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HIGH FIDELITY

OCTOBER 1977 \$1.00

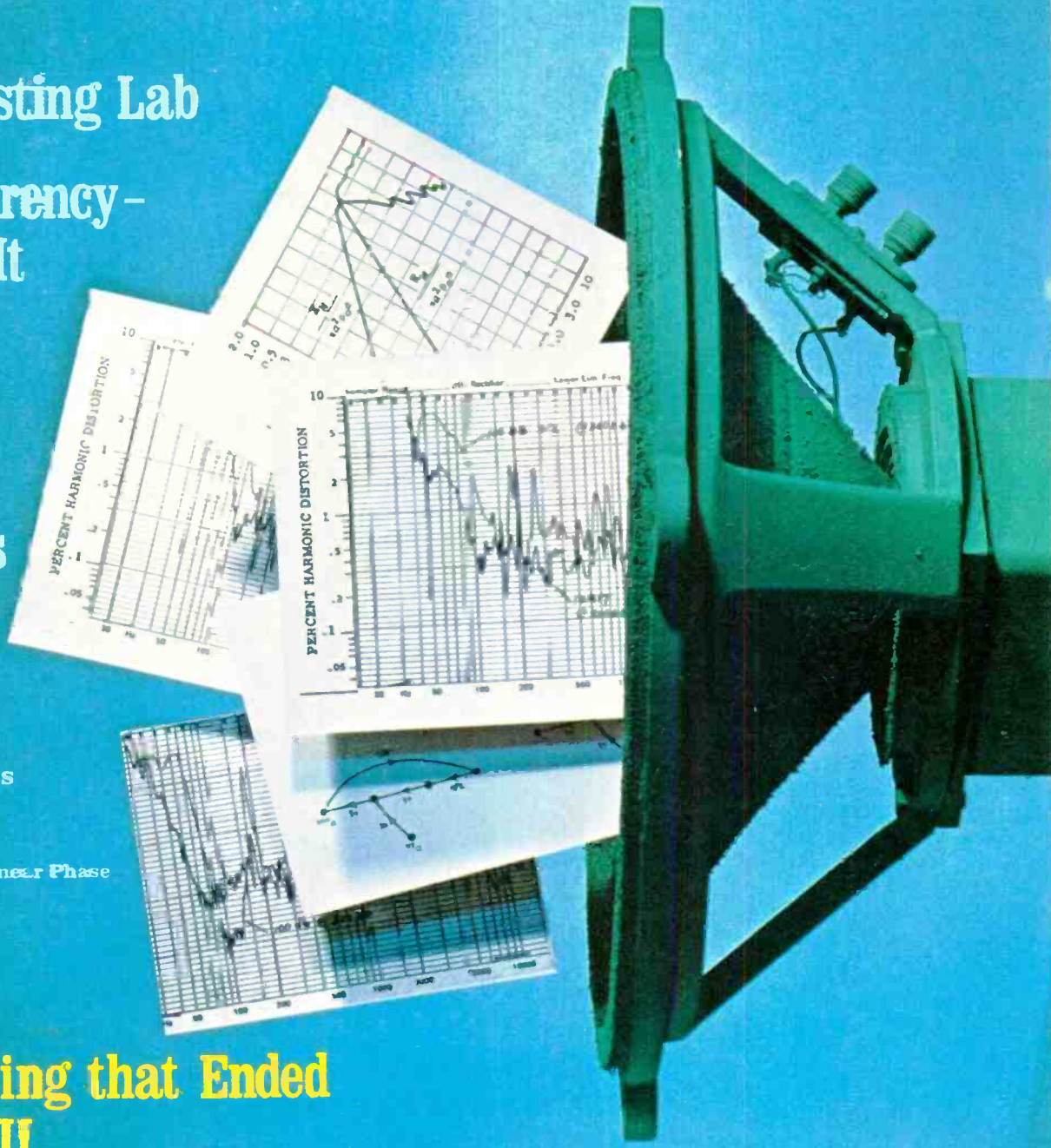
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SPEAKER ISSUE

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Speaker Testing Lab

Phase Coherency—
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Do for You?

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Transforms



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**The Recording that Ended
World War II**



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PIONEER

THE PL 570. UNDER \$400.*

The average quartz phase locked loop turntable plays records virtually perfectly, has no audible wow or flutter, is unaffected by voltage changes, and manages to accomplish all this for slightly under \$800.

The new PL 570, on the other hand, has all the same features, but with one distinct advantage: it costs less than \$400.*

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MORE ACCURATE THAN A QUARTZ WATCH.

In brief, the PL 570 works by using a quartz crystal that oscillates 180 million times a minute as a timing mechanism. The speed of our direct-drive platter motor is then "locked" onto that rate of oscillation—and constantly adjusted to account for things like heat, line voltage variations, and even the weight of the record on the platter.

The benefit of all this is simple: the PL 570 can run virtually forever with no variation in speed. In fact, it's so accurate, special measurements are needed to fully describe it. Something called "time drift" is a mere 0.0003%. A figure unsurpassed by the finest quartz watch that gains or loses up to ten seconds a month. And "thermal drift" is 0.00004%. Which means that while we can't guarantee just how well the PL 570 will play in your freezer, normal room and operating temperature variations shouldn't affect it at all.

In more mundane measurements, wow and flutter is 0.025%. Four times under what the human ear can hear. And even with the quartz phase locked loop off, the turntable speed is unaffected with stylus pressure of up to 120 grams. Which, by no small coincidence, is about 119 grams more than you'll ever apply.

FOR THIS KIND OF MONEY YOU SHOULDN'T HAVE TO LIFT THE TONE ARM.

Unlike any other quartz phase locked loop turntable, the PL 570 is automatic. So

you're spared the burden of lifting our tone arm. But this isn't your average tone arm return system. Or your average tone arm, for that matter.

Where most automatic turntables use one motor for both the platter and tone arm, the PL 570 has a separate motor for each. Which means that the action of the tone arm motor never interferes with the accuracy of the platter motor. And where most tone arms sense when to return by using cams and gears that lessen sensitivity and cause vibration, the PL 570 uses a light emitting diode that does neither.

Then there's the tone arm itself. It's fully adjustable. You can even set the vertical tracking angle of your cartridge with a height adjustment lever. And the whole unit is mounted in a 1/2 inch aluminum frame that not only looks nice, but helps your records sound nice by removing unwanted resonance.



The heart of the PL 570: a quartz crystal.

OTHER FEATURES NOT USUALLY FOUND ON "BARGAIN" TURNTABLES.

When we set out to build the PL 570, we wanted it to be a lower cost quartz phase locked loop turntable. Not lower quality.

So like the quartz turntables that sell for hundreds of dollars more, the PL 570 features an electric strobe circuit that eliminates normal voltage frequency variations so you can adjust the PL 570 perfectly. Plus a "quick down" circuit that lets you go from 45 to 33 1/3 almost instantly. And one piece monocoque construction that cuts howling caused by vibration.

At Pioneer, we've become number one today with people who care about music simply because we've always managed to take state of the art technology, and offer it with some consideration of the state of your wallet.

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CIRCLE 29 ON READER-SERVICE CARD

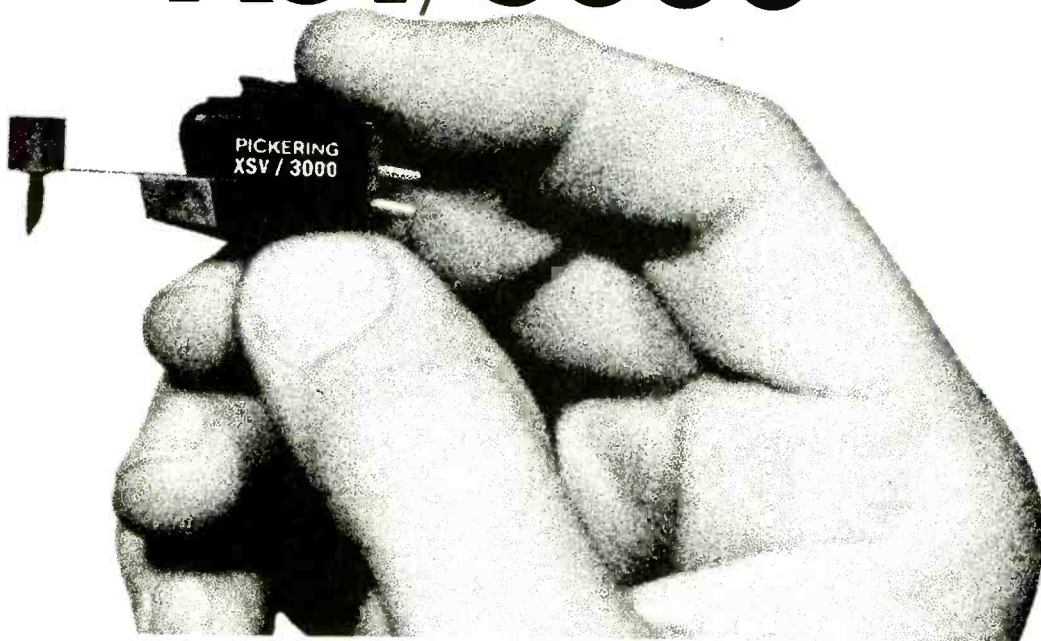
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The reviewers applaud as never before!

"... we don't see how you can do better at any price."
Hirsch-Houck Laboratories. Stereo Review. February 1977

"The new unit offers the stereo performance of the XUV/4500Q (or perhaps a little better than that) at a lower price. It seems hard to go wrong with such a combination."

High Fidelity. February 1977

"Congratulations to all concerned on a fine contender amongst the world's best stereo pick-ups."

John Borwick. Gramophone. United Kingdom 1977

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permits extremely low mass, and also offers high output. **Second**, this cartridge features the new Stereohedron™ stylus tip, a Pickering first! This extraordinary shape has a far larger bearing radius, which provides increased contact area in the record groove. This assures gentler treatment of the record groove, longer record life, and also, far longer stylus life.

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CIRCLE 44 ON READER-SERVICE CARD

HIGH FIDELITY

OCTOBER 1977 VOLUME 27, NUMBER 10

MUSIC AND MUSICIANS

- 19 Why Records Shouldn't Be Flat *John Culshaw*
- 22 Music U.S.A.: The Sinatra Phenomenon *Gene Lees*
- 58 Behind the Scenes
- 81 The Microgroove Era *painted by Jim Jonson*
- 91 Bach on the Piano? Why Not? *Rosalyn Tureck*
- 95 Lully's Operatic World *Paul Henry Lang*
- 97 Heinz Holliger: Now That's Charisma *R. D. Darrell*
- 131 Emerson, Lake & Palmer *John Storm Roberts*

EQUIPMENT AND INSTRUMENTS

- 30 News and Views
- 37 Equipment in the News
- 42 Too Hot to Handle
- 49 Equipment Reports
 - Technics SB-6000A loudspeaker system
 - KLH Model 355 The Baron loudspeaker system
 - Visonik D-50 loudspeaker system
 - EPI Model 200 loudspeaker system
 - ESS Tempest LS-5 loudspeaker system
- 64 Pathfinder: Frank McIntosh *Norman Eisenberg*
- 69 In the Speaker Testing Lab *Emil Torick*
- 74 Computer Technology Comes to Speaker Design
Harold A. Rodgers
- 76 The Great Phase-Coherency Bandwagon
Peter Mitchell
- 87 The Recording That Ended World War II
Faubion Bowers

- 135 Syndicated Radio *Jim Melanson*
- 139 Instruments and Accessories

REVIEWS

- 95 Featured Recordings
 - Lully's *Alceste* Heinz Holliger and Aurèle Nicolet
- 99 Classical Records
 - Abrevanel's Brahms Zimerman debuts in Chopin
- 100 Critics' Choice
- 112 Denon/Reference/Gale Recordings:
Art Weds Technology *Harold A. Rodgers*
- 129 The Tape Deck *R. D. Darrell*
- 142 Popular Records
 - Carole King Kiss Elvis Presley
- 167 Books
 - Tex Ritter Duke Ellington

BACKBEAT

- 131 Emerson, Lake & Palmer Insights: Syndicated Radio Input Output Record Reviews
Breakaway: The Rumour
Spinoffs: New Acts Books

ET CETERA

- 6 Letters
- 56 HiFi-Croctic *William Petersen*
- 118 Advertising Index
- 119 Reader-Service Cards



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HI-FI STEREO BUYERS' GUIDE, March-April, 1976

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TAPE DECK QUARTERLY, Winter, 1975

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HIGH FIDELITY, January, 1976

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COMING NEXT MONTH

If you are in the market for an FM tuner, do you know why the standard rule of thumb for judging most specs—"the higher, the better"—is not enough? In November, Edward J. Foster, continuing a series of articles that guide the uninitiated through our equipment reports, explains it all in **Interpreting FM Tuner Specs**. You also learn, courtesy of broadcasting-industry observer Robin Lanier, whether there's **New Hope for TV Audio**. And, thanks to Harvey Geller, you learn that Nathan Stubblefield—yes, Nathan Stubblefield—may have been **The Real Inventor of Radio**. Estelle Kerner takes us on **The Violinistic Odyssey of Nathan Milstein**, and in **BACKBEAT** Sam Sutherland covers the quite different odyssey of **Steely Dan**. Also: some off-camera insights into **Music on Television**; Gene Lees, John Culshaw, five test reports, and more.

