequency, the unit produces a peak SPL exceeding 107 dB with a peak power input of 24 dBW (251 watts). Efficiency is on the low side: A 0-dBW (1 watt) input delivers an output of 83¼ dB SPL (average, 250 Hz to 6 kHz). The impedance curve, while not particularly smooth, never dips below the 6.7 ohms measured at the nominal rating point, so it offers no severe pitfalls to an unwary amplifier.

In listening evaluation, the Epicure 11 shows excellent transient response, excellent handling of high-level pulses, and an uncanny ability to play at realistically loud levels. We can only speculate as to why the listening performance outstrips the measured data in this way, but possible answers include low intermodulation distortion and the fact that the onset of serious harmonic distortion occurs suddenly and only with relatively large amounts of power. (There is sufficient audible suffering, however, to warn a heavy hand on the volume control to ease off.)

Sine waves are audible and clean from just below 40 Hz to about 16 kHz, with some beaming evident at the upper frequency. Dispersion is very good, however: A 12-kHz tone is audible almost throughout the front radiation hemisphere. Pink noise in one-third-octave bands confirms good dispersion and smooth frequency response. Wideband pink noise is reproduced with a somewhat bright cast, but adding "oomph" to the bottom end via tone controls brings no complaint from the woofer. This driver, despite its relatively small size (6-inch diameter, nominal), performs its labors well and when pushed beyond its limits gives up with minimal sounds of struggle.

To sum up, we would characterize the Epicure 11 as a real sleeper, a speaker that would be very easy to miss—except for its sound. It can be driven by amplifiers that are modest in output and will rise to heights that are respectable, if not exclusive, when more muscle is available. Here is a fairly small box that, unlike Pandora's, is full of happy surprises, including a moderate price.

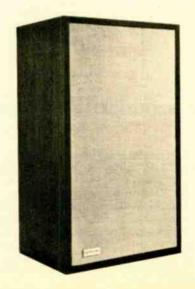
CIRCLE 132 ON READER-SERVICE CARD



Epicure II Loudspeaker Harmonic Distortion*

Output		Frequ	Jency	
Level	80	Hz	300	Hz
(dB)	% 2nd	% 3rd	% 2nd	% 3rd
70	0.21	0.20	0.24	0.30
75	0.25	0.17	0.38	0.35
80	0.37	0.18	0.70	0.43
85	0.62	0.38	1.5	0.49
90	1.1	0.80	3.0	0.45
95	1.7	1.3	5.0	0.80
100			10.0	1.6

*Distortion data are taken on all tested speakers until distortion exceeds the 10% level or the speaker produces the spurious output known as buzzing, whichever occurs first.



Genesis Model I, an Intimate Loudspeaker

The Equipment: Genesis Model I loudspeaker with enclosure finished in walnut-grained vinyl. Dimensions: 21 by 12 by 8% inches. Price: \$94. Warranty: "limited," five years parts and labor. Manufacturer: Genesis Physics Corp., Newington Park, Newington, N.H. 03801.

Comment: Some of us—probably because our bookshelves are not made of prestressed concrete and we need some room left over for books—tend to regard the term "bookshelf loudspeaker" with misgivings. Refreshingly, the 28-lb. Genesis will fit conveniently and safely on a bookshelf of ordinary construction. The announced aim of the de-

signers is to produce a small speaker with high performance capabilities and a modest price. We would agree that they have succeeded to a notable extent.

The exterior of this unit is simple indeed. The front is faced with a white grille fabric (removable, but only with difficulty) decorated with a tasteful nameplate. On the back are a pair of color-coded, spring-loaded connectors designed to accept bared (preferably tinned) wires. There are no balance controls, but the manufacturer's instructions are quite explicit as to how the low-frequency response is affected by room placement.

Omnidirectional frequency response, as measured in the anechoic chamber at the CBS Technology Center, is about ±5 dB between 45 Hz and 18 kHz, exactly as claimed. Moreover, the response curve about 63 Hz is one of the smoothest we have seen, varying by $\pm 2\frac{1}{2}$ dB or less up to 10 kHz, where it rolls off gradually. Capable of producing an average sound pressure of 87 dB at 1 meter on axis, 250 Hz to 6 kHz, from a 0-dBW (1-watt) electrical input, the system is moderately efficient. This fact compensates somewhat for the limitations shown in the powerhandling test. Actually, for the likely applications of the Genesis I, its steady-state output (just shy of 100 dB sound pressure at 300 Hz without excessive distortion) is quite adequate, and its pulse capability (nearly 107 dB peak at the same frequency) is downright commendable. We would estimate that an amplifier rated at 25 to 30 watts (14 to 15 dBW) of continuous power per channel would drive a set of these speakers very well.

The amplifier will benefit, too, from the relatively smooth impedance curve of the speaker. The data confirm the manufacturer's rated impedance of 8 ohms and, further, show just one insignificant dip below that value.

There certainly should be no problem in paralleling two sets across the output of a typical solid-state amplifier.

High-frequency dispersion is good, with tones approaching 18 kHz audible to about 40 degrees off axis. The low end holds up well to about 40 Hz, both on sine waves and one-third-octave bands of noise. Below this frequency, provided the power input is kept reasonable, the response retires gracefully, without buzzes, rattles, and the like. On wide-band pink noise the speaker produces a smooth overall sound that is just a trifle weak in the bass. This, as we shall see, poses no problem in listening.

To get the best results from the Genesis I, a listener must respect its essential personality: The unit will not play loudly in a large room. Once this is accepted the results are indeed excellent, especially since the bass rolloff is smooth and gradual enough so that loudness compensation (à la Fletcher-Munson) is taken easily in stride. Positioned 4 feet or so from the corners of a room, and with the listener seated 8 to 10 feet away from them, a stereo pair of these speakers reproduce the sound of an orchestra with a perspective that is on the distant side but extraordinarily clear and detailed. As a reproducer of chamber music, the system is exceptionally attractive. As with other accurate transducers, the very lack of coloration seems disappointing at first, but one soon realizes that it is possible to hear "through" these speakers to the music almost without effort.

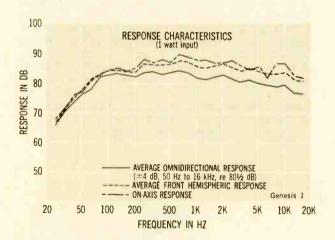
If your listening space is intimate rather than expansive and you like to hear music at moderate (though by no means lifeless) levels, the Genesis I is a loudspeaker to audition—carefully. And it won't strain your budget, either with its own price or the cost of an amplifier to drive it.

CIRCLE 131 ON READER-SERVICE CARD

Genesis I Loudspeaker Harmonic Distortion*

Output		Frequ	Jency		
Level	80		300	Hz	
(dB)	% 2nd	% 3rd	% 2nd	% 3rd	
70	0.32	0.20	0.25	0.30	
75	0.45	0.20	0.30	0.33	
80	0.85	0.25	0.50	0.38	
85	1.2	0.20	0.98	0.45	
90	2.0	0.17	2.0	0.52	
95	3.3	0.40	4.0	0.70	
100			8.0	1.8	

^{*}Distortion data are taken on all tested speakers until distortion exceeds the 10% level or the speaker produces the spurious output known as buzzing, whichever occurs first.



Sonab OA-14, an Electroacoustic Ventriloquist

The Equipment: Sonab Model OA-14, a floor-standing loudspeaker system in wood-finished enclosure. Dimensions: 9 by 16½ inches (top), 22½ inches high. Price: \$576 per matched stereo pair. Warranty: "limited," one year parts and labor. Manufacturer: AB Sonab, Sweden; U.S. distributor: Sonab Electronics Corp., 1185 Chess Drive, Foster City, Calif. 94404.

Comment: A glance at one of the Sonab "orthoacoustic" loudspeakers from a distance of 10 feet or so would leave

most people in considerable doubt as to its intended function. Is it, perhaps, a room humidifier? Of course, as one gets closer one can see the drivers through the wire-mesh top. There is a bass-midrange unit aimed about 15 degrees away from vertical and inward, toward the listening area. Two of the four tweeters (the crossover is at 1,800 Hz) are aimed similarly except for a lower radiation angle, and two are positioned to bounce sound off the side walls and the wall between the two speakers. The back radiation of the woofer is coupled to a duct-tuned bass-reflex enclo-



sure, and the port (from which most of the low frequencies emerge) is located at the bottom of the cabinet.

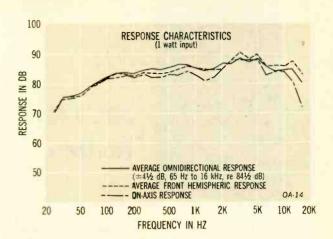
Obviously this is intended as an indirect radiator—or what some American companies were calling "omnidirectional" loudspeakers a few years back. Some sound reaches the listener directly from the drivers, and the remainder only after reflecting off walls, ceiling, and furniture. For best effect the OA-14 should be placed at least 1 meter from room corners, according to Sonab; designer Stig Carlsson has mounted the system on large, smoothacting casters so that it can easily be moved about. He also has provided mirror construction in the two speakers of the stereo pair. (They are sold only in pairs.) Connections are made—via a DIN-style speaker jack—at the bottom of the unit; there are no controls.

Electrically, the model is only moderately efficient; it produces an average output (250 to 6,000 Hz) of 84½ dB sound pressure level from an input of 0 dBW (1 watt). A steady 300-Hz tone is produced at 97 dB SPL—from an input of 17 dBW (50 watts)—before excessive distortion sets in. But despite this fairly modest steady power capability, the speaker is capable of a "big" sound. This is partly because levels of 105 dB and above can be reached on pulses; the maximum peak output of the test amplifier (25 dBW, or 321.4 watts) is accepted without signs of undue strain. Rated impedance (8 ohms) is reached only at about 5 kHz. At all other points in the spectrum this value is exceeded, and the CBS lab gives the Sonab a nominal impedance rating of 11.2 ohms at 200 Hz.

The anechoic omnidirectional frequency response of this speaker is ± 5 dB from 63 Hz to just beyond 16 kHz re 84¼ dB SPL. Output falls by about 6 dB between 60 and 30 Hz, the point at which useful low-frequency radiation becomes practically nil. The power-handling ability of the woofer at low frequencies does, however, permit moderate boost below 50 Hz, and we found that this improves the tonal balance. The tweeters, on the other hand, are not so ready to rise to the occasion and give some audible evidence of overload when driven hard at 12 kHz and above. They tend toward an edginess os sound, perhaps due to intermodulation distortion, on loud musical signals as well as test tones.

As might well be expected from a design such as this, dispersion of all frequencies is excellent. The character of wideband pink noise varies very little as one wanders through the listening area. Some coloration can be heard in this test: A rumbling quality and the aforementioned edginess obtrude just slightly.

On musical program material we find that the transient response of a pair of OA-14s is very good indeed. Stereo imaging—which should be a strong point—is more proble-



Sonab Model OA-14 Harmonic Distortion*

Output Level	80		quency 300	Нz
(dB)	% 2nd	% 3rd	% 2nd	% 3rd
70	0.12			Garage .
75	0.55	0.35	0.17	0.13
80	88.0	0.45	0.22	0.14
85	1.5	0.65	0.28	0.12
90	7.0	2.4	0.58	0.07
95			1.1	0.35
			1.1	

*Distortion data are taken on all tested speakers until distortion exceeds the 10% level or the speaker produces the spurious output known as buzzing, whichever occurs first.

matical, however. On recordings that contain a fair amount of reverberant information, things sound just fine. Orchestras, for example, seem to be spread above and beyond the two speakers so convincingly that, under these circumstances, one is seldom aware that the sound is emanating from the two "boxes" on the floor. But a "dry" recording does not expand so easily into a full stereo panorama, and apparent size as well as placement of the musical sources can be influenced by musical dynamics. Such effects are, of course, influenced by recording, the loudspeakers, and the listening room. In fairness we must add that these effects themselves are relatively subtle and that the imaging at its best is spectacular.

The virtues of the OA-14 should prove particularly attractive to users who plan to place it in a listening room of medium or small size. Too large a room may, in fact, encourage overdriving—which, as we pointed out, the Sonabs do not accept very gracefully. But used correctly (and, though it isn't a critical factor, this includes their position in the room), the way in which the Carlsson design distributes the sound can offer a significant advantage over conventional speakers.

CIRCLE 134 ON READER-SERVICE CARD

A Price Correction

The price of the Stax SRX Mk. 3 ear speakers (headphones) was reported incorrectly in March. The correct price is \$230.



JBL's New Horizon

The Equipment: JBL L-166 Horizon loudspeaker system with oiled walnut enclosure. Dimensions: 14¼ by 23½ by 13 inches. Price: \$375. Warranty: "limited," five years parts and labor. Manufacturer: James B. Lansing Sound, Inc., 3249 Casitas Ave., Los Angeles, Calif. 90039.

Comment: Wherever the so-called "West Coast sound" is supposed to be hiding these days, its refuge is not in the JBL L-166 Horizon loudspeaker. The omnidirectional, anechoic frequency response of this unit ($\pm\,5\%$ dB between 40 Hz and 10 kHz), made with the balance controls at their "zero" settings, is commendably flat, and advancing the tweeter level control to its maximum (" $+\,3$ ") appears to make the high end even flatter. (Some listeners may find that this gives too bright a sound, but we liked this balance best.) The Horizon, to be sure, has its own ways of coloring the reproduced sound, but these are relatively slight and not representative (to our ears at least) of any school of thought in speaker design. So much for geographical myths.

Measured performance data taken at the CBS Technology Center show that the L-166 is above average in efficiency, producing an average output (250 to 6,000 Hz) of 89 dB sound pressure level at 1 meter on axis from an electrical input of 0 dBW (1 watt). This fact should not, however, tempt anyone into skimping on amplifier power, for this is a speaker that produces its most lifelike sound when driven fairly hard. With a steady-state 300-Hz input signal of just over 18 dBW (64 watts), it produces a sound pressure level of 107 dB. On pulses the peak output sound pressure can be driven to 116 dB—at the limit of 27 dBW (500 watts), peak, in our test amplifier—without undue strain. This is an excellent dynamic range.

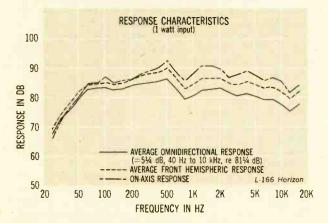
The tweeter level control, as we have noted, is capable of keeping the high end flat to about 20 kHz when set wide open; turning it downward lowers response in the range between about 3.5 and 12 kHz by up to 10 dB. The minimum ("-3") position provides a very rapid drop in response above 12 kHz. The midrange control is most effective between approximately 1.5 and 6 kHz, with a spread averaging about 6 dB between maximum ("+3") and minimum ("-3"). We find that setting this control to "+1" gives very pleasant results, especially when listening to female vocals. To judge from the sound of wideband pink noise reproduced via the JBL, the model accepts moderate equalization gracefully (and gratefully) in the range of 50 Hz and below. Without equalization the low end, which rolls off at about 6 dB per octave, remains audible quite close to 30 Hz. One-third-octave bands of pink noise centered as high as 14 kHz undergo little change in quality as one moves from 15 degrees off axis to almost 90 degrees off axis, showing excellent dispersion from the tweeter.

Above bass resonance the impedance curve of the L-166 is quite smooth. At the rating point (about 130 Hz) it measures 7.3 ohms and stays above this value throughout the midrange—the critical range in terms of musical energy and hence of possible excessive current demands on a solid-state amplifier when two speakers are paralleled in the same channel. The impedance does drop to about 6 ohms in the region around 8 kHz, however.

Transient response is very good, though not quite outstanding, in our judgment. Onset transients are dulled a bit, giving the sound a slightly distant character, while whatever overhang the unit may produce blends nicely with recorded reverberant sound. The measured frequency response (omnidirectional, anechoic) shows a moderate peak around 500 Hz, and we suspect this of obscuring sung and spoken words just slightly, as well as giving violas and cellos a mild guttiness. Yet we find the total sound big, clear, and pleasing—and just a little on the warm side.

The listener in search of a moderate-sized monitor-type loudspeaker that can be mounted on a bookshelf (a strong one, however) would do well to consider the JBL L-166 Horizon. The unit is not cheap—but then, neither are the design and construction. Not only is the sound fine, but the cosmetics are striking (as we have come to expect from JBL). The grille is a molded and perforated sheet of what is called APP, a new material for which the company claims even better acoustic transparency than that of the widely copied sculptured-foam treatment on the Century model. (The balance controls are readily accessible behind this grille.) Its black finish contrasts nicely with the natural wood grain of the enclosure.

CIRCLE 133 ON READER-SERVICE CARD



JBL L-166 Horizon Harmonic Distortion*

Output Level	80		uency 300	Hz
(dB)	% 2nd	% 3rd	% 2nd	% 3rd
70 75 80 85 90 95 100	1.4 0.8 0.5 0.5 0.6 1.0	0.26 0.23 0.26 1.7 2.5 2.1	0.32 0.30 0.32 0.62 1. 2. 3.	0.24 0.20 0.15 0.25 0.89 1.0 0.85
107			8.	1.6

Distortion data are taken on all tested speakers until distortion exceeds the 10% level or the speaker produces the spurlous output known as buzzing, whichever occurs first.

Brand New! 1976 Edition High Fidelity's Test Reports



The new 1976 edition of High Fidelity's Test Reports is packed with more than 200 test reports of currently available stereo and four-channel equipment and accessories, including:

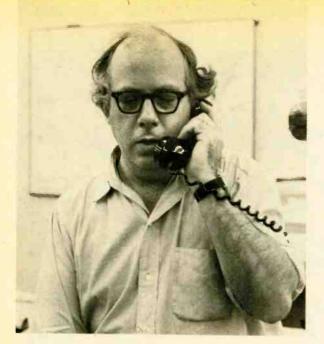
HURRY!
QUANTITIES LIMITED

Receivers • Headphones • Amplifiers • Tape Equipment Turntables & Pickups • Speakers • Tuners . . . and more!

This year's edition is better than ever! Almost 300 pages of in-depth analyses with charts, tables, pictures and prices, plus a guide to technical audio terms.

Order now. Indicate the number of copies you want and return this form with your check or money order.

High Fidelity's Test 1976 Editlon 1 Sound Avenue, M		43302	
Please send me 1976 High Fidelity's T (postage and handling Name	est Reports		
Address			
City	State	Zip	-,
(add tax where applicable)			D6FF1



by Norman Eisenberg

High Fidelity Forthfinders The Men Who Made an Industry

Seventh in a series
HENRY KLOSS

EVERYONE seems to refer to Henry Kloss as the "K of KLH," but the KLH Research and Development Corporation was only a ten-year interim period for Kloss between his first company association—at Acoustic Research, which he helped Edgar Villchur found in 1953 and left in 1957—and his present one—at Advent Corporation, which he founded in 1967. For the record, the "L" of KLH was Malcolm Low, and the "H" was Anton "Tony" Hofmann.

In the early 1950s, Kloss was an undergraduate physics major at MIT. To help support himself he started a woodworking business, which soon became devoted mainly to building speaker enclosures for students experimenting in the MIT acoustical laboratories. Intrigued by this work, Henry himself began carting home audio gear from parts-supply outlets and became fascinated with the idea of translating the concepts and performance of that equipment into products suitable for home use. One of his earliest preoccupations was understanding and solving the problems of the moving-coil loudspeaker.

After MIT he taught electronics to GIs at Ft. Monmouth, New Jersey. While there he also attended an adult education course in sound reproduction given at New York University by Villchur. Low was a fellow instructor at Monmouth; Hofmann, a theoretical physicist (and son of pianist Josef Hofmann), was a neighbor in Cambridge who asked Henry to build him a special speaker enclosure at the workshop (a loft off Harvard Square) that Kloss maintained for weekend projects. Villchur and his student Kloss, to whom he had introduced the acoustic suspension concept, got together with Low and Hofmann (each investing \$2,500) and formed Acoustic Research in 1953.

In 1957 the four agreed to part company. Kloss, Low, and Hofmann established KLH to produce their own line of speakers under an agreement with AR. Kloss insisted on making speakers from the ground up and set up his own papermaking facility so that KLH could produce its own diaphragms rather than modify existing ones. According to Kloss, this approach "gave us full control over the midrange." He points with pride to the KLH Model Six, which he feels was one of the most important speaker systems ever made.

In 1960 Kloss brought out the KLH Model Eight radio, the first tablemodel FM set that high fidelity enthusiasts could take seriously. It was housed in two simple but attractive walnut cabinets, each only 1034 by 5% by 6% inches, one containing the tuner and amplifier and the other the speaker system. It grew, actually, out of a special small speaker that originally had been designed for use in the U.S. Senate. The Senate never bought the speaker, but having it on hand led Kloss to design suitable electronics to go before it. The present Advent 400 two-piece FM radio is a direct descendant of that Model Eight.

The following year saw the second important spinoff from that miniaturization project—the Model Eleven "stereo-in-a-suitcase" system. By 1963 this had evolved into the walnut-encased Model Twenty and touched off the whole trend toward compact (or "modular") stereo systems.

In 1967 came another breakaway. KLH was sold to the Singer Corporation, and Henry Kloss formed Advent. Malcolm Low spent some time in Utah working on computer graphics, then imported Braun equipment from Germany, and now is in York, Maine, where he runs a small company pro-

ducing specialized sports equipment. Hofmann returned to his first love, theoretical physics, and is today involved in basic research.

Before leaving KLH, Kloss had become interested in the Dolby noise-reduction system, which was then still confined to recording work and other professional applications. In his own words, he "pushed Dolby into consumer products," encouraged the development of the Dolby-B system for that market, and in 1970 (after introducing the Advent Loudspeaker) wedded the Dolby concept with a new kind of tape-chromium-dioxidethat had been developed by Du Pont but was not being promoted very vigorously in consumer terms by that giant organization. The ultimate result was the Advent 201 cassette deck, which proved to be the bellwether for a new product trend: the high-performance cassette recorder.

Advent also produced its own recorded cassette to demonstrate how good the format could sound at its best. The machinery and techniques developed then provided the basis of the company's present facility for duplicating the critically acclaimed CR/70 cassette line (Dolby-encoded and on chromium-dioxide tape). And while all this was going on Kloss also was at work on the Advent Videobeam Projection Color Television system, which displays the TV image on a large screen.

A soft-spoken man in his mid-forties, Kloss says he has no hobbies—unless thinking constantly about consumer product ideas can be called a hobby. He enjoys family life with his wife and children, perhaps regrets that he stopped riding a bicycle to work a few years ago, and "may take up tennis."

With Henry, that could mean a whole new kind of ball game.



and you'll drop all the others.

There is a new cassette on the market. The FUJI FX, a Pure Ferrix cassette that soon will be the standard of excellence for top quality, truly high fidelity reproduction. It already is in many parts of the world.

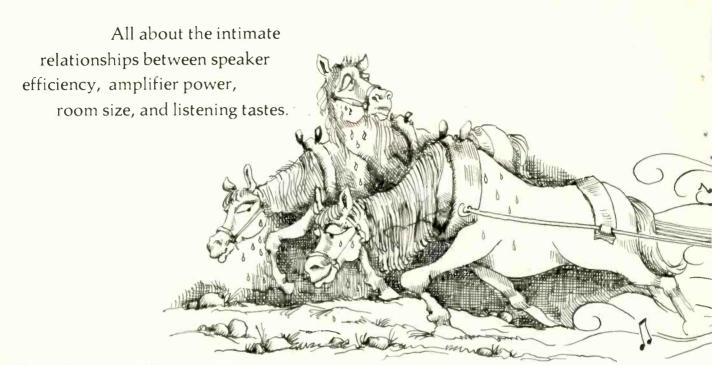
FUJI FX gives you the music you want, the way you want your music. Clear, crisp sound over the entire audio frequency range without perceptible distortion. A signal-to-noise ratio of better than 58 db. No hiss. Virtually failure-proof. The finest music at your fingertips without the need for any special bias. Drop in at your FUJI dealer today; then drop in a FUJI and hear music as you have never heard it before.

FUJI FX cassettes come in lengths of 46, 60 and 90. Also available, a full line of FUJI FL Low Noise cassettes in lengths of 30, 60, 90 and 120 minutes. FUJI Photo Film U.S.A., Inc. The Empire State Building, New York, New York 10001.





THE TAPE THAT'S HEARD AROUND THE WORLD



by Norman Eisenberg

How Loud Are

ONE OF THE MOST striking paradoxes in high fidelity sound is the fact that though loudspeakers have, over the years, been significantly improved and audibly refined over earlier offerings, the linguistic key to understanding their basic working has remained archaic and confusing except perhaps to a relative handful of insiders—and even these worthy souls find it difficult to explain it all in simple language. The real villain in this scenario is the term "watt"—a concept widely misunderstood and misused.

A "watt" is one seven-hundred-forty-sixth (1/746) of a horsepower. How does one relate the notion of a team of sweating horses pulling a plow or cart to the idea of a walnut cabinet producing the sound of a Mozart quartet or an Oscar Peterson combo? The answer is, one doesn't really except in the most oblique and tenuous terms. Horsepower (i.e., wattage) is the rate at which work is done. Specifically, one horsepower equals 550 footpounds of work per second. An amplifier producing the not inconsiderable output of 746 watts has about as much potential for doing work as one healthy horse, both given the same amount of time. But what relevance does this have to the

erage person who only wants to enjoy his favorite music at home over audio components suitably matched with each other and, as a system, suitably matched to the room for a desired and understood quantity and quality of sound? The watt does not even tell us—directly—how loud a loudspeaker will sound. For that insight we have been using the decibel, and—as you probably suspect by now—there is no simple relationship between decibels and watts.

Speakers by the Numbers?

If the existing system for "quantifying" information about loudspeakers is awkward and less than communicative, it at least has the virtue of some degree of consistency within its own framework, and it has provided some basis for the numbers that have for years been given for speakers—originally in terms of anticipated performance (such as manufacturers' specifications), and more recently in terms of actual performance (such as the data provided in HIGH FIDELITY's published test reports).

Before describing this system, though, two fac-



Your Speakers?

tors must be emphasized. One has to do with the way end measurements are derived. There is and likely always will be some discrepancy between what a metering device shows and what anyone actually hears. The other has to do with the relation of the decibel to this work: In circuit measurements (of amplifier power) or sound-pressure levels (acoustic power) a two-to-one change is represented by 3 dB. Thus, 20 watts is 3 dB higher than 10 watts; 40 watts is 3 dB lower than 80 watts. However, in terms of perceived sound, what seems (to a listener) to be a two-to-one change is represented by a change of approximately 10 dB. Thus, music coming from a speaker driven by a 20-watt amplifier does not sound twice as loud when the driving wattage is upped to 40 watts. That change—an increase of 3 dB—would be perceived as "somewhat louder." For the sound to seem twice as loud, the wattage would have to be increased tenfold, to 200 watts. Conversely, you could drop down to as little as 2 watts (a tenfold decrease in power) before reaching a level (-10 dB) where the sound would seem to be half as loud. To put it another way, if a given sound level is shown to be, say, 80 dB, adding 10 dB more (by, for example, feeding it with ten times the electrical power) will double its apparent loudness; reducing 80 dB to 70 dB will cut the apparent loudness in half

The amount of sound a loudspeaker produces can be expressed as a sound pressure level (SPL) in decibels, or in corresponding acoustic power levels in watts. Either expression presumes specific conditions of amplifier driving power, speaker efficiency, and the acoustic load "seen" by the speaker (which implies not only the room, but its position in that room—and, in the case of a measurement via instruments, the location of the microphone used for picking up or "hearing" what the speaker is producing).

It has been customary to think of acoustic power in terms of "maximum orchestral level"—a figure based on measurements made years ago (by Bell Labs and others) which indicated that the most sound made by a full orchestra, as perceived from a "good seat" in a concert hall, came to 100 dB SPL. The same orchestra, playing as softly as possible, produced a "minimum orchestral level" of 30 dB, which was just above the normal masking level of "room noise." The dynamic range of the orchestra



therefore was thought of as being 70 dB.

Tenuous as this formulation is, it at least offers some aural idea of the sonic dimensions involved in perceived musical sound. Table I, showing typical sound pressure levels, will help you develop some sort of acoustic perspective if you're not already familiar with the subject. Translating this idea into the conventional wattage figures quoted for both amplifiers and loudspeakers, however, becomes very tricky, since the same input signal fed to the same speaker will produce varying levels of acoustical power, depending on the room in which it happens (as Table II demonstrates). But we'll return to that.

This means that to get 100-dB sound pressure levels from the same speaker in rooms of different sizes requires that the input signal to the speaker be changed according to the room size, and that the speaker be capable of handling the change correctly—i.e., reducing or increasing its sonic output as directed by the amplifier signal, without an increase in distortion, at the same time that it maintains its dynamic range, linearity, tonal balance, and all the other desiderata of good speaker response.

Ideally, a speaker must be able to disperse acoustic power evenly over a wide frequency range; efficiency must be considered all across the audio band and not merely as a virtue of the lows, middles, or highs alone. For instance, a speaker that has a relatively depressed midrange will sound "softer" or "more remote" than another whose midrange is "ample" even when both are driven to the same over-all loudness levels in the same acoustic environment. You may prefer that kind of sound, but you should know what you're getting, and you can't tell from conventional measurements and numerical expressions. In particular, an expression like "83 dB SPL at 1 meter on axis at 1 kHz," though it appears to offer an objec-

tive statement about the efficiency of the speaker, cannot be interpreted without knowing how response at 1 kHz compares with that at other frequencies. This is why HIGH FIDELITY's tests for this property are made (at CBS Technology Center) with evenly distributed noise in the "music" band between 200 and 6,000 Hz.

Then, too, any rule-of-thumb presumptions about room acoustics cannot take into account the complex nature of real rooms. For example, the figures in Table II are based on theoretical ideals: rooms that have optimum reverberation times and no pronounced resonant modes. These variables, which are virtually impossible to predict, can result in many departures from anticipated response, such as peaks and dips that can augment or mask certain portions of the tonal range and thereby give the effect of altered efficiency or of a tonal coloration. In other words, we generalize about speakers at our peril.

Generalization runs riot, particularly, in "speaker power ratings." Just what information does such a rating convey? Obviously when someone speaks of a "100-watt speaker" he does not mean that the speaker can produce 100 acoustical watts, because that much sound could almost bring the house down. Nor, usually, does it mean that the speaker needs 100 electrical watts to deliver its advertised performance. Such a rating would indicate both that it is a really low-efficiency speaker and that it is built robustly enough to handle that much drive. Most often it suggests that the most the speaker can safely accept from an amplifier is 100 watts. But this still gives you no idea of how much sound the speaker will produce from that 100 watts of amplifier power-nor, for that matter, how much less it will produce for lower amounts of amplifier power.

Somewhat more to the point, but still hedging, is the frequently seen "recommended amplifier power." This type of figure is closer to the minimum amplifier power needed to get the speaker to perform as claimed. But it still does not tell you how much sound the speaker will furnish when fed with that power—or conversely, how loudly the manufacturer is "recommending" you play the speaker. And it also bears no necessary relationship to the maximum-level information, which is germane to the upper safe limit of power to feed the speaker, and to the dynamic range of the speaker with respect to its rated response and distortion limits.

Which Leaves Us----

The answer of loudspeaker manufacturers to this tangle of alternative informational systems—many of which do very little to inform the prospective purchaser—has, all too often, been one of simply making no attempt at informing. Where a manufac-

turer does give consistently arrived-at specifics, allowing you to make useful comparisons between models in a given line (JBL is a good example), comparisons with other brands usually are hampered by differences in modes of expression. How, for example, does one translate acoustic output at 1 meter into acoustic output at 6 feet, even assuming that everything else is equal? It can be managed, but not by the average buyer—certainly not with any confidence.

The alternative, obviously, is independent, consistent tests such as those that appear in HIGH FIDELITY. First let's take a quick look at the information HF presents, before going on to its inter-

pretation.

Frequency response should need little comment, except to emphasize that the omnidirectional response (which represents the total energy radiated into the room) is considered most representative of how the speaker will sound. Therefore HF characterizes numerically only this omnidirectional curve in the data—which are derived, of course, in an anechoic chamber, rather than a lis-

tening room.

HF represents the overload point of the speaker-and therefore, essentially, the upper limit of its dynamic range-in a number of ways. First, the test reports give the harmonic distortion data at 300 Hz, which is carried to the speaker's effective performance limit as manifest in rapidly rising distortion. (The limits at 80 Hz, though they may be lower in output, say more about the cleanliness of the deep bass than about dynamic range since in most music the energy at this frequency is not nearly as great as it is at 300 Hz.) The 300-Hz limit also is repeated in the text of the report. Whether you are looking in the text or in the distortion chart, keep in mind that this represents continuous-tone testing and that the important thing to find is the output level (in dB SPL) at which this limit is reached.

In the text you also will find data for the maximum pulse power that the speaker will accept—in other words, its ability to cope with brief transients that exceed the maximum power levels at which it will respond satisfactorily to continuous tones. The pulse test results represent, generally speaking, the threshold of destruction. Increase the level of the pulse, or prolong it, and a burned-out voice coil might result. For this reason some users prefer to limit the driving amplifier to one whose output rating is no higher than the pulse-power limit of the speaker, to minimize the possibility of speaker damage without compromising its transient response.

In terms of dynamic range, the continuouspower limit is the more significant. Not only can you damage the speaker if you attempt to drive it beyond this level with continuous musical signals, but in this range changes in driving power are not

TABLE I

AVERAGE SOUND PRESSURE LEVELS

dB	Sound
130	
125	Approaches threshold of pain (Note: some rock groups have been known to perform at, or at least
	to hit peaks of, 120 dB or more)
115	
110	 First row at symphony concert; orchestra playing tutti and fortissimo
100	 Subway station, express passing through
95	 Maximum concert levels in a "13th row seat" (about midway in the hall); riveter, 25 feet away
90	 "Very loud"; high-powered playback system in
85	average large room
80	 Factory; average loud level, playback system
75	
70	 Busy street traffic
65	 Ordinary conversation, 3 feet away
60	 Restaurant
55	Small store
50	Swall Store
45	
40	 Ambient level, average apartment
35	
30	 Quiet house, country
25	Broadcast studio Empty theatre
20	 Average whisper, 4 feet away
15	
10	 Quiet whisper; rustle of leaves
5	
0	 Threshold of hearing

exactly mirrored by changes in acoustic output. At lower levels, you can rely on any good speaker to give you what might be called good dynamic linearity. But as suspensions and voice-coil windings near their limits, the increase in acoustic output no longer will be proportional to the increase in drive power.

The moral of this should be obvious: In all that follows it must be understood that at no point should you plan to drive a speaker beyond (or even, preferably, as far as) its continuous power rating.

The importance of this reminder becomes evident when we look at another specific in the test

reports—that showing how much acoustic output a speaker will deliver for a given electrical input. The implication of this sensitivity figure is that actual sound pressure levels can be adjusted upward or downward as required by the room and the listener's taste, ad lib, by adjusting amplifier drive. This is true, but only up to the limit of the speaker's dynamic range.

In the past, HF has shown speaker sensitivity in terms of how many watts had to be fed in before acoustic output (at 1 meter on axis, using the aforementioned noise spectrum between 200 and 6,000 Hz, in the anechoic chamber) of 94 dB SPL is reached. The new method (explained in greater detail immediately following this article) answers the same question in reverse: What sound pressure

	f	or variou	LOUDSF	PEAKER F		E REQUIR		evels				
DESIRED	12				ROO	OM SIZE (in cu <mark>bic</mark>	feet)				
LISTENING LEVEL		1,000			2,000		3,000			4,000		
(IN dB SPL)	live	av.	dead	live	av.	dead	live	av.	dead	live	av.	dead
120	120	122	124	123	125	127	125	127	129	126	128	130
115	115	117	119	118	120	122	120	122	124	121	123	125
110	110	112	114	113	115	117	115	117	119	116	118	120
105	105	107	109	108	110	112	110	112	114	111	113	115
<mark>10</mark> 0	100	102	104	103	105	107	105	107	109	106	108	110
95	95	97	99	98	100	102	100	102	104	101	103	105
90	90	92	94	93	95	97	95	97	99	96	98	100
85	85	87	89	88	90	92	90	92	94	91	93	95
80	80	82	84	83	85	87	85	87	89	86	88	90
75	75	77 -	79	78	80	82	80	82	84	81	83	85
70	70	72	74	73	75	77	75	77	79	76	78	80
65	65	67	69	68	70	72	70	72	74	71	73	75
60	60	62	64	63	65	67	65	67	69	66	68	70
55	55	57	59	58	60	62	60	62	64	61	63	65
50	50	52	54	53	55	57	55	57	59	56	58	60

The numbers for various room conditions, shown in the body of the table, represent approximate anechoic-chamber response measurements at 1 meter (such as those that appear in HF's test reports for loudspeakers) required to achieve the listening levels shown in the left-hand column. The figures for average room acoustics (the center column for each room size) are based on those published by electroacoustics pioneer Harry F. Olson; those for live and dead rooms assume 2 dB less or more sound absorption than for Olson's "optimum acoustics" and therefore represent fairly extreme "liveness" and "deadness."

To use the chart, first find, in the left-hand column, the maximum listening levels you want in your room. Now move to the right until you come to the column that most closely approximates the size and acoustics of your listening room and read off the equivalent anechoic figure. (You may want to make adjustments if the figures for your room size or acoustics differ from those given.) The number you arrive at represents the sound pressure level that your speaker must deliver in an anechoic chamber if it is to achieve the desired listening levels in your room. Information on applying this data is given in this article and in the one that follows it.

Since a perfect anechoic chamber is the acoustic equivalent of an infinitely large listening room (in which the boundaries are so far from the speaker that sound never reaches them and hence is not reflected back to the listener), one might expect the anechoic figures to approach those for the listening room (the left column) as room size increases. But, as the table shows, the two sets of figures diverge as room size increases. The larger the room, the greater the distance between the listener and his loudspeakers normally will be. Sound propagation-like that of any energy in free space-conforms to the inverse-square law. That is, the sound pressure measured at 2 meters would be one-fourth (the inverse of the square of two) that measured at 1 meter. And even in a small room most listeners will sit considerably more than 3 feet from their speakers. So, despite reverberant reinforcement of the sound in the listening room, a given speaker output will "sound" (measure) louder at 1 meter in the anechoic chamber than at normal listening position in most rooms. The fact that the figures shown for a very live room of 1,000 cubic feet are identical to their listening equivalents means simply that, in this situation, reverberation just about makes up for the greater transmission distance.

level will the speaker achieve for an input of 1 electrical watt (0 dBW-again, as explained in the following article). This is tantamount to an efficiency rating, since it is on the basis of this figure that you can determine how much amplifier power you need to achieve a given sound pressure level in a given room.