SOLUTION TO HIFI-CROSTIC NO. 28

F[RANK R.] ROSSITER:
[Charles] Ives and His America

In *A Yale-Princeton Football Game*, Ives presented a musical picture: Bassoons were the "fat guards pushing and grunting," the trumpet was a "running halfback," and the crowd was brought in with songs of the two colleges. Naturally, the work was extremely dissonant.

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

High Fidelity and High Fidelity/Musical America are published monthly by ABC Leisure Magazines, a subsidiary of American Broadcasting Companies, Inc., Warren B. Sver, President, Herbert Kepler, Vice President, Photographic Publishing Division, Warren Tuohy, Vice President, Finance, Cathleen Alois, Assistant to the President, Member Audit Bureau of Circulation. Indexed in Reader's Guide to Periodical Literature. Current and back copies of High Fidelity and High Fidelity/Musical America are available on microfilm from University Microfilms, Ann Arbor, Mich. 48106. Microfilm copies of these magazines (1973 forward) are available through Bell & Howell Micro Photo Division, Old Mansfield Road, Wooster, O. 44691.

Editorial correspondence should be addressed to The Editor, High Fidelity, Great Barrington, Mass. 01230. Editorial contributions will be welcomed, and payment for articles accepted will be arranged prior to publication. Unsolicited manuscripts should be accompanied by return postage.

Letters

Bali Wha?

Being from that part of the world that John Culshaw writes about in "Bali Hoo!" [July], I would like to point out that the finest dances and good gamelan music were usually reserved for the rulers of Indonesia; they are traditionally performed in the kratons [roughly translated, hideaways] of the sultans. Consequently, if one wants to hear this authentic music and see the real dances, one must still seek them at the traditional places. The sultanate in Bali is hardly what it was in the late 1800s. More appropriate places would be the kratons at Jogjakarta or Surakarta.

Mr. Culshaw's expectations are a little like asking for the quality of the Metropolitan Opera or the New York Philharmonic on the beach at Miami.

Paul A. Elias
New York, N.Y.

The tourist only courts disappointment if he asks a Balinese taxi driver to take him to the evening's display of Barong, gamelan, or Ketjak dancing—as my wife and I found during a visit to the island two years ago.

Far better to sound out the local people, hire a motorbike, and head off inland for the true village ceremonies. Expect your hotel to be innocent of running water if you want to enjoy three days of wedding and funeral festivities, as we did in Ubud, miles from the coastal tourist centers.

Balinese music is intricately woven into the unique religious culture of this beautiful island. Small wonder, then, that the Balinese jealously preserve its true performance for authentic family occasions. Tapes that I made while eavesdropping on such events indicate (to me, at least) that their musical culture is no less healthy than it was when it fascinated Debussy and Britten. I've broadcast them in the past on the BBC and just recently on the CBC-FM network.

Keith Horner
Toronto, Ont.

Of Destiny and Mistaken Identity

Figure my chagrin to open the April issue of *HIGH FIDELITY* (my mail comes late, *naturellement*; frankly, I feel fortunate receiving it at all) and find [in "Rosa Ponselle Reminiscences"] a purported photograph of myself—together with a then popular Neapolitan tenor and a *parvenue* American soprano—in the 1918 premiere at the Met of *La Force du Destin*. Alas, *mon pote*, whoever may be the dim character skulking behind that farcical zarefa, it is not Léon Rothier! Perhaps this type is some furtive admirer of the lady? Doubtless we shall never be sure, for (as you, *copain*, will be the first to forgive my observing) even our anonymous subject would be hard put to recognize himself beneath the burden of so preposterous camouflage.

"Pleads for divine mercy," read the caption about our subject as Padre Guardiano. "Pleads for divine mercy," indeed! That vul-

gar gesticulation in the photograph would better serve to entice an unengaged *caleche* or a vagrant *cocotte*. Invoking the Maker is a solemn thing, unsuited to the arena-style of that epitomic nonentity. I should not have resented your conferring my identity upon the image of an *artiste*: of a Plançon, a Journet, or possibly, in a pinch, a Vanni-Marcoux. But upon that of a nondescript impostor who may even, for all I know, be some talentless gravel-voiced Spaniard of the sort of José Mardones?

Léon Rothier
c/o A.C. Hall
Dallas, Tex.

Figure our *chagrin* to consult the *Metropolitan Opera annals* and discover that indeed it is Mardones' visage that is obscured by that so preposterous camouflage. But in the interest of historical evenhandedness, we must dissociate ourselves from M. Rothier's somewhat intemperate artistic judgments at the same time that we offer our sincere apology for the error.

MXR Compander

Your evaluation of the MXR Compander in the article "Get the Noise Out of Your System" [July] has caused much concern on our part at MXR. We feel the recording and playback levels were improperly set during the evaluation, as indicated by the references to a "false brightness" added to signals without sufficient high-frequency content, tape saturation during "very fast transients," and the "relatively high noise level of the cassette" medium used during the evaluation.

Contrary to statements in the article, I feel one of the most beneficial uses of the Compander is in conjunction with cassette equipment, as evidenced by the intentional absence of high-frequency pre- and de-emphasis, and the Compander's price (about \$130). This high-frequency tailoring places more stringent demands upon the capability of the user's tape equipment; therefore, we opted for no high-frequency tailoring in our design of the Compander in an attempt to cover a wider range of applications. Another design requirement was that the cost of the noise-reduction device not approach or exceed the cost of the equipment it is benefiting.

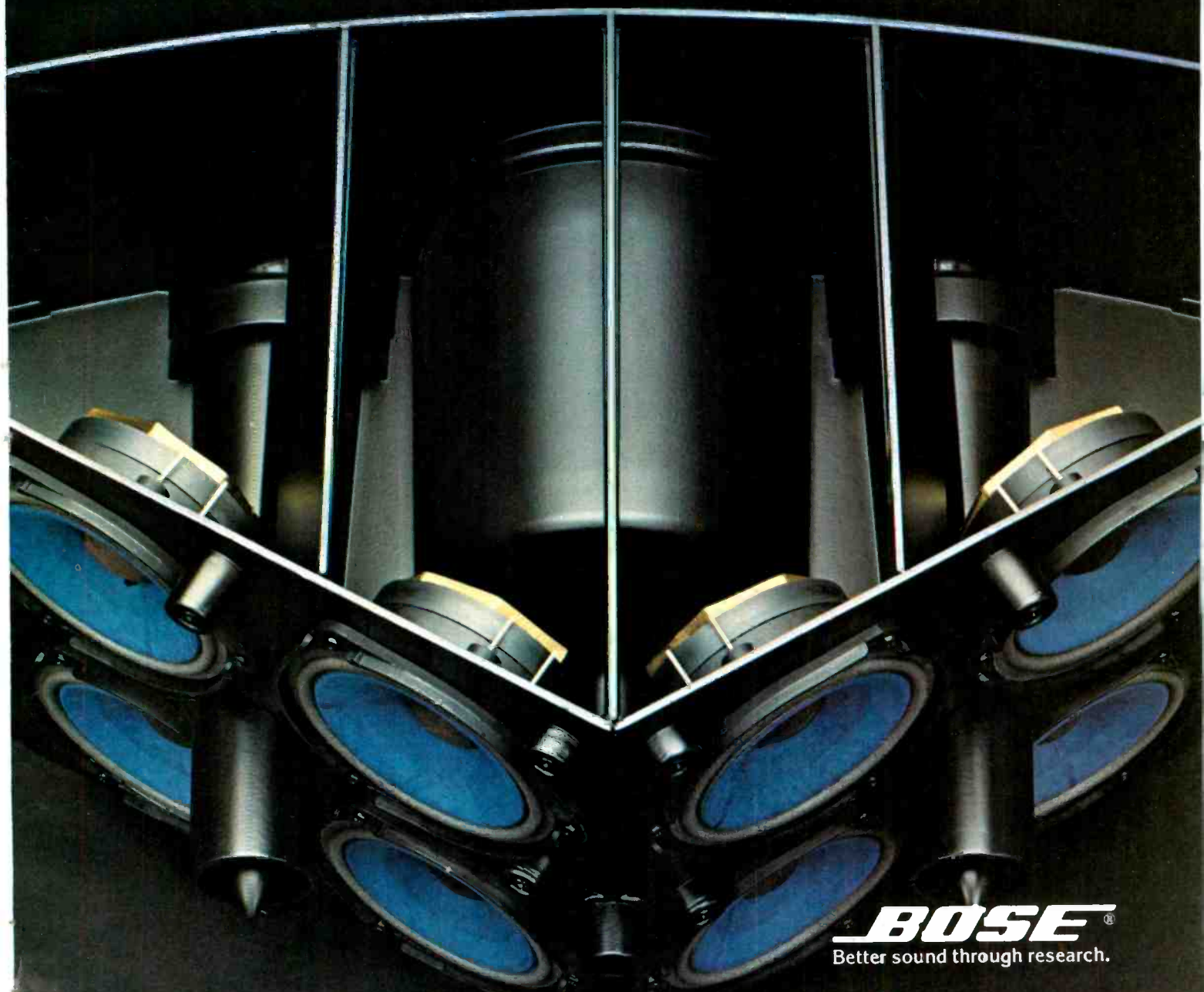
The reference to the lack of "convenience features" was interesting. There was no recognition of the fact that the Compander simultaneously compresses two channels and expands two channels, allowing continuous monitoring of the actual recording on three-head machines and eliminating the need for record-play switches on the Compander. The Compander has no bells, whistles, or unneeded flashing lights.

Richard Neatroux
Chief Engineer
MXR Innovations, Inc.

On the assumption that there may have been a malfunction in our first sample of the MXR—though the unit showed no obvious signs of it—we did further testing with another sample. The second sample, unlike the first, did not seem significantly slow in "grabbing" the fast transients. But it did, like the earlier sample, cause audible

No other speaker has ever looked like this, no other speaker has ever been built like this. And we believe no other speaker, regardless of size or price, can recreate the impact and feel of live music like the Bose 901 Series III.

It is a speaker unlike any other.



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In one page we cannot begin to describe the 901 Series III and the technology behind it. So we've put together a comprehensive literature package that includes a detailed 16-page color brochure, a 20-page owner's manual, and a copy of Dr. Amar Bose's paper on "Sound Recording and Reproduction," reprinted from Technology Review. To receive this literature, send \$1.00 to Bose, Dept. HF10, The Mountain, Framingham, Mass. 01701. Patents Issued and pending. Cabinets are walnut veneer.

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Here's why. *Frequency response of the main amplifier section of the AU-717 and AU-517 is from zero Hz to 200kHz (+0.0dB, -3.0dB). This ensures sharp, clean transients and greatly reduces the problems of phase shifts. Audible distortion has been virtually eliminated by reducing total harmonic distortion to an astoundingly low 0.025%.

Dual independent power supplies permit true stereo separation and provide a large power reservoir.

For uncolored phono reproduction, equalization is within ± 0.2 dB (20-20,000 Hz, extended RIAA curve). The calibrated-attenuator volume control adds another precision capability to these professional quality amplifiers.

The ample power of the AU-717 and AU-517 lets you fill your listening room with the outstanding musical quality that the amplifiers provide. 85 watts and 65 watts per channel, respectively, min. RMS both channels driven into 8 ohms from 20-20,000Hz with no more than 0.025% THD.

The matching TU-717 tuner is designed to fully complement the achievements of these amplifiers. Dual IF bandwidth lets you select for lowest distortion (0.07% mono, 0.09% stereo) or for maximum selectivity (80dB). Signal-to-noise ratio is excellent: 80dB mono, 77dB stereo.

In addition to their outstanding musical capabilities, these new Sansui matched separates are elegantly styled with rack mounting adapters to be pleasing to the eye. And they are most attractively priced. The AU-717 and AU-517 are less than \$450 † and \$370 †, respectively. TU-717, less than \$320 †. Look for them at your franchised Sansui dealer today.



A whole new world of musical pleasure.

a new standard Zero Hz to 200kHz.*

DC integrated amplifier available today.

When you listen to these brilliant new components, you'll understand why from today on the new Sansui AU-717, AU-517 and TU-717 will be the standards of excellence against which all other integrated amps and tuners will be measured.

*Approximate nationally advertised value. The actual retail price will be set by the individual dealer at his option.



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Introducing The Bose Model 601.



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The Model 601's unique configuration of six drivers—four tweeters and two woofers—spreads a balance of reflected and direct sound to every corner of the room.