Applying the Numbers

Now let's see how all these elements fit together. The first decision you must make is how loudly you want to play your music. This is the most important single variable in choosing your equipment, since listening tastes vary by tens of dB whereas most other variables affect your system by only a few dB. Table I obviously is intended to help you come up with a figure for the maximum sound pressures you want from your system. For the sake of argument, let's say you choose a "fairly loud" level of 85 dB as your maximum.

The next step takes us to Table II, and that brings us to a brief discussion of room acoustics. Few readers will have "ideal" rooms, of optimum proportions and acoustic properties, measuring exactly one of the cubic-foot specifications in Table II. You must allow for the real nature of your room. Rooms with large doorways or similar openings into other areas will behave as though the room itself were larger and will therefore require more acoustic power for a given listening level. Normal-size doorways or small openings behave more like acoustic dampingdraperies, for example-that contributes to the "deadness" of the room. These too will require more acoustic power, though the acoustic effect is not precisely the same.

Also, the table's "live" and "dead" figures presume rather extreme liveness and deadness. Let's assume that your listening room has average acoustics, is 11 by 20 feet in floor area, has a slanting ceiling whose average height is 9 feet, and at one side has a large archway leading to another room. The room itself measures close to 2,000 cubic feet in volume, but you can allow another 500 cubic feet for that archway. This means that you will have to use figures halfway between those shown for a room of 2,000 cubic feet and those for one of 3,000 cubic feet.

You look up your listening level (85 dB SPL) at the left. Then read off 90 dB for 2,000 cubic feet and 92 dB for 3,000 cubic feet. You would need a speaker capable of delivering (in the anechoic chamber) a sound pressure level halfway between these two figures (or 91 dB) to get your 85-dB listening level. Then you remember plans for redecorating (including wall-to-wall carpeting) and wonder whether this allowance will be adequate. Noting that the figures for a very dead room are 2 dB higher than those for an average one, you decide to

allow 1 dB more in case the redecorating should result in a significantly deader acoustic. So 92 dB is the figure we will be working with. The speaker must deliver 92 dB in the anechoic chamber if it is to deliver listening levels of approximately 85 dB in your room.

The next question is whether the speakers will handle 92 dB adequately. (Almost all will.) As you check the test reports on possible speakers, keep this in mind, looking as well for the sensitivity rating of the speakers. Let's say you decide on one that will not overload until it is driven to 105 dB (representing plenty of headroom) and find that it will deliver 84 dB with a 1-watt (0 dBW) input. That acoustic level is 8 dB below the 92 dB that you have determined you will need (for a listening level of 85 dB), and hence you must be prepared to drive it with an amplifier capable of delivering at least 8 dB more power output than the 1 watt used in the sensitivity test. Since 8 dB above 1 watt works out to 6.3 watts (again, see the following article) you know that any decent amplifier will do.

Since we have assumed only moderate acoustic demands in this example, let's suppose that you now decide you had better be prepared, on ocasion, to drive the whole system 10 dB harder (subjectively, "twice as loud") to listening levels of 95 dB to impress your friends. Now the speaker would have to reach levels of 102 dB in the anechoic chamber. The test report's continuous-tone figure shows that it can do so with equanimity. So you go on to compute the necessary amplifier power. You would now need 18 dB above the 1-watt test level, or 63 watts—a big jump (remember that 10 dB, in power, always represents a factor of 10), but one that many amplifiers and receivers these days can handle.

This last example makes plain how useless normal "minimum power requirement" ratings for speakers really are. For our imaginary speaker the manufacturer might claim that 20 watts is sufficient. That would give you listening levels of 90 dB in your room—perfectly adequate for the majority of purchasers, but well short of your requirements if you want showoff levels of 95 dB.

As you go through the steps outlined above, from choice of loudness to choice of speaker to choice of amplifier, remember that the tables are designed to offer useful information rather than inflexibly "scientific" data. Differences in speaker performance and placement, among many other factors, can influence precise results. I have said that we generalize about loudspeakers at our peril; the data in the tables are generalizations. They will help to explain the concepts involved; more important—always keeping in mind that as generalizations they are subject to the (relatively small) "allowances" by which the specific invariably differs from the ideal—they can be used as a practical way of making choices.

Meet the dBW

A Significant New Tool to Help You Understand and Choose High Fidelity Components

For years we have sighed sympathetically over readers' letters, which prove overwhelmingly how easily the average component purchaser can be confused by wattage references—particularly where it's a question of feeding watts into a loudspeaker and getting out decibels—and have wished that there were an acceptable alternative way of specifying amplifier power and related quantities. Explanations, however often repeated, have a way of slipping through the sieve of memory and allowing old misconceptions to resurface. And new readers, exposed for the first time to the details of this subject, must try to cope without benefit of past explanations.

The arithmetic nature of the wattage scale itself is the primary stumbling block. Audio—like just about everything to do with our sensory perceptions—behaves in logarithmic ways, and that is why the inherently logarithmic scale of the decibel has such wide currency for quantifying sound properties. The failure to think logarithmically about power leads to such anomalies as talking of one amplifier as delivering, say, 20 watts more than another. If the output power of amp A is rated at 10 watts, the capability of amp B, at 30 watts, happens to be just under 5 dB greater; if A's rating is 100 watts, B's 120-watt output is less than 1 dB greater. To the prospective purchaser, "20 watts more" sounds like a useful absolute. On the contrary, it is merely misleading.

We were therefore struck by a suggestion of audio engineer Edward J. Foster, whose byline appears frequently in these pages: Why not use a dB power scale? Of course, any dB scale must be referred to something—its 0-dB level—if it is to have meaning. Well, for clarity and simplicity, how about 1 watt? In that case, we might call our power unit the dBW, meaning a scale in dB with its zero reference at 1 watt.*

The more we talked about the proposition, the more virtue we saw in dBW. In particular, its decibel scale gives a much more direct expression of what one hears—and measures in loudspeakers—than conventional wattages do. For over a year now we have been using dBW, where appropriate, for our own private calculations, and we have come to the conclusion that the use of a dB power scale would have sterling advantages for our readers. So we have decided to institute it with this issue

To understand how it works, examine the conversion table on this page. A full scale of power levels from 1 watt to 1 kilowatt is shown on the table, though our equipment reports and articles will continue to show conventional watts in parentheses when talking of dBW so that you needn't consult this table every time the subject comes up. In fact you should need the table only for converting figures in watts from past issues into dBW for easier handling—so you can have the advantages of the various comparisons that dBW make possible and watts only serve to obscure.

In discussing power, an increase of 10 dB always represents ten times the wattage (or one order of magnitude, in scientific jargon). Thus, referring to the table, 16 dBW is 10 dB greater than 6 dBW (40 watts vs. 4 watts) and 26 dBW, another 10 dB, is ten times more powerful yet (400 watts). Also, a difference of 3 dB represents a doubling or halving of wattages. So 6 dBW is 3 dB less than 9 dBW (4 watts is half of 8 watts), while 27 dBW is 3 dB greater than 24 dBW (500 watts is twice 250 watts).

Since power bandwidth classically is defined in terms of the amplifier's "half power" or "minus-3-dB" points (that is, the frequencies at which the amplifier can be driven to only half its rated wattage before reaching rated distortion), the power bandwidth of an amplifier rated at 21 dBW (125 watts) is measured between those points at which it can achieve only 18 dBW (63 watts), and beginning immediately we will show power bandwidth in terms of both dBW and watts. And our har-

CONVERSION TABLE FOR POWER OUTPUT

FOR POWER	ROUIPUI
WATTS	dBW
1	0
1.25	1
1.6	2
2	2 3
2 2.5	4
3.2	5 6
4	6
5	7
6.3	8
8	9
10	10
12.5	11
16	12
20	13
25	14
32	15
40	16
50	17
63	18
80	19
100	20
125	21
160	22
200	23
250	24
320	25
400	26
500	27
630	28
800	29
1,000	30

^{*}The term dBm also is used to express power measurements but, since it is referred to 1 milliwatt as its "zero," is more awkward to use for the purposes we had in mind.

monic distortion graphs for amplifiers—which always are measured at rated power, half power (3 dB lower), and 1% of (20 dB below) rated power—will show the three sets of curves in both dBW and watts. Thus the full-power curves of what the manufacturer calls a 50-watt amplifier will be made at 17 dBW (50 watts), 14 dBW (25 watts), and -3 dBW (0.5 watts). Intermodulation curves likewise will show the power scale in both dBW and watts. The point of these changes is not so much to clarify the distortion numbers themselves as to put them in a more useful perspective—one free of the misleading implications of the conventional

The virtues of this system really begin to emerge when we come to discuss noise. In past reports we have measured noise as so many dB below rated output: for example, 73 dB below rated output of 100 watts. This means that if you are driving the amplifier to its full output on the peaks, the total dynamic range will be 73 dB. But what if you turn down the volume? The dBW system answers this question. A 20-dBW (100-watt) amp with noise at -53 dBW (73 dB below 100 watts-which, incidentally, is the equivalent of -23 dBm or 0.005 milliwatts) theoretically will continue to exhibit noise at -53 dBW no matter what level it is driven to. (Of course, if some of the noise is generated ahead of the volume control, it will be reduced as the level is cut back from the "wide open" condition under which it is measured for us at CBS Technology Center; the -53 dBW measurement remains, therefore, worst-case.) So if we reduce the level until we are driving the amplifier to only 7 dBW (5 watts), the difference between signal (7 dBW) and noise (-53 dBW) is (again, worst-case) 60 dB. In other words, even at only 5 watts this superamp manages an effective dynamic range of 60 dB-something not easily ascertained from conventionally expressed figures but available at a glance once both signal and noise values are expressed in dBW. And considering the number of superamps on the market and the frequency with which they are used at "idling" levels for normal entertainment (as opposed to blockbuster demonstrations). this is important information. Our theoretical amp would have a dynamic range of only 53 dB when driven at background-music levels of 0 dBW (1 watt); some superamps, it appears, can't do even this well under such circumstances.

The levels at which you actually drive your amplifier depend in part on the efficiency of your loudspeakers, of course. (See the article, by Norman Eisenberg, that precedes this one for a discussion of the factors that affect loudspeaker "loudness" and how to calculate them in setting up a component system.) And, effective with this issue, we have made a change in our way of reporting this parameter so that it can be used more directly with the dBW scale. In the past, the data have been given for so many watts needed to achieve a 94-dB sound pressure level measurement from the speaker; now we are showing it as so many dB SPL from the speaker for a 1watt (0-dBW) input. The conversion table on this page enables you to translate 94-dB (wattage) ratings from past reports into the 0-dBW (SPL) ratings that we are now using.

This makes it a snap to figure the amplifier power you will need for your speaker. Determine what level (in dB SPL) you plan to drive the speaker to, as explained in the previous article. Subtract the level reached by the speaker in the 0-dBW test (as shown in our test report) from this desired level. Your answer is the power in

CONVERSION TABLE FOR LOUDSPEAKER EFFICIENCIES

WATTS for 94-dB output 0.8 1 1.25 1.6 2 2.5 3.2 4 5 6.3 8 10 12.5 16 20 25	dB (SPL) for 0-dBW (1-watt) input 95 94 93 92 91 90 89 88 87 86 85 84 83 82 81
25	80
32 40	79 78

dBW you will need to achieve the desired SPL level with the chosen speaker—always assuming, of course, that the level you want is one that can be managed by that speaker. And, if the output rating of the amplifier is significantly above this figure, you can go back and calculate what the actual dynamic range of this combination will be when driven to whatever sound pressure level you want to drive it at.

To use the example cited in the previous article, you might decide you want your system to produce listening levels to 85 dB. The table in that article shows that for your room 92 dB would be required of the speaker in anechoic measurements. The chosen speaker produces 84 dB for a 0-dBW (1-watt) input; so you will need at least 8 dB more, or 8 dBW (6.3 watts), in the driving amplifier. If you then decide to allow for "showoff" levels to 95 dB (10 dB more than you originally had planned for), you would simply increase all the figures by 10 dB, giving an amplifier requirement of at least 18 dBW (63 watts). If the manufacturer (accurately) rates his amplifier at 80 watts (19 dBW) with a signal-to-noise ratio of 77 dB, the noise level is at -58 dBW (77 dB below full output of 19 dBW) and the effective S/N ratio will be 76 dB at the "showoff" level of 18 dBW (63 watts), 66 dB at the normal full-listening level of 8 dBW (6.3 watts), and 58 dB at the background-music level of 0 dBW (1 watt).

We believe that the ease with which these computations can be made will do a lot to help our readers choose speakers and amplifiers that really do work well together in their listening rooms. We hope that manufacturers, too, will adopt dBW ratings. We have broached the subject with a few of them already, and the comments have been unanimously positive. One major manufacturer has indicated it is considering adding dBW figures to its specifications so that potential customers will be able to make the easy comparisons that the dBW uniquely allows. If others follow, the always-confusing job of component shopping will be more forthright than ever before.

JUNE 1976

51

response devised by the mind of man-which, after all, is where this electronically synthesized piece came from. On a good system the sound

loudspeakers make the music you want to hear sound the way you want it to. No one knows your ears as intimately as you do.

The Great A&P No-Compromise by William Warriner Loudspeaker

Spiffy Vista Rest Home 12110746 Offshore-Drilling Blvd. San Diego, California 92115

Mr. Leonard Marcus, Editor High Fidelity Magazine Great Barrington, Massachusetts 01230

Dear Len,

The food here is not bad, though it took some getting used to. Thanks for the record albums. I do appreciate them, although the nurses say they have orders not to let me near any sound equipment until I "have calmed down a little." Actually, I am very calm. (That may be the little blue pills.)

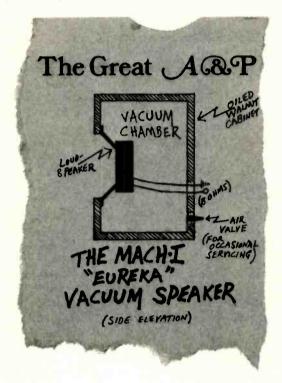
Thanks also for your offer to get me sprung. I think they will release me soon anyhow. Unfortunately, the Euphonia Corporation has asked for my resignation, and of course I will comply. However, I want to explain my position, so you can see for yourself that this whole sorry mess is simply a mistake. In the first place, it goes without saying that my new speaker project is kaput. The fact that my design became known as the Great A&P loud-speaker was due to some confusion at the corporate publicity office. When I first hit upon the idea for the (revolutionary!) speaker, I was on what they call a much-needed vacation and had no drafting paper, so I did my initial drawing on an old grocery bag. I enclose a copy.

You can readily see how this was misinterpreted. The real name—the Mach I Eureka Vacuum Speaker—should be obvious from the fact that I use a vacuum inside the cabinet to suspend the cone perfectly in place. You can see that it is a spectacular concept. The excursion of this speaker cone is theoretically perfect. My reasoning is this: Because of the vacuum, the negative pressure on the rear of the cone is uniform over its entire surface, and we thereby eliminate forever the problems of nonuniform vibration. Also, there is virtually no inertia in this speaker cone. Talk about damping! Once you get it to move forward, it will snap back to its starting point in nano-nanoseconds, distortion-free, because there is zero tendency for the cone to keep vibrating. There is also zero tendency for the cone to vibrate at all, so we did have some problems with design details.

Maybe I was wrong to assign the whole Euphonia Research

and Development team to 'round-the-clock work on the project. But it just goes to show you that the spirit of true innovation has fled our industry. Edison had detail problems with "Mary Had a Little Lamb," did he not? Anyhow, the board of directors was pretty teed off. The main problem, of course, is that vacuum. It sucks the speaker cone in so tight, it's difficult to get it to make a forward excursion. In fact it won't budge.

Best wishes to all the gang, and don't worry about me. I can take it.



Keeping sound in mind,

SPIFFY VISTA REST HOME

12110746 Offshore-Drilling Blvd. San Diego, California 92115

Mr. Leonard Marcus High Fidelity Magazine Great Barrington, Massachusetts 01230

Dear Mr. Marcus:

Your concern for our patient George "Tweeter" Pulsifer is understandable. I am well aware of his reputation as a designer, and as a matter of fact I have personally used his well-known Mach I Non-Gravitational speaker systems in my own home for some time. However, the prognosis for Mr. Pulsifer is an open question. I would not exactly describe him as a burned-out case, but his progress so far has been, in a word, downhill.

From our analysis sessions I understand that his overriding concern for many years has been to develop a perfect loudspeaker, and his inability to compromise, to "face reality," is certainly at the heart of the problem. In Freudian terms, the vacuum he so fervently wants to incorporate in his latest speaker design may symbolize (to him) some event in his past, such as an unhappy love

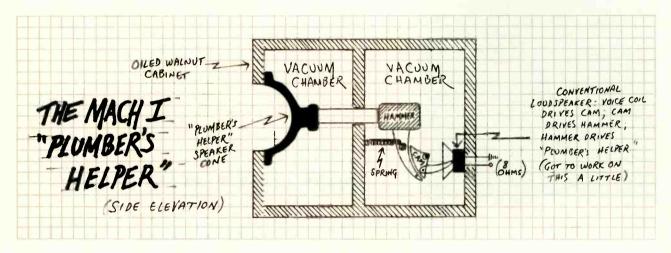
affair. But this is conjecture. He spends most of his occupational therapy class modeling speaker cabinets from clay and making sketches for new speaker designs. We have given him some graph paper, as it seems to make him feel more at home.

He now tells me he may have solved the problem of moving his Mach I Eureka speaker cone out of its vacuum and has produced the enclosed sketch. Frankly, I am not qualified to judge its validity as a workable design, so I would be grateful if you could comment on it from that point of view. It would help me in my analysis of Mr. Pulsifer's condition.

Sincerely,

Dr. Endicott Graywacke Attending Physician

Encl: 1 drawing



SPIFFY VISTA REST HOME

12110746 Offshore-Drilling Blvd. San Diego, California 92115

Mr. Leonard Marcus High Fidelity Magazine Great Barrington, Massachusetts 01230

Dear Mr. Marcus:

I have your most recent letter, and I am sorry to hear that. Yes, I will try to keep you informed. We have had to take away his graph paper.

Sincerely

Dr. Endicott Graywacke Attending Physician

SPIFFY VISTA REST HOME

12110746 Offshore-Drilling Blvd. San Diego, California 92115

Mr. Leonard Marcus High Fidelity Magazine Great Barrington, Massachusetts 01230

Dear Mr. Marcus:

As I promised, here is Mr. Pulsifer's latest "design effort." At our last analysis session, we discussed its possible symbolism at some length, but he insists it is simply a loudspeaker design and not an attempt to return to the womb. I am not so sure. At any rate, the "design philosophy," as he puts it, is based on the fact that the interface between air and water is a poor transmitter of sound. As I understand it, a noise occurring under water will not penetrate the air above the water. This, Mr. Pulsifer believes, is the key to designing a perfectly nonresonant speaker cabinet. It has to be mounted in the floor.

Your comments in this matter have been very helpful. I hope you will continue our correspondence.

Sincerely.

Dr. Endicott Graywacke Attending Physician

Encl: 1 drawing

IFFY VISTA

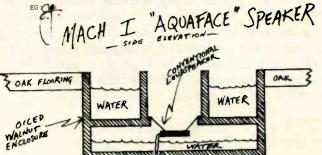
memorandum

PROM: You know who

TO: All staff members

SUBJECT: GROUNDS MAINTENANCE

There will be no further frolicking in trees on the front lawn. This means you.



Spiffy Vista Rest Home 12110746 Offshore-Drilling Blvd. San Diego, California 92115

Dear Len,

Things are going well, except now they have taken away my T-square. I hit upon a way of making loudspeaker models during basket-weaving therapy and have been thinking more and more about bionic design theory. After all, the invention of radar merely imitates the navigation system of the common bat. The Japanese have made a TV camera lens designed like the compound eye of a housefly. But I ask you, how much bionic research is being done on vegetables? Think of it! A world of untapped ideas.... In nature's grand design there must be a good loudspeaker lurking somewhere. There is much to learn.

Could you see your way clear to sending me a book on mushrooms?

Hard at work,

() weeter

SPIFFY VISTA REST HOME

12110746 Offshore-Drilling Blvd. San Diego, California 92115

Mr. Leonard Marcus High Fidelity Magazine Great Barrington, Massachusetts 01230

Dear Mr. Marcus:

I'm afraid it is all over. We found Mr. Pulsifer eating funny mushrooms that he picked on the exercise lawn. Since that day he smiles a lot but has refused to talk during our analysis sessions. His last drawing, executed on a matchbook cover, is enclosed. We have had to assign him to a padded guest room, and, from the remarks he makes to himself while leaping about, I take it he believes himself to be <u>inside</u> a speaker cabinet. Perhaps this is the ultimate womb for him. He frequently thumps the padding on the walls, saying such things as, "We need a couple more inches of fiberglass here." Occasionally he butts the padding with his head and laughs, complimenting the room on its "damping characteristics." Reluctantly, I must conclude that a great high fidelity mind is here o'erthrown. But for the perfectionist, there is often no other destination.

Sincerely, Endicott Graywacke

> Dr. Endicott Graywacke Attending Physician

Encl: 1 matchbook cover





At Chicago TV station WTTW, where the PBS special *The World of John Hammond* was taped last December, Hammond, second from left, posed with the show's writer and associate producer (and author of this article) John McDonough and guests Goddard Lieberson, retired Columbia Records president, and Jerry Wexler, president of Atlantic Records.

HE MIGHT HAVE BEEN a well-connected corporate lawyer if his father had had his way. Or a radical New England minister, had he emulated the combative intellectual piety of his cousin Henry Sloane Coffin. So how is it that John Hammond, at sixty-five, can look back on what undoubtedly must be one of the most incredible nonperforming careers in the history of the recording industry?

Lest there be readers who are not familiar with this celebrated name, here are a few facts. For seventeen years Hammond was director of talent acquisition and vice president of Columbia Records. In December 1974 he "retired" and assumed the title of consultant, but the official change had little impact on his routine. Right up to the present, as head of his own Snum Music Corporation (releasing through Columbia), he continues to seek new talent, produce records, help pick material, set up studio time, supervise sessions, and oversee final production details.

Over the decades he has accumulated a discography of personal discoveries that surely constitutes a national cultural treasure: Billie Holiday, Count Basie, Lester Young, Charlie Christian, Benny Carter, Bob Dylan, Aretha Franklin, Bruce Springsteen, and many others—all recorded first by John Hammond. Add to these names the rediscoveries, the great reputations he rescued from artistic oblivion: Bessie Smith, Fletcher Henderson, Pete Seeger, Albert Ammons, Mildred Bailey, Big Bill Broonzy, and Eubie Blake.

And, as if that were not enough, there is Benny Goodman, who had settled into the steady and secure routine of studio work when Hammond ap-

John McDonough is a critic for Down Beat magazine.

by John McDonough

The Multiple Lives of John Hammond

proached him in the old Onyx Club in 1933 with an opportunity to once again make jazz recordings. Hammond became a key figure in the formative years of the Goodman band, bringing into the organization the likes of Jess Stacy, Teddy Wilson, and Gene Krupa. Goodman readily credits Hammond, too, with launching him on his distinguished career as a classical soloist. The Hammond discography would thus also include Joseph Szigeti and Béla Bartok (for Contrasts) and the Budapest String Quartet (for the Mozart clarinet quintet), with whom Goodman collaborated. (He also supervised Walter Gjeseking's only recording sessions in the U.S.—the second book of Debussy's Preludes.) And when Goodman married Hammond's sister, Alice, in 1942, the two men became family as well as colleagues.

It's perhaps to his credit that Hammond seldom produced a conventional million-seller—many classics, but few hits. His disinterest in commercialism often earned him the wrath of Mildred Bailey, who felt that the small-group jazz accompaniments he imposed on her deprived her of a superhit. She was probably right, but as it happens she is still listened to twenty-five years after her death.

"For all he has done in promotion and helping all those great careers," says Count Basie, with more than a hint of surprise still in his voice, "he has never taken a dime. His payoff was to see his artists do well. He would sit down and listen to them and say. "This is the house that I built." But he never took a percentage or fee."

"John was never very commercially minded," Goodman agrees. "If he had been, he might be head of Columbia today. He has always been in

Hammond recorded Billie Holiday (near right) in the Thirties and Aretha Franklin in the Sixties.





the business, but has avoided the business."

This is a good point. Hammond's career resumé just doesn't show the old "climb to the top" in the traditional corporation sense. He began in 1932 as American artists-and-repertoire chief for EMI's English Columbia and Parlophone labels; in 1934 he was musical director for Irving Mills; from 1935-38, a&r for the American Record Company (for which he recorded Billie Holiday's greatest work); from 1939-42, a&r for Columbia following its purchase by CBS (for which he recorded the early Count Basie bands and the classic Goodman sextets). After the war there was a brief return to Columbia, and then he went to Majestic Records; in 1947, to the bankrupt Keynote label, which he soon merged with Mercury; from 1953-58, he was with Vanguard, where he recorded the famous Jazz Showcase series; and then finally he returned to Columbia, where he recorded the first of Dylan and Franklin.

But, although Goodman's observation is correct, it is quite beside the point really, because Hammond has never marched to the rhythm of a formal career. The various jobs by which he has made his living over the years have been merely a consequence of his life's overriding interest, never a condition of it. It's one of the privileges of being a fifth-generation Vanderbilt. This aloofness has given him a paternally philosophical point of view toward the music business and its various tribal wars. The profit motive may have driven great-great-grandfather Commodore Cornelius Vanderbilt, but the aggregate of Hammond's long career has been incalculable prestige, not profit.

It's a measure of Hammond and, perhaps, of his patrician upbringing that he has rarely been prey to the whims of fashion, be they intellectual, musical, or sartorial. He knows who he is, where he belongs, and what he's about. It's this elementary self-knowledge that makes John Hammond a true man of style.

Consider a trifling but revealing example. Through the years hair has provided a useful and usually changing index as to where a person's head is at, or at least where he'd like others to think it's at. Hammond chopped his hair down to a bristly crew cut when he was seventeen, and there it has stayed without apology for forty-five unbroken years.

"Either you're yourself, or you're not," he declares. "People switch images when they're not secure about their taste and judgment. I may be terribly wrong about my taste and judgment, but I'm awfully sure about them."

John began the process of sorting the important from the unimportant when he attended Hotchkiss School in Lakeville, Connecticut (class of '29). He had already developed a voracious appetite for jazz via hard-to-get records distributed mainly in the rural Black Belt of the South and occasionally in Harlem. He would travel from Lakeville for his viola lessons in New York. His route took him to the better Harlem record stores and past the Alhambra Theater on Seventh Avenue, where he first saw Bessie Smith in 1927. Six years later, as a green a&r man, he took Bessie back into Columbia's studios with the then unknown Benny Goodman for what was the last record date of her life.

As his musical taste matured, so did his convictions on the racism he observed. He got to know club owners and performers on a backstage basis. During two subsequent years at Yale, he began acting as American correspondent for England's Gramophone magazine and, soon after, Melody Maker. He covered Harlem regularly, reviewing musicians whom the white press never heard of. Though a teetotaler, a nonsmoker, and a virgin, he managed to develop a close rapport with his beat. He visited in performers' homes and drew close to their style and traditions. And as he did, a distressing thought struck him: He could mingle with blacks on their own territory, but he couldn't have them as his guests in the better downtown places.

His sprouting social conscience also took root in the old-line radical soil of Yankee New England, where antislavery sentiment had first taken hold in America. At Hotchkiss he read *The Nation, New Republic*, and even *New Masses*, an intellectual organ of the American Communist party. Although he put in his mandatory appearances at chapel, he also studied with John McChesney, who started a Sunday philosophy class "to undo the damage done by the chapel sermons."

His growing spunkiness brought him into closer contact with his maverick cousin, Henry Coffin (uncle of former Yale chaplain William Sloane Coffin). Henry was the head of Union Theological Seminary, a pacifist during World War I, and the

The late Senator Ernest Gruening (shown in 1969) was one of Hammond's mentors.



major factor in desegregating the Protestant Church in the Twenties. They worked together on a feisty little magazine called Protestant Digest, which attacked anti-Semitism "in all its forms, including Francis Cardinal Spellman." Hammond says, "Coffin was one of the two great influences

on my intellectual life.'

The other great influence was the late Sen. Ernest Gruening of Alaska (Hotchkiss '03), who in the late Twenties, as editor of the Portland (Maine) Evening News, was going after Samuel Insull and the power trusts. Hammond joined the News while still at Hotchkiss. "I learned more than I can ever acknowledge about journalism, the civil rights movement, and trade unionism from Ernest Gruening," he says.

Gruening's sister Martha, a founder of the NAACP, helped bring intellectual shape to the moral outrage Hammond felt over the race situation. At meetings of the Ethical Culture Society, leading liberal intellectuals from New England gathered to exchange ideas. Here Hammond met the most articulate black leadership in the U.S .-James Weldon Johnson and Walter White, who preceded Roy Wilkins as NAACP executive secretary. In 1933 Gruening, then the editor of The Nation, dispatched his protégé to Alabama to cover the Scottsboro trial. In 1936 Hammond joined the board and executive committee of the NAACP and for thirty years helped push the organizationsometimes against its cautious will-away from the separate-but-equal traditions of the Nineties and into the modern era of black protest. In 1966, still just as impatient as ever, he resigned, fed up with the "right wing" leadership of Wilkins, who, he felt, had made himself "a patsy for Lyndon Johnson on the war issue."

Following his departure from Yale in 1932, Hammond roamed around the country listening to music. Although his father had tried to convince him that radio would kill the record industry-certainly not an unreasonable warning then, with most of the record companies in bankruptcy-Hammond had enough money from trust funds to get away with it. After hearing some remote broadcasts that he managed to pull in on his car radio in Chicago, he drove to Kansas City to find their source. What he found was a loosely disciplined band of musicians held together by Count Basie and including drummer Jo Jones and Lester Young on tenor sax. Based on a tip from Mary Lou Williams, he set out for Oklahoma City in 1939 and returned bearing the most brilliant guitarist jazz has produced: Charlie Christian. In Chicago he discovered pianist Jimmy Yancey working as groundskeeper at Comisky Park and Meade Lux Lewis in a carwash. And there were countless side trips-many dead ends.

He did a lot of writing as well—the Brooklyn Eagle, the Chicago Daily News. In 1935, for the fledgling Down Beat magazine, he covered Goodman's new band as it toured America and came finally to Chicago's Congress Hotel. He published the first national dispatches from the Reno Club in Kansas City, where Count Basie was on the thresh-



This photograph, taken in 1941 in a Harlem nightclub, found Hammond (left, with cigarette) in his milieu. To his left, reaching for the bottle, is Earl "Fatha" Hines; at the rear of the table, with glasses, is jazz guitarist Charlie Christian; opposite him, with turban, is singer Helen Humes. At right, Benny Goodman watches the birdie, and Count Basie watches Hammond.



With two of his discoveries, Bob Dylan and Benny Goodman.

old of changing the character of big-band jazz.

He also wrote on music and labor for *The New Masses*, which cosponsored with him the original Spirituals to Swing concert. Though Communist, the radical magazine provided a congenial, if doctrinaire, platform for Hammond's views; that is, until he began attacking race discrimination in the unions, namely Local 802 of the Musicians Union in New York. American Communists, seeing a separate proletariat nation with radical potential, aggressively courted black support in the early Thirties. But in the mid-Thirties, Stalin decided the time had come to make common cause with liberals in the Western democracies against fascism. So during the Popular Front years, Communists turned into pussycats on the race question.

"The Communist caucus in 802 was absolutely reactionary," says Hammond. "They preached about higher wage scales in Harlem but did nothing to break black exclusion from radio, theaters, class A nightclubs, and any decent job in New York. The union had been 'integrated' since 1923, but the effect was simply to see that blacks worked

the Savoy and not Roseland."

In 1942 he began a campaign to integrate the radio orchestras. CBS quickly came through and hired, in one fell swoop, six of the finest black musicians in New York, including Cozy Cole, Emmett Berry, Teddy Wilson, and John Simmons. "Then [there was] trouble with the Chesterfield Hour, when the sponsors—mostly southerners—forced the network to drop them," Hammond recalls. "So I went to the last decent secretary we had in 802, Willie Feinberg, and told him it was immoral and disgraceful. These men were members of 802 and deserved its protection. We couldn't let the sponsor get away with this, and we finally won out. It was the first integrated orchestra on a straight sponsored network show."

Since he rejoined Columbia in 1958, the battles he has waged have always seemed to reflect his values with unusual accuracy. Although he miraculously escaped the direct attention of the witch-hunters during the infamous McCarthy years, he has had no reluctance to challenge their malevolent influence. His determination to sign Pete See-

ger to Columbia while he was still blacklisted by CBS is a case in point. The fact that Seeger finally was signed, Hammond is convinced, paved the way for his signing of Bob Dylan, who otherwise would have gone to Vanguard.

Hammond prefers to say nice things about people, but he speaks with a frankness that spares no one. On Bud Powell: "I despise his piano playing." On Stan Kenton: "He must have had the worst band of all time. So pretentious! Such lack of swing!" On Al Cohn: "A complete mediocrity." On Lennie Tristano: "An abomination. I had to record him in 1947. . . . Very painful for both of us." On the New York Rock Ensemble: "Dreadful." On Miles Davis: "I really can't see what he's trying to prove except that he can make a buck, which of course he's entitled to do." On Count Basie in the late Fifties: "The band stinks—and Basie thinks so too."

"He has certainly been my severest critic," the portly pianist from Red Bank admits, "but one of my greatest friends. His opinions have never

short-circuited that friendship."

The late novelist Richard Gehman once reminded Hammond of a report that he had read a newspaper during part of pianist Hazel Scott's performance at Cafe Society in the Village. He admitted to such discourtesies, but said that it must have been Mary Lou Williams: "I know it wasn't Hazel Scott. When she was playing, I read my newspaper all the time."

"If he weren't so likable," drummer George Wettling once suggested, "he'd be positively un-

bearable."

He is currently working on his autobiography, to be published by Macmillan. Though he has not spelled out details, he asserts that the book will be no less frank than usual.

Hammond's impact on contemporary music continues, although, as always, through the back door. He locates the forces that shape the tastes of the elite, who in turn influence the mass merchandisers, who in turn dictate popular fancy. Just as his classic recordings of authentic boogie-woogie in the late Thirties culminated in the craze led by the Andrews Sisters and Will Bradley, his rediscovery and promotion of Eubie Blake in 1970 merged with the growing Nonesuch catalogue to provide the impetus from which Marvin Hamlisch made ragtime a national sensation.

Superstardom is not Hammond's criterion for success, and certainly many of his pets have fallen short of commercial fame and fortune—Ruby Braff, John Handy, Ray Bryant, Mel Powell, Bobby Henderson, Helen Humes. The story of Bill Watrous, his latest, is just beginning. But whatever the commercial destiny of his protégés has been, each has had something that engaged Hammond. And that encompasses them in a very special circle of excellence. That's what John Hammond is really

about.

A Hammond Retrospective on Discs

"John Hammond's contribution to the history of jazz and blues has been monumental." Thus Columbia Records announced the "John Hammond Collection," one of the most distinguished reissue series of the decade. Below are listed albums from that series, as well as others. For music that is enduring and brilliant, we may thank the artists. For the fact that it was recorded and preserved, we may thank John Hammond.

Spirituals to Swing, 1938-39. VANGUARD VSD 47/48. Spirituals to Swing, 1967. COLUMBIA G 30776. The original "Spirituals to Swing" concerts remain among the greatest concert recordings in the annals of jazz. Several studio-made cuts are included in the guise of live performances, but as a result virtually every important Hammond discovery of the era is heard here. The 1967 concert, despite a butchered editing job, has lots of power as well as the finest Joe Turner and Big Mama Thornton sides ever recorded.

Benny Goodman: The Early Years, Vol. 1. SUNBEAM SB 138.
Benny Goodman: The Early Years, Vol. 2. SUNBEAM SB 139.
Benny Goodman and the Giants of Swing. PRESTIGE PR 7644.

Charlie Christian/Lester Young: Together, 1940. Jazz Archives JA 6.

Solo Flight: Genius of Charlie Christian. Columbia G 30779. Bartók: Contrasts. Béla Bartók, Joseph Szigeti, Benny Goodman. Odyssey 32 16 0220.

Hammond recorded Goodman's most important jazz sessions between '33 and '35, heard virtually complete on the Sunbeams and the Prestige. The Christian and Bartók albums are unrivaled classics.

Fletcher Henderson: Study in Frustration. Columbia C4L 19.

The Big Bands, 1933. PRESTIGE PR 7645.

Fletcher Henderson made his most notable recordings in 1932-33 under Hammond, including the original "Talk of the Town" with Coleman Hawkins.

Count Basie: Super Chief. COLUMBIA G 31224.
Young Lester Young. FRENCH CBS 65384.
Basie on the Air. COLLECTORS CLASSICS CC 9.
The first of the five two-disc sets of the great Basie-Young recordings of 1936-42 will be reissued this month, with the others to follow at two-month intervals, but these two Columbia and CBS albums contain many rare treasures. The "On the Air" LP features two Hammond-commissioned air checks of prime early Basie.

Billie Holiday: Original Recordings. COLUMBIA C 32060. Billie Holiday: Golden Years, Vol. 1. COLUMBIA C3L 21. Aretha Franklin: The First 12 Sides. COLUMBIA KC 31953. Aretha Franklin: In the Beginning. COLUMBIA KG 31355. Helen Humes: Talk of the Town. COLUMBIA PC 33488.

Mildred Bailey: Greatest Performances. Columbia C3L 22. Hammond put many female vocalists on disc, including Patti Page, but these certainly constitute his Big Four. Holiday and Franklin made their first recordings for him. Humes's LP was recorded in February 1975, although Hammond first brought her to Count Basie in 1938.

Story of the Blues. COLUMBIA G 20008.

Bessie Smith: World's Greatest Blues Singer. COLUMBIA GP 33.

Robert Johnson: King of the Delta Blues Singers. Vol. 1, Co-LUMBIA CL 1654; Vol. 2, C 30034.

Jimmy Rushing: Listen to the Blues. VANGUARD EVERYMAN SRV 73007.

Hammond's interest in basic blues forms has led to the preservation of some of the best rural and urban blues performances ever. The Bessie Smith LP has her last, and most jazz-influenced, performances. After being recorded by Hammond's American Record Company, Johnson was being sought for the "Spirituals to Swing" concerts when it was discovered he had been poisoned by a girl friend. The Rushing LP is from Hammond's great Fifties Vanguard series.

Bob Dylan. Columbia KCS 8579.
Bob Dylan: Freewheelin'. Columbia KCS 8786.
Aside from the Beatles, no performer caught the restless radicalism of the Sixties with greater impact than Dylan, whom Hammond first recorded in November 1961.

Red Norvo and His All-Stars. Epic EE 22009. Swing Classics. Prestige PR 7646. Harry James and His Orchestra, 1936-38 (due for release on Columbia in September). Benny Carter, 1933. PRESTIGE PR 7643. Original Boogie-Woogie Piano Giants. COLUMBIA KC 32708. 86 Years of Eubie Blake. COLUMBIA C2S 847. Teddy Wilson and His All-Stars. COLUMBIA KG 31617. Bill Watrous: The Tiger of San Pedro. COLUMBIA PC 33701. Hammond recorded the first real chamber jazz with Red Norvo and what may still be the finest of Harry James's discs. He also captured the first Benny Carter band with Chu Berry and Teddy Wilson, as well as countless of Wilson's small groups in the late Thirties and the classic boogie-woogie sessions of that same period. Bill Watrous, an extraordinary trombonist, made an impressive debut under Hammond last year.

Bruce Springsteen: Greetings from Asbury Park. COLUMBIA KC 31903.

Bruce Springsteen: Born to Run. Columbia PC 33795. There is a poetic strain to Hammond's preferences. Springsteen, whom Hammond signed in 1972, is the latest example. The "Asbury" LP, where he sings absorbing lyrics against his own acoustic guitar, got him labeled the "new Dylan" when the old one was still going strong. In "Born to Run" he went rock and was an overnight sensation. J.M.

JUNE 1976

At long last Louise. Late in January, CBS produced the first stereo recording of Charpentier's Louise at EMI's London studios, with Ileana Cotrubas in the title role, Placido Domingo (in London for Cav and Pag at Covent Garden) as Julien. Jane Berbié and Gabriel Bacquier as Louise's parents, and what sounded like a cast of thousands. Georges Prêtre was conducting the New Philharmonia.

Producer Paul Myers preferred to schedule the eleven Louise sessions as nearly in sequence as logistically feasible. He produced the Boulez Pelléas et Mélisande that way, and more recently the sense of continuity in the CBS Navarraise no doubt had something to do with that recording philosophy, which will presumably be applied to CBS's growing operatic calendar

Music Editor Kenneth Furie was delighted to arrive in time for the session for the opening of Act III, which began with Cotrubas working on "Depuis le jour" and continued with Domingo joining in an ardent scene that wasn't quite completed. It was to be finished the following evening, when the chorus would be on hand for the ensuing scene, but when European Editor Edward Greenfield arrived for that session he learned that Domingo had sent word that his throat was giving him trouble. Myers took advantage of the chorus' presence to record the Act II scene at the dressmaker's shop where Louise works. Domingo was back the next day, and work proceeded more or less on schedule for this inordinately complex project.

The score requires an exotic array of percussion instruments and specified off-stage sound effects, including a sewing machine, which arrived just in the nick of time for the Act II shop scene. To facilitate the effects, a prefabricated summer house was erected in a corner of the studio. The little house, Greenfield reports, looked curiously domestic, complete with old-fashioned hat stands in the corners.

And more to come. Among the operas to be recorded in the near future by CBS is Bartók's Bluebeard's Castle with Tatiana Troyanos and Siegmund Nimsgern, Pierre Boulez conducting the BBC Symphony. Farther ahead are Gianni Schicchi with Tito Gobbi and a couple of Offenbach projects.

Berman's Beethoven. The recent U.S. debut tour of the "legendary" Russian pianist Lazar Berman, introduced to HF readers at length in the January issue, can be fairly called "triumphant." Berman's current recordings from Columbia/Melodiya and Deutsche Grammophon—of works by Liszt,



Tchaikovsky, Prokofiev, and Rachmaninoff—were reviewed in May. During the U.S. tour Columbia got Berman into its New York studios for his first American record, of rather different repertory: a pair of Beethoven sonatas—the Appassionata and Op. 31, No. 3.

He recorded the latter work on Thursday, February 19, and the Appassionata the following day, just two days before his trip back to Russia. The producer of the sessions was Steve Epstein. ("Epstein? Epstein!" exclaimed the Soviet Jewish pianist, when he was first introduced to the young man after his Sheffield, Massachusetts, concert.) Columbia had asked Professor Boris Schwarz of the Queens College music department to act as translator between Berman and his coworkers

Berman proved to be, as our January report on his Moscow session implied, averse to patching. The first movement of Op. 31, No. 3 had only one insert, although he played the entire movement through a few times. In the Menueto, the lack of sonority of an F in the middle of a B flat seventh chord was enough for him to record the whole movement again. But he was not against the tape editors splicing sections from among his long takes. At the end of the same movement, when one of the final E flats didn't sound full enough, Berman told Epstein, "You've got that on the other take.'

One-man Eroica. "Unlike some of my pianist colleagues," the young Australian Roger Woodward told Edward Greenfield during his latest RCA sessions in London, "I have no desire to conduct. I only want to play the symphonic repertory on the piano!" He was in fact recording Beethoven's Eroica Symphony in Liszt's solo-piano arrangement; of course, as producer Ralph Mace pointed out, the finale has roots in a piano work, the Op. 35 Eroica Variations. As usual Woodward was recording basically in complete-movement takes, using a \$24,000 Bösendorfer with its six extra bass notes; even when those notes are not used, the extra strings add resonance.

Woodward's set of the complete Shostakovich preludes and fugues (reviewed last month) had just been released in the U.S., and during the Eroica sessions Woodward and Mace were delighted to learn that it had climbed into the U.S. classical charts.

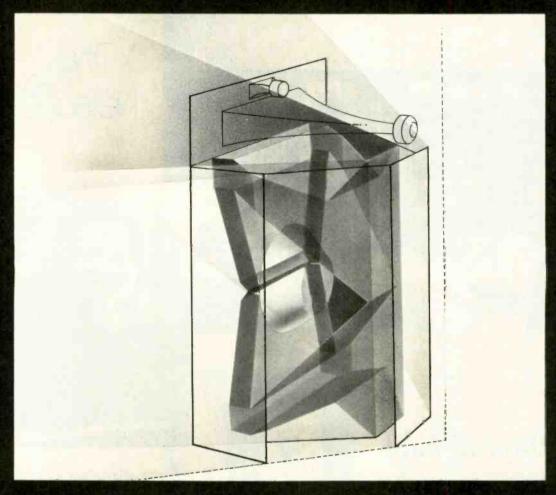
English National Opera. Any opera company represented by a recorded Ring cycle has reason to be taken seriously, and the English National (formerly Sadler's Wells) Opera's credentials have been established rather impressively by its English-language performances for EMI of Rheingold and Siegfried, conducted by Reginald Goodall, reviewed in April by David Hamilton. (Die Walkure was recorded in December for probable fall release, and Götterdämmerung will no doubt follow soon. There is also a possibility of a Meistersinger, the opera whose success led the then Sadler's Wells Opera to undertake the

ENO singers can now be heard on a disc of piano-accompanied operatic solos and ensembles, many of them unfamiliar (including several first recordings), produced by EMI (at no cost) for the English National Opera and Sadler's Wells Benevolent Fund. Many of the Ring principals are featured in familiar (though not always expected) repertory: Rita Hunter (Brünnhilde) in "Casta diva" from Norma, Alberto Remedios (Siegmund and Siegfried) in "Una furtiva lagrima" from L'Elisir d'amore(!), Norman Bailey (Wotan and Gunther) in "O du mein holder Abendstern" from Tannhauser, Clifford Grant (Fafner, Hunding, and Hagen) in a most impressive "Infelice! e tuo credevi" from Ernani, Josephine Barstow, who sang the title role in the ENO's recent Gotz Friedrich production of Salome, is heard in "Divinités du Styx" from Gluck's Alceste.

The English price of the record is £1.50 (these days about \$3.10), to which a bit should be added for mailing. It can be obtained from the Press Office of the English National Opera, London Coliseum. St. Martin's Lane, London WC2N 4ES, England.

No Follies, thanks, RCA's original-cast recording of Pacific Overtures, the controversial Broadway musical that includes Stephen Sondheim's latest score, has materialized promptly—it was reviewed in May by Royal S. Brown. Which provides an occasion to correct a slip in our March report: While producer Tom Shepard was indeed involved in the Columbia and RCA recordings of Sondheim's Company and A Little Night Music, he points out that he had no connection whatever with Follies, which was recorded by Capitol.

klipschorn loudspeaker systems



WHERE THOSE 32 FOOT BASS NOTES COME FROM

From an exponential horn, the best type of sound transducer ever developed. No flapping cone here, but a highly efficient system that delivers goose pimple-incucing dynamic peaks. With virtually no distortion.

The KLIPSCHORN bass horn, four feet long if unfolded, is formed from fifty nine specially cut pieces of wood, two gross of screws and three quarters of a pound of glue. Not simple. But necessary if you want to hear honest subcontra bass. No other speaker can claim such reproduction. Hear it at your Klipsch dealer's. This coupon will bring his name.



KLIPSCH AND ASSOCIATES, INC.

P.O. Box 688 H-6 Hope, Arkansas 71801

In Canada: Superior Electronics, Inc.

Please send me your latest brochure and list of dealers.

Name ____

Address

City _____ State ____ Zip _____
Plywood construction





Haydn: And Now the Operas

by Andrew Porter



Tillers of the rich soil of Haydn's operatic writing: top, Antal Dorati and the Lausanne Chamber Orchestra; above, Frederica von Stade; left, Ileana Cotrubas.

Dorati's recording of La Fedeltà premiata whets the appetite for Philips' projected series.

HAYDN'S OPERAS can no longer be called unknown. Most of them are in print. The tally of twentieth-century productions grows long; in the ordinary critical round, I have in the last decade seen eight of them—not counting the puppet operas—generally in two or three stagings. Bringing them to a still wider audience is Philips' series of recordings; La Fedeltà premiata is to be followed by La vera costanza and Orlando Paladino and at least two more.

For some twenty years, Haydn's principal activity was directing the Esterházy opera troupe; from 1780 to 1790, he put on more than a thousand performances. He was in touch with all the latest develop-

ments. Scores poured in from all over Europe to be adapted to the talents of his company. But he himself was no born musical dramatist. Performances of and further acquaintance with his operas confirm what both received opinion and first encounters suggested: that the scores are a treasure house of richly worked, beautiful, interesting, and various music, but not surefire in the theater. Haydn could express character. He could convey emotion. He was a master of the operatic scena. He could even set action. In all his operas we can point to many excellently successful "operatic" features—but to hardly one of them that can be termed quite simply "a success" all

through as a stage piece. Yet they are well worth staging. There are many things too good to miss. And for the record listener, they provide a sequence of

The failings are partly of dramatic timing-Dent's charge that Mozart's arias are almost always too long applies more forcibly to Haydn's-and partly of dramatic sense. When other men's librettos were adapted for his use, they were invariably weakened in the same kind of way. The Fedelta premiata libretto derives from L'Infedeltà fedele, which Cimarosa composed to open the Teatro del Fondo in Naples in 1779. In one of Cimarosa's arias, the philandering Count Perrucchetto endeavors to captivate a fair lady by rattling off a list of his charms and accomplishments; to his embarrassment, a former conquest of his turns up, overhears, and is much annoyed. He attempts to pacify her by going through the whole spiel again, addressed to her-same words but different music in a different tempo. It is an amusing idea and a lively piece. Haydn misses the point by stopping after the passage in which the second lady expresses her annoyance.

Cimarosa's aria is good comedy; Haydn's is far more interesting music. He was trying to do something different, aiming at something that it took a Mozart to achieve without becoming undramatic. Haydn must have found the music of Cimarosa, Anfossi, and the rest thin stuff; to their fluent, facile devices he added richness of instrumental texture, density of musical incident, variation, development, and purposive harmonic movement. That is why his op-

eras are so good to listen to.

The setting is the countryside near Cuma, west of Naples, by the lake of Avernus. The main matter is, as usual, amorous intrigue and misunderstanding, but an element of danger is ever-present, since the donnée of the action is the annual sacrifice of a pair of faithful lovers to a monster. So love in Cuma-at any rate, faithful love-is fraught with peril, and affections are best concealed, especially since Diana's high priest Melibeo runs the rite as a sneaky attempt to sacrifice an inconvenient rival and win the girl he wants for himself.

Nerina loves Lindoro, but he loves Celia, and she loves Fileno, who loves her back (they are the faithful lovers whose fidelity is rewarded). Count Perrucchetto makes love to every girl he meets, but Amaranta (who is loved by Melibeo) is determined to snare him and become a countess, and eventually she does so. An elaborate plot, you see, though it works out quite easily in performance. It is further complicated by a raiding party of satyrs who carry off Celia, a hunt in honor of Diana, and much arbitrary coming and going. The general sentiment of each particular situation remains clear, and the characters are consistently defined. Celia and Fileno are the serious lovers, a pair like Constanze and Belmonte whose music speaks from the heart. Nerina is a delightfully straightforward, spirited girl. Amaranta is a fine comic creation, a local girl who has spent some time in Capua and gives herself city airs. Perrucchetto has a funny scene with a wild boar. To effect the happy ending. Melibeo is killed. (Since there are seven characters, excluding Diana ex maching, a neat pairing would otherwise have been impossible.)

The overture became the splendid finale of Symphony No. 73, La Chasse. Then Haydn seems to have started with a determination to write short, direct airs, for once, but soon yielded to his natural fertility and expansiveness. The opening numbers are (by Haydn's standards) a shade conventional-though Fileno's entrance aria, "Dove, oh dio," is a remarkable piece, serenely sad in its outer sections, with some chromatic stabs at the center. In the eighth number Haydn introduces his heroine: Above a murmur of muted strings the flute steals out and Celia sings "Placidi ruscelli." In the next air Fileno declaims simply, movingly, above an adagio heartbeat accompaniment from staccato strings, alternating with a presto. (There should be an alternation, but a cruel cut removes the second adagio.) Then Amaranta bursts out in a fine frenzy, "una furia sarà per te," a splendid parody of the high heroic style. Celia's subsequent "Deh soccori un infelice" is a great aria: Bassoon and first violins in octaves sing the lovely theme; when the tempo changes to largo, there is an astonishing high horn obbligato. The first finale runs to sixty-three pages of score and takes the whole of Side 4 (lasting nearly twenty minutes). Animated and delightful, it uses the seven soloists in all kinds of textures and with varied kinds of choice accompaniments.

From Act II let me pick three pieces for special praise. First, a powerful monologue for Fileno, part accompanied recitative, part aria, with a line that spans nearly two octaves from bass A. It begins as a symphonic slow movement interrupted by dramatic declamation. This is followed by Celia's great accompanied recitative and aria, "Ombro del caro bene," which Haydn later published as a solo cantata for concert use. (As in his previous opera. L'Isola disabitata, one character carves an epitaph, somewhat prematurely: the other comes across it and laments. These two numbers form the serious heart of the opera.) The finale is nearly as long and as animated and effective as its predecessor. Act III is short: a melting duet for the serious pair, Diana's recitative abolishing the annual sacrifice, and a final chorus.

I shall probably be told that the opera was not recorded in anything like its proper sequence. Nevertheless, I get a strong impression that the cast began operations not knowing the whole opera very well. not realizing what sort of characters they were meant to be playing or what sort of piece it is. Maurizio Mazzieri gives very little character to the scheming Melibeo; line after line of recitative that could be pointed and amusing goes for nothing. He sings the notes well enough. Frederica von Stade quite misses the fun of Amaranta's first entrance. But by the time Amaranta returns, Von Stade has got into her skin, and her performance is one of the most enjoyable in the set. The range is from B flat below the staff to the A above it: The low B flat is rather weak. but above the staff the tones ring brilliantly. How beautifully this voice runs; how cogently she shapes her phrases!

Next comes Lindoro, Luigi Alva, whose singing is slight but neat, elegant, and winning. This is a small part, made smaller by the omission of the aria that should open Act II. Alan Titus, as Count Perrucchetto, again begins somewhat tamely. The first exchanges with Amaranta, as he loses no time in announcing his title and she responds with an impressed gurgle, should be very funny; but the two of them—and also the dismayed Melibeo, who is watching the encounter—deliver the lines more like an elocution lesson than as witty dialogue. In his later scenes, Titus has realized that his is a buffo role, and he makes more of it. Tonny Landy, the Fileno, sings his entrance aria very feebly indeed. He comes to life in the subsequent recitative and, fortunately, remains alive for the rest of the opera. This Danish tenor is new to me. (He sang in The Creation at the Washington Haydnfest last year.) He is not quite polished; sometimes he is accurate and elegant, sometimes impassioned, seldom both. But there is something very likable in his timbre and his style.

From her first notes, Ileana Cotrubas is both decisive and characterful as Nerina; this is a completely charming performance. The Celia, Lucia Valentini (now calling herself Valentini Terrani), has sung Isabella in L'Italiana at the Met, and, as I write, enthusiastic notices of her Cenerentola, with the Scala company at Covent Garden, reach me. In this set she displays a clean, cool, decisive, admirably schooled mezzo, very even and sure across a range from the A below the staff to the A above it. Her singing is accurate, stylish, and polished. (I feel like Beckmesser when expressing a wish that there was a shade more emotion in the timbre.) Finally there is Diana. In the original performance, Haydn's Nerina doubled the role, and it might have been a nice historical touch to invite Cotrubas to do the same. Kari Lövaas has a good voice but is a trifle clumsy in her delivery of the phrases; her Italian sounds unidiomatic.

Antal Dorati conducts with the finesse of a Haydn specialist—as well he might, after having recorded all the symphonies. His tempos are unfailingly convincing. His responses to the many miracles of texture in this score are keen. He enjoys such jokes as the bellowing bulls in Melibeo's first aria but does not exaggerate them. The orchestral playing is neat and lively, the studio recording clean and bright, with the voices forward. The finales are dapper and delightful.

The edition used is unspecified. There are (to

simplify things a little) essentially two versions of the score: the 1780 original, with a mezzo Celia, and a 1782 reworking for a soprano. H. C. Robbins Landon writes a note in the album booklet in which a recurrent "we" ("First, we had located . . . we also discovered") certainly implies that it is his edition of the work, published by Universal Edition, that is used. But it is not his 1970 edition, at least as I heard it in Holland that year when two of Celia's arias were in the higher keys and one in the original. It is something fuller and closer to the 1780 score. The main cuts I have already mentioned above. Recitative is also shortened, to an extent that would be unacceptable in the theater (since it is in the recitatives that the singers get their main chance to act) but matters less in a recording. All the available music in its various versions can be found in two volumes of the Haydn Complete Edition, edited by Günter Thomas and published in 1968.

Any version is likely to cause problems for modern singers, since Haydn's tessitura demands are great. As Erik Smith puts it in another of the album notes, "Where do we find basses with over two octaves from F and the technique of a bassoon, or tenors with two octaves from C and the technique of a clarinet?" (In this set, Landy and Titus occasionally resort to octave displacement when the written line drops out of their effective grasp.)

Philips has in fact assembled a cast of uncommon distinction; all in all, this is the best-sung Haydn opera that has come my way. Although one can hope that in future issues there may be a little more sense of the theater—of characters in lively interplay—right from the start, this Fedeltà premiata sets a high standard and whets the appetite for more.

HAYDN: La Fedeltà premiata.

Nerina Diana Celia Amaranta	lleana Cotrubas (s) Kari Lövaas (s) Lucia Valentinl (ms) Frederica von Stade (ms)	Lindoro Fileno Count Perrucchetto Melibeo Ma	
Amarania	Frederica von Stade (ms)	Melibeo Ma	aurizio Mazzieri (bs)

Michel Perret, harpsichord; Suisse Romande Radio Chorus; Lausanne Chamber Orchestra, Antal Dorati, cond. PHILIPS 6707 028, \$31.92 (four discs, manual sequence).

American Music and the Hand-Me-Down Habit

Is there a lesson in the fact that so much music written on this continent makes use of quotation?

by Robert P. Morgan

In the past we have been inclined to view this country's concert music within an almost exclusively European framework, limiting the scope of concern to those compositions most readily relatable to the German, French, and Italian roots of our musical heritage. Native efforts, particularly those written before the present century, have consequently been considered only poor cousins to—or idiosyncratic departures from—the main course of Western mu-

sical evolution. More recently, however, we have been disposed to take a broader and more liberal view of music history, including many of the "minor" and more parochial developments that have occurred both here and abroad. As a result, a great deal of music felt by many only a few years ago to be beneath consideration now seems remarkably suggestive and deserving of attention.

One of the main topics of interest that has emerged



The title page of the first edition (1820) of Heinrich's *Dawning of Music in Kentucky*. Below the sunburst, the book shows the opening notes of his song "Hail to Kentucky."

from all this, due in part, no doubt, to the intensive involvement with Ives, is the prominent role played by quotation in so much of American music, a prominence amply attested to by five recent releases of works by native composers. Although two of the five are devoted to Ives himself, the others—a trio of Vanguard Everyman reissues—give equal evidence of a preoccupation with the puzzling phenomenon of compositional "borrowing."

The most interesting of the recordings contains works by Anthony Philip Heinrich (1781–1861). A Bohemian who came to the New World in 1818, Heinrich did not begin composing until after he settled in Kentucky and so is justifiably considered a truly American figure. He produced an extensive body of music during the last forty-odd years of his life, including pieces for piano, voice, chamber groups, and full orchestra. Although he came to be known by his contemporaries as the "Beethoven of America," he preferred to think of himself as the "log-house composer" from Kentucky.

All of the music on the present disc is taken from Heinrich's first three publications: The Dawning of Music in Kentucky, or the Pleasures of Harmony in the Solitudes of Nature (1820); The Western Minstrel (a supplement to the first, published the same year); and The Sylviad, or Minstrelsy of Nature in the Wilds of North America (in two volumes, 1823 and 1824–26). There are vocal works (for solo, duet, and chorus) and several programmatic piano pieces. All of his music gives evidence of considerable knowledge of the rules of tonal harmony, but these are often treated in a curious, even cavalier fashion. Also

noticeable is a pronounced, quite possibly intentional naiveté and a well-developed sense of humor.

Most notable is the Barbecue Divertimento, an extended piano piece with phrases and sections dissolving unpredictably into one another to create a dreamlike continuity. Frequent quotations appear—e.g., "Yankee Doodle," "God Save the Queen," and Heinrich's own "Hail to Kentucky" (also on the disc and itself containing a fragmentary allusion to "Hail Britannia").

Like Heinrich, Ernest Bloch came to the U.S. in maturity (in 1916, when he was thirty-six), but he was already a well-established composer. Upon arriving, he conceived of a work that would express his feelings for this country. But he undertook the composition of America only after spending ten years absorbing folk (including Indian), popular, and patriotic music. Subtitled "Epic Rhapsody in Three Parts for Orchestra," the work is obviously the product of a skilled craftsman, although Bloch's apparent intention to use as much local material as possible results in a highly sectional, episodic structure. Also, it is difficult not to be discomfitted by the strong strain of sentimentality. I confess to more than a bit of embarrassment when the motto for the entire work-in this case of Bloch's own invention-finally blossoms into an exalted anthem, performed by a full chorus. on Freedom, Justice, and Peace for all.

Folksong Symphony, which makes up the third Vanguard release, is listed among Roy Harris' symphonies (No. 4), although it is really little more than a suite of "arrangements"-admittedly quite effective and original ones-of folksongs taken from John and Alan Lomax's Cowboy Songs and Other Frontier Ballads and Carl Sandburg's American Songbag. Thus the five vocal movements present complete versions of the songs they employ, sung by a chorus to their original texts. (Three are devoted entirely to one song each; the fourth consists of two tunes, the other of three.) All this is pasted together with instrumental introductions and interludes between verses. The two nonvocal movements are also only interludes, again based on folk materials. There is not much more to be said, except that it is a very slick, professional job.

As for the use of borrowed material, the Harris represents at least one prominent tendency in American music, particularly in the popular and commercial field: a predilection for presenting existing music in a completely new (and usually showy) way. The best pop artists, for example, are able to transform their material into something uniquely their own (although only seldom to the extent of destroying its recognizability). The tendency can also be seen in certain aspects of jazz, often considered our sole truly native musical genre. But in jazz—at least the best of it—the borrowed material serves only as a point of departure, a formal base for the musician's own elaborate and highly original creations.

I suspect that the whole question is much more complicated than may at first appear to be the case: and taken together, the Vanguard discs provide a valuable lesson by indicating how difficult it is to make generalizations in this area. Although Heinrich, Bloch, and Harris undeniably have in common the way their works absorb "other" music, one is struck most forcefully by the differences. In Heinrich and the struck most forcefully by the differences.

rich, for example, the citations, most of them fleeting, are used primarily for atmospheric purposes, as brief, often humorous, and very pointed representations of certain basic musical characters and types—such as a fiddle tune or a patriotic song.

Bloch, on the other hand, makes every effort to integrate the quoted materials into his score, weaving them into the fabric as organic components of the total design. Thus the borrowed tunes are used not so much as specific musical signs, but as symbols evocative of the general American character and heritage. In this regard, it is useful to remember how natural such a procedure must have been for a European musician trained during the latter part of the nineteenth century. Musical nationalism was at its height during this period, and one of the most common ways in which the nationalists attempted to separate their works from those of the central (mostly Germanic) tradition of European instrumental music was to use indigenous folk material-either by quotation or synthetic construction—as a melodic ingredient.

In spirit, then, Bloch's work is very close to what was already an established "foreign" compositional approach. A great deal of music by native-born Americans belongs in this category (such as works by MacDowell and Daniel Gregory Mason). But what one notices in these pieces—and it is especially apparent in the Bloch—is that, although the folk material lends the score a decided non-European character, the specifically musical means through which it is handled is taken right out of the technical catalogue of nineteenth-century program music. In other words, the "American" aspect of these scores is superficial and not an integral feature of the over-all musical conception.

One of the most impressive aspects of Ives was his ability to use quotations in a more consequential way, so that they determine not only the "manner" of his music, but also its "substance" (to draw a distinction Ives himself was fond of making). The Holidays Symphony and the Concord Sonata provide convincing illustrations: The whole logic of the musical development is transformed through the use of preexisting music. No one will deny that the quotations are still strongly evocative, but, formally considered. they have taken on a new meaning. Treated as malleable fragments that can be reordered and juxtaposed at will-rather like the found objects in a collage-they produce an extremely disruptive, nonsequential continuity that represents a significant departure from traditional European procedures.

It is no coincidence, I think, that Ives was an American, for no doubt his secondhand relationship with the European tradition enabled him to break away more easily from some of its most basic assumptions. But similar tendencies are also detectable in European music of the same time—in Mahler, for instance.

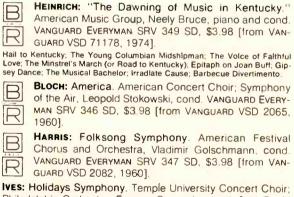
Any simple equation of quotation with American music, then, seems a great mistake to me. It should be remembered that quotation has been an accepted practice throughout European musical history, although—as in America—the manner and aesthetic meaning of its use has varied considerably from period to period and from piece to piece. Bach quotes Luther in the cantata Wachet auf, Mozart quotes himself in Don Giovanni. Tchaikovsky quotes Grétry in The Queen of Spades, Debussy quotes the "Mar-

seillaise" in Fireworks, and Berg quotes Wagner in the Lyric Suite.

A few words about the recordings themselves. The sound on all of the Vanguard discs leaves something to be desired, and the performances are uneven. By far the best is Stokowski's reading of the Bloch. which comes off very well on the whole. The Harris symphony is decidedly on the rough side; the spirit is there, but the edges are ragged. (For comparison. there is the Abravanel/Utah Symphony version on Angel S 36091 that R.C.M. reviewed last December.) The Heinrich works are played by the American Music Group of the University of Illinois, an ensemble that has made an important contribution in bringing unknown earlier music to the public. Directed by Professor Neely Bruce, who also plays the piano solos, the performances have been prepared with care and enthusiasm. but they do not come up to professional standards. However, I will say that they seem appropriate to the music, whose "nonprofessionalism" is one of its most endearing qualities. Bruce's notes are both interesting and helpful, but Vanguard unpardonably fails to include texts.

As for the Ives, I have reservations about both performances. Ormandy is not my idea of an Ivesian. He is too inclined to let the Philadelphia sound engulf the complex surface of the scores, spreading over them an impressionistic haze that cancels out their multiple levels. The livelier sections, such as the Barn Dance segment in Washington's Birthday, are stiff and awkward, and the ensemble playing is not always ideal. I am sure many will disagree, but to my mind this is Ives for people who don't like Ives.

Hadassah Sahr is unfortunately hampered by a less than first-rate recording in her Concord performance. She approaches the work in a more subdued, lyrical manner than is common: Tempos are on the moderate side, and contrasts are generally played down. Despite occasional technical lapses, it is an interesting reading—though not, I think, one to take a place beside the distinguished versions currently available: Kirkpatrick's Columbia (MS 7147) and Kontarsky's Mainstream (5013) offerings, to name two radically different but equally successful interpretive approaches.



IVES: Holidays Symphony. Temple University Concert Choir; Philadelphia Orchestra, Eugene Ormandy, cond. [Jay David Saks, prod.] RCA ARL 1-1249, \$6.98. Tape: ♠ ARK 1-1249, \$7.95; ♠ ARS 1-1249, \$7.95. Quadriphonic: ARD 1-1249 (Quadradisc), \$7.98.

IVES: Sonata for Piano, No. 2 (Concord). Hadassah Sahr, piano; Carl Adams, flute. [Henry Jocker, prod.] CRITICS CHOICE CC 1705, \$6.98.

STEREOTECH "You'll hear more from us!"

Make sure you get your moneys worth when you buy a stereo. Modern technology, solid state electronics and contemporary engineering permits most equipment available today to have comparable performance. If performance is the only measurement you

1270

make you will be in danger of not getting the most for your money.

Stereotech performance has been designed to be "State of the Art" and high value. Not only must each Stereotech perform but each Stereotech product must deliver long trouble-free life. Careful engineering combined with time consuming life and stress testing of each component part that goes into a Stereotech have assured the performance of Stereotech. Handcrafted construction and unit by unit testing assures you that the Stereotech you get will perform to your expectations.

To prove the value of long life, Stereotech will give you a 5 Year Factory Service Policy when you invest in a Stereotech. Not only is long life promised without additional cost but is assured by this Stereotech offer - - - Full details are at carefully selected dealers. That's right, Stereotech isn't everywhere; only at those specialists that think enough of you to invest in facilities that can care for your needs properly.

Or, send us the coupon. We will rush data to help you select the right stereo dealer plus full information on Stereotech and the right stereo for you.

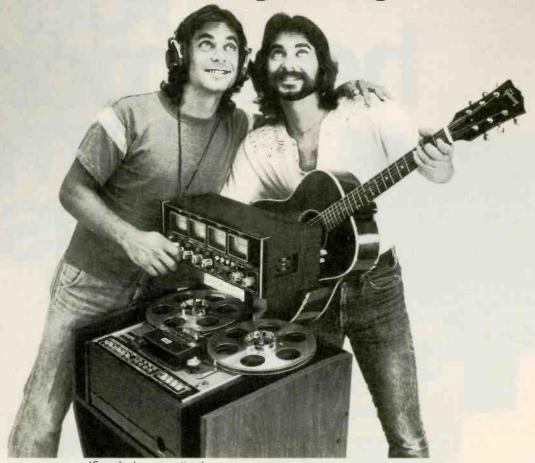
1230

1200

Stereo Technology Division 1010 Conklin Rd.
RD 1 Box 413A
Conklin, New York 13748
NAME
ADDRESS
CITY STATE ZIP

If you are in a hurry for your information please send the coupon to Stereo Technology Division.

The end of the war between art and engineering.



*Console shown is optional.

There is performing and there is engineering. Art and signal. Both are important and both can suffer when you have to do both. Especially when your music and the machine that records it are making heavy demands on your concentration.

Our new 1140 lets you focus more on your music and worry less about how it's getting there.

Take sync. The 1140's simplified automatic sync control is a more logical approach to the function than anything you've used before. It frees you from that "Where the hell am I" frustration when you're building tracks.

It also lets you punch in (and when you punch in you're automatically switched from sync to source).

Sync level is the same as playback level, too, in case you don't have a third arm available for gain control.

The 1140 has built-in bias with the bias controls up front so you don't have to tear the electronics apart every time you change tapes. Plus a 200 kHz bias frequency for further noise reduction and one of the few heads around capable of erasing those exotic new formulations.

Then there's program memory, motion-sensing circuitry for anti-

TEAC A3340S	DOKORDER 1140
0.04%	0.04%
=3 dB, 35-22K	±3 dB, 30-23K
65 dB WTD	60 dB WTB
No	Yes
No	Yes
Yes	No
No	Yes
No	Yes
\$1199.50	\$1199.95
	=3 dB, 35-22k 65 dB WTD No No Yes No

Features and specifications as published by respective manufacturers in currently available literature.

CIRCLE 9 ON READER-SERVICE CARD

spill tape handling, peak level indicators and an optional floor-standing console that makes the 1140 even easier to work with.

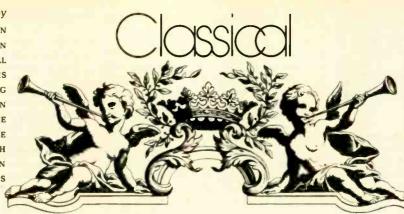
For all that and more the 1140 costs \$1199.95, about 45¢ more than Teac's A3340S. But if you spend that extra half-a-buck with us, you can spend more time with your music.

DOKORDER



5430 Rosecrans Avenue Lawndale, California 90260

Wow at Frequent Signal-t Front P. Built-in Mic/Lir Peak In Motion Manufa reviewed by
ROYAL S. BROWN
ABRAM CHIPMAN
R. D. DARRELL
PETER G. DAVIS
SHIRLEY FLEMING
ALFRED FRANKENSTEIN
KENNETH FURIE
CLIFFORD F. GILMORE
HARRIS GOLDSMITH
DAVID HAMILTON
DALE S. HARRIS



PHILIP HART

PAUL HENRY LANG

ROBERT LONG

ROBERT C. MARSH

ROBERT P. MORGAN

CONRAD L. OSBORNE

ANDREW PORTER

H. C. ROBBINS LANDON

JOHN ROCKWELL

HAROLD A. RODGERS

PATRICK J. SMITH

SUSAN THIEMANN SOMMER

BACH: Brandenburg Concertos (6), S. 1046–51. English Chamber Orchestra, Raymond Leppard, harpsichord and cond. PHILIPS 6747 166, \$15.96 (two discs, manual sequence).

With so many fine sets of the Brandenburgs, I have previously avoided recommending any single "best" version. I'm glad I was cautious, for here is an edition that combines some of the polished probing of Britten's (London CSA 2225) and Goldberg's (alas, unavailable-last offered here on World Series) with the sheer electricity of Newman's (Columbia M2 31398), the clarity and textual inventiveness of Davison's (Vanguard Everyman SRV 313/4 SD), and a bit of the lyric freedom of Casals' (Columbia M2S 731). A touch of everything, in short, but the original instruments of Harnoncourt (Telefunken 26.35043) and the Collegium Aureum (Victrola VICS 6023) or the conjecturally reconstructed "pre-dedication-copy" scores offered by Marriner (Philips 6700 045).

Perhaps the most direct competitor is the last entry in the Brandenburg sweepstakes, Somary's (Vanguard VSD 71208/9, March 1976), also with the English Chamber Orchestra and sharing seventeen of the twenty-two identified soloists. Since I had high praise for the playing on the Somary set, I should note that Leppard generally gets even more crisply on-target response from the ECO.

The predictably brisk and vital outer movements of No. 1 frame an Adagio that Leppard molds with loving but not lingering flexibility. José-Luis Garcia, one of the soloists not in the Somary set, plays the violino piccolo part with a pure, sweet sound. (He is the concertmaster in the other concertos:) In the finale, Leppard varies the instrumentation of the recurrent Menuetto as strikingly as anyone since Scherchen. In No. 2, John Wilbraham nicely surpasses his clarino performance on the Somary recording, and Leppard loses no momentum in those outer movements through needless ritards. The two Allegros of No. 3 go well enough, though Somary is a little more unbuttoned and Goldberg more undulating. For the phantom middle movement, Leppard interpolates the Largo of the G major Violin Sonata, S. 1021 (also used in the Dart edition recorded by Marriner), but Philips doesn't trouble to identify it.

As with Somary, David Munrow and John Turner are the fine recorder duo in No.

4, and in the last movement Leppard's harpsichord continuo is more imaginative than it was with Marriner. The Andante has great depth and character, though I would prefer it a whole lot slower. No. 5 offers an exalted experience in ensemble partnership as violinist Garcia and flutist Richard Adeney swap phrases. Leppard's handling of the big harpsichord cadenza is recklessly propulsive, but he knows just the right moments to come up for air. Again, as with Somary, there is a lovely realization of the bass line by cello in the slow movement. The little Spanish-type tune in the finale goes with crackling lilt. In No. 6, Leppard's string sextet gives a clear and well-controlled reading, though the rubato-laden interpretation of Goldberg (who is also one of the stunning viola soloists) remains unique in my affections.

As of now, Leppard wins my first Brandenburg recommendation. A.C.

BACH: Sonata for Violin and Harpsichord, No. 6—See Busoni: Sonata for Violin and Piano, No. 2.

Banks: Concerto for Horn and Orchestra— See Musgrave: Clarinet Concerto.

BEETHOVEN: Concerto for Violin and Orchestra, in D, Op. 61. Isaac Stern, violin; New York Philharmonic, Daniel Barenboim, cond.' [Thomas Frost, prod.] COLUMBIA M 33587, \$6.98. Tape: MT 33587, \$7.98. Quadriphonic: MQ 33587 (SQ-encoded disc), \$7.98.

Comparison: Stern, Bernstein/N.Y. Phil.

rn, Bernstein/N.Y. Phil. Col. MS 6093

Isaac Stern's recent work has been uneven;

Explanation of symbols

Classical:

B Budget
Historical
Reissue

Recorded tape:
Open Reel
8-Track Cartridge
Cassette

here, I am pleased to say, he is in really good form. In the main, the playing is well in tune, the bowing secure, the phrasing—in its Romantic way—musicianly and communicative. Fine as his recording of the Beethoven concerto with Bernstein was, I prefer the new one, though that is partly for the differently conceived accompaniment.

Whereas Bernstein, like Barenboim both a pianist and conductor, concentrated on finesse of orchestral execution, Barenboim in this instance serves a more inspirational role, stressing naturalness of phrasing and motion at the occasional expense of detail. Both approaches work: Bernstein's framework is sometimes more judiciously balanced, but Barenboim's is less fussy.