From virtually any listening position, the sound is open and spacious, full of the feel and ambience of a live performance, and with none of the harshness so characteristic of conventional high-fidelity speakers.

The Model 601 is also highly efficient (minimizing amplifier power and expense) and exceptionally versatile (allowing superior performance in a wide range of speaker positions).

For a more complete introduction to the Model 601, visit any authorized Bose dealer or write for a full-color brochure to Bose, Dept. HF10, The Mountain, Framingham, Mass. 01701.



BOSE
Better sound through research.

"breathing" of the cassette tape hiss. Despite the Componder's increased dynamic range (by comparison to Dolby B) with steady-state signals, and working with what we would consider musical signals of normal dynamic variation, the noise (which can suggest brightness) via the MXR is, if anything, a little more apparent—at least in some passages and with some equipment.

FM Limiting

In "Ten Loudspeaker Shopping Tips" [June] readers are told not to use FM stations for evaluating speakers unless the stations are known not to "limit or otherwise process" signals being transmitted. Regardless of what they may say, 99.99% of all stations limit their signals with compressors, peak limiters, or clippers, or else they would overload their transmitters, distort, go off the air, or face FCC citation. FM pre-emphasis requires automatic devices to bring high-frequency transients under control in order to broadcast them legally. Luckily, the latest generation of audio processing equipment, like the Orban OPTIMOD, does this so well that much of the action is inaudible.

And if one is going to listen to FM radio with the speakers, it stands to reason that one should evaluate the speakers with FM radio! I can cite two personal examples: At one audio salon, I was given a speaker demonstration on a souped-up system using Sheffield records. What I heard bowled me over. But I asked to hear a few FM stations I knew and enjoyed so that I could tell what typical program material sounded like. At another store, the only classical discs were two incredibly scratched and mangled copies of Copland's Rodeo. I had to turn to FM to get a perspective on the differences between speakers.

Using FM stations to check for voice quality is also helpful. I tune in stations that appear to have natural-sounding mikes and announcers and listen for speakers with a tendency toward tubbiness or nasality.

Perhaps I am writing from an oasis in the broadcasting desert, but in the San Francisco Bay Area we seem to have many FM stations that are doing an outstanding technical job.

Stephen R. Waldee
San Mateo, Calif.

If you plan to listen only to FM, there's nothing wrong with using only FM signals in picking speakers. If you want to repeat at home the type of enjoyment you evidently derived from the Sheffield discs, however, you'd better make sure your speakers will also handle signals that are more demanding than FM—such as those from your own discs.

Reviewers Reviewed

I was very pleased to see a magazine finally give proper credit to one of the original geniuses of the modern record industry. I speak of Todd Everett's review of "Phil Spector's Greatest Hits" [June]. This album is a basic repertoire item that should be in every collection. Most of the popular music we hear today is either a slight modification of or a

variation on Spector's famous "wall of sound."

Paul W. Urbahns
Radcliff, Ky.

Jim Melanson's review of Emerson, Lake and Palmer's newest release, "Works" [July], prompts me to write. He says, "The idea of having members of a supergroup momentarily part ways on the same release is precedent-setting in itself." But in 1969, Pink Floyd released the legendary "Ummagumma," a two-record set. On the first disc, the group plays four cuts live in Cambridge, England. The second disc features one solo studio piece by each member of the band, plus an extra piece of multitracking genius by Roger Waters (bass, vocals, synthesizer,

spiritual leader of Pink Floyd) entitled "Several Species of Small Furry Animals Gathered Together in a Cave and Grooving with a Pict." (A Pict is a Scottish Highlands aborigine.)

Larry Rogak
Coral Gables, Fla.

Mr. Melanson replies: While I can appreciate Mr. Rogak's point, I still maintain that ELP's "Works" is precedent-setting. True, Pink Floyd members Roger Waters, David Gilmour, Nick Mason, and Rick Wright have a solo cut apiece on the studio portion of "Ummagumma"—produced by Norman Smith, whereas only the "live" sides were produced by the group. On the other hand, "Works" contains full individ-

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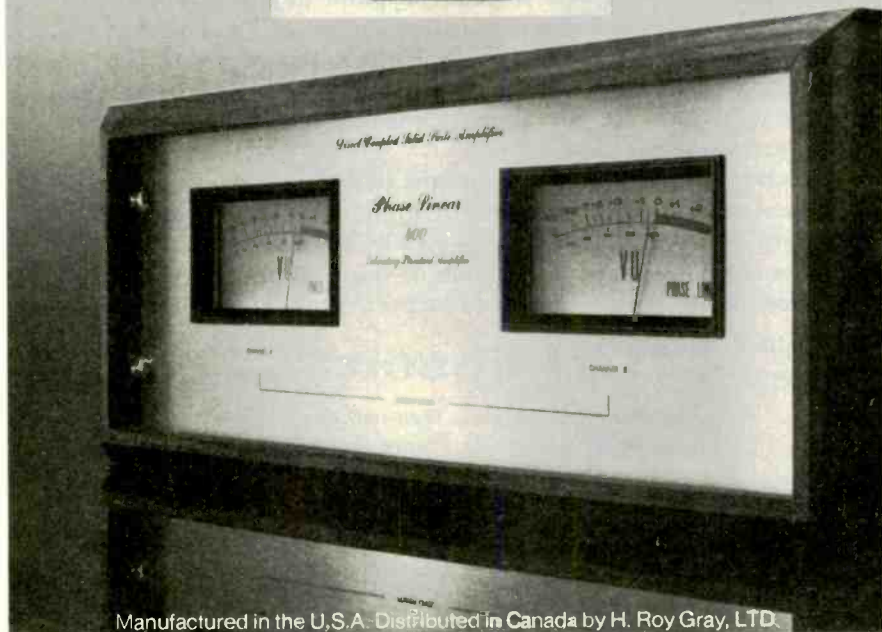
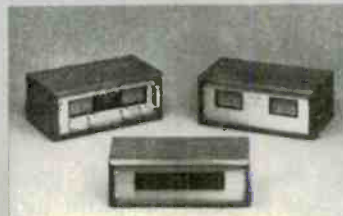
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ualized sides, virtually mini-LPs, by Emerson, Lake, and Palmer, each player having conceived and produced his own from start to finish. "Ummagamma" may or may not have been a source of inspiration; I don't know. But I wouldn't call it a precedent merely because of its solo cuts. "Works" broadens the age-old notion of a group player going solo to the point that structurally the result stands alone.

[John Storm Roberts provides a full-scale overview of ELP's career in BACKBEAT this month—Ed.]

Hubris or Criticism?

When Janet Baker is described as having

"severely limited" vocal resources [review of Bach arias, July] in a magazine that regularly praises Jan DeGaetani, one begins to wonder what you are listening to. Anyone who has heard Miss Baker sing in Carnegie Hall, the Coliseum, or the War Memorial in San Francisco—all large halls—would find such a wholesale condemnation ridiculous and insulting. This kind of lofty, inaccurate judgment is hubris, not criticism.

Stephanie von Buchau
Performing Arts Editor
San Francisco magazine
San Francisco, Calif.

Surely it is a temporary lapse, brought on by excessive spleen, that permits Ms. Von Buchau, a professional journalist herself,

to write of "a magazine that regularly praises Jan DeGaetani" and to wonder "what you [sic] are listening to," as if HF were a monolith with ears. In that region of each issue in which HF publishes signed reviews, it is merely a slate on which its contributors write. The resulting conglomeration of opinion is subject only to the dictates of factual soundness, good taste, and fair play; no strictures are placed on how praise and censure may be allotted. Kenneth Furie, who wrote the review Ms. Von Buchau quotes, hears Baker's vocal resources as "severely limited," an assertion he regards as objectively verifiable with evidence not even the artist's most perfervid fans would call into question. Others, could they offer data of a similar kind to support the opposing view, would be equally welcome in HF's columns, where their postulates and those of our music editor could exist in benign contradiction without raising any moral requirement that "we" take sides.

And who says a pinch of hubris isn't an ingredient of good criticism?

MHS Reclamation

Reviewer David Hamilton laments his inability to find a record, once on the Da Camera label, containing a performance of Hugo Wolf's Goethean disquisition on alcoholism, "Sie haben wegen der Trunkenheit" [June]. It is obtainable from the Musical Heritage Society as MHS 1868, which contains a number of other unusual Wolf items. It also suggests that singer Gilvan prefers to spell his name Raimund, as do the other Gilvan records I've encountered.

David M. Greene
Bethlehem, Pa.

David Hamilton replies: Mr. Greene is perfectly correct, and I suppose we must all learn to check the Musical Heritage Society catalog regularly, for it now reaches into virtually every corner of the repertory.

Viennese Light Music Society

In his "Tape Deck" column [June], R. D. Darrell discussed the Viennese Light Music Society, which produces cassettes of the great waltz kings, etc. Since that was written, we have been appointed agents for the Society on this side of the Atlantic. We are attempting to carry stocks of all the cassettes in this country for sale and to operate on a nonprofit basis. All revenues go into new recordings.

Membership is no longer required under this arrangement. The cassettes are priced at \$9.00 for one and \$8.50 each for two or more, postpaid. Most of the music is not commercially available. We welcome inquiries (as well as orders!).

John Johnston
K. C. Co.
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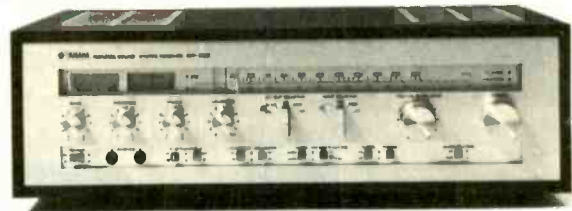


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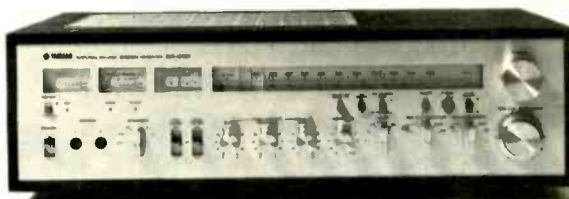
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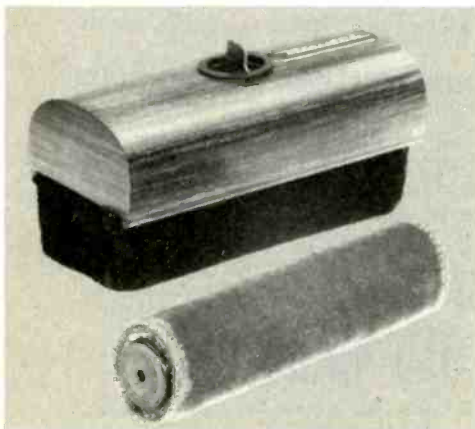


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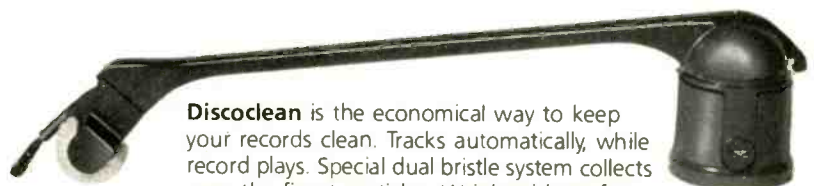


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Contributions (which are tax-deductible) or inquiries will be welcomed at the Foundation's address, 101 Station Rd., Irvington-on-Hudson, N.Y. 10533.

Werner Isler
President
Bruce Hungerford Memorial
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Irvington-on-Hudson, N.Y.

Posthorn Postscript

May I make a few further remarks about the posthorn part in Mahler's Third Symphony [March review and Maurice Abraham's comments on it, "Letters," June]? In the summer of 1970 I had the opportunity to help prepare the International Gustav Mahler Society's "Critical Collected Edition" of this work, and a lot of material from its archives was made available.

In the manuscript, the posthorn part was originally marked "trumpet," but this was scratched out and changed to "flugelhorn," as shown in the first edition. In Mahler's personal copy of the first edition, with retouches made in red ink, "flugelhorn" was changed to "piston" (cornet), but this in turn was scratched out in favor of the posthorn, the instrument designated in the second edition and, of course, also in the Society's version (Universal Edition), which represents Mahler's final intention.

Incidentally, the music for the posthorn is prudently cued into the first trumpet part.

Parks Grant
Oxford, Miss.

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Why Records Should Never Be Flat

by John Culshaw

LONDON—It is a pleasant experience to find one's own thoughts emanating from another mind, and a double bounty when the mind is that of an old adversary. In other words, welcome home, Conrad L. Osborne, for all is forgiven. Or, rather, *almost* all, for I have not yet closed the door behind him and may well find reason in the future to boot him out again.

Of course it is open to readers to conclude that Conrad and I have grown long of tooth and hard of hearing, for it is many years (it was 1968) since we joined in that glorious battle over my production techniques in London's recording of Richard Strauss's *Elektra*—a battle from which I emerged claiming total victory. (So, incidentally, and with typical impertinence, did he.) But some of his words concerning the CBS *Louise* (February 1977) force me to withdraw my fangs, bury my hatchet, and whatever else one does in the face of plain common sense. I quote from his review:

The recording ... is only fair by current standards, missing any real breadth or weight of sound. I do not at all care for the runny textures and strange balances of the street scene—the vendors' voices do not sound off, but only separate (the same is true of the supposedly distant chorus in Acts III and IV), the worst instance being that of the Carrot Vendor: The whole point is that he is crying out at the top of his lungs, but at a considerable distance, whereas he is clearly not more than two feet away, crooning. *All the staging here sounds like mixing, and it's pretty unconvincing [my italics].*

There are only two things slightly amiss with that statement. The first is that *Louise* is, on the whole, representative of current standards in operatic recording, and the second is that when Osborne writes about mixing he does not mean what is done during

recording, but rather reduction from multitrack to two-track afterward—which process is rapidly turning from the helpful adjunct it was meant to be into the blight of modern recordings, operatic or not. It makes for flat records. Not flat in pitch (which is mercifully rare) nor physically flat in relation to the turntable (which with advantage could have a higher incidence), but flat—utterly, boringly flat—in perspective. *Louise* is not the only victim. Both the recent versions of *Meistersinger* are flat in my sense of the word, and CBS and London have each achieved the impossible by flattening *Daphnis* almost out of recognition, although London confuses the issue by having shortly before produced a recording of Prokofiev's *Romeo and Juliet* with the same conductor and orchestra (Maazel/Cleveland) that is a model of what orchestral perspectives should be. Most RCA operas over the past few years have been as flat as the proverbial pancake, and the reason for all this is that producers are not using space any more. They record in one perspective and then attempt to "reduce" their multitrack to create a spatial effect; and the truth is, brethren, that it doesn't work.

I can think of a parallel from some twenty years ago when what is known as "panpotting" was introduced. No longer, I was told, need Tosca move in order to exchange intimacies with Cavaradossi; on the contrary, she could stay right where she was by her own microphone and be "panned" over to him. It worked, in the sense that her voice certainly traversed the space between them. The only trouble was that, instead of sounding like a woman heading toward her lover, it sounded like a man turning an electronic control; in other words, her disembodied voice floated uncannily

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across the sonic spectrum. I likened it to underwater opera, if you can imagine such a thing, with Tristan paddling down a forest stream to greet Isolde, or Amonasro backstroking up the Nile to intercept Aida and Radames. It was an easy but self-defeating way of avoiding a problem, for in stereo there is no point in moving characters at all unless a dramatic purpose is served.

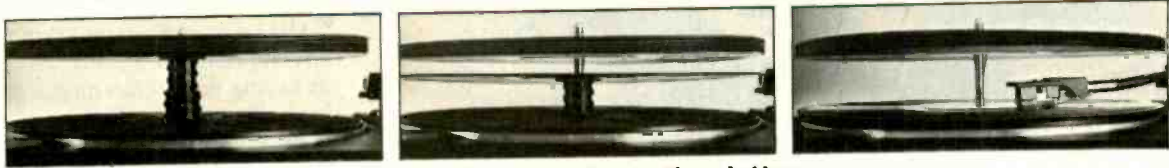
What Osborne noticed in *Louise* is the same canker in a much more advanced state. You need more from the trombones? Then don't be old-fashioned by doing anything so primitive as asking them to play a little louder, or slightly increasing the level on an appropriate microphone (which in terms of good sound may not be the one nearest to them), or placing them in a more advantageous position. No; all you do is to "pull them out" on track six (or whichever it is) at the reduction stage and then pop them back when they've finished. The fact that the result sounds dry, artificial, and flat seems to strike few of today's producers. The trombones are there, aren't they? You can hear them, can't you? Okay, then what's wrong? What's wrong is the texture, and the place within that texture of all the strands it comprises. I have said it before, and now Osborne has said it again (reference the *Carrot Vendor*), but it is still worth saying for a third time: There is all the difference in the world between a soft sound recorded close and a loud sound recorded from a distance. It is so utterly obvious that it hardly seems worth writing down, and indeed it would not be worth writing down were not so many producers ignoring it, month by month.

The word most frequently used by reviewers to describe this and associated phenomena is "congested," and a congested sound is exactly what insensitive reduction produces. It creates an apparent rather than a real space between orchestral sections, and choruses tend not to integrate with the rest of the sound. The fact is that nobody has yet invented a satisfactory way of conveying spaciousness by artificial means. A new version of the *War Requiem*, be it ever so multitracked and echo-plated, would not, I wager, compare with the Kingsway Hall two-track original.

But please do not misunderstand me or Osborne, for although we are united on this issue we are not reactionaries; we are not against multitrack per se any more than we are against microphones. We are simply against the misuse of multitrack and all the laziness and self-indulgence that such misuse implies.

No more "plop."

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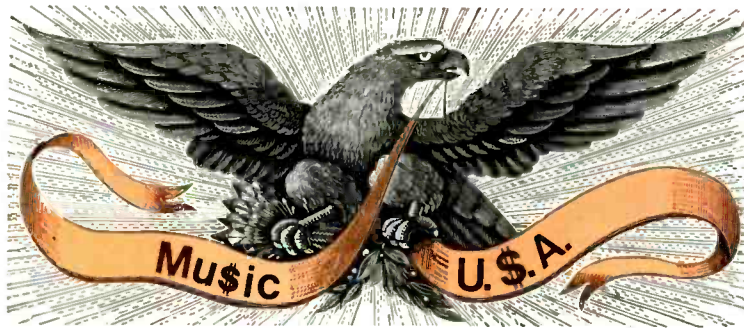
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*Price shown in this ad is approximate. Selling price is determined by the individual dealer.



ADC Accutrac® + 6
A BSR Company



9. The Sinatra Phenomenon

by Gene Lees

JUDGING FROM the testimony of many who knew him, Tommy Dorsey was a dyed-in-the-wool, 22-karat son of a bitch and probably the most implacable martinet in the band business. A superb instrumentalist himself, he would tolerate nothing but the best—he hired the best, then turned the screws on them to get every last drop of performance of which they were capable. That is one reason touchstones like "Well, Get It" remain among the great instrumental classics of the era.

Yet for all Dorsey's regimentation, his band was constantly on fire, as if burning with some great inner freedom. It was a band full of brilliance and of temperament, containing as it did at least two young men whose perfectionism, sense of self, willfulness, and short temper were equal to Dorsey's own. One was the virtuoso drummer Buddy Rich, who once threw down his sticks in the middle of a theater performance and quit. (He later returned.) The other was Rich's inexorable enemy (and, eventually, close friend), Frank Sinatra. Sinatra once punched Rich while on the job and also, it was said, hurled a pitcher of water at him.

But Sinatra had more than a bad temper, which of course was why Dorsey hired him away from the fledgling Harry James band. It should be noted that James encouraged this move, since the more famous Dorsey was able to do more for the singer than he could. Sinatra has never forgotten this gesture.

Also traveling with Dorsey in those days was the Pied Pipers. Many bands carried vocal groups, and some of them were vaguely embarrassing, with their doot-doot-doo-wah irrele-

vancies and nasal vocal production. But the Pied Pipers were not, partly because lead singer Jo Stafford, whose training had been operatic, had perfect intonation. Remembering those days, Stafford once told me, "Frank joined the band while we were playing a theater in Milwaukee. The Pied Pipers were—well, we thought we were pretty good, and we were a little clique. Frank was very thin, almost fragile-looking. When he stepped up to the microphone, we all smirked and looked at each other, waiting to see what he could do. The first song he did was 'Stardust.'

"I know it sounds like something out of a bad movie, but it's true. Before he'd sung four bars, we knew he was going to be a great star."

Three or four years later, when Sinatra had left Dorsey and girls were fainting (or pretending to faint) over his performances, newspapers and magazines hurried to interview sociologists and psychologists in hopes of eliciting explanations of the phenomenon. But the secret of Sinatra's success is simple: He was (and is) the best singer in the history of American popular music. He brought to the craft an unerring musicality, an analytical intelligence, and a deep dramatic instinct. One critic of the period scoffed that Sinatra sang popular songs as if he believed them. In this the man demonstrated his ignorance of how good much pop music had become, and an even deeper ignorance of the art of acting. In 1904, Lionel Barrymore wrote, in an analysis of what it takes to be a great actor, "Let the most profound, the most classic line fall from his lips, he must be unconscious of the fact that he is not the author of it." That's how Sinatra sang. He was a

great vocal actor, and every line he sang sounded as if he were making it up as he went along. This gave his work a compelling intimacy and immediacy, something like the acting a few years later of Marlon Brando or, perhaps even more, the late James Dean. No other singer had ever made lyrics so credible or so touching.

His art was much more studied than anyone realized. Sinatra is on record as saying that he learned a great deal from listening to Dorsey play trombone night after night on the bandstand. A report circulated during the first flush of Sinatra's success that he had learned an Indian trick of breathing in through the nose while continuing to sing. But no Indian ever achieved this physiological impossibility, and neither did Sinatra. In brass and woodwind playing, there is a rare technique (of which Clark Terry is a master) called rotary breathing. This entails filling the cheeks with air, closing the throat, and maintaining pressure on the embouchure while inhaling through the nose. Dorsey himself never mastered it. But he did have remarkable breath control, and his slow, deliberate release of air to support long and lyrical melodic lines was instructive to Sinatra. Dorsey would use this control to tie the end of one musical phrase over into the next. And Sinatra picked up the trick.

This is obvious in their 1941 recording of "Without a Song." Since the trombone solo precedes the vocal, one can observe the similarity of approach. At the end of the release, Sinatra goes up to a mezzo-forte high note on the words "as long as a song is strong in my soul." But he does not, as other singers would have done, breathe at that point; he drops immediately to a pianissimo and continues without interruption into: "I'll never know what makes the grass so tall. . . ." This linking of phrases gave Sinatra's work an apparent seamlessness.

On that same recording (available in a reissue album, RCA ANL 1-1586) one hears another of the Sinatra devices. The next time he sings "I'll never know," he hits an A on the word "know" before descending immediately to G, the proper note for the word. This device—a kind of appoggiatura—drove the adolescent girls wild. In fact it was adapted most directly from Dorsey's trombone work. Such "bends" are easy to make on the trombone and natural to the instrument.

Sinatra's voice at that time was a pure, rather sweet tenor. A year and a half later, when he recorded "In the Blue of Evening," he had already



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abandoned that almost bel canto purity, and Italian gravel was audible in the voice. His singing was acquiring guts. And his concern for enunciation already was evident. Actually, it had been there from the beginning, but in earlier recordings the well-shaped vowels sound consciously produced. By the time of "In the Blue of Evening," the vowels seem natural to him, part of his own accent. In singing, the vowels carry the sound; consonants are devices of articulation, something like tonguing or the movement of the valves in trumpet-playing. Sinatra was as meticulous about consonants as he was about vowels. His singing was notable for its unflinching clarity.

If he acquired technique from Dorsey, he acquired at least some of his ways of conceiving a song from Billie Holiday. Indeed, so did most of the best singers of his generation, including Peggy Lee—Sinatra's equivalent among women singers in interpretation. Holiday's records are something of a puzzle, at least to those who are not caught up in her mystique. She always gives me the impression of not quite knowing what she is doing. Musically unschooled, with a small, limited voice and a tendency to short phrases (in contrast to Sinatra's long phrases), she seems to be doing the natural thing because no one taught her the unnatural. Thus she phrased her songs not according to their musical structure, but according to the meaning of the words. Whether she did this by intent or accident, I do not know. But Sinatra did it by intent.

And something else contributed to his success: He understood the microphone like no singer before him. In the days when popular music was heard mostly in unamplified vaudeville houses, singers of necessity were "belters." Jolson came from that era. In the 1920s, the megaphone enabled band singers to produce a louder sound, but one that seemed to have been filtered through a box of soda crackers. When microphones came into use later in that decade, they were not very good, and singers weren't quite sure what to do with them. Some, particularly Bing Crosby, used them in a lazy and amiable way. Sinatra was the first singer to comprehend fully the advantages (and drawbacks) of the microphone. Journalists made sport of his manner of handling one, suggesting he held onto it to prop himself up. They failed to understand that he was working the mike—playing it like an instrument.

The microphone restored to singers the possibility of performing at a natural volume, rather than that necessitated by large theaters and opera houses. It did not make singing un-

natural; it restored naturalness to it. But—and this is little understood—the microphone is a treacherous instrument: It magnifies every flaw in a performance. It is difficult to use properly.

For example, the plosive consonants *p* and *b*, which pose no problem to anyone singing in an opera house or the bathtub, become booby traps to the singer working close to a mike. The burst of air released by these consonants can rattle the elements in the



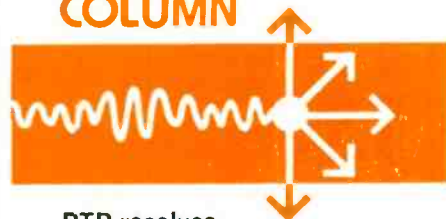
mike. Therefore a singer must approach them with care. Failure to do so results in a phenomenon called "popping the mike." You hear it on records—but never on Sinatra's.