The orchestral work Barenboim secures is far more to my taste than that he drew from the London Philharmonic in the recent RCA set of the Beethoven piano concertos with Rubinstein (CRL 5-1415, May 1976). The basic sonority is still a trifle heavy and lumbering, but the pulse is strong and there is a definite feeling of (good) tradition behind the interpretation. It is interesting to note that the New York players rarely swell after the attack of long notes as the LPO does in the piano concertos. This is an altogether tougher and, in my view, more durable approach to Beethoven.

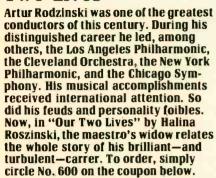
Stern plays the Kreisler cadenza in the first movement; the shorter cadenzas in the second and third movements, probably Stern's own, are very tasteful. Two unusual textual variants should be noted: First, at the end of the first movement the cello answers (bars 525-26, 529-30) to the bassoon phrases are omitted, in accord with the manuscript; Beethoven apparently added the cello statements before publication. Second, in the Rondo one bar (217) is elided, following a full handwritten score in which the copyist (inadvertently?) dropped a measure. Whatever the historical merits of these deviations, I find both of questionable merit from a practical musical standpoint.

Buyers of this record are advised to check the stamper number of Side 1, which should be "2A" or higher. Copies with a "1A" Side 1 may be in circulation; Columbia has informed us that that side is out of phase. The record should be exchanged as defective.

BEETHOVEN: Sonatas for Piano: No. 25, in G, Op. 79; No. 26, in E flat, Op. 8la (Lebe-

NEW!

Our Two Lives



"Our Two Lives" is only one of the wide selection of carefully chosen books made available to HIGH FIDEL-ITY readers through Music Listeners' Book Service. (Many of the selections are not readily available in bookstores.) Choose your books today from the list below, circle the numbers on the coupon, and enclose your check or money order. That's all there is to it.

No. 600 Our Two Lives. Halina Rodzinski.

The story of Artur Rodzinski's turbulent career in the world of music, told by the woman who shared it with him.

No. 287 THIS BUSINESS OF MUSIC. Revised & Enlarged Edition. Sidney Shemel & M. William Krasilovsky, Edited by Paul Ackerman.

The 544 pages of this latest edition include 180 pages of appendices containing applicable federal and international laws, as well as sample contracts, applications, agreements, etc. \$15.00

No. 341 THE GLORY OF THE VIOLIN. Joseph Wechsberg.

A fiddle fancler's delight from the pen of the famed New Yorker author, who delives into all aspects of the violin, including the fascinating business of buying, selling . . . and cheating. \$8.95

Check or money order must accompany your order.

No. cash or C.O.D.'s please.

Allow 60 Days for Delivery.

Dept. H\ 2160 Pa	LISTENER: V Iterson Str	eet, Cincir	SERVICE mati, Ohio 4 Please circled belo	e send
NameAddress City, Sta				

wohl); No. 27, in E minor, Op. 90. Emil Gilels, piano. [Günther Breest, prod.] DEUTSCHE GRAMMOPHON 2530 589, \$7.98.

Gilels seems best suited temperamentally to the slightest of these sonatas, Op. 79, where he achieves a winning mixture of charm, delicacy, and high spirits. This first movement is a bit sedate and unsmiling, but the little central barcarolle and the final vivace are altogether touching in their delicate simplicity. This is one of the most successful accounts since Backhaus' 1954 Carnegie Hall version (London LL 1108/9, deleted), the Schnabel (Seraphim IC 6065), and the mono Kempff (DG, deleted).

In the Lebewohl, Gilels' attention to detail produces some memorable moments (and he uses a reliable text), but on the whole I find his treatment overly finicky. His Op. 90, too, has its points: the wide dynamic scheme, crisp staccato, and scrupulous attention to placement of accents and sforzandos, the judiciously gauged endings of both movements. And yet I am bothered by the bodiless fortissimos, which lack the shimmer and allure of Gilels' softer playing. The finale is taken at something near Schnabel's tempo, but the poetic flow is disrupted by all sorts of hesitations and clattery disturbances.

Flawless surfaces; distant but generally good sound. H.G.

BEETHOVEN: Symphony No. 4, in B flat, Op. 60; Egmont Overture, Op. 84. BBC Symphony Orchestra, Colin Davis, cond. PHILIPS

9500 032, \$7.98. Tape: 7300 455, \$7.95.

A good, tough Fourth—to my hearing the most successful installment so far in Colin Davis' unfolding Beethoven symphony cycle.

Davis paces the adagio introduction to the first movement broadly but keeps the line moving. The allegro vivace-with its exposition repeat taken-has a lithe, muscular, eminently classical quality, and the close recording is notably strong on detail. The slow movement sings ardently, even if the BBC Symphony strings lack the blend and absolute unanimity of some other orchestras; interpretively, only the heavy tenutos on the last two chords bothered me. The scherzo is well sprung, with the trio slightly-but not obtrusively-eased in the manner of Beecham's reading. The finale is excellent: measured, always dancing in its pulse, yet not overly pressed (the marking is allegro ma non troppo).

The Egmont Overture is steady, granitic, weighty. Once again balances are finely gauged, and the crystal-clear reproduction is exactly right for Beethoven's orchestration. For all that, the performance never quite springs to life.

BLOCH: America. For a review, see page 70

BRAHMS: Concerto for Piano and Orchestra, No. 1, In D minor, Op. 15. Radu Lupu, piano; London Philharmonic Orchestra, Edo de

The best classical records reviewed in recent months

BEETHOVEN: Quartets, Op. 18. Végh. TELEFUNKEN 36.35042 (3), Mar. BIRTWISTLE: Triumph of Time; Chronometer. Boulez. ARGO ZRG 790, Mar.

BRAHMS: Symphony No. 1. Levine. RCA RED SEAL ARL 1-1326, May.

DUFAY/ DUNSTABLE: Motets. Pro Cantione Antiqua, Turner. ARCHIV 2533 291, Mar.

GERSHWIN: Porgy and Bess. Maazel. London OSA 13116 (3), May.

HENZE: Compases para preguntas ensimismadas; Violin Concerto No. 2. Henze. HEADLINE HEAD 5, Apr.

Liszt: Piano Sonata; other works. Berman. Columbia/Melodiya M 33927, May. Mahler: Das Lied von der Erde. Ludwig, Kollo; Karajan. DG 2707 082 (2), Apr. Maystyrappy. Vespro, della Roota Vergino; other works. Schooldt. Appuly 2716

MONTEVERDI: Vespro della Beata Vergine; other works. Schneidt. ARCHIV 2710 017 (3), May.

Mozart: Divertimentos (17). N. Y. Philomusica, Johnson. Vox SVBX 5104 (3), 5105 (3), 5106 (3), Apr.

NIELSEN: Wind Quintet; other works. W. Jutland Ensemble. DG 2530 515, Apr.

RAVEL: Daphnis et Chloé, Martinon, ANGEL S 37148, Mar.

Kalish, Nonesuch H 71320, Mar.

ROCHBERG: Chamber Works. Concord Quartet. Composers Recordings SD 337, May. Chamber Symphony; Music for the Magic Theater. Oberlin College ensembles; Moore. Desto DC 6444, May.

SCHOENBERG: Brettl-Lieder; Songs. Nixon. RCA RED SEAL ARL 1-1231, Mar. SCHOENBERG: Das Buch der hängenden Gärten. SCHUBERT: Songs. DeGaetani,

SHOSTAKOVICH: Preludes and Fugues. Woodward. RCA RED SEAL CRL 2-5100 (2), May.

SHOSTAKOVICH: Quartets 7, 13, 14. Fitzwilliam. OISEAU-LYRE DSLO 9, May.

STRAVINSKY: Chamber Works. De Waart. Philips 6500 841, Mar.

WAGNER: Das Rheingold (sung in English). Goodall. ANGEL SDC 3825 (4), Apr. WAGNER: Siegfried (sung in English). Goodall. EMI ODEON SLS 873 (5), Apr.

LYNN HARRELL: Cello Recital. RCA RED SEAL ARL 1-1262, Apr JEFFREY SOLOW: Cello Recital. DESMAR DSM 1006, Apr.



Colin Davis and the BBC Symphony
The most successful installment in his Beethoven symphony cycle.

Waart, cond. London CS 6947, \$6.98.

Comparisons:
Fielsher, Szell/Cleveland
Curzon, Szell/London Sym.
Szerkin, Szell/Cleveland
Col. MS 7143 or MG 31421

Departing from the usual storm-tossed route, Lupu and De Waart take a gentler approach to this youthful, defiant concerto: The pianist's mellifluous touch is set against a sleek orchestral backdrop that blends string and wind choirs and removes all traces of harshness from the brass. There is nothing tortured or contrived about this interpretation, and Lupu negotiates all the considerable technical hurdles without difficulty, smear, or bluster. For all that, it strikes me as too placid for this score, in which the young Brahms freely vented his inner anger and emotional agonies in a way that he never would again.

Leon Fleisher (who made his recording at about the same age as Lupu) does storm the heavens and, at the same time, exhibits greater structural insight and a feeling for color different from, but scarcely inferior to, Lupu's. The Curzon and Serkin accounts essentially present compromises between Fleisher's ardent approach and a more controlled emotionalism. (All three of these versions are superbly conducted by George Szell.) Lupu's rare gifts, both pianistic and musical, are again much in evidence. If his work to date has seldom satisfied me completely, he almost always intrigues me, even when, as here, he completely misses what seems to me the point of a piece.

The well-balanced sound is rather soft in focus, and the low strings tend to sound plummy:

BRAHMS: Concerto for Piano and Orchestra, No. 2, in B flat, Op. 83. Bruno Leonardo Gelber, piano; Royal Philharmonic Orchestra, Rudolf Kempe, cond. CONNOISSEUR SOCIETY CSQ 2088, \$6.98 (SQ-encoded disc).

There are more than two dozen versions of this work in the current catalogue, and if you simply pick one of them at random the odds favor your getting a performance of real merit

I find two excellent reasons for recommending this version: The performance has a very warm, Romantic manner that suits the music well (better, indeed, than much of the striving for virtuosity that other pianists provide), and the recording is appropriately robust, with a wide dynamic range and a firm sense of presence. The SQ effects are not striking, but you can secure some impressive and room-filling sound. I ended up using a double quad systemeight tweeters, eight midranges, and eight woofers—in a circular formation. It sounded marvelous.

Pianist and conductor see this work in the same terms, so it's a well-unified performance with a sentimental glow that brightens the opening movement, brings joy to the scherzo, and really bursts forth in the Andante and the grazioso elements of the finale. If you prefer Brahms the poet to Brahms the philosopher, here he is. R.C.M.

BRAHMS: Hungarian Dances (21). Michel Béroff and Jean-Philippe Collard, piano. Connoisseur Society CS 2083, \$6.98.

Béroff and Collard join in remarkably poised, extremely subtle performances of the complete Hungarian Dances. They underplay the "gypsy" character, emphasizing rather the delicate interplay of the ensemble and the lyrical aspects of the music. This is admittedly a rather special approach to this kind of music, but the degree of clarity, attention to detail, and over-all musicality provide sufficient justification. My only real regret is that the texture is so light and delicate that the bass is occasionally obscured; this music demands clear

harmonic direction, and for that the bass is essential.

Listeners open to an unorthodox approach should hear this record; on its own terms, it is enormously successful. R.P.M.

BRUCKNER: Symphony No. 4, in E flat (*Romantic*) (ed. Nowak). Vienna Philharmonic Orchestra, Karl Böhm, cond. [Michael Woolcock, prod.] LONDON CSA 2240, \$13.96 (two discs, automatic sequence).

Some forty years ago Karl Böhm, one of the phonograph's earliest Bruckner champions, made the first complete recording of the Fourth Symphony, with the Staatskapelle Dresden, currently available on EMI Da-Capo 1C 053 28924. That performance remains an impressive one (even if no conductor today-Böhm included-would allow the casual string portamentos, for example in the first movement's second theme), but its flexibility of pulse is worlds apart from the severely controlled, steadily solemn, and massively tense statement of the new recording. Böhm/Vienna runs some six and a quarter minutes longer than Böhm/Dresden, and it is also more consistently grand in scale than my LP favorites heretofore-Haitink (Philips 835 385), whose breadth and gravity is concentrated in the outer movements, and Klemperer (Angel S 36245), whose scherzo alone is notably deliberate. Furthermore, I have heard no other conductor manage the finale with Böhm's seamless unity and tensile cohesion. If Brucknerian monumentality doesn't scare you off, Böhm/Vienna is the clear choice.

This release completes Decca/London's Vienna Philharmonic cycle of the nine numbered Bruckner symphonies. The orchestral playing and engineering have maintained an impressive level of excellence and sonic consistency despite the long time span and the variety of conductors (Böhm, Solti, Stein, Abbado, Maazel, and Mehta).

Though three sides was once a standard format for the Fourth, most recordings of the last decade have been accommodated on two, so Böhm's four sides will raise many eyebrows. London already has two technically superb single-disc Fourths: Mehta's fairly good Los Angeles performance (CS 6695) and Kertész' fine London Symphony performance, newly reissued on Stereo Treasury (STS 15289) at less than a third the price of the new set. Böhm's broad first movement probably rules out a twosided issue (the first two movements would have produced a 35:35 side), but four sides? The recording does have a slightly wider dynamic range than the Kertész and Mehta. and somewhat more cuttingly vigorous brass timbres-though no better bass response. For these gains, U.S. buyers have to pay for two full-priced discs. (The English set costs little more than a single disc, but London was unable to offer a special price.) Still, the Brucknerian will get some superbly authoritative music-making for the money.

BUSONI: Sonata for Violin and Plano, No. 2, in E minor, Op. 36a. BACH: Sonata for Violin and Harpsichord, No. 6, in G, S. 1019. Ser-

NEW!



Handbook of Multichannel Recording

Here is very possibly the single most important book on sound recording for the layman or professional who wants to make quality recordings of musical groups. For the first time, here's a book that covers it all—dubbing, special effects, mixing, reverb, echo, synthesis—for both stereo and four-channel recording. Simply circle No. 781 on the coupon below.

"Handbook of Multichannel Recording" is only one of a wide selection of carefully chosen audio books made available to HIGH FIDELITY readers through Music Listeners' Book Service (Many of the selections are not readily available in bookstores.) Choose your books today from the list below, circle the numbers on the coupon, and enclose your check or money order. That's all there is to it.

No. 781 HANDBOOK OF MULTICHANNEL RECORDING. F. Alton Everest.

A comprehensive volume of 322 pages, with 201 illustrations, covering all aspects of live recording in both stereo and four-channel formats. Paperbound: \$7.95, Hardbound: \$10.95.

No. 598 OFFICIAL GUIDE TO HIGH FIDELITY. Compiled by the Institute of High Fidelity.

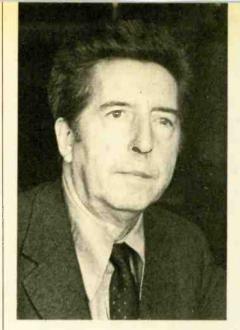
An informative introduction to the various components that make up a modern high fidelity system, covering everything from phono cartridges to quad systems. Paperbound: \$2.00.

No. 756 FOUR-CHANNEL STEREO . . . FROM SOURCE TO SOUND, 2nd Edition (1974). Ken W. Sessions, Jr. Complete technical and nontechnical information on

Complete technical and nontechnical Information on all approaches to four-channel sound, both discrete and matrix. Paperbound: \$4.95. Hardbound: \$7.95.

Check or money order must accompany your order.
No cash or C.O.D.'s, please.
Allow 60 Days for Delivery.

HIGH FIDELITY MUSIC LISTENER Dept. HW		
2160 Patterson Str	eet, Cinci	nnati, Ohio 45214
Here's my check fo		Please send
me, postpaid, the books I've circled below.		
781	598	756
Name		
Address		
City, State & Zlp		





Henri Dutilleux and Witold Lutoslawski Carrying the solo cello into almost impossible realms.

giu Luca, violin; David Golub, piano; Albert Fuller, harpsichord. [John Wright and Judy Sherman, prod.] DELOS DEL 25404, \$6.98.

BUSONI: Sonata for Violin and Piano, No. 2, in E minor, Op. 36a. PADEREWSKI: Sonata for Violin and Piano, in A minor, Op. 13. Endre Granat, violin; Harold Gray, piano. [David Hancock, prod.] DESMAR DSM 1004, \$6.98.

Busoni's fascinating Second Violin Sonata of 1898 has been recorded several times, most notably in 1958 by Szigeti and Horszowski for Columbia. With only the unexceptional 1967 Oiseau-Lyre disc by Bress and Johnsson in the catalogue, there should be a warm welcome for these two new, markedly contrasted, versions.

The Luca/Golub performance (and Carson C. Taylor's Delos recording) is in the true Grand Manner: boldly dramatic, often impassioned, sonically big and vividly close in a relatively reverberant ambiencea gripping big-hall concert presentation. Granat and Gray play in smaller-scaled, more lyrical and refined, chamber music style, and David Hancock's audio engineering is appropriately characterized by less powerful and close (yet brightly clean and natural) sonics and by a relatively smallhall acoustical ambience. Each approach is legitimate, with the Delos more likely to convince newcomers of the music's and Busoni's greatness, while the Desmar may well be more satisfactory for repeated home hearings.

The couplings are no less strongly contrasted. The Romanian-born Luca, using a 1700 baroque bow, plays the Bach S. 1019 Sonata on a 1733 Bergonzi violin adapted for baroque-style performances with allgut strings, shifted sound post, and tuning lowered approximately a half tone. And since the harpsichordist is the authoritative Albert Fuller, playing a modern replica of a c. 1800 instrument, all this insures considerable historical authenticity, perhaps slightly contradicted by the violinist's occasional touches of anachronistic vibrato and "expression" as well as by the robustly close-up recordings.

The Desmar coupling is Paderewski's rarely encountered early violin sonata—an

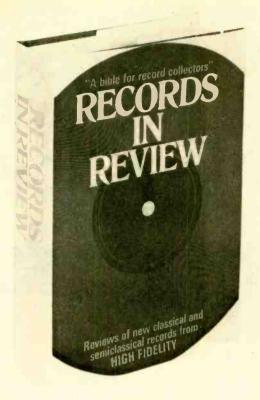
expectedly Romantic work that is unexpectedly fresh in its melodic appeal and unexpectedly magisterial (if of course orthodox) in its formal craftsmanship. Here the Hungarian-born Granat's relatively small but sweet tonal qualities and Hancock's sonically chamber-scaled recording are perfectly suited to the charming, lighterweight materials.

R.D.D.

DUTILLEUX: Concerto for Cello and Orchestral (*Tout un monde lointain*).* **LUTO-SLAWSKI:** Concerto for Cello and Orchestra.* Mstislav Rostropovlch, cello; Orchestre de Paris, Serge Baudo* and Witold Luto-slawski*, cond. [David Mottley, prod.] ANGEL S 37146, \$6.98 (SQ-encoded disc).

Mstislav Rostropovich's performance of the Dutilleux cello concerto at the Aix-en-Provence festival in July 1970 was the fifty-second world premiere the great Russian musician had given. In many cases, he himself commissioned the works, as with the Dutilleux and Lutoslawski concertos (both completed in 1970) on this outstanding new release.

Subtitled Tout un monde lointain (An Entire Faraway World) after a Baudelaire poem that sings of total escape of "the mind and the senses," the Dutilleux work is made up of five interrelated movements, each inspired by Baudelaire lines. As in the Second Symphony [HF, May 1975] and the Cinq Métaboles, the composer makes considerable use of reverse variation, in which material presented in fragments does not take on its full form until developed via variation. The opening cello theme, for instance, sounds quite atonal but is not presented as a complete tone row until the first variation, where it is colored by expansive orchestral chords reminiscent of the principal chord motive from the Métaboles. Throughout the concerto those emotionally charged chords, whether tightly clustered or wide-intervaled, contrast with the dvnamically conceived themes (usually given to the solo cello) to produce an extraordinary sensation of expansion, contraction, and transformation. Furthermore, Dutilleux's instrumental genius shows



Now Available RECORDS IN REVIEW

The Twentieth annual collection of record reviews from High Fidelity

- COMPREHENSIVE—Includes a compilation of record reviews of classical and semiclassical music from the pages of High Fidelity. The sturdy, hard-cover book reviews all types of music—vocal, orchestral, chamber and solo—from all periods—medieval to contemporary—and includes all formats—discs, open-reel tape, cartridges, and cassettes in both stereo and quadriphonic editions.
- AUTHORITATIVE—High Fidelity's reviewing staff includes today's most knowledgeable and noted critics: Royal S. Brown, Abram Chipman, R. D. Darrell, Peter G. Davis, Shirley Fleming, Alfred Frankenstein, Kenneth Furie, Clifford F. Gilmore, Harris Goldsmith, David Hamilton, Dale S. Harris, Philip Hart, Paul Henry Lang, Robert C. Marsh, Robert P. Morgan, Andrew Porter, Conrad L. Osborne, John Rockwell, and Susan T. Sommer. They discuss the composition, performance, and sonic quality of each recording and compare it with earlier releases and legendary performances.
- CONVENIENT—Reviews are arranged alphabetically by composer. In the case of frequently recorded composers, reviews are further divided into categories such as Chamber Music, Vocal

Music, etc. Moreover, there's a special section on Recitals and Miscellany and a complete Artists' Index of all performers whose recordings were reviewed during the year, as well as those mentioned only in the text.

With so many records being issued each year, you need a reliable source of information. What better source than reviews from this book, which has been called "a bible for record collectors!" Order your copy now by filling in and returning the coupon below.

(Allow 60 days for delivery)
(Also Available at Bookstores)

	Wyeth Press, State Road, Great Barrington, MA 01230		
Please send the following copies of Records in Review:			
I	☐ 20th Annual @ \$14.95 postpaid ☐ Please enter my standing order for all future editions of Records		
İ	in Review		
-	I enclose payment (Check or Money Order only). Add sales tax where applicable. (Sorry—we cannot invoice!)		
Ì	Name		
l	Address		
-	City		
	StateZip		

stunningly in the ongoing coloristic metamorphosis and osmosis (the work's original title was Osmose) between soloist and orchestra.

If Dutilleux is imparting new vitality to traditionally rooted directions, Lutoslawski with equal success follows an almost opposite course, using such ultramodern devices as microtonal intervals, aleatory passages, and multidivisi instrumentation in an inspired, nonsystematic way that generates immense excitement and tension. Opening with an obsessively repeated D in the cello, the concerto gradually expands this single note into more complex motives that finally involve the orchestra in a somewhat violent, extended interplay in four episodes. After a return to the D motive, a much quieter, slower section moves toward a deceptive resolution into order-an extended unison passage that is brutally interrupted by the brass, beginning the final section. Inevitably, the music works its way back to a single repeated note on the cello-this time a high A-that quietly concludes the concerto. (The Dutilleux concerto ends ambiguously on a buzzing, chromatic trill in the cello.)

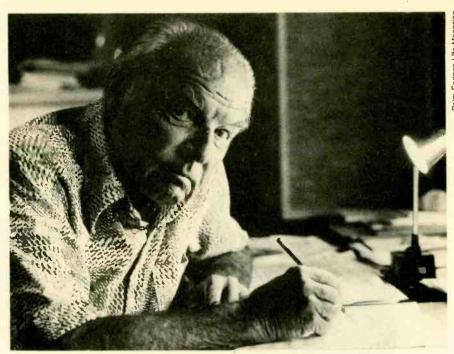
It is obvious that Rostropovich has inspired both composers to carry the solo cello into realms that one could justifiably consider impossible for the instrument. Yet he not only unflinchingly accomplishes the impossible, but does it with a consummate blend of tone and technique that makes it all sound beautifully natural. Both of these works also make virtuoso demands on the orchestra, whose performances here are as dynamic and sonorous as the soloist's. All of this is captured in brilliant state-of-theart sound.

GRIEG: Concerto for Piano and Orchestra, in A minor, Op. 16. RAVEL: Concerto for Piano and Orchestra, in G. Jenö Jandó, piano; Hungarian Radlo-Television Orchestra, Antal Jancsovics, cond. [Tibor Erkel, prod.] Hungaroton SLPX 11710, \$6.98.

Jenö Jandó, born in 1952, is yet another outstanding pianist out of the Franz Liszt Academy in Budapest. His account of the Grieg concerto is superbly wrought—sufficiently dramatic but refreshingly unpretentious in its pristine phrasing and attractive color. The orchestral part in the warhorse Romantic concerto literature is often taken for granted; here conductor Antal Jancsovics takes altogether uncommon care to blend and balance instrumental choirs, and there is superb dovetailing of lines and shaping of phrases.

The Ravel G major Concerto gets a similarly unforced, tonally attractive statement. Jandó strikes a middle position between the chiseled exactitude and everynote-in-place classicism of the superb Michelangeli/Gracis recording (Angel S 35567) and the jazzy splashiness of the François/Cluytens account (Angel S 35874). One is reminded of the work's natural expressivity, of its beautifully intricate pianism, and of the wonderful concertante orchestral writing (which the Budapest brasses cannot quite execute with razorsharp precision).

The close-up microphone placement and



Ernst Krenek-a sampling of a varied compositional career.

spacious but very clear acoustic add up to vibrant reproduction. Recommended especially for the Grieg, though both performances are excellent. H.G.

HARRIS: Folksong Symphony. For a review, see page 70.

HAYDN: La Fedeltà premiata. For an essay review, see page 68.

HEINRICH: "The Dawning of Music in Kentucky." For a review, see page 70.

HERRMANN: Quintet for Clarinet and Strings

(Souvenirs de Voyage)*; Quartet for Strings (Echoes)*. Robert Hill, clarinet; Ariel Quartet.* Amici Quartet*. [Gavin Barrett* and John Snashall*, prod.] UNICORN RHS 332, \$7.98

There is certainly no mistaking the composer of the lovely clarinet melody flowing into softly modulating string chords of the opening of Bernard Herrmann's 1967 clarinet quintet. Yet it is not so much the themes in this opulently romantic, also occasionally Ravelian piece that make the greatest impression, but rather the Herrmannesque harmonic directions they take. Any listener waiting for those moody, outside-of-time chromatic modulations that give the composer's film music so much of its character will not be disappointed. (One section-the opening theme of the third movement-was later used in the film score for The Battle of Neretva.) The only disappointment here is in the thinnish, rather sloppy playing hy the Ariel Quartet; Robert Hill's clarinet performance is much better, although it overbalances the strings.

Like the quintet, the 1966 Echoes Quar-

tet-a single-movement work whose ten titled episodes are frequently linked by the opening "Prelude" theme-avoids the larger-sounding textures some composers elicit from the medium, a point of kinship with the Shostakovich quartets. But where the quintet aims its poignant modulations at the softer emotions, the deeper quartet concentrates on dark, nervous, luguhrious, even morbid moods (note the disquieting "Valse lente" and "Scherzo macabre"). I am not enamored of this performance (released earlier in the Pye Golden Guinea series in England). The Amici Quartet is at its best in the faster tutti passages; the slower sections frequently highlight the soloists, and none of the individual playing stands up very well. Entrances and intonation could be surer too.

Until a first-rate string quartet decides to tackle these works, however, this disc will remain an essential document in the Herrmann discography. R.S.B.

Ives: Holidays Symphony; Sonata for Piano, No. 2. For a review, see page 70.

KRENEK: Various Works. Various performers. ORION ORS 75204, \$6.98.

O Lacrymosa (Genevieve Welde, soprano; John Dare, plano); The Santa Fe Timetable (California State University Northbridge Chamber Singers, John Alexander, cond.); Tape and Double (Patricia Marcus and William Tracy, planos); Toccata (Robert Young McMahan, accordion).

Ernst Krenek's remarkable compositional career now spans over half a century. During this period he has, remarkably, maintained a position close to the center of the most up-to-date musical developments. He has been, at one time or another, closely associated with jazz-influenced composition, the Second Vienna School, and postwar total serialism.

This recording contains four pieces encompassing virtually the entire range of his career. The earliest, O Lacrymosa, dates from 1926, Krenek's twenty-sixth year. It is a setting for soprano and piano of three poems by Rainer Maria Rilke that were dedicated to the young composer with the understanding that he would set them to music. (Rilke received news of the completion of the piece just before his death.)

At this stage Krenek was still writing tonal music in the functional, triadic sense,
and O Lacrymosa shows clearly the extent
to which he had mastered traditional musical language and shaped it into a vehicle to
suit his own expressive purposes. These
songs are, to put it simply, quite lovely, and
they make a deep and lasting impression.
Although they are described in the liner
notes as "neo-Romantic," their Romanticism is tempered by a haunting twentiethcentury reserve. They are beautifully sung
here by Genevieve Weide, but unfortunately the German text is almost completely unintelligible.

The Santa Fe Timetable (1945) is just that: a choral setting of the names of the railroad stations between Albuquerque and Los Angeles. Not surprisingly, at the time of its composition the work created something of a sensation. Krenek explains: "It was conceived as a highly 'objective' documentary corollary to the subjective lyricism of my Ballad of the Railroads for solo voice and piano of the same year. The concept was inspired by the Liber generationis Jesu Christi by Josquin des Prez, an ingenious six-voice setting of the 'begat' section of the Gospel according to St. Matthew." These days, when such things have become our daily musical bread, the effect is no longer shocking, but at best mildly amusing. The music in this instance is something of a bore: The unrelieved dissonance of the dense, obsessively imitative a cappella choral writing soon begins to wear on the ear. And here the performance, by the California State University Northbridge Chamber Singers under John Alexander, does not help. The singers struggle valiantly, but one is conscious of an almost constant strain to meet the inordinate vocal difficulties.

The most recent work is the Tape and Double (1969-70) for two pianos and electronic tape. One of the pianos is "prepared": A light metal chain is stretched over the strings, thus modifying the timbre and contributing to what the composer refers to as "connotations of growing tension and catastrophe." The altered piano also serves as a sort of timbral buffer between the normal piano sound and the electronic portions. The coordination between tape and live performers appears to be carefully regulated. At times the live and taped portions are contrasted with one another, but they also frequently mimic each other. Many interesting timbral exchanges grow out of this idea, and sections have a strong dramatic profile (especially the ending). But formally the over-all impression is of a stringing together of fragmentary effects (much of the piece seems to be made up of scraps of what might be termed a latter-day equivalent of passagework). And given the composition's extended length-twentytwo minutes-this makes demands upon the listener's attention span.

One of Krenek's many interests (as with Hindemith) has been to supply "practical"

music for instruments lacking an extensive solo literature. (The harp sonata, for example, is one of his best-known works.) The toccata for accordion, written in 1962, falls in this category. In four sections, it is a brilliant, but stylistically eclectic, tour de force for the instrument. Krenek has always struck me as an extremely gifted composer who has had difficulty finding his own 'proper" voice, an explanation no doubt for his tendency to experiment with currently fashionable compositional developments. In this case, the style is by no means "avant-garde" but rather a sort of nondescript Gebrauchsmusik. Nevertheless, Krenek gives the accordionist a fine workout-which, I suspect, was his main concern. The piece is beautifully played by Robert Young McMahan. R.P.M.

LISZT: Dante Symphony, Bolshoi Theater Chorus and Orchestra, Borls Khaikin, cond. COLUMBIA/MELODIYA M 33823, \$6.98.

Comparison: Cao/Luxemburg Radio Sym.

Can. QCE 31082

The contradiction between Liszt's extraordinarily imaginative innovations and his unabashedly sentimental clichés becomes glaringly evident in the symphonic poems and the two "symphonies." No doubt because most listeners feel most comfortable with music they can decisively like or dislike, the symphonies are heard relatively infrequently, on and off records, but the Dante has fared even worse than the Faust. The present release and the Cao/Candide Dante (July 1975) were preceded, to my knowledge, only by three nondescript mid-Fifties mono versions and the so-so 1962 Lehel/Westminster performance, all out of print.

While the two latest versions benefit from modern engineering, both are handicapped by less than the best orchestral playing and by the limitations of their individual interpretative approaches. In the stormy opening "Inferno." Khaikin is by far the more savage, Rhadamanthine master of the hellish terrors. In the calmer love-music midsection of this movement, in the serene and nostalgic "Purgatorio," and in the religioso fervency of the final "Magnificat" with women's chorus, Cao is by a wide margin the more warmly poetic. He is also much more expansive, taking nine minutes more than Khaikin for the whole work, and his choristers are decidedly more "angelic."

The Russian engineers provide more powerfully realistic and reverberant, if rather hard (even coarse) sound. Candide's drier studio ambience is only partially compensated by the enhanced expansiveness of quadriphonic playback. So while we continue to wait for an ideally performed and recorded Dante Symphony, we just have to face up to these new as well as the old Lisztian contradictions and decide whether we want Khaikin's Satanic melodrama or Cao's songful ecstasies. R.D.D.

Liszt: Hungarian Rhapsodies (19). Michele Campanella, piano. PHILIPS 6747 108, \$23.94 (three discs, manual sequence).

Comparisons: Kentner (complete) Szidon (complete)

Vox SVBX 5452 DG 2709 044





Reflections On Wagner's Ring

John Culshaw has molded his acclaimed Saturday Metropolitan Opera broadcast intermission talks into a highly readable volume on Wagner's famed Ring. No opera lover—and certainly no student of Wagner—can afford to miss this masterpiece. To order, simply circle No. 601 on the coupon below.

"Reflections on Wagner's Ring" is only one of the wide selection of carefully chosen books made available to HIGH FIDELITY readers through Music Listeners' Book Service. (Many of the selections are not readily available in bookstores.) Choose your books today from the list below, circle the numbers on the coupon, and enclose your check or money order. That's all there is to it.

No. 601 REFLECTIONS ON WAGNER'S RING. John Cuishaw.

An invaluable compilation of Information based on Cuishaw's Saturday Metropolitan Opera broadcast intermision talks.

\$6.95

No. 512 SEASON WITH SOLTI. William Barry Furlong.

A sustained close-up view of Georg Solti and his Chicago Symphony. Human and readable. \$12.50

No. 597 RECORDS IN REVIEW 20th Annual Edition Compiled and edited by Edith Carter.

A 553-page compilation of all reviews of classical and semi-classical records appearing in MIGH FIDELITY magazine during the preceding year. A bible for record collectors everywhere. The reviews are organized alphabetically by composer for quick, easy reference—and, in the case of composers frequently recorded, further subdivided by categories of music. In addition, there is a special section on recitals and miscellany, as well as a complete Index of all performers reviewed during the year. \$14.95

Check or money order must accompany your order.
No cash or C.O.D.'s please.
Allow 60 Days for Delivery.

	HIGH FIDELITY MUSIC LISTENERS' BOOK SERVICE Dept. HW 2160 Patterson Street, Cincinnatl, Ohio 45214 Here's my check for \$ Please send me, postpaid, the books I've circled below.
i	601 512 597
	Name

Desmar DSM 1003

Campanella presents an ideal synthesis between the fire-breathing flamboyance of the old-school Lisztians and the musical "correctness" of the new order. Like Louis Kentner (on his badly reproduced Vox set), he employs rhetorical expansiveness and tonal weight where called for and catches the special stylistic traits of the late rhapsodies, missed by Roberto Szidon in his glittery but rather bland DG set.

Campanella has a beautiful technique: pearly, even trills; sprinting passagework; bronzen, solid octaves; enormous dynamic range; smooth glissandos that, with Philips' extraordinarily vivid, clean reproduction, virtually reach out and grab the listener's

senses. Pianissimos quiver with atmosphere. Fortissimos may not be quite so memorable, but it should be recalled that Horowitz's too are not generally distinctive coloristically.

The young Neapolitan's work bears a resemblance to the synthesis of virtuosity and introspection in the five rhapsodies recorded by Arrau in 1951, only recently issued for the first time (January 1976). Sometimes Arrau's slower tempos and greater clarity make Campanella's way seem a trifle brusque, but just as often Campanella is fresher and more spontaneous, though no less serious. I warmly second R. D. Darrell's recommendation of the Arrau disc (remarkably recorded for its age) to all lovers of great pianism; for the complete rhapsodies,

the distinguished Campanella set is a clear choice. H.G.

LISZT: Die Legende von der Heiligen Elisabeth

Landgrave Hermann Countess Sophie Landgrave Ludwlg Elizabeth Frederick II A Hungarian Magnate The Seneschal Ludwig as child Elizabeth as child Kolos Kováts (bs)
Erzsébet Komlossy (ms)
Sándor Sólyom Nagy (b)
Eva Andor (s)
Józset Gregor (bs)
Lajos Miller (b)
Gyorgy Bordás (b)
Dušan Turlnič (boy s)
Eugenia Kraičírova (glrí s)

Czechoslovak Radio Children's Choir, Bratislava; Slovak Philharmonic Choir and Orchestra, János Ferencsik, cond. [János Mátyás, prod.] HUNGAROTON SLPX 11650/2 (three discs, manual sequence).

Among the great composers who have been directors of busy, important opera companies, Weber wrote just one successful opera and no others that show any sure command of the theater; Haydn wrote operas whose success was confined largely to his own troupe; Mahler wrote none, and Liszt none after the one-acter Don Sanche, composed when he was thirteen. (South of the Alps the picture may look different. In Naples, Rossini and Donizetti were at once musical directors and house composers, but, under contract to Barbaia, neither of them controlled his company and its repertory in the way Haydn, Weber, Liszt and Mahler did theirs.) It does seem odd that neither Liszt nor Mahler should have tackled music drama; perhaps the constant attention to the staging and conducting of other men's operas inhibited efforts of their own in the genre.

Under Liszt, Weimar became a center for operatic adventure: Lohengrin and Schubert's Alfonso und Estrella received their premieres there, Tannhäuser, Benvenuto Cellini, and Schumann's Genoveva their first revivals, and I due Foscari its German premiere.

Liszt had produced Tannhäuser in 1849. In 1851 he learned how Siegfried, which had already grown from one opera to two but was still promised to Weimar, had now grown into a four-evening work beyond Weimar resources; what had previously been narrative would now be shown as stage action. The next year-apropos of Venus' and the dead Elisabeth's appearances in the last scene of Tannhäuser but indicating Ring thought-Wagner told Liszt that "nothing that can be shown on the stage should be left to the imagination or merely indicated; everything should be shown." The year after that, Liszt put into print his conviction that the stage is "too confined a field for lofty passions," cramping when it "tries to replace the resplendent visions of the imagination by visible scenery." In 1855, he began work on Die Legende von der Heiligen Elisabeth.