Furthermore, the proper use of a microphone in good popular singing requires a constant moving in and out—backing off on loud notes, coming closer for soft. Of course, you must know, or feel, how far to move back. If you draw back too far, room sound—a tinny distant quality—results. Yet if you are not far enough away when singing a loud note, you can force the recording tape into overload distortion. An engineer can help the singer by compression, but the resulting sound is a little unsatisfying and unnatural. Sinatra shuns compression in recording, because he doesn't need it.

Sinatra's genius as a performer—and that he is a genius is virtually universally accepted within the profession—was not fully manifest until after he left the Dorsey band. With Dorsey, he had been required to sing at tempos suited to dancing. Freedom to explore a song as a dramatic miniature did not come until he made four sides for the Bluebird label, "The Song Is You," "The Lamplighter's Serenade," "Night and Day," and "The Night We Called It a Day." The arrangements by the late Axel Stordahl (who, with Paul Weston, had been a Dorsey arranger) may well be the first example of the skillful use of strings in popular music. With those four records, Sinatra became com-

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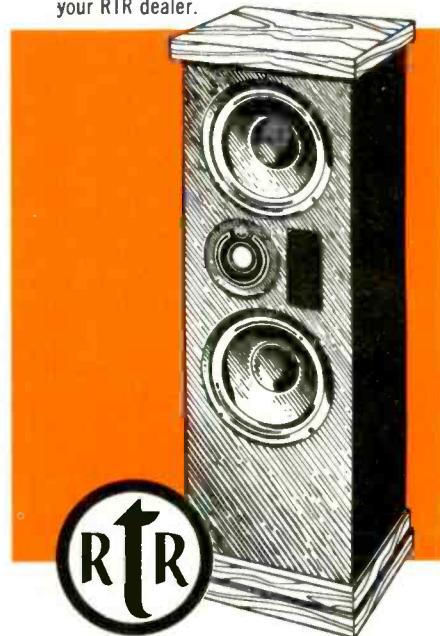
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pletely Sinatra. In later years, his work would mellow, deepen, and mature. But the conception and the method were fully developed by the time of those recordings.

From that moment on, Sinatra's success was such that the record companies rushed to get other band singers into the studio, including Billy Eckstine (dubbed, inevitably enough, "The Sepia Sinatra" by the press agents, though there was little similarity between their work) and the brilliant Sarah Vaughan, both alumni of the Earl Hines band; Jo Stafford; Doris Day from the Les Brown band; Perry Como from Ted Weems; Peggy Lee from Benny Goodman; Andy Russell from the Alvino Rey and early Stan Kenton bands; and Dick Haymes, who had followed in Sinatra's footsteps in both the James and Dorsey bands. Sinatra opened the way for all of them. And he influenced at least two generations of singers, including Vic Damone, Steve Lawrence, Matt Munro, Jack Jones, and one of the most sensitive and intelligent (and underrated) of them all, Julius LaRosa.

But in pioneering a new approach to singing, Sinatra also posed a problem. What he did seemed so indisputably right that any other approach to phrasing seemed wrong. If one phrased his way, one sounded obviously derivative. But what was the singer to do—not phrase for the meaning of the lyric?

Indeed, in the era of rock that followed and largely obscured or obliterated the achievements of the band era and the postwar period—the Sinatra era, as it were—that is precisely what singers began to do. And not only do singers now phrase in ways that violate the sense of the lyric, but the lyrics themselves are often written in violation of the inflections, phrase structure, and note-groupings of the melody. Much of the post-Sinatra pop music has been notable for its *lack* of naturalness.

What the band-trained singers had in common was discipline. Having worked so long within the iron strictures of dance tempos, most of them had excellent timing. It took care of itself, and freed from the limiting metric patterns of the bands they were able to explore singing as an art in itself.

And their recordings became music to listen to, not music to dance to, a shift in aesthetic priorities whose consequences could not be foreseen. It would be a contributing factor in the decline of the big bands. Ironically, the singers would help destroy the very bands that had nurtured them.

This is the subject I will consider in the next issue.

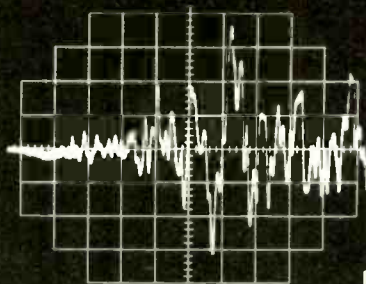
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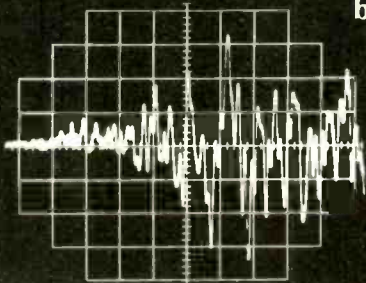
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Linear Ban Gets CB Industry Support

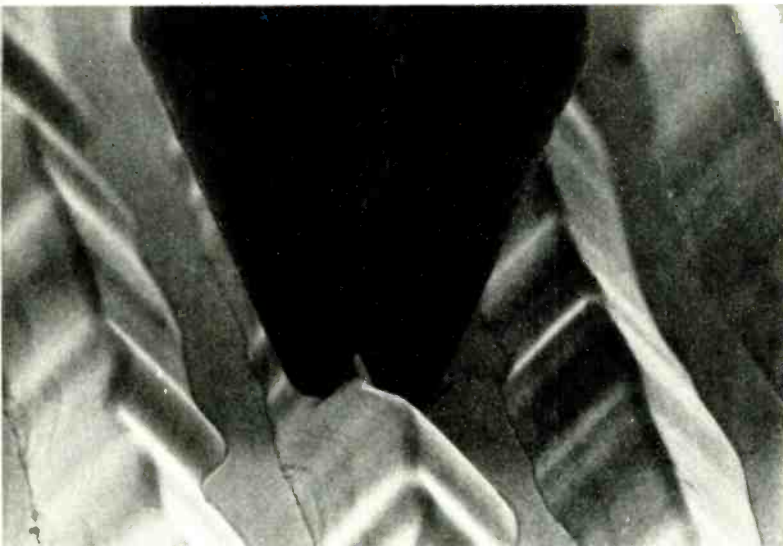
The Citizens Radio Section of the Electronic Industries Association recently filed comments with the Federal Communications Commission endorsing a proposed ban on the manufacture and marketing of "linear amplifiers." These add-on devices, which can increase the power of a CB transmitter from the legal 4 watts to 200 or more, are generally considered to be responsible for a large part of the CB-caused interference in home television receivers and audio equipment. In filing its remarks the EIA group noted that sales of such amplifiers to legitimate radio amateurs ("hams") are minimal and incidental. (Hams, with their higher allowable radiating power, can buy bigger basic transmitters and hence don't need the add-on power.)

We congratulate the Citizens Radio Section on its enlightened stand and number ourselves among those favoring the proposed rule. Cutting off these pestiferous devices at the source is indeed a welcome prospect—

provided that an illicit market is not permitted to develop. We note with some satisfaction that the first prosecution for making and selling linear amplifiers took place in Los Angeles earlier this year and resulted in a conviction. But it is not enough.

From where we sit, it looks like time for the FCC to show that it intends to enforce its rules and for Congress to give it the tools to do so effectively. Local law-enforcement agencies could help too—perhaps by observing vehicles and reporting any extra-beefy antenna, cables, or other evidence suggesting that an illegal transmitter is aboard to the FCC. While we are on the subject of antennas and the FCC, why can't the commission demand a power-handling limit (or even an integral, nonreplaceable fuse) for these components to thwart overmuscular transmissions?

It seems a truism that the direst penalty is no deterrent when the likelihood of apprehension appears remote. The commission has increased enforcement levels, but the effort still has the air of tokenism. Let's stop kidding around. If peaceful phonographs and untrammelled television for the great majority means the big stick for the outlaw, loud-mouth linear operators, then so be it.



Stanton Magnetics' Left-Handed Stylus

No, it doesn't require a tone arm suspended from a skyhook, and it doesn't connect to the preamp via six feet of shore line. It does, however, need a turntable that runs counterclockwise (the opposite of the usual rotation) if the music is to sound normal—and it has a serious purpose. Designed to work with a 681 Calibration series cartridge, the new 681-BPS styli are meant for direct playback of metal matrices and stampers, both of which are "negatives" of the final disc. (That is, they have ridges instead of grooves.)

The new stylus design makes it possible to check a matrix before the metal mother has been made from it and, similarly, a stamper without a test pressing. Thus time can be saved in record manufacture and quality improved in the final product. Model BPSR, which takes a tracking force of 3 to 7 grams, can be used to polish away small flaws that result from imperfect plating. For minimal wear to the matrix or stamper, the BPSM tracks at 1 to 1.5 grams. We suspect that the BPS styli (unlike other Stanton professional products that have achieved status in the home high fidelity market) will have virtually all of its application in the record industry.

For Collectors Only

It's astonishing what gets printed these days. Even ten years ago there was only a handful of dedicated souls publishing esoterica for the specific benefit of record collectors, but the numbers have grown manifold and the variety and reliability of the available materials increased

enormously in the interim. Partly, this is symptomatic of what has been happening in publishing in general; partly, it is an index of the degree to which the collecting of antique and arcane recordings has gelled into a recognized and relatively widespread pursuit—not just something occupying a few "nuts."

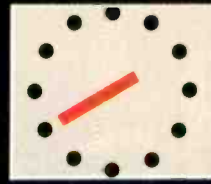
These thoughts are occasioned by our perusal of the



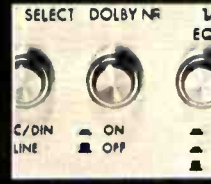
5 LED peak level indicators help eliminate distortion.



Long life Sen-Alloy head improves performance, reduces distortion.



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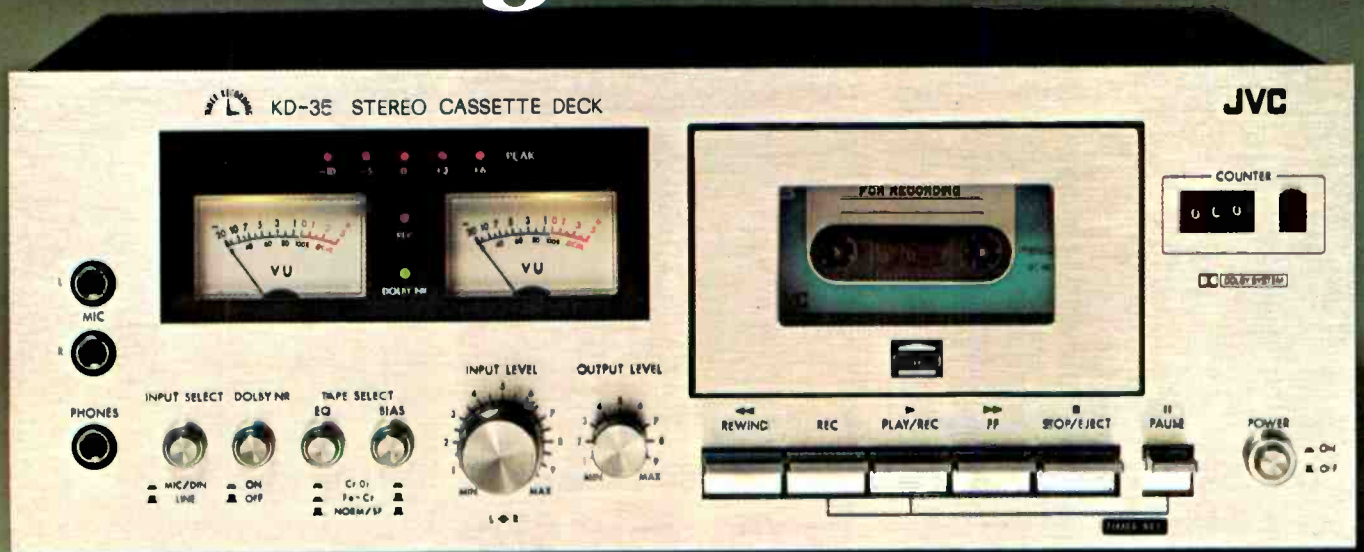


Dolby reduces tape hiss.



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No cassette deck can give you better performance without all these recording ingredients.



Most quality cassette decks look pretty much alike on the outside. So at first glance you might take the new JVC KD-35 for granted.

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Then there's JVC's exclusive Sen-Alloy head for record and playback. Designed to give you the best of two worlds, it

combines the truly sensitive performance of permalloy with the ultra long life of ferrite.

Of course, the KD-35 has many other features like Dolby, bias and equalization switches, and automatic tape-end stop in all modes. It's also possible to go from one operating mode to another without going through Stop. What's more, you'll never have to miss taping a favorite broadcast because you're not

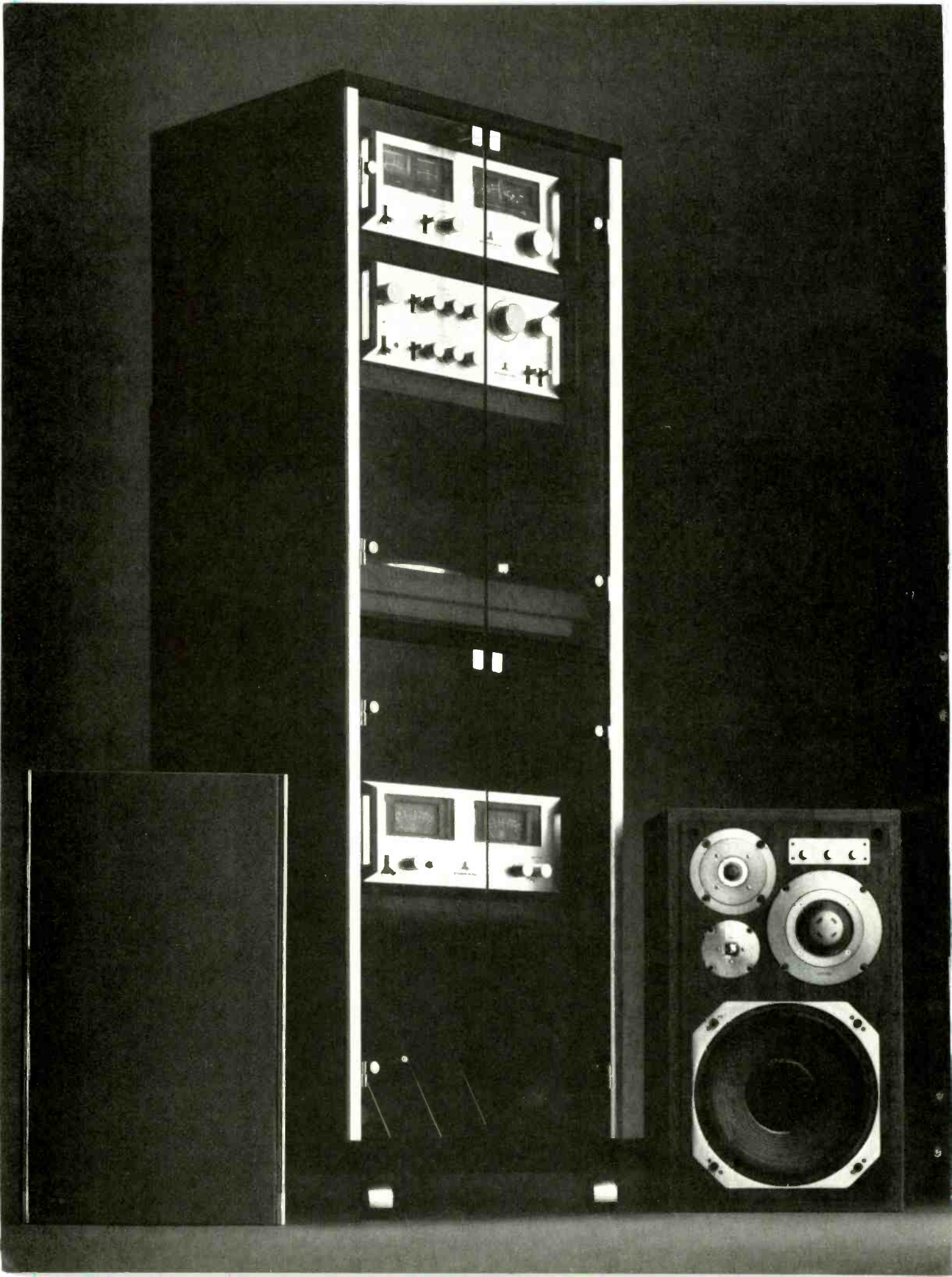
there; just connect the KD-35 to a timer and switch to automatic record.

And yet, with all this built-in capability, the new JVC KD-35 is priced just above the least expensive model in JVC's new cassette deck lineup. Just imagine what our top model is like.

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So, no matter how much you care to spend on alternatives, you simply cannot improve The System. You can only make it different.

Consider the loudspeakers, for example. You could substitute other legendary names in the speaker business. But none are so legendary as Mitsubishi, whose speakers are noted for superb design, meticulous construction and testing, and absolutely faultless response.

Or amplifiers. You could substitute others. But none would give you the 80dB inter-channel separation of the Mitsubishi dual-monaural amplifier in The System.

Or turntables. You could substitute something else. But something else wouldn't give you the benefit of our 3 years' exhaustive testing—covering all aspects of performance—that gave our Mitsubishi Logic Control Turntable its superb audio

quality and foolproof operation.

So, what all other names do for music, the one Mitsubishi name does for music. Without the time and trouble of collecting 7 different components from 7 different manufacturers with 7 different warranties to confuse you.

And since The System comes from one company, with one design philosophy and one standard of quality—it has to look better than any diverse assembly of components. (One Mitsubishi equipment rack is worth a thousand words.)

Still, The System isn't inflexible. You can tailor one to your needs, and your available funds. At prices ranging from about \$1,600 to about \$3,000.

Your audio dealer will be happy to audition all the possibilities for you.

All-Mitsubishi.

Or partly Mitsubishi, and partly alternatives.

And we think you'll agree. There aren't really any alternatives.



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

CIRCLE 34 ON READER-SERVICE CARD

*Introducing 3 new ways
to get the truth out of your
cassette deck.*



ER

REW



FF



STOP



PLAY



REC



ON



**The Master Series.TM
A Scotch[®] cassette for every
switch position.**

Three totally different tapes. Each developed to deliver the truest, clearest sound possible at each tape selector switch position.

Our Master I cassette is for normal bias recording. It features an excellent dynamic range, low distortion, uniform high frequency sensitivity and output that's 10 dB more than standard tapes.

Our new Master II replaces chrome cassettes and is designed for use on hi-fi stereo systems with chrome bias (70 microsecond equalization). It features some spectacular performance characteristics, including a special coating that gives it a 3 dB better signal-to-noise ratio at low and high frequencies than chrome cassettes, yet it's less abrasive.

Our new Master III is for the ferri-chrome setting. It's formulated with the most advanced technology available, giving a 3 dB output improvement at low frequencies and 2 dB at high frequency. And the unique dual layer construction increases both low and high frequency sensitivity over chromium dioxide and ferric oxides.

All this, plus unique inner workings you can actually see. Our new Master line has a special bonus feature. A precision molded clear shell that allows you to monitor the inner workings of the cassettes. You can actually see the recorder head penetration and the unique roller guides in action. Look closely at the transparent shell and you'll see the water wheels which were specially designed to move the tape evenly across the head, reducing friction and noise. And two radially creased shims insure smoother wind, improved mechanical reliability and reduced wow and flutter.

Enough said. Now it's time for you to take the true test. Match up the right Master cassette with the bias you prefer. Then just listen.

You'll find that whichever switch position you use, a Scotch[®] Master is the way to get the most out of it.

**Scotch[®] Recording Tape.
The truth comes out.**



PAUSE



Credentials Like These Are Worth Reading



When you're buying speakers, you want to talk specs. And we don't blame you. In fact, we encourage it. Because when you invest your good money in a pair of speakers, you want more than just a pretty cabinet.

Consider the new Jensen Spectrums. These good sounds didn't just happen. They're the result of extensive engineering efforts and exhaustive testing. Testing that ranged from exacting measurements in laboratory "live" rooms and anechoic chambers to in-depth consumer surveys.

Examine our Spectrum Model 540. It's an excellent example of the superb specs you'll find throughout the Jensen Spectrum Series.

The Spectrum 540 is a 3-way, 4 element system that is so efficient it can be driven with as little as 10 watts continuous power. Its maximum power rating is 75 watts continuous.

The woofer is a 12" long-throw, high compliance design. Special acoustic suspension and infinite baffle enclosure give you extremely low distortion. And a high temperature voice coil affords high power handling. Magnet structure weight is a hefty 4½ lbs. with a Gap Flux Density of 10,000 Gauss.

Two 3½" cone midranges give excellent power handling and eliminate break-up in the critical midrange region. Tuned isolation chambers control response at the low end of the midrange spectrum. They also provide acoustical isolation in the cabinet between the midranges and the woofer. An edge damped rim suspension with specially treated molded cone offers sharp, clear, midrange reproduction.

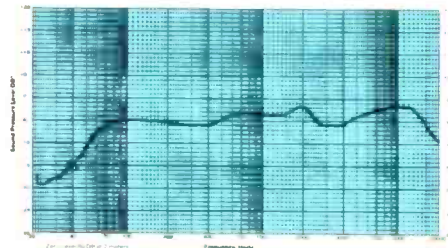
A 1½" Mylar® rear damped hemispherical dome tweeter offers a disper-

sion of 170°. Its large, lightweight voice coil gives high power handling, yet maintains a low mass for good high frequency reproduction.



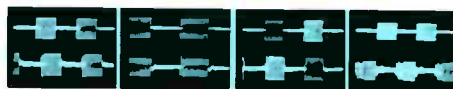
Tweeter and midrange controls allow you to adjust your Spectrum System to room conditions and listening preferences; controls are front mounted for convenience, continuously variable, calibrated in db attenuation from a maximum, or flat, response.

FREQUENCY RESPONSE



About as flat as you can get... and that's good. The Frequency Response Range is an admirable 25 to 25,000 Hz.

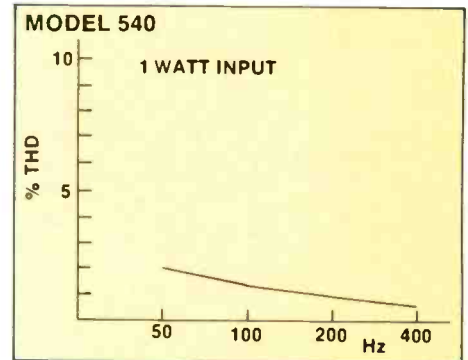
TONE BURSTS



"Blurring" and "Overshoot" are reduced to a minimum in this acid test of transient response. The Spectrum 540 re-

produces each waveform accurately with low distortion.

TOTAL HARMONIC DISTORTION



Distortion is kept to a minimum in Jensen Spectrum Speaker systems.

The cabinet is built with solid walnut front moldings and walnut veneer on wood composition panels. All walnut surfaces are hand rubbed for a rich luster and beauty. The baffle is finished in an attractive, durable black pebble grain.

In short, Jensen Spectrum speakers aren't designed to put out the most amount of bass or the most amount of treble. They're designed to put out the right amount. We consider them to be the best speakers we've produced in 50 years. Simply because when it comes to sound reproduction, they're extraordinarily accurate. And that's what specs are all about.

For further information and name of your nearest authorized Spectrum Dealer, write to: Jensen Sound Laboratories, Dept. HF-107, 4136 United Parkway, Schiller Park, Illinois 60176.

JENSEN

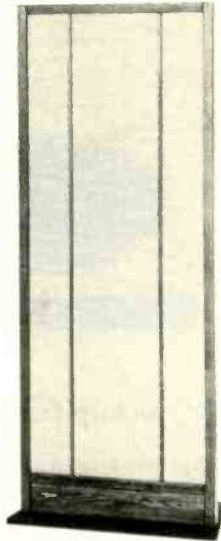
SOUND LABORATORIES

Division of Pemcor, Inc. Schiller Park, Illinois 60176

1977 *Kastlemusick Directory for Collectors of Recordings*. It costs \$12.50 for the forty-odd-page directory plus a supplement. This may seem a bit steep, but considering the limited market and the work involved in preparing the contents—plus the difficulty of obtaining its information elsewhere—it is not at all unreasonable. It identifies listees as private collectors, stores, mail-order houses, and so on, and gives a brief resumé of the special interests of each (such as out-of-print operatic recordings, Edison cylinders and discs, old radio material, new-release LPs of Moravian

music). An index covers the more "special" of special interests. There also are listings of publications and associations.

It's easy to pick holes in such a project, and we have found some. But for a first edition (which it seems to be—we trust there will be more) it strikes us as an eminently competent job. The wonder is that it ever got published at all, and we're glad it did. (If you're interested, *Kastlemusick* is located at 170 Broadway, Suite 201, New York, N.Y. 10038.)



Equipment in the News

Magnepan adds to speaker line

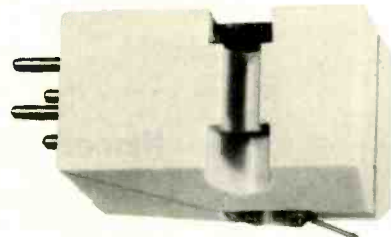
Recently added to its line of two-way Magneplanar speakers is Magnepan's MG-I. Its midrange/bass radiating area is 500 square inches, the tweeter radiating area 85 square inches. Although minimum recommended power is 40 to 80 watts (16 to 19 dBW), the MG-I is said to be capable of handling up to 200 watts (23 dBW). Frequency response is rated at ± 4 dB from 50 Hz to 16 kHz, impedance at 5 ohms at any frequency. The MG-I comes in an oak frame and is priced at \$495 per pair. Also new is the MG-III, priced at \$895 per pair.