Those facts form a sequence, I believe, and Saint Elizabeth is in some sense an "answer" to Tannhäuser. Wagner's heroine is a conflation of the saintly Elizabeth of Hungary (the Landgrave Hermann's daughter-in-law, not niece, in history) and the fair Countess Matilda loved by both Heinrich and Wolfram; Liszt's libretto is drawn more closely from history and hagiology. The



Next time you plan a trip to Europe, make sure you visit the unique country.

Where can you find: Europe's blondest blondes?

Europe's highest geysers?

Europe's greatest glaciers?

Europe's largest waterfalls?

And where can you find moonlike craters where the astronauts trained? More volcanos than anywhere else on earth? Historic landmarks of the world's oldest continuous parliament? Celebrations marking Europe's youngest republic?

The answer to all of these questions is—ICELAND, Next time you plan a trip to Europe, make sure you visit Iceland.

The only thing it may cost you is time well spent. Because you'll save enough money on Icelandic's lowest jet fares to Luxembourg to pay for your stopover in Iceland. Or, you can hop over from New York or Chicago for longer tours. See an envirting yolcano. Take a cross country control

tours. See an erupting volcano. Take a cross-country pony trek.

Next time you plan a trip to Europe, ask your travel agent about Icelandic Airlines. Or phone Icelandic Airlines, for folders about Iceland and lowest jet fares to Europe. In New York State, phone (212) 757-8585.

Elsewhere in U.S., phone (800) 555-1212 for local toll free number.

CIRCLE 14 ON READER-SERVICE CARD

This could be one of the best

\$250 speakers in the world.

There's just one problem...

we sell it for only \$149⁹⁵

The Heathkit AS-1373 competes with mediumpriced speakers by AR, KLH, Advent and Epicure but only in price. In performance, it rivals systems costing up to \$250 or even more.

We're so confident of our speakers that we guarantee every performance specification! Frequency response extends from 30 Hz to 22,000 Hz and is within ± 3 dB from 40 to 20,000 Hz. That would be exceptional performance at any price, for less than \$150 it is extraordinary.

But numbers alone can't describe the sound. The 10" acoustic suspension woofer provides solid, low-distortion bass. The midrange is incredibly smooth and natural because the midrange speaker is completely isolated from woofer vibrations by its own subenclosure. (Most bookshelf systems use a less effective plastic back behind the cone.) And a polyester damping material virtually eliminates coloration caused by reflections inside the subenclosure.

The tweeter's clarity and definition are superb. Even at 12,000 Hz, horizontal dispersion is 120° and there are no "rails" on the cabinet to limit dispersion or cause peaks and dips in frequency response.



The AS-1373 is also the only speaker which maintains optimum imaging by keeping the tweeter directly above the midrange, whether the system is positioned horizontally or vertically. You can simply interchange the tweeter and the control panel. It's a Heathkit exclusive!

And the AS-1373 sounds great with almost any amplifier or receiver. It can be driven by as little as 10 watts, yet can handle pulses of up to 200 watts effortlessly. That kind of awesome dynamic range is something you won't find in many other bookshelf systems. And for extra safety, all three drivers are individually fused.

The AS-1373 is also easy to build — even if you've never built a kit before. The luxurious walnut veneer cabinet comes preassembled and finished. You just wire the crossover and install the speakers.

When you're finished, you'll own a better speaker than you probably thought you could afford.



FREE

Catalog with over 400 more-for-yourmoney electronic kits. Hi-Fi components, Speakers, Color TV, Test Instruments, Amateur Radio gear, Automotive, Marine, Aircraft accessories, more!

Heath Company, Dept. 8-18 Benton Harbor, Michigan 49022

Prices and specifications subject to change without notice.

سب ننگ بیب رین می بیب می
Heath Company, Dept. 8-18 Benton Harbor, Michigan 49022

HEATH Schlumberger

- ☐ Enclosed is \$_____ for ____ AS-1373 speakers at \$149.95 each (motor freight shipping charges COD).
- ☐ Send me my FREE Heathkit Catalog.

Name_

Addres

City

HF-306

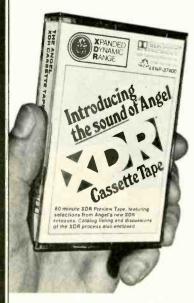
_ State_ Zip

CIRCLE 13 ON READER-SERVICE CARD

Introducing The Sound of Angel



Cassette Tape



Raw tape has undergone stunning advancement: frequency response is spectacular; tape noise is minimal. And to refine cassette sound still further, at the duplicating stage of production, Capitol-Angel engineers have incorporated new technological developments. These processes together are the foundation of Angel's new XDR_{TM} cassette series.

Expanded Dynamic Range cassettes provide you a consistently rewarding listening experience. Average test results show:

- the dynamic range is expanded by 60%
- sound level is increased by an additional 4 db
- the high frequency limit is extended to 15 KHz
- electrically induced distortion is reduced from 5% to 0.3% at peak levels.

And, adding even greater dimension to XDR cassette sound, Angel has incorporated the DOLBY*† system which provides you a truly exciting new listening experience.

For easy identification, all Angel XDR Cassette tapes carry the XDR logotype bordered in distinctive red-orange.



CIRCLE 3 ON READER-SERVICE CARD

oratorio has other sources, too. One is Liszt's own feeling for charity, philanthropy; like Saint Elizabeth, but less obsessively, he gave away much of his wealth to the poor. Another is his patriotism; he hoped that Saint Elizabeth "would one day become an organic part of the new Hungarian literature," and it had its first performance in Budapest, in 1865, to celebrate twenty-five years of the National Conservatory that had been founded through his generosity. An immediate inspiration was the Elizabeth fresco cycle painted in the Wartburg, just outside Weimar, by Moritz von Schwind in 1854; Liszt's work is similarly a series of "tableaux," beginning with the child Elizabeth's arrival in the Wartburg and reaching its climax with her solemn burial, the Emperor Frederick II in attendance. (In a colorful, lavishly illustrated companion booklet, it seems perverse to have included only one of Schwind's pictures; the numerous details from a Hungarian fifteenth-century Elizabeth altarpiece are less relevant.) Liszt conducted Saint Elizabeth in the Hall of Song in 1867

The first of six tableaux-Elizabeth in the care of a Hungarian magnate, at the court where one day she is to reign-contains welcome choruses, a childish exchange between her and the boy Ludwig, her future husband, and children's games. The second is the Miracle of the Roses: Elizabeth, carrying wine and bread to a poor cottager, is surprised by her husband and pretends she has merely been gathering roses; supernatural intervention turns her alms to roses, and a wonderful fragrance fills the air. Part I ends with Ludwig's departure for the Sixth Crusade. He dies, and in Scene 4 his mother, the Countess Sophie, an Ortrud-like figure, turns her daughter-in-law out of the palace. Scene 5 is a long scena for heroine-a prayer, thoughts of her childhood home in Hungary, her death-framed by choruses of the poor and of angels. And in the final scene the emperor, the people, crusaders, and at last " the chorus of the whole Church" praise her.

Liszt's recurrent thematic material includes a plainchant for the Feast of Saint Elizabeth, another old Elizabeth hymn, a Hungarian popular melody, and a chorale that purports to be from the time of the Crusades but slips easily into lush hymn-tune harmonies. His text is not a narrative, but a series of evocative scenes. Berlioz' musical transformations of Faust and of Romeo and Juliet were probably a conscious precedent. But a good deal of the score seems to be conscientiously constructed rather than inspired. The motifs come in at the appropriate places and undergo appropriate "thematic metamorphosis." The choral writing tends to be square and repetitive. And the dramatic dialogues, the important recitatives, have little life in them: Voice declaims, and then orchestral motifs provide punctuation. Liszt's aims-his "free form" movements, his use of "dissolves" at the end of episodes instead of closed numbers-are more interesting than his actual achievement. Saint Elizabeth is a large, ambitious, carefully worked, and slightly dull composition.

It could be more vividly performed than it is here. The recording was made with

Czech choirs and orchestra but soloists from the Hungarian State Opera, in Bratislava (Pressburg, Pozsony, now in Czechoslovakia but for centuries the capital of Hungary), where Liszt himself conducted Saint Elizabeth in 1883. By conductor János Ferencsik and all concerned, the dramatic elements are underplayed. The heroine, Eva Andor, has a clear, gentle soprano, which has also been heard on the Hungaroton discs of Liszt's Christus and Prometheus and Kodály's The Spinning Room. It is convincingly and pleasingly the voice of an Elsa or an Elizabeth, but-until Scene 5, where the emotional temperature does rise and she becomes a moving interpretershe puts too little expression into the words and the phrasing. Erzsébet Komlóssy, who sang an unfortunate Azucena at Covent Garden in 1970-71, has no inhibitions about characterizing the cruel mother-in-law, but she lets fly in a breathy, imprecise, undisciplined manner. The male roles, all small and all low-voice (no tenors), are lyrically and steadily sung.

The work is done in the original German. Its words are clearly pronounced rather than brought to life. The choirs sing well but sound much the same whether they are impersonating courtiers. warriors, or angels. The orchestral playing is fine-grained; occasionally the woodwind chording misses the purity of intonation that is essential to Liszt's writing. (The all-wind accompaniment to Elisabeth's Prayer, in Tanhäuser, may have been an influence here.) The recording is smooth, decently balanced, not fierce even at the largest climaxes. The surfaces are free of pop, but my pressings contained some swishy passages.

A long, careful introductory essay comes in four languages (Hungarian, English, German, and Russian), and the German column of libretto is flanked by Hungarian and English translations (strictly, not an English translation, but a doggerel singing version lifted, I guess. from the Novello vocal score). Anyone unfamiliar with the life of Saint Elizabeth will need more help than has there been given to set Liszt's isolated tableaux in context.

A.P.

Lutoslawski: Concerto for Cello and Orchestra—See Dutilleux: Concerto.

MARTINO: Paradiso Choruses.* PINKHAM: Liturgies; For Evening Draws On; Toccatas for the Vault of Heaven.* Soloists, choruses, orchestra, et al. of the New England Conservatory, Lorna Cooke de Varon, cond.* Kenneth Roth, English horn; John Grimes, timpani; Larry Phillips, organ.* GOLDEN CREST NEC 114, \$6.98 (SQ-encoded disc).

Donald Martino's Paradiso Choruses, Part III of a projected larger oratorio based on Dante's Commedia, is heard here in a live recording of the world premiere, May 7, 1975. Commissioned by the Paderewski Fund to mark the twenty-fifth anniversary of Lorna Cooke de Varon's tenure with the New England Conservatory Chorus, the half-hour work is in a more conservative idiom than that usually associated with its Pulitzer Prize-winning composer. The Mahler Eighth Symphony was brought to

Milda introduces the "Audiophile Series", a new line of high tidelity receivers, turntables, speakers and profess onal electrostatic headphones.

What is the moment of truth? It's the moment you turn a stereo or and listen to the sounc.

Milda has a sound that audiophiles will buly appreciate. It's clear clean and has more than enough Dower to satisfy the most demanding enthusiast.

The Mida 3140 AM/FM Stereo Receiver delivers 45 watts per channel minimum RMS, both crannels driven at 8 onms. From 20Hz to 20kHz with no more than 0.5% Tota Harmonic Distortion, IHF Sensitivity of 2.0, Capture Ratic 1.5 db, and IF Rejection 70 db.
The T3115 Direct Drive Turntable is more than

equally, impressive. It has a full 131/2" planer. Only one other maker has this size but their suggested retail

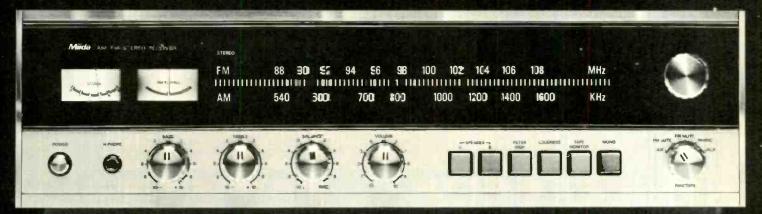
value is about \$100 more. The T3115 has rumble of -70 db and with wow and flutter of .03% or less.

Miida also offers a complete line of speakers and electrostatic headphones.

Miida receivers, turntables speakers and headphones are made to exacting audiophile standards and specifications.

Take a moment and see a demonstration of the Miida moment of truth





da makes it at oment

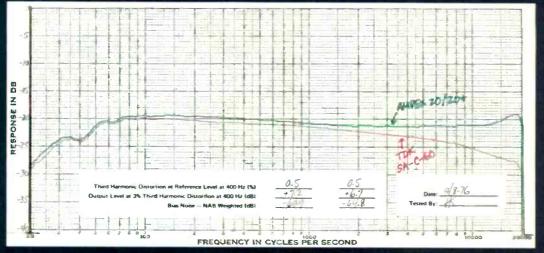


For more information, write Milda Electronics, Inc.,

the stereo specialist ... VIIICa

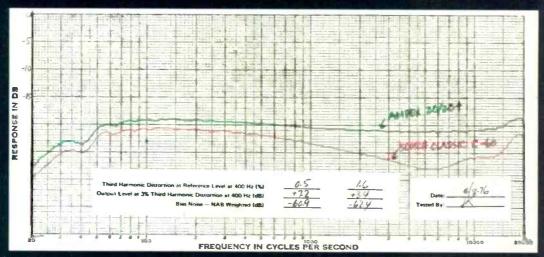
a subsidiary of Manubeni Corp., 14 Henderson Drive, West Caldwell, New Jersey 07006 / Telephone (201) 575-9302

THE PREMIUM CASSETTE PLAY-OFFS.

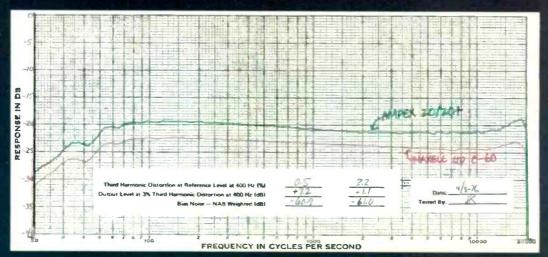


AMPEX 20/20+VS. TDK SA.

THE WINNER: AMPEX.



AMPEX 20/20+VS. SCOTCH CLASSIC. THE WINNER: AMPEX.

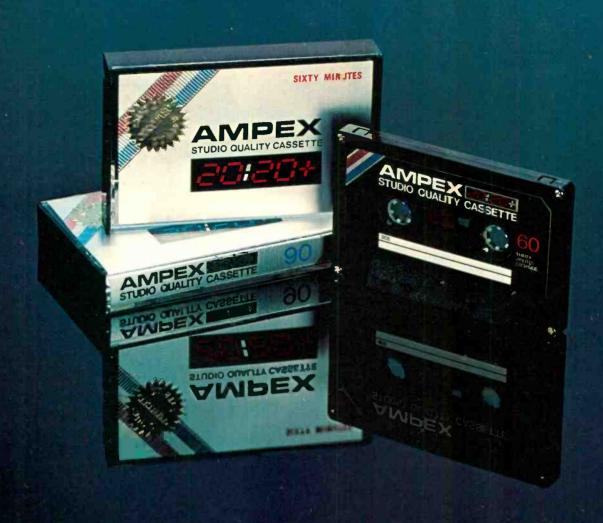


AMPEX 20/20+VS. MAXELL UD.

THE WINNER: AMPEX.

CIRCLE 2 ON READER-SERVICE CARD

THE WINNER.



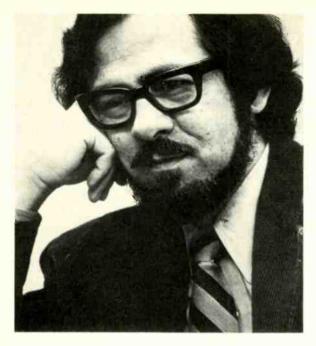
Play-offs were held April 8, 1976, in the Ampex Magnetic Tape Research Laboratory at Redwood City, California, using a Nakamichi-1000 cassette deck at standard factory bias setting. We measured frequency response at a record level 20 dB below 200 nwb/m, third harmonic distortion at zero dB (200 nwb/m, 400 Hz), output at 3% third harmonic distortion (400 Hz), and N.A.B. weighted noise. C60 cassettes were used. The photos are unretouched chart recorder output. You can see why Ampex 20/20+ is the best quality cassette you can buy.

But you don't need a lab full of instruments to tell the difference. All you need is your two ears. Ampex tapes sound better.

Ampex 20/20+ cassettes, 8-track cartridges and open reel tape. If you haven't been using Ampex tapes, you haven't been using the best.



The best cassette yet.



Donald Martino
Paradiso Choruses in a conservative idiom.

mind by the recurrent elements of Impressionism and late Romanticism (both Viennese and Italian), along with the gigantic performing forces—a fair-sized orchestra, large adult and children's choirs (in two-and three-part groupings, deployed at the premiere around the horseshoe-shaped balcony of Boston's Jordan Hall), fourteen soloists, and taped effects (for the Devil's voice and others).

At this remove from the excitement of the live event, with a recording that—especially in two-channel playback—lacks the luster and clarity I heard from an ideal location in the center of the hall, I am more conscious both of the limitations of the performance and of the rambling character of the score itself. It may take a thoroughly professional performance under studio conditions to permit a fuller assessment of

the work's staying power.

The overside three pieces by Daniel Pinkham, written between 1972 and 1974, lean heavily on aleatoric and electronic effects. Except for the 1973 setting of For Evening Draws On, where the lovely Englishhorn soliloquy is impressively spectral in the context of all that tape background, it is rather arid stuff.

There are notes on all the works and full texts for the Paradiso Choruses. My pressing could have been better.

A.C.

Mozart: Missa brevis in F, K. 192; Missa brevis in C, K. 259 (*Organ Solo*). Celestina Casapietra, soprano; Annelies Burmeister, mezzo; Peter Schreier, tenor; Hermann Christian Polster, bass; Leipzig Radio Chorus and Symphony Orchestra, Herbert Kegel, cond. PHILIPS 6500 867, \$7.98.

Archbishop Colloredo liked his Masses kept short, well within an hour, so the young Mozart had to be concise in setting the Ordinary to music. Despite such restrictions and the fact that the composer was only eighteen, one of the two Masses offered in this recording-K. 192, composed in Salzburg in 1774-is a masterpiece. The concentration is extreme, yet entirely successful; there are no filler measures, and every word is aptly set to music. This compactness could not have been due solely to the archbishop's preferences. Mozart is palpably experimenting here to satisfy himself; the forms are rounded, the thematic elaboration is consequent and tight.

If a vented, equalized speaker system is so great, how come everyone isn't building them?



Frankly, everyone doesn't know how. It took E-V 2 years to apply the Thiele methodology to achieve a sixth-order Butterworth Class 1 response.

Today, we're

the only people with a vented, equalized speaker system using these elaborate concepts.

So the Interface: A comes to you with a great deal of thought behind it, but with one single goal in mind. Measurably accurate reproduction.

The Interface: A delivers more accuracy than classic acoustic suspension systems twice our size costing lots more.

Our Interface: A gives you 1/3 octave more bass (3dB down at 32 Hz) with remarkably low distortion (around 1% at 32 Hz) at



CIRCLE 10 ON READER-SERVICE CARD

A surprising feature is that Mozart, who in some of his earlier church music used a larger orchestra (even four trumpets) with gusto, now returns to the old practice of trio writing, to the skeleton orchestra of two violins and bass-no violas, no winds (an organ continuo is necessarily added). But the little orchestra is handled with skill and is always engaged. Indeed, thematic work is so much on the young composer's mind that he makes little distinction between the voices and the orchestra, using the same material in both. Yet the choral writing is idiomatic, everything is through-composed even though words are repeated, and a delectable melodiousness envelops all. The magnificent theme of the Gloria was obviously the model for Schubert's song "Der Mond.

The Credo is a remarkable piece. Time and again Mozart repeats the principal motif to emphasize the key word, "credo." This four-note motif, well known to everyone-it opens the finale of the Jupiter Symphony-is of liturgical origin; it was used by the Netherlanders and by later composers, among them Haydn in his Symphony No. 13. This simple theme accompanied Mozart throughout his creative life: From the early symphony, K. 16, onward it had a mysterious attraction, and it is always lovingly manipulated. The contrapuntal configurations in this movement are not of the scholastic type; they are subtle, inventive, and deeply felt.

The Sanctus is also fine: Its melodies are beguiling, and its "Osanna" is a light, sparkling fugato, delightfully sung by the Leipzig chorus. The Benedictus is dreamy; then in the Agnus Dei dramatic accents appear for the first time, the harmony and counterpoint close in boldness to Mozart's mature language. Perhaps this extraordinary concentration tired the youthful master, because in the "Dona" he falls back on the Italian style then in vogue, composing the kind of pretty music that makes purists uncomfortable.

This Mass is so full of captivating ideas, and is so pregnant of things to come, that no Mozartean should miss it. As I said above, it must have been an experiment of sorts, because Mozart never returned to this kind of setting. Though K. 192 must have been popular, its delicate features were hardly appreciated by the editors of the several editions that preceded the modern critical one. Diabelli composed a complete viola part for it, and other editors added wind parts.

K. 259, though composed two years later, is more routine, but of course it is routine Mozart. The orchestra is enlarged by trumpets and drums; the whole work is festive and bright with its open choral writing, giving the impression that both gaiety and the popular tone are deliberate. Perhaps the archbishop was celebrating some joyous event. At any rate, there is no polyphony in this work, nor does Mozart set every word with the tender care for affective values he showed in the older Mass. The Sanctus is a veritable concert, especially the Benedictus with its brilliant obbligato organ solo that gave the Mass its title. The Agnus Dei is a Neapolitan serenade, with a melting melody and pizzicato accompaniment. There are some fine moments in this Mass, but it cannot compare with the earlier work.

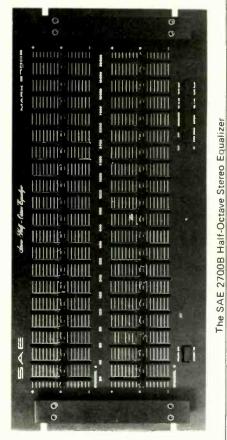
THE YOUNG SOUND OF RED SEAL.

Breathtaking performances of superior artistic achievement from the acknowledged new masters.



CIRCLE 29 ON READER-SERVICE CARD

Flexible alternative



The 2700B can bring to your system the clarity & definition you have been looking for. Wayward sounds (booming bass missing highs, blaring horns, or stifled solos) are all put in their place with the SAE 2700B Half-Octave Equalizer. The flexibility of 20 controls per channe only begins to tell the story. Some facts:

- * 0.02% THD & IM
- * -100dB S/N Ratio
- * Can drive any system
- * FREE 5 YEAR Service Contract

PLUS, long-throw oil-damped slide pot for better accuracy, precision wound toroid inductors for low distortion & a pink noise generator for system balance. Built with SAE quality, the 2700B is value packed with the capability and performance you need to control your system.

PRICE: \$550.00 (suggested list)

Scientific Audio Electronics, Inc.
P.O. Box 60271, Terminal Annex Los Angeles, Calif. 90060 Please send me more information on the
SAE 2700B Half-Octave Equalizer. NAME ADDRESS
CITYSTATEZIP

CIRCLE 32 ON READER-SERVICE CARD

The performances are excellent. Everyone knows his place: the solo ensemble is discreet and in good balance, the chorus is euphonious and lively, and the orchestra is light without being self-effacing. Credit must go to the conductor, Herbert Kegel. His tempos are just right, and he closely watches the changes necessitated by the affectively or dramatically set passages. I should single out the attractive choral trebles; their tessitura in K. 192 is high, but they cope with the situation handsomely. Walter Heinz Bernstein's continuo is unobtrusive but efficient-as it should beand his solo performance in K.259 is very nice. The sound is good; the liner notes are

MOZART: Quintets for Strings: in C minor, K. 406 (516b); in G minor, K. 516. Grumiaux Trio; Arpad Gérecz, violin; Max Lesueur, viola. PHILIPS 6500 620, \$7.98.

In ensemble and intonation, these are absolutely faultless renditions. Octaves are dead in tune, unisons bowed with incredible unanimity, and precision carried over into such matters as use of vibrato, balance between instruments, and even the style and use of shifting and portamento.

Sometimes this quintet's classical decorum approaches emotional self-denial. The opening movement of K. 516, for example, clearly etched and light-fingered, is undeniably beautiful in an abstract way but fails to realize the smoldering, quasi-operatic elements in the writing. Tempo relationships are maintained very strictly, with absolutely no slackening for the second theme group. (The first-movement repeat is not taken, an altogether sensible decision.) The détaché phrasing of the Menuetto takes some getting used to, although the textures are kept more buoyant than usual and the rhythmic accentuation is wonderfully precise. I find the sublime slow movement rather rigid and hurried; compare the emotional outpouring of the 1957 Budapest Ouartet/Trampler reading, unfortunately 'superseded" by the group's much coarser stereo remake. The finale, with its dirgelike adagio introduction and swift allegro, is remarkably well played here.

There is less to cavil at in K. 406, though again the performance seems a mite too cool and lightweight, particularly when heard alongside the superbly driving, rhythmically alive Danish Quartet/Collot reading (in Telefunken 56.35017, December 1974). Grumiaux and colleagues heed note values and articulation but avoid the somber, almost Beethovenian overtones that for me give this piece its particular flavor. The level of execution is very high, but the Danish version is as finely executed and its more powerful interpretation is more to my taste.

For K. 516, the one major disappointment in the Danish set, either the Grumiaux or the more homespun Tátrai Quartet/Mauthner (in Hungaroton LPX 11438/40) will do very nicely until Columbia re-releases the earlier Budapest/Trampler set. H.G.

MOZART: Serenade No. 4, in D, K. 203 (189b); March in D, K. 237 (189c). Uto Ughi,

violin; Staatskapelle Dresden, Edo de Waart, cond. Philips 6500 965, \$7.98.

De Waart's Mozart serenade series began with the later wind works; more recently he has shifted from the Netherlands Wind Ensemble to the Dresden State Orchestra to tackle the earlier serenades that call for strings and trumpets as well as woodwinds and horns, beginning with the Posthorn (No. 9, Philips 6500 627, September 1975) and now moving back to No. 4. (Nos. 5 and 7 are already available overseas.) Too few discophiles have ventured into these delectable divertissements, which in the cases of Nos. 3, 4, and 5 even include scaled-down violin concertos often more demanding technically than Mozart's formal violin concertos.

The present serenade is sometimes nicknamed the Colloredo on the presumption that it was intended (as its companion Nos. 3 and 5 also may have been) as banquet music for the Salzburg archbishop's September 27 nameday. In traditional serenade/divertimento fashion, De Waart's performance begins with a cheerfully festive introductory march, one linked both by its more-or-less simultaneous composition and by some thematic kinship. The serenade proper begins with a ceremonial Andante maestoso prefacing a driving Allegro assai. The next three movements comprise the miniature concerto sections: a grayely eloquent Adagio, a breezy Menuetto (concertante only in its dashing trio), and a bravura showpiece Allegro. Then follow a second and third Menuetto framing a second Andante, and a high-potency final Prestissimo featuring brief examples of the socalled Mannheim crescendo.

The whole program is so capably played—by the delicate-toned soloist as well as by the properly small-sized orchestra—and so brightly and invigoratingly recorded that I feel almost ashamed that I can't bring myself to praise it unreservedly. But De Waart's reading falls short of my Mozartean ideal in its overintensity and insufficient grace and humor.

I haven't had a chance to make direct comparisons with the currently available competitive versions, but I presume that the budget-priced 1968 Boskovsky edition (Stereo Treasury STS 15077) may be mellower if less sonically vivid than this one. Listeners wanting a more extroverted virtuoso soloist may want to wait for domestic release of Zukerman's 1975 CBS recording. But in whichever version, you'll welcome this serenade as a lifetime musical good companion.

MUSGRAVE: Concerto for Clarinet and Orchestra.* SEARLE: Aubade for Horn and Orchestra.† BANKS: Concerto for Horn and Orchestra.† Gervase de Peyer, clarinet*; Barry Tuckwell, horn*; London Symphony Orchestra* and New Philharmonia Orchestra*, Norman Del Mar, cond. ARGO ZRG 726, \$6.98.

Have you ever noticed how the English write about their horn players in the same tone they use for their star cricketeers? Barry Tuckwell certainly deserves that kind of treatment. The way that man rules his side of this record is a caution. He is to-

tally in command of Humphrey Searle's magnificent, short, pungent Aubade and Don Banks's academic-modern concerto. Musical values and virtuoso interest are perfectly matched in the Searle but sadly part company in the dull concerto.

Thea Musgrave's clarinet concerto also brings forth a fine performance from its soloist. But the work is, as Beethoven said of the Kreutzer Sonata, scritto in un stile molto concertante; everybody-strings, brass, woodwind, percussion-has his say. with the clarinet serving as master of the revels. Now and then the clarinetist is directed to go stand with one or another section of the orchestra that he happens at the moment to be leading. A cap and bells would help, too. A.F.

PINKHAM: Liturgies; For Evening Draws On; Toccatas for the Vault of Heaven-See Martino: Paradiso Choruses.

PROKOFIEV: Peter and the Wolf-See Saint-Saëns: Le Carnaval des animaux.

RAVEL: Concerfo for Piano and Orchestra. in G-See Grieg: Concerto.

SAINT-SAENS: Le Carnaval des animaux (with verses by Ogden Nash).* PROKO-FIEV: Peter and the Wolf, Op. 67. Hermione Gingold, narrator; Alfons and Aloys Kontarsky, pianos*; Vienna Philharmonic Orchestra, Karl Böhm, cond. [Werner Mayer, prod.] DEUTSCHE GRAMMOPHON 2530 588. \$7.98. Tape: 3300 588, \$7.98.

Comparison-same Coupling: Lillie, Henderson/London Sym.

Lon CS 6187

R.D.D.

This Carnival of the Animals is well-nigh ideally played and recorded, with top honors going to the exceptionally deft and bravura pianists and to engineer Klaus Scheibe for capturing such exceptionally clean and glittering piano and orchestral sonics. Credit too to cellist Wolfgang Herzer, along with the Kontarsky brothers, for perhaps the most beautifully played "Swan" I've ever heard. What a pity that so matchless a recorded version of such consistently delectable music is cluttered with Hermione Gingold's mannered reading of the Ogden Nash verses. The narration is amusing enough on first hearing, especially if more airily tossed off (as by Noël Coward, on Odyssey Y 32359, or the inimitable Beatrice Lillie), but it becomes increasingly superfluous with each rehearing.

Prokofiev's own text for his Peter and the Wolf stands up far better, and Gingold's delivery here is less labored, though she does sound more like a cautious English nanny than a Russian folktale-teller. And while the Vienna Philharmonic's playing and the DG recording are again first-rate, conductor Karl Böhm seems lacking in the zest and humor that he brings to the overside Saint-Saëns. If you prefer a more straightforwardly narrated, much better played and recorded version than the sonically dated 1961 London one by the eternally manic Beatrice Lillie, I suggest the 1974 Angel SFO 36962 featuring Mia Farrow, with André Previn and the London Symphony.

In any hi-fi system, the one component most likely to wear out is the phono cartridge. Or more specifically, the phono stylus.

While you're relaxing to your favor-

ite music, the stylus is riding miles of groove, withstanding accelerations that would black out an astronaut.

Which is why the Shibata stylus, used on the top models of Audio-Technica

cartridges, is so important. Its shape reduces tracking pressure at any given tracking force. Even with a setting as high as 2 grams it will outlast an elliptical stylus tracking

> at a fraction of a gram. Which means the good sound of Audio-Technica lasts longer. And so do your records.

> > Audio-Technica with a Shibata stylus: lower cost per record/mile and better sound in the bargain!

audio-technica

INNOVATION / PRECISION / INTEGRITY

When you shop for better sound ask about good mileage!

AUDIO-TECHNICA U.S., INC., Dept. 66H, 33 Shiawassee Avenue, Fairlawn, Ohio 44313 Available in Canada from Superior Electronics, Inc.

HIGH BLOOD PRESSURE IS HELPING TO KILL ONE-SEVENTH OFAMERICA'S ADULTS.

Every year, hundreds of thousands of Americans die needlessly from heart disease, strokes and kidney failure. Many more are crippled for life. They didn't know they had High Blood Pressure.

It strikes like a time bomb. The victim feels fine, but all the while the time bomb is ticking away. And then, suddenly, it explodes.

But treating High Blood Pressure is usually as simple as taking a pill every day. And you can lead a longer, healthier life.

So when you finish reading this, see a doctor or visit a clinic.

Because, it's a lot better to know if you have High Blood Pressure than to die from ignorance.



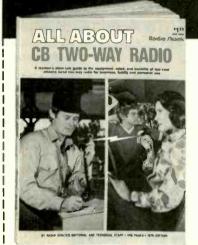
The National High Blood Pressure Education Program. U.S. Department of Health, Education, and Welfare.

A Public Service of this Magazine & The Advertising Council Ad



Everything you need to know about CB is in this new book

by Radio Shack!



Special Introductory Offer!

Our just-published 116-page CB pocket-size book is available now at Radio Shack stores at a 'give-away'' price of just 25¢, prior to its listing in our catalog at \$1.25. If you're into CB 2-way radio or getting in (as who isn't!) you'll want this book to avoid costly errors.

Edited by the folks who started our famous Realistic® CB line in 1959. I it's authoritative and very easy to read. 9 chapters. Over 100 pictures. Written for laymen. None sent by mail. * Get your copy for 25¢ by bringing this ad to any nearby participating Radio Shack store or dealer TODAY!

Contents Include

- Types of radios Antenna facts
- Methods of installing equipment
- How it works
 Distance
 Rules
- CB slang Glossary More!

Radio Shack LEADING THE WAY IN CB SINCE 1959

730

Milniosh Catalog

Get all the newest and latest information on the new McIntosh Solid State equipment in the McIntosh catalog. In addition you will receive an FM station directory that covers all of North America.



FM/FM STEREO - AM TUNER AND PREAMPLIFIER



	McIntosh Laboratory, Inc. East Side Station P.O. Box 96 Binghamton, N.Y. 13904	1
1	NAME	ì
	ADDRESS	1
ļ	CITYSTATEZIP	1
-		-1

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 20 ON READER-SERVICE CARD

SCHOENBERG: Moses und Aron

Moses Aron A Young Girl An Invalid Woman A Young Man; A Youth; A Naked Youth Another Man Four Naked Virgins

Six Solo Voices

Günter Reich (spkr) Richard Cassilly (t) Felicity Palmer (s) Gillian Knight (ms) John Winfield (t) John Noble (b) Roland Hermann (b) Richard Angas (bs) Jane Manning (s) Felicity Palmer (s) Glillan Knight (ms) Helen Watts (ms) Jane Manning (s) Gillian Knight (ms) Helen Watts (ms) Philip Langridge (t) Michael Rippon (b) Denis Wicks (bs)

BBC Singers: Orpheus Boys' Choir: BBC Symphony Orchestra, Pierre Boulez, cond. [Paul Myers, prod.] COLUMBIA M2 33594, \$13.96 (two discs, automatic sequence)

Comparison:
Relch, Devos, Gielen/Austrian Radio

Phi 6700 084

In 1951 Schoenberg wrote that the subject matter and treatment of his opera Moses und Aron were "purely religious and philosophical in nature," rejecting any interpretation that "brings the artist into it." This letter is quoted with approval by Harry Halbreich in his essay accompanying the new recording of the opera, yet it is hard not to regard the work as an allegory of communication: all those situations in which a gifted and far-seeing individual (Moses) has difficulty conveying his perception to the rest of humanity (the people of Israel) and in which his chosen intermediary (Aron-politician, public-relations man, musical "interpreter," or what you will) distorts that perception in the process of translating it into public terms. (A particularly interesting discussion of this aspect of the opera, which Halbreich cites, will be found in an article by David Lewin reprinted in Perspectives on Schoenberg and Stravinsky, edited by Benjamin Boretz and Edwart T. Cone and published in paperback by W. W. Norton.)

Conceivably the reason for Schoenberg's desire to suppress (as well as, probably, to repress) the artistic interpretation of the opera lies in the potential for misunderstanding that it offered-that is, food for the critics who felt that the composer was a Moses, a man who could not express himself. (To some such critics, even today, Alban Berg was the Aron to Schoenberg's Moses, a suggestion unfair to both men.) In any case, the most important point to make about Moses und Aron is that Schoenberg did not fail to communicate, brilliantly and movingly, the problem of communicating the incommunicable.

Each of the four levels is distinctively characterized in sound: God's voice represented by six solo voices doubled by instruments; Moses using rhythmical speech; Aron a bel-canto tenor, singing flowing and melismatic lines; and the people an elaborately various polyphonic chorus, singing, speaking, and whispering, often in combination. Although the musical structure, a series of clearly delineated movements, is not dissimilar to that of late Wagner and Strauss, the sound is quite different: lean and linear, made up of punchy accents and spare, soaring phrases rather than richly doubled textures wrapped around a warm core of close harmony in strings and horns. The details of the writing are unfailingly colorful and often unusual; the climaxes are shaped surely and stirringly.

Between this new recording and last year's Philips set conducted by Michael Gielen (February 1975), the choice is not simple. Both share Gunter Reich as Moses, but he gives rather different performances: restrained for Boulez, rather more vehement for Gielen (perhaps because the latter's sympathies are "100 percent with Aron," as he says in an interview in the Philips booklet). Aron remains a problem, and not without reason, for his is an extremely difficult part. I'd like to hear a really Italianate voice, but few such singers are trained to cope with the rhythmic and intervallic relationships that Schoenberg deals in Columbia's Richard Cassilly is about as accurate as Philips' Louis Devos and offers a bit more heft in the climaxes (although his top notes, B flat and B, are neither secure nor attractive). Still, Devos offers a sweeter sound-if hardly the optimum in that direction-and more fluency, both essential aspects of the role's characterization. The remaining parts, most of them quite short, are fairly well taken by the English team, although with some funny accents here and there.

Some significant, yet not necessarily decisive, differences emerge in considering the larger forces. The BBC chorus is certainly larger than the Austrian Radio forces that Gielen worked with, and that is all to the good. But the recording is rather less focused, so we lose in clarity what we gain in impact. Small details, both choral and orchestral, tend to melt away in the rather spacious resonances that the Columbia engineers favor. This is a problem here, as it would hardly be in, say, La Bohème, a work not only well known, but also in a style so familiar and so consistent that the listener can infer details only partially explicit in a recording. If only for this reason, I would recommend Gielen's version, with Boulez' a valuable supplement.

There are some other valid points in Gielen's favor. In several scenes, he gets more swing and punch into the rhythms, and the big spoken double-chorus exchanges have more rhetoric and conviction—sometimes Boulez' people seem to be chanting laundry lists rather than shouting revolutionary slogans. Naturally, Boulez manages some characteristically revelatory bits of textural clarification (the leprosy episode has fine shape, and the pouring of the Nile water is a dazzling detail), but the recorded sound is not particularly friendly to this strength of his conducting.

Philips does better by side breaks. putting the first one after Scene 2 rather than Scene 3 (which is not really a break, but rather a carefully prepared silence, its effect washed away in Columbia's runoff groove), the second one before rather than after the whispered Zwischenspiel ("Wo ist Moses?")—rightly preceding the second act, rather than following on the heels of Act I's enormous climax. The remaining break is identical in the two sets.

In Columbia's favor is Halbreich's interesting essay, which explores Schoenberg's little-known drama Der biblische Weg, on a theme closely related to that of the opera. This is much more to the point than Philips'

tendentious interview with Gielen. I do miss, however, the valuable essays by Allen Forte and Milton Babbitt that accompanied the old Columbia recording (although Babbitt's, at least, is reprinted in the Schoenberg-Stravinsky paperback mentioned earlier). Both librettos present Forte's translation and include the nevercomposed text of the third act.

Bad marks to Columbia for billing the opera as Moses and Aaron. As Nicolas Slonimsky pointed out in the April issue, "Aron" is not the German form of "Aaron," but Schoenberg's purposeful misspelling of a name that is normally the same in both languages (at least in part to avoid a trauma to his triskaidecaphobia).

SCHUBERT: Sonata for Piano, In B flat, D. 960. Rudolf Serkin, piano. [Thomas Frost, prod.] COLUMBIA M 33932, \$6.98.

Serkin's performance of the monumental Schubert B flat Sonata is often quite touching in its muted intensity, and there are some brilliant, even piercing, passages. But I found myself more wearied by the reading's oppressive weight and regularity than moved and soothed by transfigured calm.

The first movement is fragmented and weighted down by Serkin's Germanic insistence on rigorously maintaining the basic tempo. In the middle movements, he begins to let the music breathe, and the Andante sostenuto—if hardly atmospheric—sings persuasively. The moderately paced scherzo has some delicacy and color, though I was bothered by some minuscule lapses in articulation; the trio is given with heavily stressed sforzandos, an unusual and ultimately convincing approach. But in the finale we are back in the schoolroom.

Serkin feels this music deeply, and in its way this is an exceptionally disciplined and exalted reading. But among current recordings I am far more comfortable with the more poetic accounts of Gabriel Chodos (Orion ORS 75179), Michèle Boegner (MHS 1042), and most of all Clifford Curzon (CS 6801).

Serkin observes the long first-movement repeat, which I like. The sound is rounder and more colorful than that of most Serkin discs.

H.G.

SCHUBERT: Wanderer Fantasy, D. 760. SCHUMANN: Sonata for Piano, In G minor, Op. 22. Bruno Leonardo Gelber, piano. Connoisseur Society CS 2085, \$6.98.

Unlike Gelber's disappointing Brahms Op. 5 Sonata (CS 2084. January 1976), this ambitious coupling upholds the promise of his outstanding early discs. The Wanderer Fantasy is taut, structured, well sprung rhythmically, with colorful but clear textures and superbly sharp articulation. In its alert, classical, beautifully proportioned way, this Wanderer recalls Fleisher's, though Gelber unfortunately uses the now discredited text that keeps the D sharp all the way through the last measure of the second section instead of changing at midpoint to D natural.

In the Schumann G minor Sonata. Gelber's prestidigitation functions within a freer mold. He rightly stresses Schumann's

Allison: Two

A compromise



ALLISON:TWO \$295°

Performance of the ALLISON:TWO is the same as that of the ALLISON:ONE down to 50 Hz. Below that frequency its power output is 2 dB less. The price is \$65 less.

Crossover network, Convex Diaphragm** mid-range units and tweeters are identical with those in the ALLISON:ONE. The cabinet is 30% smaller but has the same shape and similar proportions. Thus the unique dispersion, Stabilized Radiation Loading** and power handling capabilities of the larger system are maintained.

Two 8-inch woofers are used in the ALLISON:TWO rather than the pair of 10-inch woofers in the ALLISON:ONE. Yet the systems are so audibly alike that a small difference can be detected only with music containing the lowest fundamental frequencies, and even then only rarely.

ALLISON loudspeaker systems are covered by a full warranty for five years that is transferable with ownership.

Descriptive literature on ALLISON loudspeakers, which includes technical specifications and a statement of warranty, is available on request.

ALLISON ACOUSTICS INC.

7 Tech Circle, Natick, Massachusetts 01760

*Higher in the West and South
*Patents pending

CIRCLE 1 ON READER-SERVICE CARD



Listening to your favorite records and tapes through the dbx 117 dynamic range enhancer is like having a new record collection. Now you can hear up to 20 dB of the missing dynamics the record or tape manufacturer sacrificed (for reasons we explain in our literature).

new record collection for \$175

With the dbx 117 in your system you'll hear the higher harmonics of strings, the incisive bite of brasses, and the sharp attacks of cymbals and percussion as you've never heard them before except in live performance. As an added bonus, the dbx 117 substantially reduces record surface noise and tape hiss on playback, and adds dynamic range to records, tapes, and FM broadcasts.

To experience a totally new dimension in recorded music listening take your favorite record or tape to your high quality component dealer and ask him to play it through the dbx 117. For complete product information and list of demonstrating

CIRCLE 7 ON READER-SERVICE CARD

dealers in your area, contact:



feverish bravura, yet achieves a spacious, deeply inflected melodic line in the brooding Andantino. The result is once again a marvelously played, exciting performance, though the superb recordings of Engel (Telefunken), Frankl (Vox), and Arrau (Philips) score by appending the work's original finale, the Presto passionato.

The sound is resonant but brilliantly focused, and my pressing was excellent. H.G.

SCOTT, C.: Concerto for Piano and Orchestra, No. 1, in C. John Ogdon, piano; London Philharmonic Orchestra, Bernard Herrmann, cond. LYRITA SRCS 81, \$7.98 (distributed by HNH Distributors).

Imagine an amalgam of Ravel (of the Jeux d'eau variety), Scriabin, Delius, and even (before the fact) Gershwin, and you will have an idea of the unique sound of Cyril Scott's haunting First Piano Concerto (1913–14). Like many works that are impressionist in orientation, the concerto concentrates strongly on interrelating harmonic and instrumental sonorities, brought into relief through the abundant use of nonresolving chordal patterns and through the immediate, often mesmerizing repetitions of short motivic filigrees.

But although the English composer (1879-1970) does not avoid sumptuous chordal combinations-indeed the warm, misty seventh chords lend an occasional aura of Gershwinesque blues-he tends toward spacious open intervals-lots of ninths, for instance-repeated, inverted, and varied in hypnotic sequences that give the concerto a very airy quality. This quality is reinforced by the subtle instrumental contrasts; the strings and winds, for example, are assigned rather warm material, while the piano and such instruments as the glockenspiel and celesta frequently provide what Christopher Palmer refers to in his excellent liner notes as "cool jadelike sonorities.

The piano's role is more functional than virtuosic, and John Ogdon admirably defines and blends his essentially coloristic material. It is easy to hear why the late Bernard Herrmann was attracted to this work, which he conducts with such an obvious love of the myriad tone colors that even small modifications are felt as warm musical surprises. There are those who will find the piece mannered, but the manner so thoroughly captivates me that I cannot imagine it not acquiring numerous admirers in this country.

R.S.B.

SCRIABIN-NEMTIN: Universe. Alexei Lyubimov, piano; Irina Orlova, organ; Yurlov Chorus of the R.S.F.S.R.; Moscow Philharmonic Orchestra, Kiril Kondrashin, cond. [Peter Kondrashin, prod.] MELODIYA/ANGEL SR 40260, \$6.98.

Scriabin intended to produce a work entitled Mysterium, the "Prefatory Action" of which was to be performed in a specially constructed auditorium with massive plays of colored lights, blending performers and spectators into a continuum. The goal of a performance of the entire Mysterium, lasting a symbolic seven days, would be, as



Bruno Leonardo Gelber Promise upheld.

Faubion Bowers points out in the jacket notes, "the general enlightenment of mankind."

The composer was barely into the project when he died in 1915, leaving behind some thirty pages of text for the "Prefatory Acand fifty-three pages of musical sketches, including references to earlier compositions. There was, then, no real question of "completing" the work. Yet the Soviet composer Alexander Nemtin (who was born in 1936 and has produced some interesting non-Scriabin-oriented works), using the existing materials, his thorough knowledge of the idiom, and his obviously profound identification with Scriabin's musical and extramusical vision, put together between 1970 and 1972 a work he called Universe, which is Part I of Nemtin's own shaping of tendencies that Scriabin's "Prefatory Action" may have followed. (Part II is scheduled for completion this year.)

In listening to Universe, Scriabin's Prometheus: The Poem of Fire (1909-10) immediately comes to mind. They are similarly scored (large orchestra, solo piano, organ, a wordless chorus toward the end) and have a number of similar characteristics: the muted horn motives rising from a miasmic orchestra and sinking back, a variant of the "mystic" chord obsessively affirming its presence, wavelike motivic patterns rising higher in each repetition. Nemtin, aware of Scriabin's evolution after Prometheus (in the last five piano sonatas, for example), pushes the harmonic language a step or two beyond. Scriabin himself would no doubt have gone farther still, but Nemtin has produced a remarkably convincing extension of his mystical musical language-the expansions and contractions of tonal space, with the momentary eruptions of a more tangible beauty out of the chaos of a mysterious universe.

Although I can imagine a more vital interpretation and I am disappointed that the chorus is shoved so far into the back-

ground, this recorded performance is dramatic, sonorous, and well defined. R.S.B.

SEARLE: Aubade for Horn and Orchestra—See Musgrave: Clarinet Concerto.

STRAVINSKY: The Firebird. London Philharmonic Orchestra, Bernard Haitink, cond. PHILIPS 6500 483, \$7.98. Tape: 7300 353, \$7.95.

Comparison: Ansermet/New Philharmonia

Lon, FBD S-1

The complete Firebird shows signs—including three new recordings in as many years—of making itself heard over the suites later prepared by the composer. While not every page of the complete 1910 score is equal to the high points of the suites, there is a genuine unity to the work as a whole, and the familiar sections acquire greater significance in their original context.

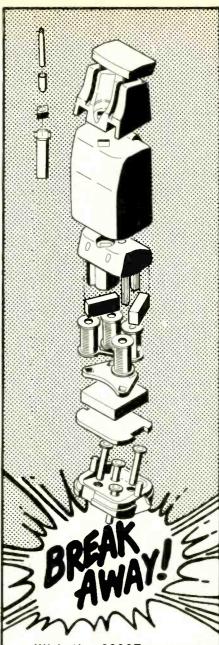
From the standpoint of history, the indispensable version of the complete Firebird is Ansermet's last one, with the New Philharmonia, issued with a remarkable rehearsal record. Stravinsky's own version (Columbia MS 6328) imposes a cool, neoclassical manner more appropriate to his later works than to this first flowering. Dorati (Mercury SRI 75058) and Boulez (Columbia M 33508) share Stravinsky's super-cool approach, and Ozawa (Angel S 36910) must contend with the mediocre playing of the Orchestre de Paris

For Haitink the links to impressionism are more important than those to the Russian school, making his performance kin to Ansermet's. Ansermet's is a little more Russian and romantic, but Haitink's very French treatment of colors, textures, and moods is filled with a sense of the exotic. (I wish, however, that the famous string glissandos in the Introduction were more forcefully achieved.) Combine this with excellent recording, and you have one of the most unabashed romps of voluptuous sensuality to appear on discs this season. In short, Haitink's Firebird is as impressive as his Rite of Spring (6500 482, April 1974) and Petrushka (6500 458, October 1975). R.C.M.

VERDI: Requiem. Heather Harper, soprano; Josephine Veasey, mezzo; Carlo Bini, tenor; Hans Sotin, bass; London Philharmonic Choir; Royal Philharmonic Orchestra, Carlos Paita, cond. [Tony D'Amato, prod.] London PHASE-4 SPC 21140/1, \$13.96 (two discs, manual sequence). Tape: SPC5 21140/1, \$15.90; SPC8 21140/1, \$15.90.

Even without scrupulously comparing the eight other stereo Requiems currently listed, I'm prepared to assert that the present performance is the worst. So far as I'm concerned, Carlos Paita's interpretation has nothing to offer except frustration. His rhythmic slackness, often coupled with extremely slow tempos, results, not in drama, but in tedium. His erratic sense of tempo (for example, the amazing succession of accelerandos and ritenutos in the "Recordare") results simply in confusion, both musical and dramatic.

One consolation is that the soloists are



With the 2000Z, you can exaggerate highs, accentuate lows or leave it flat. You can make your own adjustments without being tied to the dips and peaks characteristic of most other cartridges.

The extreme accuracy of its reproduction allows you the luxury of fine-tuning your audio system exactly the way you want it.

The Emprie 2000Z.

Already your system sounds better.



CIRCLE 11 ON READER-SERVICE CARD

by and large on a par with Paita; there is no sense that the conductor is preventing them from giving first-rate performances. Tenor Carlo Bini, to begin with, is technically uncertain and stylistically provincial. His tonal quality is uneven, his legato intermittent, his intonation—especially in soft passages—unsure. His top notes are raw and often strangulated. Bass Hans Sotin, like the rest of the quartet a more estimable singer than Bini, is here quite out of his element: He lacks the technique, the timbre, and the instinct for Italian music. The end of the "Confutatis maledictis" is all aspirates and ugly portamentos.

The women are just as much at sea. Josephine Veasey, though she sounds inoffensive when singing softly (the Agnus Dei, for instance), does not begin to measure up to the grandeur of Verdi's conception. Heather Harper too is no Verdian: Her top is thin, often spread in quality, and not entirely reliable in pitch, and she lacks substance in the middle and lower registers. Finally, the four voices do not blend at all, as a passage like "Salva me, fons pietatis" makes plain.

The London Philharmonic Choir is weak in basses but is otherwise proficient. The Royal Philharmonic's strings sound scrawny. There is, however, some good wind playing to be heard. The recording is strikingly spacious and clear—the latter a dubious advantage in these circumstances. There is a damaging pre-echo before all the great climaxes (e.g., the Dies Irae), and my copy was full of rumble. Text, translation, notes.

D.S.H.

WAGNER: Lohengrin.

 Elsa
 Anja Silja (s)

 Ortrud
 Astrid Varnay (s)

 Lohengrin
 Jess Thomas (t)

 Telramund
 Ramon Vinay (b)

 The Herald
 Tom Krause (b)

 King Henry
 Franz Crass (bs)

 Four Noblemen
 Niels Moller (t)

 Gerhard Stolze (t)
 Klaus Kirchner (b)

Bayreuth Festival Chorus and Orchestra, Wolfgang Sawallisch, cond. Philips 6747 241, \$31.92 (four discs, manual sequence) [recorded live at the 1962 Bayreuth Festival].

Zoltan Kelemen (b)

Comparisons:
Keilberth/Bayreuth Fest. (1953)
Kempe/Vienna Phil.
Kubelik/Bayarian Radlo
RG 2713 005

For all its popularity of yore, now somewhat abated, Lohengrin is probably the least satisfactory of Wagner's mature operas. An inordinate amount of time is consumed by "public music": those two nonpeople, the King and the Herald, mouthing proclamations in rather undistinguished recitative, the male chorus responding in Weberian accents, the whole apparatus all too frequently dragged back into C major by peremptory fanfares. It doesn't help, either, that every bit of the music save the King's prayer is in duple meter.

Unless performed with exceptional warmth and imagination (as well as exemplary vocal technique), the "romantic leads" remain less than two-dimensional. Their relationship is only sketchily established, an attraction we accept as fact primarily because we know she's the soprano and he's the tenor (like those passionless

screen romances between Doris Day and Gordon MacRae). It takes a Melchior to lift the Grail Knight above the level of a priggish Boy Scout, a Lotte Lehmann to kindle a visionary streak in Elsa that will raise her from mindless ninnydom (and, in the last act, shrewdom).

On the other side of the coin, of course, there is the vivid depiction of Ortrud and Telramund, who make the second act really go. And there are fine things in the scoring, from the divided strings of the Prelude (not only the ethereal effects at the start, but the rich contrapuntal impasto that develops later on) to the massed sonorities of the climaxes. With the right cast and a savvy conductor, Lohengrin is still able to make a good effect.

Alas, no recording to date has managed a really all-round cast, and few have been led with real distinction. If we could combine the conducting of Kempe (in his 1951 Urania set, far more alive than the later Angel) or Kubelik or even Keilberth with the Elsa of Steber (Richmond) or Grümmer (Angel); the Ortrud of Klose (on Preiser. Urania, or the old RCA set under Schüchter), Varnay (Richmond), or Ludwig (Angel); the Lohengrin of Melchior (only on private discs, unfortunately); the Telramund of Metternich (old RCA) or Stewart (DG); and the King of Ridderbusch (DG), then we would have a real performance. But we can't do that, and so we must pick and choose among imperfections, partial views of the work.

The "new" Philips set doesn't really change that picture. It dates from 1962, the same year as the Sawallisch Tannhäuser (not now available here) and the Knappertsbusch Parsifal, and is apparently released at this late date to complete a Philips Bayreuth centennial package (with the loan of DG's Böhm Tristan) for the luxury trade at this summer's festival.

It's not a bad job—certainly much more successful than the same company's recent Meistersinger from the 1974 festival. Sawallisch gets good playing and acceptable choral singing. He keeps the piece moving and pointed toward destinations, if without the expansiveness of Kubelik's reading.

Unfortunately, Sawallisch also makes some cuts-not indefensible under repertory conditions, but deplorable in a recording, especially one bearing the Bayreuth imprimatur. The most serious is the standard cut in the final scene, from Elsa's line following the Grail Narrative to the reappearance of the swan. (The same abbreviation was made in Heger's Preiser set. Schüchter's RCA, and the old DG set led by Jochum.) Various nibblings at the Monnerchor responses to the Herald in Act II are also taken (Jochum and Kempe/Urania made similar, though not identical excisions), as well as a few other bits too trivial to enumerate, too pointless to have made in the first place. The omission of the second half of "In fernem Land" is authorized by Wagner and followed by everyone except Leinsdorf, in his deleted RCA set, but the cut is made here in a nonstandard way. With all this, the performance fits on four discs, as against the five of the going competition-though, if economy is an overriding consideration, Richmond's mono recording has almost as many tangible musical merits as any of the others.

Two members of the Philips cast stand out. Along with a beautiful voice, Franz Crass brings to the King's material a lively delivery and warm tone. This last is very much to the point, for this purely ceremonial figure ought to sound like a Good Guy even though his music gives him little specific help in this direction; the more usual Hagen sound is dramatically counterproductive. As in the 1953 Bayreuth set, Astrid Varnay is a compelling Ortrud, a figure of much authority and convincing nastiness. Every line has real point, and even the now rather more evident edge and quaver in the voice are put to good use in the characterization.

Not without interest is Anja Silja's Elsa. She was twenty-two when this recording was made and could sing "Euch Lüften" with a virginal freshness that is very special and most moving. Still, that doesn't meet the role's other demands. At all times, Silja operates with intelligence and musicality—if only the voice didn't lose focus and precision at higher volume levels, for this spoils any number of climactic passages. Her light voice does handle the many turns and graces of Elsa's lines with unusual fluency.

Opposite her, Jess Thomas is pretty reliable (though not as consistent as under Angel's studio conditions) and stolid. Even though the top of the voice then had a ring that is now gone, there isn't much uplift in his delivery, much spontaneity or thrust of rhythm.

Ramon Vinay ought to have been a more memorable Telramund; as a de-converted Heldentenor, he has the top notes for the part but seems rhythmically and tonally unsettled. (This was, I believe, his first season back in the lower registers.) To say that Tom Krause is better than most Heralds on record may be a limited compliment, but we should be grateful for even that.

The sound is, not surprisingly, comparable to those other 1962 Philips Bayreuth sets and very much preferable to the work of 1974. There is little stage noise, and the audience is audibly active only during the preludes: when action begins on-stage, they settle down.

The booklet offers Lionel Salter's translation (borrowed from DG's Kubelik set) and some minor anomalies. Why, for example, is there no picture of Astrid Varnay? The scene shots all show Irene Dalis, and William Mann's note on the production also refers to Dalis, but the voice is unmistakably Varnay's. And someone is pulling Mr. Mann's leg (or is he pulling ours?) about "a very old record of part of Tristan und Isolde which some claim to be conducted by Wagner himself in the Festspielhaus." For one thing, Tristan was never performed at Bayreuth during Wagner's lifetime, and the other improbabilities ought to be selfevident.

I don't think this Lohengrin supersedes any of the current crop (except, of course, the dismal Swarowsky set on Westminster). In any case, Angel will have a new Karajan set before very long, so caution is advised. In fact, if you already have a Lohengrin you can live with, remember that Solti, too, can't be far behind.

D.H.

New DGs: the rhapsodic Liszt. Lacking the new series of London musicassettes processed overseas by British Decca (not by Ampex in this country), the headline tape newsmaker this month is the Deutsche Grammophon/Archiv release of six more Prestige Box sets and twenty new cassette singles. Most impressive is the oversize box of Karajan's nine Beethoven symphonies with the Berlin Philharmonic (DG 3378 001, six Dolby-B cassettes, \$47.88). But since these c. 1963 recordings are already so well known in earlier reel and non-Dolby cassette formats, and since I'm currently preoccupied with solo instrumental and chamber music. I'm giving precedence to a tape first: the DG box of all nineteen Liszt Hungarian Rhapsodies plus his Spanish Rhapsody as played by the Brazilian pianist Roberto Szidon (3371 018, three Dolby-B cassettes, \$23.94).

Contemporary connoisseurs tend to sniff superciliously at any suggestion that these presumed hackneyed, vulgarly gypsyish showpieces can be taken seriously. But if so pejorative a judgment is not entirely unjustified in the case of a few warhorse rhapsodies, it's not fairly applicable to the other, less familiar ones in the original set of fifteen composed when Liszt was in his thirties, and it doesn't apply at all to the poignantly haunting or infectiously vivacious last four rhapsodies written nearly forty years later near the end of the composer's life. There are depths here that Szidon does not plumb, but he plays with immense bravura (if also some heavyhandedness, and -footedness on the damper pedal) and the recording is appropriately grand and ringingly so-

Inner sanctum chamber music. For most connoisseurs, the closest they ever come to heaven on earth is in listening to Mozart's string quintets and wind-string quintets and quartets. The only controversy is whether the interpretations of these masterpieces should be stylistically cool or hot, objective or subjective, "classical" or "romantic." The generally younger partisans of the former approach will delight in the lucidity, restraint, and vet delectable piquancy brought by the Dutch clarinetist George Pieterson and French oboist Pierre Pierlot, with comparably skilled string players led by Arthur Grumiaux, to Mozart's K. 581 Clarinet Quintet and K. 370 Oboe Quartet (Philips 7300 414, Dolby-B cassette, \$7.95).

On the other hand, the mostly older partisans of a more fervently impassioned approach will rejoice in the reby R. D. Darrell

turn to tape, after too long an absence, of the famous Griller Quartet/Primrose Vanguard versions of Mozart's last four string quintets-this time in GRT's new, 4/2-channel-compatible cartridge format (discussed last month), bargain-priced at only \$4.95 each. So far I've heard only the K. 515 Quintet in C (Vanguard Everyman/ GRT E 8184-15802), but its resurrection of the original 1960 recording proves to be so warm and vital sonically that I don't hesitate to recommend its companions unheard: K. 516 in G minor (E 8184-15801), K. 593 in D and K. 614 in E flat (E 8184-194).

The trumpet shall sound! Whatever other Golden Ages lie in the past, that of clarino-register trumpet playing is now. A batch of current and recent all-Dolby-B musicassettes testifies eloquently to the artistic as well as technical mastery commanded by the contemporary triumvirate of supervirtuosos: the Americans Edward Tarr and Gerard Schwarz and the Frenchman Maurice André. Most richly rewarding for me is Tarr with organist George Kent in the combined Vols. 1 and 2 of their all-baroque programs I reviewed from discs so warmly in August 1973 and July 1974 and which sound if anything even better now (Nonesuch/Advent F 1038, double-play, \$7.95). And Tarr fans also will want to hear him, less well recorded a full decade ago, playing his own musicological discovery, the Tartini Concerto in D, not catalogued by Giegling, that has become every trumpeter's warhorse. With it is Tarr in the popular Albinoni Concerto in C, and several other more routine trumpeters playing the Torelli Concerto in D, G. 9, and two-trumpet concertos by Manfredini and Vivaldi (P. 75): SMG-Vox CT 126, \$5.98.

The technically even more scintillant Schwarz also is represented by older and newer programs. The former is his fine set of five Frescobaldi canzone and six Fontana sonatas with bassoon-and-harpsichord continuo (Desto X 46481, \$7.95). The latter is the dazzling "Festival of Trumpets" collection (disc review February 1975) in which he leads an ensemble of topnotch trumpeters, with timpani and harpsichord/organ continuo, in fasci-

nating multiple-trumpet works by Biber pere et fils, Gabrieli, Molter, Pezel, Rathgeber, and Scheidt (Nonesuch/Advent D 1039, \$5.95; 43-min. B side left blank).

André is heard, like Tarr, in baroque trumpet/organ works (with Marie-Claire Alain), all transcriptions of flute, violin, or oboe sonatas—Handel's Op. 1, Nos. 3 and 12, Corelli's Op. 5, No. 8, and Albinoni's Op. 9, No. 2—but none the less satisfying for that (Musical Heritage Society MHS 2118, \$6.95).

Reversible wear. Not so many years ago, when most music-lovers were amateur music-makers, alternative versions were commonplace for solo string and wind instrument works. Hence a flute-and-piano version of the incomparable Franck violin sonatawhich, once over the initial shock, proves to be miraculously effective music in its own quite different right. At least it seems so when played as persuasively as it is by James Galway and Martha Argerich (RCA Red Seal ARK/ARS 1-5095, cassette/cartridge, \$7.95 each). Appropriately enough, the coupled Prokofiev Flute Sonata in D, Op. 94-one of the Russian's most effervescent yet also most hauntingly songful works-is often heard and recorded in the composer's own violin/ piano edition. But none I know is as exciting or as magnificently recorded as this one. Alas, RCA's spoilsport editor is up to his dirty tricks again, breaking the Franck finale less than a minute and a half from its end to leave the bobtailed conclusion for the B side. Imagine such an atrocity on discs! But on tape, who (at RCA anyway) cares?

New Archives: back to (Walcha's) Bach. By today's more vigorous and incisive executant fashions, the restrained dynamics and registrations of the blind German organist Helmut Walcha may seem unexciting. But many older listeners, remembering his veoman services to Bach in the late mono and early stereo eras, will welcome the tape Vol. 1 of his complete Bach organ-works series (Archiv Box 3376 004, 3 Dolby-B cassettes, \$23.94). Recorded over the years 1956-70, the selections here represent both Walcha's Alkmaar and Strasbourg sessions. From the former are the Fantasias and Fugues, S. 537, 542, 562; Fantasia, S. 572; Passacaglia, S. 582; Toccatas and Fugues, S. 538, 540, and 565; and Toccata, Adagio, and Fugue, S. 564. From the latter are the Preludes and Fugues, S. 532, 535, 536, and 550; the Pastorale, S. 590; and the "little" G minor Fugue, S. 578.



Who's #1 in audio equipment?

Three famous national component brands, each with fine equipment at all the traditional price points, each with fine magazine ratings and lots of customers. Naturally we at Radio Shack like to think Realistic*

is top dog. Our reasoning goes like this: Realistic has over 4600 stores—the entire worldwide Radio Shack system — and 21 years of manufacturing experience. Realistic has exclusive Glide-Path* and Auto-Magic* controls. An audio consultant named Arthur Fiedler. Service like no tomorrow. And prices like yesterday.

Maybe a better question is who's #2?

A Tandy Company Great sound since 1923

Over 4600 Stores - Dealers — USA, Canada, England, Australia, Belgium, Germany, Holland, France, Japan

CIRCLE 28 ON READER-SERVICE CARD

SAVE

TOP QUALITY GEAR LOWEST PRICES PROMPT DELIVERY SAVE ON FREIGHT **SELECTION**

BSR GARRARD KENWOOD **DYNACO SANSUI** B.I.C. DUAL **PIONEER** and more than 50 others

PLEASE REQUEST PRICE QUO-TATIONS ON YOUR CHOICE OF QUALITY STEREO GEAR

Component Discounters

DEPT. 6HF 24020 ONEIDA OAK PARK, MICH. 48237 313-559-1270



ADVERTISING INDEX

ADVERTISING INDEX
Key No. Page No. Accuphase by Teac 13 ADS-Analog & Digital Systems, Inc. 23 Akai America Ltd. 33 1 Allison Acoustics Inc. 93 2 Ampex Corp. 86, 87
3
BASF Systems, Inc. 103 Bose Corp. 27 Bozak, Inc. 7 5 British Industries 31
Classified Ads
7DBX, Inc
Dixie Hi-Fidelity 112 9 Dokorder, Inc. 74 17 Dual 10
10 Electro-Voice, Inc. 88 Elpa Marketing Industries, Inc. 15 11 Empire Scientific Corp. 95 ESS, Inc. 104
12Fujl Photo Film U.S.A. Inc. Magnetic Tape Division
Harman-Kardon, Inc. 8, 9 13 Heath Co. 83 High Fidelity's Test Reports 41
14 Icelandic Airlines. 82 15 Illinois Audio. 110 16 International Hi-Fi Distributors 98
18Jennings Research, Inc108
30Kenwood
Lux Audio of America Ltd
Marantz Co. 116, Cover III 20McIntosh Laboratory 92 Micro Acoustics Corp. 107 22Mida Electronics. 85 Music Listener's Book Service76, 78, 81 Music Listener's Record Service106
43 Nikko Electric
24Onkyo
25Phase Linear Corp. 105 26Pickering & Co. 2 27Pioneer High Fidelity Cover II, 1
Radio Shack 20, 92 28 Radio Shack 98 29 RCA Records 89 31 RTR Industries 16
32 SAE, Inc. 90 33 Sansui Electronics Corp. 14 34 Sherwood Electronic Laboratories 29 35 Shure Brothers, Inc. 21 36 Sony Corp. 64,65 37 Sound Reproduction 112 38 Spectro Acoustics, Inc. 109 39 Stereo Corp. of America 110 40 Stereotech 73
TDK Electronics 19 Thorens 15 3M Company 111 41 Top Discount Audio 110 42 Toshiba America, Inc. 115
17United Audio Products
5Venturi
Wyeth Press

Boyd, prod.] REPRISE MS 2235, \$6.98. Tape: ●● M 52235, \$7.97; ● M 82235, \$7.97.

Maria Muldaur first got attention with an off-the-wall and appealing hit single titled "Midnight at the Oasis." Both singer and song were contemporary in an old-fashioned way (or maybe the reverse). Muldaur continues to rub the old against the new in her albums, without making a big deal of it. "I Can't Stand It" by Smokey McAllister is contemporary and funky, but it includes a trombone solo by the distinguished Benny Powell, "Rockin Chair" by Hoagy Carmichael is arranged by Benny Carter and, to my joy, features "harmonies" by Carmichael himself.

Muldaur has an odd little voice. It yodels as she crosses from chest tone to head tone, it vibrates the ends of notes, and, when we least expect it, it soars. It is a present, personal sound, and she takes far more chances with it than many of her contemporaries. While she charms on traditional material, for me she is most real on sensitive contemporary work such as the songs of Wendy Waldman, particularly "Back by Fall." beautifully arranged by Howard Johnson.

Maria Muldaur seems to be handling her life as an artist about as well as anyone could, presenting stable, well-produced, and tasteful albums. She seems a little less crazy than the others, a little more fond of fun.

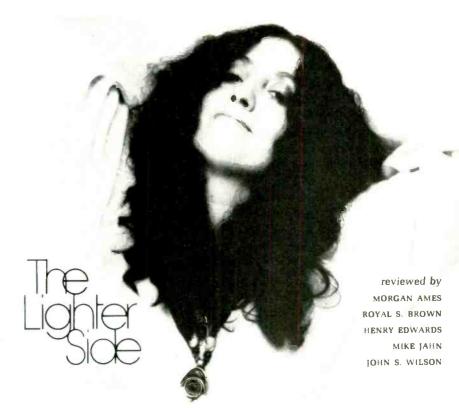
M.A.

GARY STEWART: Steppin' Out. Gary Stewart, vocals and slide guitar; keyboards, drums, strings, and vocal accompaniment. Flat Natural Born Good-Timin' Man; Quits; Trudy; eight more. [Roy Dea, prod.] RCA APL 1-1225, \$6.98. Tape: APK 1-1225, \$7.95; APS 1-1225, \$7.95.

Gary Stewart's debut LP, "Out of Hand," introduced to the public a young performer with three Top 10 country-music singles to his credit and one who not only could captivate the country-music audience, but also had the potential to conquer the much larger—and far more lucrative—rock-music market. Stewart's approach of taking honky-tonk and giving it the rock-a-billy sound proved to be "country" enough for country fans and rocked enough for those rockers who were willing to give it a chance.

"Steppin' Out" provides another attractive sampler of this approach. Here Stewart performs eleven selections drawn from Southern rock artists like Charlie Daniels, honky-tonk greats like Lefty Frizzell, and country-music "outlaws" like Willie Nelson. as well as four songs that Stewart wrote or collaborated on.

A masterful vocal approach marks his reading of all the lyrics on this album. The words are essentially sentimental, and Stewart has the ability to project the proper air of mournfulness they demand, along with the strength. In addition, this disc is



Maria Muldaur-a little more fond of fun.

highlighted by a demonstration of polished instrumental musicianship.

"Steppin' Out" is slicker than "Out of Hand"; It's also less interesting. But Gary Stewart is a potent rock-flavored country talent—there's no denying that.

ENO: Another Green World. Brian Eno, guitars, keyboards, percussion, and synthesizers; strings, keyboards, rhythm, and percussion accompaniment. *Sky Saw; Over Fire Island; In Dark Trees*; nine more. [Brian Eno and Peter Schmidt, prod.] Island ILPS 9351, \$6.98. Tape: • Y8I 9351, \$7.98.

Eno, formerly of Roxy Music, has set out on his own to make avant-garde rock music discs that depend upon improvisational music-making and peculiar recording and mixing techniques to achieve their effects. The results have been uneven—amateurish on the one hand, intriguing on the other, especially when Eno substitutes cleverness and some respect for form for the chance happenings that usually occur in the recording studio.

"Another Green World," Eno's latest, is his most accessible to date. Mostly instrumental, the disc features a great many melodic themes, some of which are classically oriented. If this is what the rock avant-garde is coming to, it's a pleasant step forward (or is it backward?). Obviously, no matter what Eno does, he will always be something of a card.

H.E.

BILL WYMAN: Stone Alone. Bill Wyman, vocals, bass, percussion, keyboards, and acoustic and electric guitar; rhythm, strings, borns, keyboards, synthesizers, reeds, and horns accompaniment; Bill Wyman, arr. A Quarter to Three; Gimme Just One Chance; Soul Satisfying; nine more. [Bill Wyman, prod.] ROLLING STONES COC 79103, \$6.98. Tape: CS 79103, \$7.97; TP 79103, \$7.97.

Rolling Stones bassist Bill Wyman, in his second solo outing, has come up with a carefully crafted LP that features guest appearances by Ruth and Bonnie Pointer, the Tower of Power horns section. Van Morrison, Dr. John, Joe Walsh, and Al Kooper, among others.

He tackles golden oldies ("A Quarter to Three"), the blues ("Every Sixty Seconds"), rockers ("Get It On"), as well as comic material ("Peanut Butter Time") and other diversified examples of pop and rock forms. The musicianship is expert, but the effect is still wildly uneven. Wyman is an uninspired though earnest player and vocalist, "Stone Alone" is an earnest but uninspiring disc. H.E.

GOOD RATS: Rat City in Blue, Peppi Marchello, vocals; John Gatto and Mickey Marchello, guitars; Lenny Kotke, bass; Joe Franco, drums. Does It Make You Feel Good; Boardwalk Slasher; Rat City in

Explanation of symbols



exceptional recording

Recorded tape:

- Open Reel
- 8-Track Cartridge
- Cassette

Blue; eight more. [Stephen Galfas, prod.] RAT City Records 8001, \$6.98.

This is the Good Rats' first album on its own label (a division of All-Platinum Records). Like its predecessor, "Tasty," "Rat City in Blue" is a compelling combination of witty, cutting lyrics and virtuoso playing—the same combination that makes this band legendary on its native Long Island.

The Rats' heart and soul is lead singer/songwriter Peppi Marchello, a stocky character with a voice akin to the sound of a basso profundo chicken being chased by a steamroller. His grating voice is a fine match for the antics of guiltarists John Gatto and Mickey Marchello, who fuse vicious rock and free-flowing jazz styles for a unique dual-guitar approach. Bassist Lenny Kotke and drummer Joe Franco (a Carmine Appice graduate) provide a driving rhythmic base for the guitar and vocal flights.

What sets this group apart from your average competent hard-rock quartet is Marchello's ability to infuse his songs—even his hardest rockers—with melodic hooks that make each one instantly memorable. The material runs the gamut from intense, psycho rockers ("The Room." "Hourglass") to lighthearted romps fit for Top 40 radio ("Almost Anything Goes"). In between are odes to or about Spencer Tracy, the Village Voice personals column. Hitler, boardwalk slashers, femme flashers, and George Gershwin.

The musicianship here is way above average, the result of playing these songs five hours a night, five nights a week, for the past half-decade. Rock fans may find the production a bit too shrill and bottomless to suit their tastes, but that problem is easily corrected with home tone controls. So crank up the basa and enjoy the best Long Island has to offer.

WAHAVISHNU ORCHESTRA: Inner Worlds. John McLaughlin, guitar and guitar synthesizer; Narada Michael Walden, drums; Ralphe Armstrong, bass; Stu Goldberg, keyboards. All in the Family; Miles Out; In My Life; Gita; Morning Calls; The Way of the Pilgrim; River of My-Heart; Planetary Citi-



Mahavishnu Orchestra-combining cooperation with panache.

zen; Lotus Feet; Inner Worlds. [John McLaughlin and Dennis Mackay, prod.] Co-LUMBIA PC 33908, \$6.98. Tape: PCT 33908, \$7.98; PCA 33908, \$7.98.

John McLaughlin has carved a niche for himself as being the premier "heavy" guitarist in rock. His work is farther out than that of almost anyone else, and yet he remains immensely popular.