CIRCLE 134 ON READER-SERVICE CARD

Denon cartridge from American Audioport

Denon phono cartridges are for the first time available to the U.S. retail market, through American Audioport. The DL-103s, a moving-coil cartridge, has a modified Shibata stylus and is designed for high compliance and low tracking force. Typical frequency response is said to exceed 20 Hz to 45 kHz. Output is rated at 0.3 millivolt (for a 1-kHz groove velocity of 5 centimeters per second) into 40 ohms and channel separation at better than 25 dB at 1 kHz. The price is \$180.

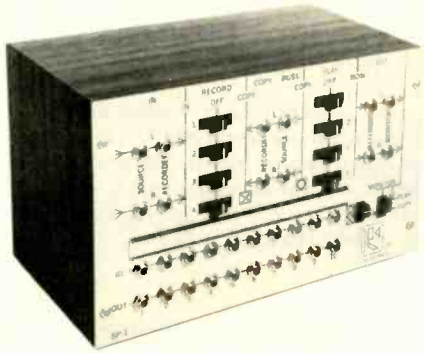
CIRCLE 135 ON READER-SERVICE CARD



A domesticated power amp from BGW

The new Model 410 amplifier from BGW, intended for home rather than professional use, produces power rated at 200 watts (23 dBW) per side into an impedance of 8 ohms. Front-panel averaging output indicators consisting of ten-element LED displays are provided for left and right channels. Other features include a three-position (-20, -10, 0 dB) indicator-sensitivity switch, gain switches, and sophisticated protection circuitry for the speaker and the amplifier itself. Frequency response is rated 20 Hz to 20 kHz, +0, -0.2 dB, with no more than 0.05% total harmonic distortion at any power level. The Model 410 costs \$699.

CIRCLE 136 ON READER-SERVICE CARD



Russound's new switching and patching center

The SP-1 is a stereo control center designed to cope with multiple noise-reduction systems, graphic equalizers, and other signal-processing devices. It plugs into a stereo system's tape-monitor in/out jacks; its own tape-jack array will handle up to four decks. Dubs can be made with or without noise reduction, equalization, or other outboarded signal processing. The SP-1, with twelve patch cords and a 22-page booklet on patching techniques, retails for \$149.95.

CIRCLE 137 ON READER-SERVICE CARD

Garrard turntable features Delglide system

The Model GT-35 turntable incorporates Garrard's proprietary Delglide (named for its use of the self-lubricating plastic, Delrin 500), a system that controls all automatic functions and is said to be extremely smooth and precise in operation. The belt-driven GT-35 can be used in multiple- or single-play format and is powered by a servo-controlled DC motor. It comes with its own lightweight tone arm and has an LED stroboscope and pitch controls. The turntable, in a rosewood base, costs \$199.95.

CIRCLE 138 ON READER-SERVICE CARD



"State-of-the-art" pickup from Micro-Acoustics

Micro-Acoustics' new top cartridge, the 530-mp, is designed for use in state-of-the-art systems. Its Micro-Point diamond stylus is an analogue of Micro-Acoustics' recording styli and thus, according to the company, has exceptional tracing and transient capabilities. The cartridge uses a direct-coupled electret transducing system with a built-in microcircuit. Supplied with each unit is a graph showing its frequency-response curve. Rated response is 5 Hz to 20 kHz, $\pm 1\frac{1}{4}$ dB, with a tracking force range from 0.7 to 1.4 grams. The 530-mp sells for \$200.

CIRCLE 139 ON READER-SERVICE CARD

New paragrafic equalizer

Audio and Design Recording's Model E-950 equalizer combines parametric and graphic equalizer functions in one 19-inch rack-mount unit. The system may be used as a 12-section mono or two 6-section stereo equalizers. The slide faders offer ± 14 dB of equalization. A knob beneath each fader permits its center frequency to be varied over a four-octave range. Individual bandwidths are adjustable for a "Q" between 0.6 and 8.0. The equalizer features balanced inputs and outputs and will handle levels in excess of +24 dBm. It costs \$1,190.

CIRCLE 140 ON READER-SERVICE CARD



Philips' two-way speaker

Model AH-475 is the third dynamic speaker from Philips High Fidelity Laboratories. This two-way model has a 1-inch dome tweeter and an 8-inch woofer. The speaker, with an 8-ohm rated impedance, is said to handle 40 watts (16 dBW) and has a rated frequency response of 40 Hz to 20 kHz. The baffle panel is finished so that it may be used with or without the grille. The AH-475 comes in a walnut-grain vinyl enclosure and sells for less than \$110.

CIRCLE 141 ON READER-SERVICE CARD

WOW!

and other comments by stereo critics about Ohm loudspeakers.

Comments about the Ohm C2.

"Surely, all things considered, the design of the OHM C2 represents a fine achievement. With classical music its performance is adequate with something to spare. And with popular music — wow!"

High Fidelity - Nov./1976

Comments about the Ohm F.

"In our simulated live-vs-recorded test it rated A to A+. The sound began to warrant the use of such words as 'awesome'. The low bass, too, was extraordinarily clean and powerful. The Ohm F achieves state-of-the-art performance."

Stereo Review/November 1973

"The Ohm F's are in a class by themselves. The sound is most unusual inasmuch as it is complete, full, natural and transparent. The bass reproduction is clean and perfect."

*Hi-Fi Stereo
(Published in Germany)
October/1974*

"It may well be the finest speaker on the market and is certainly without a doubt among the top few."

*The Complete Buyer's Guide
to Stereo/Hi-Fi Equipment/1977*

Comments about the Ohm H.

"Ohm managed to get prodigious bass response out of a small box without sacrificing efficiency. The high end is handled by conventional drivers and is everything one might ask from a speaker. Dispersion is excellent and the overall sound quality is exemplary."

*The Complete Buyer's Guide
to Stereo/Hi-Fi Equipment/1977*

Comments about the Ohm D2.

"The OHM D2 is designed to provide the identical response as

the C2, sacrificing only the ultra-wide high frequency response of the latter."

*The Complete Buyer's Guide
to Stereo/Hi-Fi Equipment/1977*

Comments about the Ohm L.

"The upper mid-range and high frequencies were virtually perfect."

"In summary, the OHM L... is easily good enough to meet the sort of critical standards usually applied to much larger and considerably more expensive speaker systems."

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Publishing Company. Reprinted
from Stereo Review, June 1977, by
permission. All rights reserved.*

Comments about the Ohm E.

"Let me assure you, it handles Chopin and pretty well anything else from accordion to zither with equal dexterity. For anyone looking for 'just an ordinary speaker' at a modest cost as Hi-Fi speakers go — this could be it."

*Canadian Stereo Guide/Winter
1974*



Ohm

You can get a free 28-page brochure and complete reprints of Ohm reviews at any Ohm dealer, or by writing us at:
OHM ACOUSTICS CORP., 241 Taft Place, Brooklyn, N.Y. 11205

CIRCLE 39 ON READER-SERVICE CARD



New amp/preamp combination

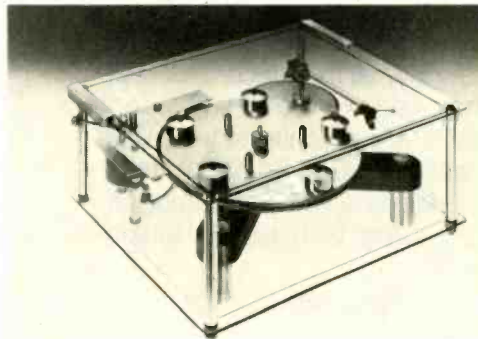
Professional Systems Engineering is now marketing a matching preamp and power amp, designated Studio One and Studio Two, respectively. The preamp, a multiple-stage phono model of discrete Class A design, contains a switchable shelving equalizer. Total harmonic distortion is claimed to be 0.01% whether the equalizer is switched in or out. The Studio Two power amp is rated at 19 dBW (80 watts) with less than 0.04% THD into an 8-ohm load from 20 Hz to 20 kHz. It has dual power transformers and is an all-balanced discrete design. Each model can be rack-mounted and costs \$495.

CIRCLE 142 ON READER-SERVICE CARD

Transcriptors has new importer

R. Allen Waech & Associates is importing and distributing the Transcriptors Skeleton turntable. The recently improved turntable is housed in a glass enclosure and comes with the Transcriptors Vestigial tone arm. Distance from the stylus to vertical pivot is only 1 $\frac{3}{8}$ inches, and the main arm moves only horizontally. Antiskating adjustment, while obtainable, is not advised. According to the company, wow is less than 0.05% and flutter is unmeasurably low. Maximum tracking error is rated at 2.0 degrees. The Skeleton turntable, with tone arm, enclosure, and lid, costs approximately \$400.

CIRCLE 143 ON READER-SERVICE CARD



Nakamichi offers budget condenser mike

Among the new mikes in the Nakamichi line is the CM-100, a lower-cost version of the company's successful CM-300. Since it can use all of the latter's capsules, the supplied cardioid capsule can be replaced at will by omnidirectional or supercardioid accessory elements. The CM-100 is said to have slightly less dynamic range than the CM-300 and is powered by a standard penlight cell instead of its predecessor's mercury battery. Besides this mike, which is priced at \$70, other additions are the CM-700 condenser studio mike, the CM-50 miniature condenser with lavalier clip, and the DM-500, a dynamic model.

CIRCLE 144 ON READER-SERVICE CARD

Sonic Research markets Pixoff

A new record-cleaning system that doesn't use liquid or chemical additives is being introduced by Sonic Research. Pixoff, as the product is called, uses a roller that has removable layers of a specially formulated tape. The adhesive is strong and flexible enough to remove dirt deep in the grooves of a record as well as surface dust and dirt, but it will not cling to vinyl, according to Sonic Research. The price of Pixoff is \$17.50; tape refills are available for \$3.00.

CIRCLE 145 ON READER-SERVICE CARD



GE's food for power-hungry portables

The General Electric line of rechargeable batteries for consumer applications includes a size for 9-volt applications as well as AA, C, and D sizes. These nickel-cadmium cells, which are rated to withstand up to 1,000 cycles of charging and discharging, are said to offer a considerable saving in cost over an equivalent number of conventional cells despite the initially higher expense. A kit containing a 9-volt cell, charger, and charger module is available for \$15.47. Similar systems using pairs of AA, C, and D cells are priced slightly lower.

CIRCLE 146 ON READER-SERVICE CARD

CIRCLE 17 ON READER-SERVICE CARD →

You're looking at the world's best-designed tonearm.

This is a Dual tonearm. It can make a big difference in the way your records sound. And now long they last.

The four-point gyroscopic gimbal is widely acknowledged to be the finest suspension system for a tonearm. It pivots the tonearm precisely where the vertical and horizontal axes intersect. The arm remains perfectly balanced in all planes of movement.

Further, the straight-line tubular design achieves the shortest distance between pivot and stylus. That's basic geometry. Curving the tonearm adds mass, decreases rigidity and makes the arm prone to lateral imbalance.

The vernier counterbalance permits you to balance the tonearm with micrometer-like precision. Tracking force is applied so that the stylus remains perpendicular to the record, even if the chassis is not level.

All this serves to establish and maintain the correct cartridge-to-groove relationship. So the stylus can trace the rapidly changing undulations of the groove walls freely, precisely and with the lowest practical force. In short, flawless tracking.

Despite the advantages of the gimbal-mounted tonearm, you won't find many around. But now, you will find one on every Dual turntable. Even our lowest-priced model, the new, fully automatic 1237.*

It's one more example of Dual's total commitment to engineering excellence.



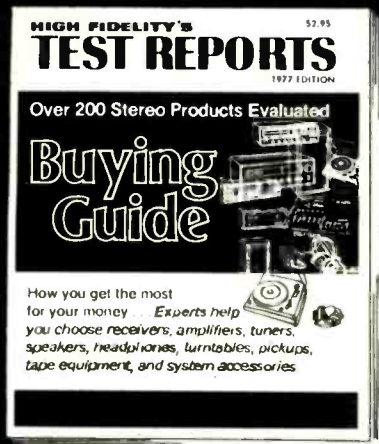
Dual

For the life of your records

United Audio, 120 So. Columbus Ave., Mt. Vernon, NY 10553

*Less than \$135. Other Duals to \$400. Actual resale prices are determined individually by and at the sole discretion of authorized Dual dealers.