He is one of the few guitarists who still uses electronic effects of the sort once called "psychedelic." But then, he came to the art late, after years spent as a fairly conventional jazz guitarist. McLaughlin favors explosive bursts of electronic rock, during which his fast fingering is used to the extreme, but he can produce moments of great

tenderness. The man is most unpredictable and always delightful.

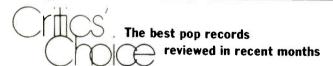
This new album is one of his best. On "All in the Family," his call-and-response duet with himself (playing guitar on one channel and guitar synthesizer on the other) is awesome. "Miles Out" is a series of vignettes from the various instruments in the Mahavishnu Orchestra, connected only by a repeating bass line. On "Morning Calls," McLaughlin uses a guitar synthesizer to create an effect curiously reminiscent of a song written for bagpipe. Best is the title tune.

Throughout the LP, his principal side-kicks accompany him with great ability. The group plays well together, something few rock bands accomplish. In rock, there is an abundance of flashy soloists but a desperate need for competent ensemble players. Narada Michael Walden, Ralphe Armstrong, and Stu Goldberg combine cooperation with panache.

LAURA NYRO: Smile. Laura Nyro, vocals, guitar, and piano; instrumental accompaniment. Children of the Junks; Money; I Am the Blues; Stormy Love; The Cat-Song; Midnite Blue; Smile; Sexy Mama. [Laura Nyro and Charlie Calello, prod.] COLUMBIA PC 33912, \$6.98. Tape: PCT 33912, \$7.98; PCA 33912, \$7.98.

Laura Nyro is a somewhat reclusive singer/songwriter who achieved great fame in the late 1960s after several of her compositions, notably "Stoned Soul Picnic" and "And When I Die," became hits for others. Perhaps because of her seclusion, Nyro has become considerably more popular than objective scrutiny of her songs would justify.

She composed seven of the eight songs on



LOUIS ARMSTRONG AND EARL HINES/1928. SMITHSONIAN COLLECTION R 002. Apr.

THE BAND: Northern Lights—Southern Cross. CAPITOL ST 11440. Mar.

TOMMY FLANAGAN: Tokyo Recital. PABLO 2310. May. DOBIE GRAY: New Ray of Sunshine. CAPRICORN CP 0163. May

KEITH JARRETT: The Köln Concert. ECM/POLYDOR 1064/65. May.

KEITH JARRETT: The Köln Concert. ECM/POLYDOR 1064/65. Mar.

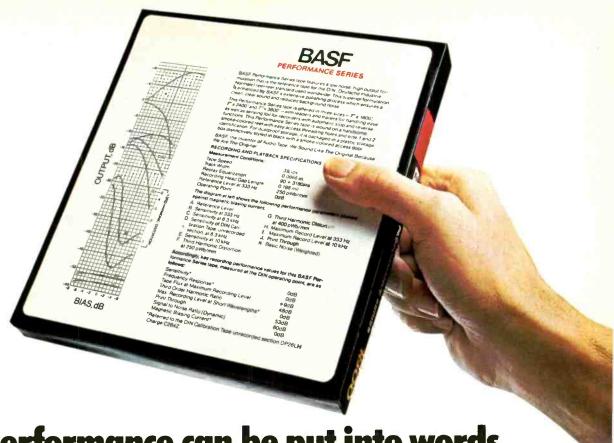
KING OLIVER'S JAZZ BAND/1923. SMITHSONIAN COLLECTION R 001. Apr.

PACIFIC OVERTURES. Original Broadway cast recording. RCA RED SEAL

ARL 1-1367. May.

PSYCHO. Original film score. UNICORN RHS 336. Mar. QUEEN: A Night at the Opera. ELEKTRA 7E 1053. Apr.

D. J. ROGERS: It's Good to Be Alive. RCA APL 1-1099. May.
SINGERS UNLIMITED: Feelin' Free. MPS 22607. Mar. ("Lees Side").
PHOEBE SNOW: Second Childhood. COLUMBIA PC 33952. May.
KENNY STARR: The Blind Man in the Bleachers. MCA 2177. Apr.



Our performance can be put into words. Your enjoyment will go beyond that.

To help you get the most out of BASF open reel tapes, we've improved our package.

We've included on it everything you need to know to achieve the most enjoyable listening experience possible. We're proud to, because there's no tape quite up to BASF standards.

Our Performance Series (formerly LH) is the DIN standard recognized throughout the world for open reel

Our Studio Series (formerly LH Super) with its high density formulation, results in a 50% increase in volume without distortion

across the full frequency range.

And our Professional Series is of mastering quality that's just that and not in name only.

All, of course, are polished for the extraordinary clarity that is BASF sound.

And while that sound can be put into words, charts and numbers, the listening experience itself can only be

felt the moment you hear it.

Which isn't surprising, considering BASF invented audio tape in the first place.



We sound like the original because we are the original.



You don't need to be a physicist to appreciate the difference.

The difference between the amtla bookshelf speaker system and all the others. Take off the grille. You can see the difference. Listen to it. You can hear the difference. The difference is the Heil Air-Motion Transformer.

All the other speakers merely push the air. The Heil Air-Motion Transformer actually accelerates air by squeezing it: effecting the most efficient transfer of an electrical signal to air motion of any device known. Result: superior sound reproduction.

When you look for speakers, trust your ears as well as your eyes. Compare our new Heil Air-Motion Transformer system to any conventional speaker.

Your ears will appreciate the difference.

Call toll free for the ESS dealer nearest you.
(800) 447-4700
(In Illinois call 800-322-4400)



California 95827.

ESS products are available in Canada through ESS CANADA.

"Smile," and they are fairly typical of her work, leaning heavily toward the sort of offhand melancholy that so often occurs when a songwriter stays up too late in the company of a piano. The same sort of sensibility that created Harold Arlen's "One for My Baby" is responsible for her "I Am the Blues," "Midnite Blue," and "Stormy Love." But "One for My Baby" includes a coherent story, while most of Nyro's songs prowl through a landscape filled with cigarette butts, departed lovers, wisps of smoke, and wine glasses in search of a point. Seldom do they find it. And while she is capable of a clever turn of phrase, she often will spoil it by dropping in a horrid line like "our love is a peace vibe.

I find it difficult to ignore bad or pointless lyrics, especially when the artist is being lionized as a lyricist, poet, or something of the sort. However, anyone who doesn't listen too carefully might find this an agreeable recording. Nyro sings well, and she is accompanied by a sterling array of New York studio musicians.

M.I.

ESTHER PHILLIPS WITH BECK: For All We Know. Esther Phillips, vocals; Joe Beck, guitar; Don Grolnick, Bobby Lyle, and Leon Pendarvis, pianos; Gary King and Will Lee, basses; Andy Newmark and Chris Parker, drums; vocal and instrumental accompaniment. Unforgetable; For All We Know; Pure Natural Love; Fools Rush In; Going Out of My Head; Fever; Caravan. [Creed Taylor, prod.] Kudu KU 28, \$6.98. Tape: KUC 28, \$7.98; KUS 28, \$7.98.

Esther Phillips is a singer of considerable ability who is nearly drowned in a series of arrangements so aggressive that they threaten at times to bite her head off.

Perhaps in the interest of commercial appeal. Joe Beck, an excellent jazz guitarist who should know better, wrote arrangements that overload the recording with violins, violas, and cellos, plus a female backup vocal group and, on top of it all, some Latin percussion. The result is a mishmash that more nearly resembles noise than music, despite the presence of heavy talent and fine tunes.

It's nice that Beck and producer Creed Taylor saw fit to give employment to lots of musicians and singers. Next time they should pay them to stay home.

M.J.

DORY PREVIN: We're Children of Coincidence and Harpo Marx. Dory Previn, vocals and acoustic guitar; strings, keyboards, rhythm, percussion, reeds, horns, and vocal accompaniment. Children of Coincidence; I Wake Up Slow; Woman Soul; six more. [Joel Dorn, prod.] WARNER BROS. BS 2908, \$6.98. Tape: • M 52908, \$7.97.

"We're Children of Coincidence and Harpo Marx" is the first disc that Dory Previn has made in New York, her first with producer Joel Dorn, and her first to be fully orchestrated. On all counts, they have meshed beautifully: This recording is a remarkable demonstration of Previn's provocative writing and singing talents.

Launching the disc with "Children of Coincidence," a song in the Brecht-Weill



Dory Previn

Provocative writing and singing talents.

mode, she sings: "Crossed connections, lost connections/Empty corners. crowded intersections/Accidents and incidents/We're children of coincidence and chance." It's an uncanny, accurate, whimsical, and yet painful perception, and that kind of quirky writing is echoed over and over again on this LP. On "The Comedian," for instance, a number set to spooky calliope rhythms (and a striking example of how full instrumentation and a carefully crafted arrangement can brilliantly amplify a Previn song). she says of the comedian, "But apart from the skits/And comical bits/Is there anything down deep inside?" The tune ends with a chant of "More more more more!" that runs down as the audience, the life of the comedian, the song itself, and the calliope effect come to a halt.

Bravo for an original, totally realized recording! H.E.

LOWELL FULSON: The OI' Blues Singer. Lowell Fulson, vocals and guitar; vocal and instrumental accompaniment. Do You Love Me; Step at a Time; Name of the Game: The OI' Blues Singer; Monday Morning Blues; Something's Wrong; four more [Butch Parker, prod.] Granite GS 1006, \$6.98.

The Ol' Blues Singer has sold out to the lure of big productions and commercial potential. Lowell Fulson, who has an expressive voice and a manner not dissimilar to that of B. B. King, has on this LP allowed himself to be accompanied by a bevy of sidemen and vocalists better left at home.

The rich, gritty tones of his vocalization are diminished greatly by the production, which, while not the worst I've heard inflicted upon a blues singer, is still too big and too busy. The use of a female soul chorus is especially unfortunate. Lowell Fulson is not a pop soul singer, no matter how much some Hollywood record producer wants him to be one. I don't mean to suggest that all blues singers should be recorded "in the field" accompanied only by

an old, rusty guitar. But there must be a way of presenting such an artist tastefully and without overpowering him. M.J.

ARGENT: The Argent Anthology: A Collection of Greatest Hits. Rod Argent, Russ Ballard, Robert Henrit, and Jim Rodford, vocals and instrumentals. God Gave Rock and Roll to You; Hold Your Head Up; Liar; Pleasure; It's Only Money, Part I; Thunder and Lightning; Tragedy; Time of the Season. [Rod Argent and Chris White, prod.] EPIC PE 33955, \$6.98. Tape: ▶ PET 33955, \$7.98; ▶ PEA 33955, \$7.98.

Rod Argent formed Argent out of the ashes of the Zombies, one of the "British invasion" groups that assaulted these shores in the wake of the Beatles a dozen years ago. Very quickly Argent developed a reputation for playing crisp, tidy progressive rock with slight jazz influences. It also acquired some entirely workable tunes, best of which are the stately "Hold Your Head Up" and the peculiar, chauvinistic, but very catchy "God Gave Rock and Roll to You."

This collection. Argent's first "best hits" album, includes the aforementioned songs and six others, all of them worth many plays.

M.I.

CHRIS SQUIRE: Fish out of Water. Chris Squire, basses and twelve-string electric guitars; horns, keyboards, strings, synthesizers, and orchestral accompaniment. Hold Out Your Hand; You by My Side; Silently Falling; two more. [Chris Squire, prod.] ATLANTIC SD 18159, \$6.98.

Yes's bassist Chris Squire has single-handedly changed the attitudes of a horde of listeners about the role of the electric bass in modern progressive popular music. His sharp, piercing tone and indebtedness to the melodic influences of Stravinsky have elevated the bass from its traditional function as a rhythm instrument to a lead instrument.

"Fish out of Water." Squire's first solo record, is a polished extension of this musical notion. Utilizing a flesh-and-blood orchestra rather than the electrically synthesized strings, horns, and brass Yes uses, he explores the many colors of his instrument in a variety of styles. A hard, funky riff à la Stanley Clarke builds into Hold Out Your Hand, the album's opener, and the race is on. By the time the disc ends, Squire has dished up a taste of rock, jazz, and classical music with the bass primarily carrying the melody. The relative absence of lead guitar-he does play small rhythm parts on acoustic guitar-draws even more attention to the bass's primary role.

Squire's long association with Yes vocalist/composer Ian Anderson has left its mark on his lyric-writing. More concrete than Anderson's vague images, Squire's lyrics still deal with abstractions about religion and love. He poses questions and offers no answers.

H.E.

NICK HOLMES: Soulful Crooner. Nick Holmes, songs, vocals, and guitar; Hugh McCracken, guitar; Donald McDonald, drums; Tony Levin, bass; Michael Mainieri, keyboards, vibes, and arr. Only a Human;

Promise Suite: Grind It Out; seven more. [Michael Mainieri, prod.] JUST SUNSHINE RECORDS JSS 3, \$6,98.

Those who apply some objectivity are able to see that most hit records contain hit ingredients of one sort or another. But sometimes those ingredients are present and yet, through some mistake, a hit is missed. Nick Holmes's "Soulful Crooner" strikes me as such an instance.

"Mistake" really isn't the right word here, for the problem is much simpler: a case of business or street difficulties. I never received a review copy of the record, nor did I hear a word about Nick Holmes, not even from my sources in the teenage underground, and teenagers know what's hot faster than anyone except the rhythm section that plays on the sessions. Holmes has been a terribly well-kept secret.

Oh well, it's only a record. Only talent and heart and mind. Only a career.

Holmes writes his own material. It's pure and easy. Anyone could write it if only he sat down—that is its feeling. Bette Midler covered one song in her new album: Roberta Flack is doing another. Holmes show a taste for irreverence in "Grind It Out"; he is a little kid ("Little Bit"); he is a poet ("The Promise Suite").

As a singer, he has a clear channel between what is felt and what is sung. Consequently, one relaxes in the sound, its humanness, its ease. His music has sadness and flow and honesty. It feeds what wants to be fed by those of us trying to survive with some grace amid the roars of tension.

The album is properly named: Nick Holmes is a "Soulful Crooner." He has sat on a pillow in a room somewhere and done some music, and almost nobody got to hear it. But that is. I hope, only the short view. Love is like a bubble: If you push it down at home, it tends to pop up again across town—only the bedroom changes. Talent is like that too. We will hear from Holmes again one of these days, from the other side of town.

A respectful acknowledgement goes as well to all the musicians, engineer Jay Messina, and graphics designers Ron Levine, Lee Marshall, and Michael Brovsky. And most especially to Michael Mainieri, who arranged and produced the album. M.A.

This English quartet has finally begun to achieve the American stardom it deserves. It is a maddeningly clever band whose precociousness is honed to fine art—one reason, perhaps, why it has taken Americans so long to catch on. But 10cc also offers fetching harmonies and honest musicianship. The oddball mind attached to a genuine pop sensibility is a novel combination that attracts a special kind of listener.

QUIET, PLUS

We made the Phase Linear 4000 Preamplifier dead quiet, but we didn't stop there. We added several revolutionary features that make music sound obviously better than any other control console:

- A Feak Unlimiter that restores dynamics lost in recording to closely approximate the original.
- A Downward Expander that reads "gainriding" and expands dynamics down to precisely the intended level.
- An AutoCorrelator that makes record/tape hiss and FM noise virtually vanish without affecting musical content.
- An **Active Equalizer** that gives you flat energy distribution over the full audio spectrum.



Hirsch-Houck Labs put it this way in Stereo Review: "A good preamplifier should have no sound of its own and many (including this one) meet that qualification easily. What we can say is that the Model 4000 makes any program played through it sound better than through any other preamplifier we have ever used, by virtue of its unique control features, and most particularly its AutoCorrelator and Peak Unlimiter. Altogether it is a most impressive technical achievement, one bound to influence equipment to come." Tell your dealer you want to hear Phase Linear's "Incredible" Preamp.

Phase Linear 4000

The Powerful Difference

Phase Linear Corporation 20121 48th Avenue West Lynnwood, Washington 98036

Manufactured in the U.S.A. Distributed in Canada by H. Roy Gray, Ltd.

CIRCLE 25 ON READER-SERVICE CARD

Technical Series PROFESSIONAL TEST RECORDS

CBS Laboratories Technical Series Professional Test Records are unique, high-precision tools designed to assist audio and quality control engineers and test and service technicians in the rapid evaluation of audio components, equipment and systems. Each record has a complete series of tests, which eliminates the need for equipment, saves hours of time, and makes it a productive tool in the laboratory, on the production line, and in field testing.

STR-100—Stereophonic Frequency Test Record—A general purpose record for pickup and system evaluation. Recorded with a constant velocity characteristic below 500 Hz and a constant velocity characteristic above 500 Hz. \$10.00

STR-101—Seven Steps to Better Listening—Through easy to make tests and simple narrative, this test record for home use will help you blend electronic components, room acoustics and the characteristics of your own ears into a well-tuned system for the enjoyment of all recorded sound. \$6.98

STR-112—Square Wave, Tracking and Intermodulation Test Record—Provides square wave modulation for a detailed study of the tracking capabilities of stereophonic phonograph pickups. \$15.00

STR-120—Wide Range Pickup Response Test Record—With response from 10 to 50,000 Hz, this record provides for the detection and elimination of low frequency arm resonance and system rattles, and evaluation of pickup response at frequencies far beyond the audible range where elusive distortion elements can cause audible distortions. \$15.00

STR-130—RIAA Frequency Response Test Record—Provides spot and sweep frequency measurements for response testing and calibration of professional and consumer record reproduction equipment. \$15.00

STR-140—RIAA Pink Noise Acoustical Test Record—By use of bands of noise rather than pure tones, standing waves are minimized, permitting the testing and adjustment of loudspeakers in the room in which they will be used. \$15.00

STR-151—Broadcast Test Record—Especially useful for the broadcast engineer, audiophile or service technician seeking a convenient signal source for the testing and adjustment of all audio equipment. \$15.00

STR-170-318 Microsecond Frequency Response Test Record— Provides a convenient, easily equalized signal for all response and separation measurements. \$15.00

SQT-1100—Quadraphonic Test Record—For the calibration, verification and adjustment of SQ $^{\rm so}$ decoding equipment. \$15.00

Check or money order must accompany your order.

No cash or C.O.D.'s, please.

Allow 60 days for delivery.

	Street, Cincinn	
	ck for \$ he records I've o	Please send ircled below.
STR-100	STR-101	STR-112
STR-120	STR-130	STR-140
STR-151	STR-170	SQT-1100
NAME		
ADDRESS		
CITY	STATE	ZIP

While all of "How Dare You!" is inspired zaniness, two cuts, for my money, count as standouts. "Art for Art's Sake" has a lyric that goes: "Art for Art's sake/Money for God's sake... Money talks, so listen to it/ Money talks to me/Anyone can understand it/Money can't be beat/Oh no..." "I Wanna Rule the World" begins: "I wanna be a boss/I wanna be a big boss/I wanna soss the world around/I wanna be the biggest boss that ever bossed the world around..."

Never has anarchism been so melodious. H.E

HENRY GROSS: Release. Henry Gross, electric and acoustic guitars and vocals; rhythm, strings, keyboards, horns, and vocal accompaniment. *Juke Box Song; Lincoln Road; Overton Square*; seven more. [Terry Cashman and Tommy West, prod.] LIFESONG LS 6002, \$6.98.

Guitarist/composer/vocalist Henry Gross does everything and does it with finesse. That finesse, however, has a tendency to disguise the thinness of a great many of Gross's songs. On this disc, for example, the multitalented musician dishes up a collection of rockers, ballads, folk narratives, rock-blues, and country-rock, among other things. It's an impressive display, but too much of it sounds borrowed and then polished up rather than refined in an original way. In addition, "Moonshine Alley," an intense, melodramatic musical "legend," is more silly than anything else.

Still, Gross does have plenty of evocative guitar lines at his disposal. With the exception of an annoying falsetto, he is a solid romantic singer who is also up to the demands of rock screaming, and his tunes, when they work, all have the sound of hits. Under the auspices of producers Cashman and West, one suspects that Gross is starbound. He has the skills—now he has to make those skills come together.

CAPTAIN AND TENNILLE: Song of Joy. Toni Tennille, vocals and keyboards; Daryl Dragon, keyboards, synthesizers, strings and horns accompaniment. Muskrat Love; Thank You Baby; 1954 Boogie Blues; eight more. [Captain and Tennille, prod.] A&M SP 4570, \$6.98. Tape: CS 4570, \$7.98; 8T 4570, \$7.98.

This is the happy couple who won a Grammy for "Love Will Keep Us Together." Toni Tennille is fast acquiring an image as a sunny, down-home person, while her partner/husband, Daryl Dragon, who is called the Captain, is the family spacer. (Be careful what image you wish for; you may get it.)

The Captain and Tennille have had an authentic meteoric rise in the record biz, based on breezy, upbeat songs (the one exception is a lovely ballad by Tennille called "The Way I Want to Touch You"), tastefully presented. As their career develops, one begins to see how the two talents break down and how expertly they fit with one another. Tennille is a surefooted, smooth, and musical singer, an able piano accompanist for herself, and a capable songwriter. Dragon, son of Carmen, is a key-



Captain and Tennille First-class entertainers.

board player who seems most at home in the rock and roll styles of the Fifties and Sixties. He is able to operate in other styles as well; he provides some cute synthesizer sounds on tunes such as "Muskrat Love" and rather unimaginative orchestral arrangements.

One is tempted to say that it is the lady who provides the duo's basic energy and homey pizzazz, but care must be taken. Nobody knows how the real chemistry works between people.

Like the Carpenters, whose label and distribution setup they already share, the Captain and Tennille come across more as first-class entertainers than as artists. Fortunately they are in a business that has room for both.

TELLY SAVALAS: Who Loves Ya Baby. Telly Savalas, vocals; vocal and instrumental accompaniment. This is All I Ask; Who Loves Ya Baby; Nevertheless (I'm in Love with You); Gentle on My Mind; The Men in My Little Girl's Lile; Time; three more. [Marvin Laird, prod.] MCA 2160, \$6.98. Tape: ©T 2160, \$7.98.

Oh, really now. Everybody knows Telly Savalas can't sing. At the very least, everybody knows Telly Savalas shouldn't singbut he does. Well, if Jim Nabors and Dennis Weaver can do it, why not?

"Who Loves Ya Baby" is a case study in middle-of-the-road recitative. The songs are inclined heavily toward the sort of philosophy espoused by Frank Sinatra and at least a hundred thousand cocktail-lounge singers in "My Way." The opening tune. Gordon Jenkins "This Is All I Ask." is a virtual brother of "My Way." Throughout the LP. Savalas half talks and half sings, all to the accompaniment of lush orchestral treatments and a strangely out-of-place soul vocal trio. There are occasional criminological references, and on "Nevertheless" the accompaniment includes a

Micro-Acoustics 2002-e cartridge. Because good tracking isn't enough.

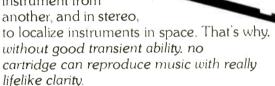
Tracking is just the beginning.

While good tracking ability is vital, it's only an indication of how well the stylus keeps contact with record grooves on louder, harder-to-follow passages, at stylus pressures low enough to minimize wear. But surprisingly, tracking ability tells almost nothing about how well a cartridge reproduces most musical sounds.

Transient ability is just as important.

After all, transients are what music is made of: sudden start-and-stop bursts of sound at all

frequencies. From the attack of a low organ note to the bite of a plucked string. Transient information is essential to differentiate the sound of one instrument from another, and in stereo,

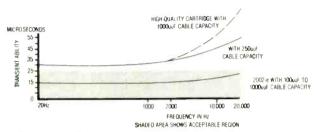


Until now, it was simply one or the other.

Tracking or transient ability. Popular high-compliance cartridges, on the one hand, offered good tracking ability and low record/stylus wear, but sacrificed transient ability. And low-compliance cartridges provided good transient ability at the expense of tracking ability and increased wear.

A new technology.

Micro-Acoustics, the world's leading manufacturer of record-mastering styli. has combined for the first time superb transient and tracking ability. In the radical design of the 2002-e (patent pending), direct-coupled electrets and critical damping provide optimized transient ability, as shown in the graph. While an ultra-low-mass beryllium stylus bar and high-compliance dual-bearing suspension provide maximum tracking ability at 1 gram, for lowest possible record and stylus wear.



Transient ability best defines how accurately a cartridge can reproduce a musical burst at different frequencies. (Note that the 2002-e's results are independent of cable capacity!)

A simple way

to convince yourself.

Micro-Acoustics has prepared a unique demonstration record to help you evaluate and compare cartridge transient and tracking ability. Just send \$3.50, and we'll mail you a record postpaid. For free information and the name of your nearest dealer, just complete and return the coupon.

1) Low mass body (4.0 grams) reduces warp flutter (2) pure gold connecting wires (3) mechanical damper (one of 8) helps optimize transient and tracking ability (4) retainer spring for precise stylus assembly alignment (3) elliptical damond stylus ground with the same precision as our famous Micro Point recording styli (6) beryllium stylus bar 35% lower mass than aluminum, for optimum high-frequency tracking and transient ability (7) dual bearings and resolver for optimum tracking ability and precise signal resolution (8) direct coupling of stylus bar to electrer for lossless transmission of groove undulations to transducers (9) user-replaceable stylus assembly (10) electret transducer permanenti-y-polarized dielectric generator, linear from 5Hz 50kHz (1) microcircult passive circult makes cartridge output impedance fully resistive, eliminating effect of cable capacity, shunts preamp input, reducing thermal noise

MICRO-ACGUSTICS CORPORATION

MICRO-ACOUSTICS CORPORATION 8 Westchester Plaza Elmsford, N.Y. 10523 () Please send me free information on the 2002 e cartridge and the name of my nearest dealer. () Enclosed is \$3.50. Please send me a postpaid copy of your stereo transient/tracking ability test record. NAME ADDRESS CITY STATE ZIP HF676

A tribute to appreciation.

Appreciation for excellence in performance. A fulfillment that comes from the experience, not from the parameters by which it was created. Ours is only to enjoy. To appreciate. To savor. Something only our ears and eyes can savor for themselves.

The Contrara Group of loudspeakers provides that appreciation.

If you enjoy your music and quality craftsmanship, you'll enjoy the Contrara Group; it's a tribute to your sensitivity. Write us for additional information and we'll send you a booklet on appreciation.

Jennings Research Inc.

64 N. Fafr Oaks Ave., Pasadena, Calif. 91103





CIRCLE 18 ON READER-SERVICE CARD

laughing woman and the clinking of ice cubes in a glass, which is appealing in the way that beer cans printed with a Bicentennial motif are appealing.

I'm not sure that this is something I would dare feed to a \$900 Marantz. One doesn't, after all, invite Craig Claiborne to dinner at Taco Bell—at least not often. But Telly Savalas as a singer does have a certain campy charm.

VICKI SUE ROBINSON: Never Gonna Let You Go. Vicki Sue Robinson, vocals; Bhen Lanzaroni, keyboards; Stuart Woods, bass; Dick Frank and Bob Rose, guitars; Roy Markowitz and Jim Young, drums; Carlos Martin and Ray Armando, conga drums; vocal and instrumental accompaniment. Turn the Beat Around; Common Thief; Never Gonna Let You Go; Wonderland of Love; We Can Do Almost Anything; Lack of Respect; two more. [Warren Schatz, prod.] RCA APL 1-1256, \$6.98. Tape: APK 1-1256, \$7.95; 1-1256, \$7.95.

"Never Gonna Let You Go" is the recording debut of Vicki Sue Robinson, a former Philadelphian who spent the past few years singing on and around Broadway in such shows as Hair and Jesus Christ Superstar, as well as in various New York clubs and coffeehouses. Her current manifestation is as a disco singer, and it's a role that she wears well.

Robinson has a tense, expressive voice, one that does not succumb to the incessant beat and bank of instruments behind her. Warren Schatz provided arrangements that, while complex, do not overwhelm the singer. The material is by and large newly written, apparently for Robinson. The songs are fairly standard disco stuff—love lyrics set to a moderate tempo and embellished with a lot of background vocals, most of them overdubbed by Robinson.

Disco singers are as common in New York as pigeons and budget crises, but Vicki Sue Robinson is better than most of them. She is a welcome arrival.

M.I.

CHET ATKINS AND LES PAUL: Chester and Lester. Chet Atkins, Les Paul, Paul Yandel, Ray Edenton, and Bobby Thompson, guitars; Randy Goodrum, piano; Henry Strzelecki and Bob Moore, basses; and Larrie Londin, drums. It's Been a Long Time; Moonglow/Picnic; Caravan; It Had to Be You; Out of Nowhere; Avalon; Birth of the Blues; Someday Sweetheart; 'Deed I Do; Lover Come Back to Me. [Chet Atkins, prod.] RCA APL 1-1167, \$6.98. Tape: APK 1-1167, \$7.95; APS 1-1167, \$7.95.

Over the past few years, Chet Atkins has recorded a series of duets with other guitarists. RCA released several LPs detailing his musical battles with Jerry Reed, as well as a record of his collaboration with Merle Travis. All of these were nothing short of brilliant, and that is again the case with "Chester and Lester."

Two more diverse styles would be hard to find. On one hand, there is Les Paul, full of "gypsy fire," notes flying from his fingers with the rapidity of numbers flowing from an IBM computer. On the other hand, there is Chet Atkins, restrained and dignified. The mixture of the two on such standard tunes as "Caravan," "Moonglow," "Avalon," and "Birth of the Blues" is a milestone not only in musical ecumenism, but in entertainment as well. With a loose, laid-back Nashville studio band behind them, the two gentlemen take their material and work magic upon it. It's been a long, long time since I've heard a version of "Birth of the Blues" as moving as this one. The same may be said for any and all of the other selections here.

I don't know how they got their different styles to merge. Perhaps genius of the type Atkins and Paul have is always mutually attractive. One thing is certain—they seem to have had fun recording this album. Both in the music and in their offhand, betweensong comments, some of which are included as informal footnotes, a great deal of joy shines through.



Vicki Sue Robinson A welcome arrival.



GREAT BRITISH FILM SCORES. National Philharmonic Orchestra, Bernard Herrmann, cond. [Tony D'Amato, prod.] LONDON PHASE-4 SPC 21149, \$6.98.

LAMBERT: Anna Karenina. Bax: Oliver Twist. Benjamin: An Ideal Husband. Walton: Escape Me Never. Vaughan Williams: Forty-Ninth Parallel. Bliss: Things to Come.

If this disc contained nothing but the eleven-minute suite from Constant Lambert's music for the Julien Duvivier Anna Karenina (1947), it would be worth twice the price. How this utterly beautiful score has escaped attention up until now is a major mystery to me. Not only is there a solemn, sonorous, Russian-cathedral overture, but the limpidly orchestrated forlane that follows in the suite contains one of the most

haunting themes I have ever heard. Lambert allows his music to build toward its tragic conclusion with utmost subtlety, thereby causing the listener to feel the dramatic tensions and progressions with particular intensity.

The other long suite on this disc is the Arthur Bliss Things to Come (1936), composed hand-in-hand with H.G. Wells for his pioneering science-fiction film. The Bliss score hardly has the whirl and wobble one has come to expect from sci-fi scores, but this is all to the good. For there is something quite stark and ominous to the futuristic bleakness of the music, which, by not departing very far from familiar idioms, makes the grim mechanization promised by the film felt more closely than one might choose.

Also welcome is the heroically elegiac prelude composed by Ralph Vaughan Williams for The Forty-Ninth Parallel (1941), also known as The Invaders. The ballet music William Walton composed for his first film, Escape Me Never (1935), exudes the dance theater from every note without ever really sounding typical of him. The "Fagin's Romp" sequence done by Arnold Bax for David Lean's Oliver Twist (1948) smacks strongly of Mahler with just a dash of Shostakovich, at least as conducted here by the late Bernard Herrmann (whose devotion to film music went well beyond his own pioneering scores): the finale, on the other hand, is pure English grandeur. Only the uninspired Vienna-isms and the Offenbach-ish scherzo from Arthur Benjamin's An Ideal Husband (1947) are unworthy of this disc. How I wish Herrmann had chosen instead some excerpts from one of Malcolm Arnold's fine scores, such as Whistle Down the Wind or The Chalk Garden.

As usual, Herrmann's tempos occasionally tend toward the sluggish, as in the Walton and parts of the Bliss. But it is perhaps this deliberateness that allowed him to concentrate so beautifully on sonority, whether in the organlike chords closing the Vaughan Williams or in the gorgeous tone blending in the Lambert. Herrmann's efforts are in every way enhanced by the rich Phase-4 sonics.

R.S.B.

RAINTREE COUNTY. Original film soundtrack recording. Composed and conducted by John Green. [John Steven Lasher, prod.] ENTR'ACTE RECORDINGS SOCIETY ERS 6503 ST, \$15.95 (two discs, manual sequence).

The outstanding film score for Rointree County, composed by John Green, appeared on disc but has been out of print for eons. Entr'acte's two-disc set is not exactly a reissue, since the initial RCA Victor album (LOC 6000) was in mono only. Entr'acte was given access to the original stereo master. If the recorded sound is not absolutely sharp, it is nonetheless quite decent, especially considering the film's age.

Something of a cult has been built around this music. (Collectors were paying as much as \$150 for the original album.) Its excellence is rather surprising in view of the fact that it is the only original score of any note composed by Green, then still known as Johnny Green. the director of MGM's music department in the 1950s and

the arranger for such film musicals as An American in Paris, West Side Story, and Oliver! This inspired score is thematic in orientation but, via its harmonic and instrumental coloring, immeasurably adds to the emotional perspectives revealed in Raintree County's story, set in Indiana during the Civil War.

The main theme is a soft-hued, autumnal tune that immediately shifts the movie's emphasis from the epic to the more intimate, psychological atmosphere of its symbolic drama, which centers around a mythical "Raintree" that becomes a kind of puremysterious haven lost and subsequently regained by the hero, Johnny (Montgomery Clift). First heard on these discs in a popsounding choral setting with lyrics by Paul Francis Webster, the theme has its strongest impact when used later in the nonchoral settings, often highlighted by a harmonica solo.

But this expansive score features a broad spectrum of themes, and the diverse melodies interweave and contrast with one another in a highly pleasing manner. One of the most delightful tunes is the one, almost always played by the banjo, belonging to Flash Perkins (Lee Marvin). More intriguing-and more achingly moving-is the love theme for Johnny and Susanna (Elizabeth Taylor), first presented as a counterbalance to the glitter of the overture's opening strains. In brutal contrast to the mellow romanticism suggested by the love theme are the weird, disjointed leaps representing the old mansion and, by extension, Susanna's madness.

So beautifully are these poignant contrasts communicated, that this recording should provide a profound experience even for those who have not seen Raintree County. For those who have, the effect should be devastating.

R.S.B.



COUNT BASIE AND ZOOT SIMS: Basie and Zoot. Zoot Sims, tenor saxophone; Count Basie, piano; John Heard, bass; Louis Bellson, drums. I Never Knew; It's Only a Paper Moon; Blues for Nat Cole; five more. PABLO 2310 745, \$7.98. Tape: S 10745, \$8.98.

I don't remember ever before hearing a record with which I could find no fault whatever. Everybody on this disc is great. Not a note is out of place.

You might say that's not surprising when you are dealing with a quartet made up of Count Basie, Zoot Sims, Louis Bellson, and John Heard, a bassist who has helped give Cal Tjader's group some of its better moments. But the fact is that all of these musicians have turned in less than great performances at one time or another. Here everything is working right, and that rightness keeps the musicians in the groove throughout.

I'm ready for that old desert island cliché now, and this record is if. The magic of it is

SPECTRO POWER! THE SUPER CLEAN SPECTRO ACOUSTICS MODEL P-202



Suggested Retail \$375.00 Spectro-Acoustics Model P-202

CLEAN, STABILIZED POWER

SPECTRO-ACOUSTICS embodies both in its Model P-202 Power Amplifier. Specifications and price are two good reasons to invest your listening pleasure in SPECTRO-ACOUSTICS equipment. Craftsmanship comes with the name.

- Not less than 100 watts, RMS, continuous power per channel. Both channels are driven into 8 ohms at any frequency from 20 Hz to 20,000 Hz with no more than 0.25% total narmonic distortion.
- Power at clipping is typically 200 watts per channel
- Instantaneous clipping indicators far more accurate than conventional meters.
- · Easily driven by any receiver or pre-amp.
- Automatic limiters and protectors for all load conditions.
- SCAMP (Self Contained AMPlifier) modular construction for rugged, reliable operation and serviceability.

For more detailed information, see your local dealer or contact SPECTRO-ACOUSTICS, INC. today.



Ask about our Model P-101 pre-amp and Model 210 Graphic Equalizer.

SPECTRO ACOUSTICS, INC.

1309 E. SPOKANE [509] 545-1829 PASCO, WASHINGTON 99301 CIRCLE 38 ON READER-SERVICE CARD

A DIFFERENT KIND OF RECORD CLUB

TREMENDOUS SAVINGS

on every record and tape in print 'agree-to-purchase" obligations of any kind

DISCOUNTS OF 43% TO 73% off mfg. suggested list special catalog

features hundreds of titles and artists ALL LABELS AVAILABLE

including most imports through special custom ordering service—guarantees satisfaction.

SCHWANN CATALOG

lists thousands of titles: classical, pop. jazz. country, etc

DISCOUNT DIVIDEND CERTIFICATES

Dividend Gifts-certificate redeemable immediately for extra discounts.

NEWSLETTERS

informational news and happenings in the world of music... special super-sale listings

DISCOUNT ACCESSORY GUIDE

Diamond needles cloths tape cleaners etc

QUICK SERVICE

same day shipping on many orders... rarely later than the next several days.

100% IRON-CLAD GUARANTEES

on all products and services—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 M 650 Main Str	USIC CLUB, INC. eet, New Rochelle, N	DEPT 8-66 .Y. 10801
Name		
Address		
City		
State	Zip	

CIRCLE 8 ON READER-SERVICE CARD

Your HEADQUARTERS

For Famous Brand

Electronics By Mail

333 N. Michigan Ave. • Suite 2025

Chicago, IL 60601 • (312) 293-1825

All Orders Shipped In

inctory-Sealed Cartons

Write Or Call For

The Lowest Prices

Anywhere!

LOWEST PRICES ON

TURNTABLES CHANGERS AMPLIFIERS

INVENTORY

TUNERS

CARTRIDGES

CAR AUDIO

MILLION SSS

Please send me a quote on

CALCULATORS COMPACTS

Top Discount Audio 333 N Michigan At Sulfe 2025, Chicag (\$12) 293-1825

RECEIVERS

NATIONAL

AMERICA's #1 VALUE LEADER

CORPORATION OF AMERICA







SHURE







AUDIO DISCOUNTING STARTED IN NEW YORK & NOW WITH THE END OF FAIR-TRADE WE ARE SURE THAT NO ONE CAN BEAT OUR PRICES:

- We Discount Over 70 Major Brands
- Over 10 Years Of Reliable Service In The Mail Order Field
- Largest Inventory/Lowest Prices!

We Get The Best Deals From The Manufacturers. You Get The Best Deal From Us!

SHOP BY PHONE! For A Lowest Of The

Low Quote (212) 338-8555 9-5 Mon. thru Sat

WRITE OR CALL! FREE

Stereo Corp. of America CATALOG

STEREO CORPORATION OF AMERICA

Dept. H-F 2122 Utica Avenue Brooklyn, N.Y. 11234 Tel. (212) 338-8546

CIRCLE 39 ON READER-SERVICE CARD

MONEY • TIME • FREIGHT

- QUALITY STEREO EQUIPMENT AT LOWEST PRICES
- YOUR REQUEST FOR QUOTA-TION RETURNED SAME DAY
- FACTORY SEALED CARTONS-GUARANTEED AND INSURED.
- SAVE ON NAME BRANDS LIKE

A.D.C.

KLH

A.R.

SHURE KOSS

DYNACO **FISHER**

SONY

PIONEER

AND MORE THAN 50 OTHERS BUY THE MODERN WAY BY MAIL-FROM



Department 217H 12 E. Delaware Place Chicago, Illinois 60611 312-664-0020

CIRCLE 15 ON READER-SERVICE CARD

that, despite the presence of only four musicians and of pieces that vary little in pace. there is so much variety within each of the performances that there is no feeling of being dragged through examples of very able people doing the same thing over and over. This is all light and air: brilliant Basie piano that shades from subtle stride to even more subtle blues; Sims gloriously, upliftingly swinging; and Bellson and Heard in tight behind them in the finest tradition of Walter Page and Jo Jones.

For anyone who has to describe jazz, to illustrate jazz, to explain what makes jazz unique, this is the record to play. If it doesn't work, words won't help. I.S.W.

EARL HINES: Quintessential. Earl Hines, piano. Look at Me; Jive Sugar; I Do It Better at Night; I'll Never Be Alone. CHIAROSCURO 131, \$6.98.

Sit Earl Hines down at a piano, let him gono time limit, no tunes-and you can end up with a full concert. He is, of course, a marvelous stylist, and he has at his fingertips an endless variety of technical ideas to draw on. No jazz pianist executes with the aplomb and polish that he does. (When this can still be said of an artist at the age of seventy, it is remarkable.)

But those are the commonplace aspects of Hines. What is usually overlooked is that he is a brilliant creative melodist. He is credited with quite a number of pieces, but not with the frequency or on the level of the prolific Duke Ellington. When Ellington sat down alone at the piano and extemporized. it was not surprising that typically Ellingtonian melodies came out. But here is Hines, alone at the piano for two full sides, extemporizing through four long pieces that not only involve his full pianistic bag, but keep coming back to original melodies that are utterly charming.

"Look at Me," the opener, is a model of Hines's ability to compose, to improvise, to show off-all at the same time. The tempos change, the styles change, and the basic melody is turned hither and thither (becoming briefly "At Sundown," just to add his ability to quote without getting in his own way). And the fascinating thing is that, after eight minutes or so, the melody that has been drifting all through the piece turns out to be a distant relative of "Blue Turning Gray Over You." It's an education. J.S.W.

FATS NAVARRO: Prime Source. Fats Navarro and Howard McGhee, trumpets; Ernie Henry, Charlie Rouse, Wardell Gray, Allen Eager, and Sonny Rollins, saxophones; Tadd Dameron, Milt Jackson, and Bud Powell, pianos; Nelson Boyd, Curly Russell, and Tommy Potter, basses; Shadow Wilson, Kenny Clarke, and Roy Haynes, drums; Chino Pózo, congas. Our Delight; The Squirrel; The Chase; twenty-three more. BLUE NOTE LA 507H2, \$7.98 (two discs).

Fats Navarro was one of those jazz musicians who established a strong identity but whose death at twenty-seven necessarily left him seemingly unfulfilled. (Suppose Dizzy Gillespie had died at twenty-seven,

HF-6

Record them over and over again.

The life of a Scotch® brand cassette is a long one. Even when you record on it time after time after time.

Because there's a tough binder that keeps the magnetic coating from wearing off. So even after hundreds of replays or re-recordings, you get great sound quality.

We wish you a long and happy life. 'Cause you'll need it to keep up with your Scotch cassettes.



Play them back without jamming.

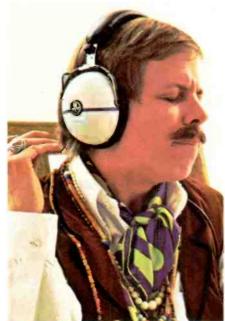
The life of a Scotch® brand cassette is a long one. Even when you play it time after time after time.

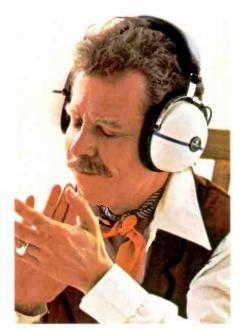
Because there's a Posi-Trak® backing that helps prevent jamming and reduces wow and flutter. And the cassette shell is made with a plastic that can withstand 150°F.

We wish you a long and happy life. 'Cause you'll need it to keep up with your Scotch cassettes.

Scotch Cassettes. They just might outlive you.





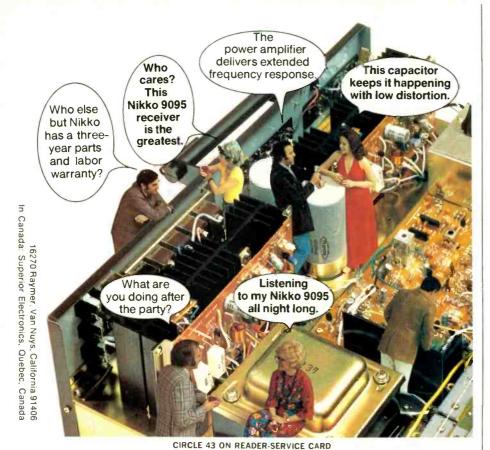








WIKKO Circuit Breakers keep it happening.







in 1944, when he was in Billy Eckstine's band but before he had formed his own first band.) Yet Navarro left a legend that is largely summed up in the two discs of this album, covering his work from 1947 to 1949 in groups led by Tadd Dameron, Howard McGhee, and Bud Powell.

Navarro's crisp, buoyant trumpet bursts out of most of these pieces (many of them in two takes, which show his ability to rise to greater heights after a superb first solo). Two sides by Dameron bands playing Dameron compositions are of particular interest since he was far and away the prime composer of the bop era after World War II. There are interesting glimpses of other musicians in these groups—Ernie Henry, Allen Eager, sounding very Lester Young-ish, and a decidedly young Sonny Rollins.

But the focus stays on Navarro. Every one of his entrances commands a listener's attention. |.S.W.

THE BOYS FROM DAYTON. Snooky Young Septet: Snooky Young, trumpet; Booty Wood, trombone; Norris Turney, alto and tenor saxophones and flute; Richard Tee, piano; Cornell Dupree, guitar; Gerry Jemmott, bass; Herbie Lovelle, drums. My Blue Heaven: The Checkered Hat; two more. Norris Turney Quintet: Norris Turney, alto saxophone; Cliff Smalls, piano; Billy Butler, guitar; AI Hall, bass; Mickey Roker, drums. The Seventh Day; A Whole Lot of Sunshine; two more. MJR 8130, \$5.50 (Master Jazz Recordings, Box 579, Lenox Hill Station, New York, N.Y. 10021)

Duke Ellington kept bringing exciting new talent into his band right up until the end, an indication that the well of prospective Ellingtonians seemed to have no bottom.

One of the best of the newcomers was Norris Turney, who took over Johnny Hodges' saxophone chair and managed to suggest his predecessor without seeming to be trying to copy him. He used a lot of Hodges touches—little dancing, pushing phrases, a suddenly swelling tone. notes that were stretched and bent. But Turney's tone was not quite as full-bodied as Hodges', nor did he have that innate swagger, so the touches that he borrowed were put in a slightly different context and, consequently, took on a new life.

Turney is heard on one side of this disc as a sideman in the Snooky Young Septet shortly after he joined Ellington in 1971 and, on the other side, leading a group of his own in 1975. So far as I know, this is the first time he has been recorded as a leader, so it is rather strange to find that he gets a better showcasing with Young's group than with his own. With his quintet Turney is heard only on alto saxophone, and of the four selections only "For All We Know"-a very slow, very deliberately stated soloreally comes off. He does not seem at ease on Hodges' "Good Queen Bess," and neither Cliff Smalls on piano nor Billy Butler on guitar is a particularly exciting soloist.

With Snooky Young, however, Turney plays alto, tenor, and flute, contributes a fine riffing arrangement of "My Blue Heaven," and pays his ultimate tribute to Hodges on his own piece, "The Checkered Hat."

HIGH FIDELITY CLASSIFIED

130 East 59th St., New York, N.Y. 10022 Phone: (212) 581-7777

CLASSIFIED RATES: 1-tIme \$1.20 per word per issue, minimum \$12. 6 consecutive issues—\$1.10 per word per issue. 12 consecutive issues—\$1.00 per word per issue. Words in caps—10¢ extra each.

Box Numbers: \$1.00 additional per insertion to cover cost of handling and forwarding mail. Count 10 extra words for box number and address.

DISPLAY CLASSIFIED AND DISCOUNTS: 1 inch by 1 column—\$230. 2 inch by 1 column—\$460. 3 inch by 1 column—\$690. Also 6 and 12 consecutive issue discount rates. Deadline is two months prior to publication date. Full payment must accompany All copy for classified ads.

for sale

RARE ROMANTIC PIANO SCORES—Moscheles, Henselt, Herz, Lifotift, Scharwenka, Scriabin, etc. Free catalog. MUSIC TREASURE PUBLICATIONS, 620 Ft. Washington Ave., 1-F, New York, N.Y. 10040.

ULTIMATE—"LIVE"—Operatic, Symphonic—Reel & Cassette Bargains! BOX 1101, WOODHAVEN, N.Y. 11221

CANADIAN DISCOUNT CATALOG. NAME BRAND STEREO EQUIPMENT, CALCULATORS, CB Gear, Parts, Surplus, Factory close-outs, and dumps. Rush \$1.00. ETCO-HF, 521 5th Ave., NYC 10017.

THOUSANDS OF LIKE NEW LP's and pre-recorded tapes. Catalog \$1.50. House of Records, Hillburn, New York 10931.

BUILD YOUR OWN SPEAKERS AND
SAVE UP TO 50%



You can assemble your own high quality, multi-element stereo speakers in a few hours and save up to half the cost of comparable speakers. Send for our free 32-page catalogue of speaker kils raw speakers and accessories

SPEAKERLAB
Dept. HF-6, 5500-35th N.E
Seattle, Washington 98105

STEREO CARTRIDGES AND STYLUS REPLACE-MENTS FOR: ADC, Audio Technica, B&O, Grado, Emplre, Micro/Acoustics, Pickering, Ortofon, Shure, Stanton, Supex. Write for free catalog: NEEDLE IN A HAYSTACK, Dept. MH, P.O. Box 17435, Washington, D.C. 2004.1

FRESH SCOTCH L/N 10½" 3600' METAL REEL 5 for \$35.00. Soundd, POB 88338, Atlanta, Ga. 30338.

SAVE 50%. CONSTRUCT SPEAKERS AND SAVE MONEY. SEND FOR FREE CATALOG AND INSTRUCTIONS. SPEAKERKIT, Box 12H, Menomonie, WI 54751.

SAVE ON SACRED COWS—BOSE, SAE, CAMBRIDGE, Sansui, Kenwood, Marantz, BIC, Dokorder, Sony, Thorens, Philips. Over 50 top brands. Write for quotes. SOUTHBOUND SOUND, P.O. Box 52508, Atlanta, Georgia 30305.

AUDIOPHILES WANTED!! Put your knowledge to use, earn an excellent spare time income. We need campus representatives to sell name brand stereo equipment at substantial discounts in your area. No Investment necessary. For information and application please write: ABCO, Dept. CR, 915 Grand Avenue, New Haven, Conn. 06511.

PROFESSIONAL HI-FI COURSE—Instructors include Len Feldman, Julian Hirsch, Larry Klein and Larry Zide. Home study course also available. Send \$1.00 for audio primer and full Information on Joining Society Audio Consultants (SAC), 393 5th Ave., New York City 10016, HF

HI-FI ENTHUSIASTS WANTED!! Earn more than just spare money in your spare time. We need campus representatives to sell name brand stereo components at discount prices in your area. High commission, no investment required. Serious inquiries only, please. Contact: Alan Weisberg, K&L Sound Services Co., 75 No. Beacon St., Watertown, Mass. 02172. (617) 787–4073.

DYNAKITS, DYNASPEAKERS—lowest prices, fastest service, large inventory. Underground HiFi Sales 324b Broadwater Road, Arnold, Md. 21012. (301) 647-0919.

PERFECTIONISTS*DYNAKITS. BEFORE YOU PUR-CHASE You Owe Yourself Our Quote. MAINLINE IIh. 971 Fronheiser, Johnstown, Pa. 15902.

BASF TAPE: Studio Series or CrO2 C-60—\$33/20; C-90—\$48/20; C-120—\$64/20. Low Noise/High Output C-60—\$26/20; C-90—\$38/20; C-120—\$64/20. Add shipping-5 lbs/20 tapes. INTERGALACTIC ENTERPRISES, 1047 Klrts, # 134, Troy, Michigan 48084.

"LOUISVILLE FIRST EDITION LPs-first 99, boxed, barely played, Offer, (213) 469-7752."

ELECTRONIC METRONOME. Loud as your present metronome yet shirt pocket size. All solid state construction, rugged and portable. Over 60 hours continuous operation from one 9 volt alkaline battery. Beat remains stable as battery voltage drops. Two dials in one make tempo selection easy and accurate. Penetrating sound, not a thump. Write for information or send \$14.95 for metronome, battery included. Connecticut residents add \$1.05 tax. Money back guarantee. Bambrough Laboratories Inc., 206 Cedar Hollow, Rocky Hill, Conn. 06067.

PROTECT YOUR RECORDS. Treat them like classics. Paper-vinyl LP liners, 18/\$3.00, 100/\$12.00, 500/\$50.00 shipped free. Cardboard jackets (glossy white)—\$:30/each plus \$1.50 shipping. QUASI-RATIONAL PRODUCTS, P.O. Box 171, Prospect Heights, III. 60070.

BIGGER DISCOUNTS ON RECORDING TAPE, Write M.A.D. REPROGRAPHICS INC., P.O. Box 532, Southfield, MI. 48075. (313) 559-6913.

LARGE STEREO/MONO RECORD COLLECTION FOR SALE. EXTENSIVE RECORDINGS FROM TOSCANINI, SZELL, REINER, OTHERS. CHILDRESS, 1430 Beaufort, Lexington, KY. 40502.

JOHN'S AUDIO SERVICE will recommend the system best suited for your taste and pocketbook. Send for free guide on how to buy a speaker and our questionnaire. Box 304, Bellerose, New York 11426.

NO GIMMICK! BUY COMPONENTS AT 50% DIS-COUNTS using highly Innovative purchasing methods. Fully legal. Request Free information packet. Stereo Cost Cutters, Box 8014B, Canton, Ohio 44711.

RADFORD

Order Radford direct from England! Immediate despatch by air of HD250 stereo amplifier, ZD22 zero distortion preamp, Low Distortion Oscillator ser. 3, Distortion Measuring Set ser. 3, speakers and crossovers. Send for free catalogues, speaker construction plans etc.

WILMSLOW AUDIO

Dept. Export H, Swan Works, Bank Square, Wilmslow, Cheshire, England.

miscellaneous

DIAMOND NEEDLES and Stereo Cartridges at Discount prices for Shure, Pickering, Stanton, Empire, Grado and ADC. Send for free catalog. All merchandise brand new and factory sealed. LYLE CARTRIDGES, Dept. H, Box 69, Kensington Statlon, Brooklyn, New York 11218.

SLEEP-LEARNING—HYPNOTISM! Strange catalog free. Autosuggestion, Box 24-F, Olympia, Washington 95801.

CONGRATULATIONS! YOU ARE NOW READING ONE OF HIGH FIDELITY'S best read pages! Use it yourself when you want to sell equipment, or a service, or want to let the avid music listener know about anything. High Fidelity Classified, 130 East 59th St., N.Y. 10022.

PROTECT YOUR RECORDS POLY SLEEVES for jackets & Roundbottom record sleeves 72 Poly Ilned paper sleeves 15¢ White jackets 35¢ Postage \$1.50. Record Supply House, Hillburn, New York 10931.

SEARCHING? WRITE DISContinued RECORDS, 216 NORTH ROSE, BURBANK, California 91505.

HOW TO BE A RECORDING STUDIO ENGINEER. A practical guide to get you rolling. \$6.95 postpaid. Attainment Books, Box 45333HF, Dallas, Texas 75245.

OFFICIAL PRESS CARD., BECOME CORRESPONDENT OF NATIONWIDE SYNDICATE. FOR PRESTIGE, DIS-COUNTS, CARD. SEND \$4.00. ARONS, BOX 6033-E, LAWRENCEVILLE, N.J. 08648

new equipment for sale

DON'T PAY THE HIGH MAIL ORDER PRICES. THIEVES WAREHOUSE OF TAMPA, 1531 SOUTH DALE MABRY, TAMPA, FLORIDA 33609.

DON'T PAY THE HIGH MAIL ORDER PRICES. THIEVES WAREHOUSE OF SARASOTA, 6564 GATE-WAY AVENUE, SARASOTA, FLORIDA 33581.

DON'T PAY THE HIGH MAIL ORDER PRICES. THIEVES WAREHOUSE OF FT WALTON BEACH, 652-D BEAL PARKWAY, N. W., FT. WALTON BEACH, FLORIDA 32548

DON'T PAY THE HIGH MAIL ORDER PRICES. THIEVES WAREHOUSE OF MOBILE, 1770 BELTLINE HIGHWAY, MOBILE, ALABAMA 36609.

"BUY DIRECT FROM ENGLAND. Save Money! B & O, Cambridge, Decca, Goldring, Gold Speakers, Jordan-Watts, KEF, Leak, Lowther, Ortofon, Revox, Rogerts, SME, Tandberg, Transcriptors, Wharledale. Price and shipping list free or send \$3 bills to include literature alrpost. Goodwins, 7 The Broadway, Wood Green, London, N.22. 6DU. Phone 888 0077. Visitors Welcome."

35% to 55% DISCOUNT ON PROFESSIONAL GUITARS, Amplifiers, P.A. Systems. Free Catalog. Carvin, Escondido, Calif. 92029.

DON'T PAY THE HIGH MAIL ORDER PRICES. THIEVES WAREHOUSE OF PENSACOLA, 3731 NAVY BOULEVARD, PENSACOLA, FLORIDA 32507.

DON'T PAY THE HIGH MAIL ORDER PRICES. THIEVES WAREHOUSE OF MONTGOMERY, 3386 NORMAN BRIDGE ROAD, MONTGOMERY, ALABAMA 36105.

DON'T PAY THE HIGH MAIL ORDER PRICES THIEVES WAREHOUSE OF ATLANTA, 3164 PEACHTREE ROAD, N.E., ATLANTA, GEORGIA 30303.

DON'T PAY THE HIGH MAIL ORDER PRICES. THIEVES WAREHOUSE OF ATLANTA, 4166 BUFORD HIGHWAY, N.E., ATLANTA, GEORGIA 30345.

DON'T PAY THE HIGH MAIL ORDER PRICES. THIEVES WAREHOUSE OF ATLANTA, 1030-3 CHEROKEE ROAD, SMYRNA, GEORGIA 30080.

DON'T PAY THE HIGH MAIL ORDER PRICES. THIEVES WAREHOUSE OF NORTH TAMPA, 1441 EAST FLETCHER AVENUE, TAMPA, FLORIDA 33612.

DON'T PAY THE HIGH MAIL ORDER PRICES. THIEVES WAREHOUSE OF ATLANTA, 2769 LAKE-WOOD AVENUE, S.W., ATLANTA, GEORGIA 30315.

D'ON'T PAY THE HIGH MAIL ORDER PRICES. THIEVES WAREHOUSE OF ATLANTA, 4162 JONES-BORO ROAD, ZAYRE CENTER, FOREST PARK, GEORGIA 30050.

CON'T PAY THE HIGH MAIL ORDER PRICES. THEVES WAREHOUSE OF ST. PETERSBURG, 9151 PARK BOULEVARD, NORTH LARGO, FLORIDA.

DON'T PAY THE HIGH MAIL ORDER PRICES. THIEVES WAREHOUSE OF PANAMA CITY, 5220 WEST HIGHWAY 98, SUITE D, PANAMA CITY, FLORIDA 32401.

FORMULA 4 PROFESSIONAL LABORATORY TONE ARM only viscous silicone damping with low effective mass (4.50 gm.) can ensure natural sound without 'llstening fatigue' enabling all cartridges to reach their 'Linear Region' of best performance. Jewelled Unipivot friction below 0.005 gm Stylus/pivot 224 mm. Bias control. VTF 0-3 gm. Reduced record wear. Leaflet \$1, deductible from purchase price \$99 including Airmall. Formula 4,15 Heather Walk, Edgware, Middlesex HA8 9TS England.

DON'T PAY THE HIGH MAIL ORDER PRICES. THIEVES WAREHOUSE OF BIRMINGHAM, 123 ROEBUCK PLAZA DRIVE, BIRMINGHAM, ALABAMA 35206.

DON'T PAY THE HIGH MAIL ORDER PRICES THIEVES WAREHOUSE OF ORLANDO, 1915 EAST CO-LONIAL DRIVE, ORLANDO, FLORIDA 32803.

DON'T PAY THE HIGH MAIL ORDER PRICES. THIEVES WAREHOUSE OF ATLANTA # 6, BELVEDERE PLAZA SHOPPING CENTER, 1203 COLUMBIA DRIVE, DECATUR, GEORGIA 30032.

HIGH FIDELITY CLASSIFIED

Continued

DON'T PAY THE HIGH MAIL ORDER PRICES. THIEVES WAREHOUSE OF KNOXVILLE, 5710 KINGSTON PIKE, KNOXVILLE, TENNESSEE 37919.

DON'T PAY THE HIGH MAIL ORDER PRICES THIEVES WAREHOUSE OF JACKSONVILLE 1239 ARLINGTON ROAD & LONE STAR JACKSONVILLE, FLORIDA 32211.

AMPEX TAPE. Ampex Audio Studio Mastering tapes, 631-641, 406-407, and "GRAND MASTER" in stock for Immediate shipment. Factory fresh. Best prices. Techniarts, 8555 Fenton St., Silver Spring, MD 20910 301-585-1118.

"DUBIE CD-5 RECORDING SYSTEM IS A MUST FOR the serious hobbyist" or anyone owning two or more recorders. DUBIE CD-5 allows you to be more creative in multiple taping, mixing, dubbing, and editing. Available at Olsen and Team Electronics stores for only \$59.95 or write Dubie, Route 4, Box 98, Stlgler, Oklahoma 74462.

DON'T PAY THE HIGH MAIL ORDER PRICES. THIEVES WAREHOUSE OF JACKSONVILLE, 6078 OLD STANDARD AND ACKSONVILLE, FLORIDA 32217

DON'T PAY THE HIGH MAIL ORDER PRICES. THIEVES WAREHOUSE OF MIAMI, 1756 S. W. 8th STREET, # 201 MIAMI, FLORIDA 33135.

SAVE UP TO 69% ON OVER 100 TOP BRAND AUDIO components from Carston Studios, New England's audio supermarket, one of the oldest mail order firms (est. 1962) and certainly one of the most reliable. All orders shipped from stocked warehouse. Send for price quote and price list. Carston Studios, Old Brookfield Road, Danbury, Connecticut 06810.

BRITISH AND EUROPEAN EQUIPMENT DIRECT TO YOU. CAMBRIDGE AUDIO. CELEF. CELESTION. CONDISSEUR. CHARTWELL (BBC MONITORS.) DECCA. FONS. IMF. KMAL. LECSON. LINN SONDEK. MONITOR AUDIO. QUAD. RADFORD. REVOX. SME. SPENDOR (BBC MONITORS.) SUGDEN. TRANSCRIPTOR. OTHER MAKES AVAILABLE. PRICE QUOTES FREE. BROCHURES SEND \$2.00. AUDIO T—DEPT. A, 190 WEST END LANE, LONDON NW6. PHONE 794-7848. VISITORS WELCOME

FRIED LOUDSPEAKERS (formerly IMF)—including the incredible Model H. Hear them at Underground Hlft Sales, 324b Broadwater Road, Arnold, Md. 21012. (301) 647-0919.

DON'T PAY THE HIGH MAIL ORDER PRICES. THIEVES WAREHOUSE OF MOBILE/VILLAGE SQUARE, 301 SOUTH CRAFT HIGHWAY, MOBILE, ALABAMA.

DON'T PAY THE HIGH MAIL ORDER PRICES. THIEVES WAREHOUSE OF BIRMINGHAM, 103 SOUTH 8th STREET, BIRMINGHAM, ALABAMA.

DON'T PAY THE HIGH MAIL ORDER PRICES. THEIVES WAREHOUSE OF CLEARWATER, 1502 A GULF TO BAY BOULEVARD, CLEARWATER, FLORIDA.

tapes & records

OPERA TAPES—DISCS OPEN REEL AND CAS-SETTES—historical performances of last 40 years—Unbelievable treasure and rarities—ALSO LP RECORDS. Ed Rosen, 66-33 Saunders St., Rego Park, N.Y. 11374.

FILM-STAGE SOUNDTRACKS, Large free list. A. Lutsky, P.O. Box 557342, Miami, Fla. 33155.

OLDER JAZZ SWING SOUNDTRACKS Lowest Prices, Lists. Box, 1138H, Whittier, Calif. 90609.

"SOUNDTRACKS, SHOWS & NOSTALGIA—free catalog & auction list—A-1 Record Finders, P.O. Box 75071-H, L.A., Calif. 90075."

.CUT-OUT RECORDS. HUGE STOCK. ALL NEW. No catalog. Cohn, 2205 Marylane, Broomall, Pa. 19008.

TAPES. CLASSICAL SINGERS, CONDUCTORS, Instrumentalists in live performance. Emphasis on Superior Sound. Catalogues. Good Sound Associates, PO Box 489, Planetarium Station, New York, N.Y. 10024.

RARE OPERA, SYMPHONIC MUSIC ON OPEN REEL TAPE. Historic performances. EUROPEAN, DOMESTIC. Free Catalogue. Underhill, Bellport, NY 11713.

TDK, BASF, Memorex, Maxell, cassettes, reels, 8-tracks, Lowest prices, guaranteed, new, S&S Audio, P.O. Box 56039, Harwood Heights, II. 60656.

SHOW ALBUMS—Rare, out-of-print LPs, 52-page list 50¢, Broadway/Hollywood Recordings, Georgetown, CT 06829

QUADRAPHONIC RECORDS AND TAPES—WORLD'S LARGEST SELECTION—ALL LABELS, OVER 1000 TITLES—at discount prices! For your free Illustrated quad catalog, write: SOUND CONCEPTS, Box 654-D, Peoria, Illinois 61601.

GOLDEN AGE RADIO—YOUR BEST SOURCE for radio tapes. Box 25215-J, Portland, Oregon 97225.

FREE FILMUSIC SOUNDTRACK CLASSIC BULLE-TINS, Words & Music, 108 N. Fourth, Las Vegas, Nevada 89101.

DISCONTINUED RECORDS, CLASSICAL, POPULAR, Lists. Steinmetz, One Seaview, Massapequa, NY 11758.

CURRENT 8-TRACKS FROM \$3,99! FREE CATALOG! Music Wholesaler, 1611 Capitol, Des Moines, Iowa 50316.

CASSETTES/LABELS

Plain white cassette labels. Norelco cassette Cleaners, Iamous brand cassettes. Send for open reel and **cassette** discount catalog.

1-9 10-99 100 1000 10M Cassette Labels 02 0.015 01 1005 Norelco Cassette Cleaner 65 60 55 50 45 10" Fiberglass used %" Hole 50 50 40 35 30 Plus Postage by Weight and Zone. Minimum Order \$5.00 **DPEN REEL STEREO TAPE BUVERS!**We've Gotthe "Spirit" The Prices And The Address To Prove It **SAUTONE'S BICENTENINIAL TAPE SHOPPE** 1776 Columbia Rd., N.W., Wash, D.C. 20009

OBSCURE PREVIOUSLY UNOBTAINABLE SYM-PHONIC MUSIC on tape: American, Russian, Scandinavlan, Others. Send for free list. Argus Enterprises, P.O. Box 1601, Lake Mary, Florida 32746.

Symphonic, Choral, Chamber Music, Rare Operas, from European broadcasts on Tape. Excellent sound. Catalog. Kerne, 5674 Linda Rosa, LaJolla, California 92037.

SOUNDTRACKS/OC, PERSONALITIES!—FREE NEWSLETTER! RTSH, 3700 Plaza, F-211, Santa Ana, California 92704.

MAX STEINER'S PRIVATE COLLECTION ON TAPE. REEL OR CASSETTE. OVER 130 DIFFERENT SCORES ON OVER 70 DIFFERENT TAPES. DEMO TAPE \$3.50 POSTPAID. MAX STEINER MUSIC SOCIETY LIBRARY, DEPT. HF, BOX 1274, KANKAKEE, ILLINOIS 60901.

MANY SUPERB OPERATIC TAPES BARGAIN PRICES. COMPLETE OPERAS, RECITALS, GALAS, FREE CATALOG FROM J.A. GEORGE BOX ± 140, HIGH FIDELITY, 130 EAST 59th STREET, NEW YORK, NY 10022.

LIEDER, OPERA, RARE OUT-OF-PRINT RECORDINGS. FREE CATALOGUE. VOCI, 9502 Erskine Drive, Huntington Beach, California 92646.

THE MARX BROTHERS in "A NIGHT AT THE OPERA"— The Original Soundtrack Recording On LP, Send \$6.00 + \$.50 Shlpping to Re-Sound Records, P.O. Box 874, Forest Hills, N.Y. 11375.

OLD RADIO PROGRAMS. FREE TAPE CATALOG. RADIO MEMORIES, BOX 714, NEKOMA, ND 58355.

OPERA, TAPES, RECORDS, BROADCASTS, "Ilve" pertormances, free list, SPECIAL MET BROADCAST HIS-TORY \$2.00. Hathaway, 49F Merbrook, Merion, Penna, 19066

PROTECT YOUR ALBUMS. WHITE CARDBOARD RE-PLACEMENT JACKETS 35¢. PLASTIC LINED INNER SLEEVES 15¢. POSTAGE \$1.25. RECORD BOXES AND 78 SLEEVES AVAILABLE. CABCO 301-2, BOX 8212, CO-LUMBUS, OHIO 43201.

LIVE OPERA TAPES. TREMENDOUS SELECTIONS. SATISFACTION GUARANTEED. FREE CATALOGUE. C. HANDELMAN, 34-10 75th ST., JACKSON HTS. N.Y.C. 11372.

SOUNDTRACKS, ORIGINAL BROADWAYS, PERSON-ALITIES, List 50¢. Checkered Door, 1 Falrview Ave., Wilmington, Mass. 01887.

LOUISVILLE ORCHESTRA, 108 records including Dallapiccola, Krenek, Sessions, \$500. (404) 252-3436, after 6 p.m. EST.

SEND FOR PRICE LIST ON NAME BRAND HI FI BUYS at super low prices! HI FI BUYS, PO Box 1157, Langley Park, MD 20787.

HISTORIC CLASSICAL (vocal, instrumental, orchestral) RECORDINGS—78s and LPs—reasonable prices. Send 25¢ for list. IMMORTAL PERFORMANCES, P.O. Box 8316. Austin. Texas 78712.

cabinets

QUALITY WOOD FURNITURE for your components in a wide selection of styles. Finished, unfinished, and kits. Sold in fine stores and direct. Send 50¢ for all new full color brochure . . . AUDIO ORIGINALS—546 S. Meridian St. "H" Indianapolis, Indiana 46225.

services

CROWN INTERNATIONAL. COMPLETE REPAIR, Overhaul and Rebuilding Service for current and early model CROWN tape recorders. Used machines bought and sold. Techniarts, 8555 Fenton St., Silver Spring. MD 20910 301-585-1118.

personals

DATES GALORE! Meet singles—anywhere. CALL DATELINE, toll-free (800) 451-3245.

disco

DISCOTHEQUES! ... FREELANCE SYSTEMS. INDEPTH REPORT. COMPLETE PHOTOS, DO'S & DON'TS, BOOKINGS, PERSONALITY, FORMATS, EQUIPMENT, ETC. \$5.00. "DYNAMIC UNO." BOX 8116 CORPUS CHRISTI, TEX. 78412.

wanted to buy

CASH FOR UNWANTED LPs AND PRE-RECORDED reel to reel tapes. Tapes, Hillburn Post Office, New York 10931.

business opportunities

STEREO REPRESENTATIVES NEEDED!!! LOWEST PRICE LIST BUYING!! OVER 100 BRANDS!! KRASCO, 623 Campbell Ave., West Haven, Conn. 06516.

Phone: 212-581-77	ng Dept. ew York, N.Y. 10022 77, Michael Littleford. ewing attached classi-
fied ad in the next	
Name Address	
City	
State	Zip
	nd Display, see schedule ACCOMPANY ORDER. prior to issue



The goal of most receivers is to sound like a good receiver. But when we set out to build the Toshiba SA620, we set our goals a little higher:

To sound like a separate tuner and amplifier.

We started at the bottom.

We began by building an amplifier. An amplifier strong enough to drive even the biggest speakers. Without strain. Yet clean enough to keep distortion to a minimum.

An amplifier with 50 watts minimum RMS per channel (both driven into 8 ohms speakers, from 20Hz to 20kHz, and only 0.4% total harmonic distortion).

And when we were through we had a sound quality that virtually achieves the sound of separates. But we were still only half way there.

Our engineers topped themselves.

Using the latest advances in audio technology, Toshiba engineers developed a tuner with specs and features good enough to stand up to separates.

A special high density Toshiba PCT-type IC ensures high IF stage performance and reliability. While our three, two-element ceramic filters and six stages of amplification give razor-sharp selectivity.

IHF sensitivity is rated at $1.8\mu V$. Conservatively. Selectivity an impressive 65dB. And signal to noise ratio a super clean 70dB.

If we didn't tell you it was one unit, you wouldn't know it.

Since our new receiver didn't sound like most other receivers, we decided it shouldn't look like them either.

So working closely with our engineers, Toshiba designers created our unique "double-decker" look.

Giving our new receiver the look of a separate tuner and amplifier. To match its sound.

You can afford a Toshiba Tuner/Amplifier.

Since every music lover has different needs, we took everything we learned from the 620 and applied it to a whole line of Tuner/Amplifiers.

So now everyone can have a receiver that looks and sounds like separate units. Without having to pay for separate units.

TOSHIBA
Toshiba America, Inc. 280 Park Ave., New York, N.Y. 10017









CIRCLE 42 ON READER-SERVICE CARD

"Marantz offers—in one speaker—both air suspension and ported design. It's the ultimate

in flexibility—and quality."

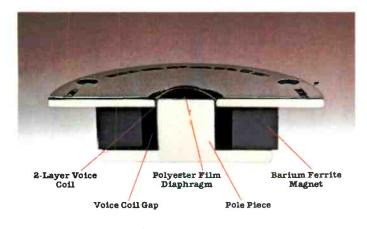
February, 1976:
Marantz engineers invited
audio experts to comment on the new
Marantz High Definition Speaker Systems.
The following remarks were taken
from that taped discussion:

44 It's one thing to design an acoustic air suspension system that will have low distortion. And it's another to design a ported system for high efficiency. But here, in one unit, Marantz offers the audiophile the best of both worlds.

Vari-Q*. Pull out the high density acoustic foam plug and the system becomes a tuned port reflex. Push it back in and the port is absolutely sealed and the speaker becomes air suspension.

MIt doesn't matter what kind of music the listener is into, either. Air suspension with the plug in is great for full orchestra, because it damps better and doesn't peak the lower frequencies. But when you listen to rock, pull the plug and you increase the low end efficiency. It pumps up the lows at about 75 Hz and really delivers that low end oomph."





Linear Polyester Film Dome Tweeter

*Another tremendous feature is the linear polyester film domes on the tweeters. The dome shape disperses high frequencies over a much wider area. And because the polyester film is so lightweight, it's more efficient.

It takes less power to do the same job. And they're practically indestructible. And higher efficiency means greater distortion-free accuracy in reproducing high-frequency transients.

We call them High Definition Speaker Systems. You'll call them the ultimate in flexibility and listening excitement. Five models in all (three with Vari-Q) ranging from the bookshelf-sized HD-44 with frequency response from 45 Hz to $18 \text{ kHz} (\pm 3 \text{ dB} - \text{all controls set flat})$ and power handling capacity of 60 Watts – to the super-powerful HD-88 with frequency response from 25 Hz to 25 kHz (±3 dB - all controls set flat) and power handling capacity of 300 Watts. Marantz High Definition Speaker Systems start as low as als choice today at your Marantz dealer. He's in the Yellow Pages.



© 1976 Marantz Co., Inc., a subsidiary of Superscope, Inc., 20525 Nordhoff St., Chatsworf, CA 91511. In Europe: Superscope Europe, S.A., Brussels, Belgium. In Canada: Superscope Canada, Ltd., Ontario. In the Far East. Marantz Far East, Tokyo, Japan. Prices and models subject to change without notice.

INNER BEAUTY

Brilliant new engineering for a bright new sound: KENWOOD RECEIVERS FOR '76



KEN NOOD introduces an all-new receive-line for '76 - six high performance new models, created in the KENWOOD tradition of engineering exce lence. The beauty of 'originalperformance' reproduction starts deep inside each new model. Big new power ratings enhance performance right down the line, but power alone is not the whole story. KENWOOD engineers have carefully concentrated on total performance, with a host of technical refinements: Direct-coupled output stages with pure complementary symmetry for better bass response and crisp transient response. New distortion-cutting circuitry in the all-important preamp for increased signal-to-noise ratio. Advanced new tuner design for greater sensitivity, better capture ratio. and full stereo separation throughout the frequency range. Plus KENWOOD's new uncluttered internal layout that minimizes wiring to maintain optimum signal-to-noise performance. Six new receivers—with an inner beauty all their own—are waiting for you at your nearest KENWOOD Dealer.