1977 Edition High Fidelity's Test Reports



The new 1977 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:

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Headphones
Amplifiers
Tape Equipment
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D7KF3



Too Hot to Handle

I own a Pioneer SG-9500 equalizer and Infinity Monitor Jr. speakers. The Pioneer's frequency response is rated up to 70 kHz and the Infinities are rated up to 22 kHz. Am I endangering my speakers if I turn up the highest frequency control on the equalizer?—Gerald Brown, Willmar, Minn.

There is always some risk to loudspeakers when they are in use, especially if high sound pressure levels are involved. A deep scratch on a record can pop tweeters—even with a fairly modest power amp. Raising the amount of power received by the tweeter for a given listening level (as by use of an equalizer) could make this possibility more likely. Judicious boost (a dB or two) can probably be used without much danger, but remember that a boost of 3 dB doubles the power in that band. It has been observed, incidentally, that most listeners find an audio system most natural-sounding when the highs beyond 6 to 9 kHz are rolled off at about 3 dB per octave.

Recently I began having difficulty with my Kenwood KR-5340 two-four receiver. When it's in the phono mode, crosstalk is picked up from the AM section. No matter where the tuner is set on the AM band, I pick up a local radio station that broadcasts on 1,400 kHz. Interference with the magnetic cartridge on my turntable seems rather unlikely since the radio station is at least two miles away. I have the local TV cable attached to the FM antenna terminals through an adapter for the FM broadcast. When I disconnect the FM cable, the crosstalk is noticeably diminished. A local repair shop wants to replace the entire AM section of the receiver. Am I right in feeling that this is a case of using the "shotgun" technique to cure a problem?—Bruce P. Rose, Fort Walton Beach, Fla.

Since the tuning of the AM section does not affect the spurious signal that you receive, and since disconnecting the FM cable ameliorates the problem, we suspect that the AM section is not at fault at all, but that some other section of the system—perhaps the phono leads—is receiving and detecting a very strong local AM signal. (Such interference is not at all ruled out by a two-mile separation from the transmitter.) First, we would suggest that you ask the repairman why he thinks he has made the correct recommendation. Second, try removing the cartridge and replacing it with a shorting plug; if the interference goes away, a new cartridge with less RF sensitivity may be the answer. If it does not, it may pay to experiment with the orientation of the turntable and receiver and to try audio cables with braided (rather than wrapped) shields. Finally, you may want to try shielded speaker leads.

My older records, which were originally played on a less than high fidelity rig, have a

curious kind of distortion that increases with modulation level and gets worse near the center of the disc. I have cleaned the records with a Watts Manual Parastat, soap and water, and even a simple felt pad, with no results. Is this kind of distortion commonplace? As best as I can describe it, it's the sonic equivalent of the feel of sandpaper.—Jim Larsen, Springfield, Mo.

We suspect that the distortion you hear from your older discs is an irremediable result of their having been played with a worn stylus or low-quality pickup in a poor arm. It is possible that a cartridge with a Shibata or similar stylus, which has a larger area of groove contact than spherical or elliptical types, might extract the goodies and leave some of the distortion behind.

Recently I was stationed overseas and am planning to have my stereo shipped over. My turntable pitch control is calibrated for 60 and 50 Hz, but not my Wollensak 4765 tape deck. I suspect that the tapes I recorded in the States with a 60-Hz line frequency will run slow when played using the 50-Hz line frequency used here in Europe, and the tapes I record over here will run fast when I return to the States. Is there any way to "recalibrate" the motor speed?—Mark L. Strand, APO New York.

A conversion kit (part number 81-01854890-9) for 50-Hz power is available from Wollensak. The swap, however, is a job for a qualified technician.

I have a pair of large Advent speakers driven by an Onkyo 4500 receiver, to which I propose to add one or two center speakers. Since I find the sound of the Advents slightly "distant," I am considering small EPI, Bose, Ohm, or KLH speakers, all of which strike me as more "forward," for the center pair. But all of these seem to be more efficient than the Advents and would require some means of controlling their levels if hooked up in parallel with them. I have heard that individual controls can be incorporated into the speaker leads. Can you tell me what these are called and how to use them? Also I have read that a single center speaker is preferable in an arrangement such as this, but I cannot see how to connect just one. Is this true, and if so, how can I make the connection?—L. J. Korden, Sandusky, Ohio.

The control you want is an L-pad. (Actually, a 100-ohm, 10-watt potentiometer wired in series with the hot lead to the speaker will work about as well.) But quite frankly, we are not overly fond of the idea of controlling speakers by means of pads or resistive networks between the amplifier and the speakers, especially if critical listening is contemplated (and your concern about the "forwardness" of the center pair certainly

THE TAPE THAT'S TOO GOOD FOR MOST EQUIPMENT.

Maxell tapes are not cheap.

In fact, a single reel of our most expensive tape costs more than many inexpensive tape recorders.

Our tape is expensive because it's designed specifically to get the most out of good high fidelity components.

So it makes no sense to invest in Maxell unless you have

no one gets into our manufacturing area until he's been washed, dressed in a special dust-free uniform and vacuumed.

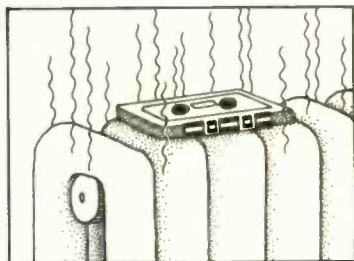
WE CLEAN OFF THE CRUD OTHER TAPES LEAVE BEHIND.

After all the work we put into our tape, we're not about to let it go to waste on a dirty tape recorder head. So we put special non-abrasive head cleaner

OUR TAPE COMES WITH A BETTER GUARANTEE THAN YOUR TAPE RECORDER.

Nothing is guaranteed to last forever. Nothing we know of, except our tape.

So our guarantee is simplicity itself: anytime you ever have a problem with any Maxell cassette, 8-track or reel-to-reel tape, you can send it back and get a new one.



Our guarantee even covers acts of negligence.

sounds at your nearby audio dealer.

(Chances are, it's what he uses to demonstrate his best tape decks.)



No other tape starts off by cleaning off your tape recorder.

equipment that can put it to good use.

THE REASON OUR TAPE SOUNDS SO GOOD IS BECAUSE IT'S MADE SO CAREFULLY.

Every batch of magnetic oxide we use gets run through an electron microscope. Because if every particle isn't perfect, the sound you hear won't be either.

And since even a little speck of dust can put a dropout in tape,



Every employee, vacuumed.

on all our cassettes and reel-to-reel tapes. Which is something no other tape company bothers to do.

OUR CASSETTES ARE PUT TOGETHER AS CAREFULLY AS OUR TAPE.

Other companies are willing to use wax paper and plastic rollers in their cassettes. We're not. We use carbon-impregnated material. And Delrin rollers. Because nothing sticks to them.

A lot of companies weld their cassettes together. We use screws. Screws are more expensive. But they also make for stronger cassettes.

GIVE OUR TAPE A FAIR HEARING.

You can hear just how good Maxell tape

You'll be surprised to hear how much more music good equipment can produce when it's equipped with good tape.



An incomparable vocal outpouring from the most illustrious singers alive today.



"A blazing statement...The solo quartet was as fine as one can imagine today...Add to this Margaret Hillis' Chicago Symphony Chorus...and you had the sort of forces that can set a melodic line soaring and

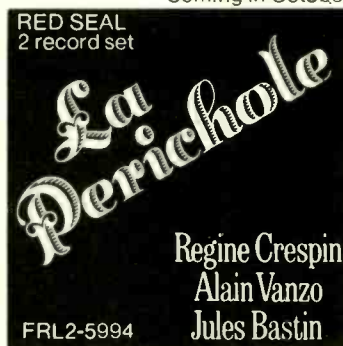
lift it, upward and upward, until your mind and emotions are caught up in it and swept along in the lyric torrent...This can be made into one of the most electrifying recordings Solti has yet produced here."

Robert C. Marsh *Chicago Sun-Times*

(From a review of the live performance)



"The extraordinary Marguerite of Montserrat Caballé...the greatest Marguerite in the history of records."
Opera



"Crespin-the diva, a smile at her lips and rapture in her heart, delivers a fantastic singing lesson...outshining all previous interpretations..."
Sud Quest

suggests critical listening). This is because speakers thus controlled are not damped by the amplifier—i.e., they are driven from a source impedance comparable to or higher than their own, which is definitely not what their designer had in mind.

A far better approach would be to purchase a small integrated amp (15 to 20 watts per channel very likely will do), connect the new speakers to that, and plug it into the tape output of the Onkyo. Should you wish to use a single center speaker, you can switch the amp to mono and leave one channel unused. Levels then would be no problem, since the amp has a volume control.

The lights in the room in which my stereo system is set up are controlled by a dimmer switch. Whenever the lights are on, a buzz is transmitted into the unit when it is in the phono or aux mode. Is there some way to shield either the stereo or the dimmer switch to prevent the buzzing?—John P. Blumberg, Long Beach, Calif.

What you have is radio-frequency interference caused by the switching action of the dimmer circuit. This is best suppressed inside the dimmer itself, so one possibility would be to look for a brand of dimmer with better RF suppression. The buzz may also be coupling to your equipment via the power line, in which case it could be ameliorated by choosing an AC outlet that is not on the same circuit breaker or fuse circuit as the dimmer. Alternatively, you could listen with the lights off or go back to a regular light switch. Other remedies exist in theory, but they tend to be only spottily effective and require connection of filters directly to the power line. This is expensive with properly designed commercial equipment and otherwise risky (perhaps illegal, depending on the local building code).

Living in an apartment, I think it prudent to consider my neighbors. Is there a way of effectively isolating the bass vibrations from my floor-standing speakers and preventing direct transmission to the floor (and my neighbors' ceiling)? Would an extra piece or two of carpeting be effective to any degree? Would special "foot mounts" for use with turntables be of value when used to isolate speakers?—A. Francis, Downsview, Ont.

Such vibrations can be attenuated but not eliminated entirely. The Audio-Technica Acoustic Insulators are a possibility, as are Acousti-Mount Speaker Pods by Netronics. You can of course try the extra carpeting first to see if it works.

I just demagnetized the heads on my Teac 450, only to discover that I had forgotten to remove all my precious tapes from the area. I had the tool on one-and-a-half to two minutes and had four tapes in the cassette well on top of the deck. Others were in a closed drawer of a desk on which my equipment sits.

I played several tapes to check the damage and was surprised to hear that even the tapes that were within inches of the demagnetizer sounded no different. Was I lucky or will these tapes eventually develop dropouts or noise? (I only use the best tapes.)—Christopher Mazarella, Perry, N.Y.

Kiss your rabbit's foot—you were lucky. The field from a head demagnetizer is easily strong enough to do in tapes. Provided you don't repeat your folly, the tapes should be all right.

RCA

RED SEAL

Where artists become legends.



Come and sit inside a song.



Your favorite tapes and records are loaded with intricacies of sound that most speakers don't let you in on. But the Koss HV/1LC's deliver your song the way the musicians played it. All the delicious touches of musical perfection unfold around you, putting you deep inside the tune. Taking you to a place where the honey-smooth power of the lead singer's voice is in delicate balance

with the instruments and back-up chorus. So that you're presented with every colorful spark of talent, from all angles—the way you'd hear it if you were standing in just the right spot on stage. And Koss HV/1LC's deliver all ten audible octaves, bringing you every ounce of everything from the low down throb of the bass, to the up-sweeping highs of the violin section.

And while the HV/1LC Stereophones bring you every note, their hear-thru design lets you catch every comment from people around you. Which in many cases may go like this: "let me try them."

So why not visit your audio specialist and slip into the exciting Sound of Koss: the HV/1LC's with volume balance controls, or the HV/1's and HV/1a's. Or write us,

c/o Virginia Lamm for a free full color catalog of all our products. Get a pair of Koss High Velocity phones and c'mon inside. The music's fine.

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Koss HV/1LC and HV/1 Stereophones

KOSS stereophones
from the people who invented Stereophones.

You've never heard anything like it. Not from us. Not from anyone. JBL's new L212: a totally new picture of high performance sound, from the people who wrote the book.

You hear the whole sound first. And when you catch your breath you search for words to describe the depth, the detail, the etched precision of the music.

That stunning pair of three-way speakers is sending clean, undistorted sound to every corner of the room. At every frequency. At every level. Loud or soft. High or low. It doesn't matter. The energy is constant.

You're experiencing three-dimensional imaging: Vocal up front. Lead guitar two steps back and one to the left. Drums further back. The piano closer, almost off the right edge of the sound.

Suddenly you're aware of a fullness in the music that you've heard before but never associated with recorded sound.

The bass! You've been hearing all of the bass, all of the fundamental tones you couldn't bring home from the concert. It's not only everything you've heard before. It's everything you haven't. The music is rich with sound at the lowest limit of your hearing.



Then you see the third speaker. The hero of the piece: The Ultrabass.

The Ultrabass is a system in itself—woofer, amplifier, equalizer and enclosure—designed, mated, blended to do one thing perfectly: reproduce sound at the threshold of sub-sonic frequencies.

It brings all the low frequency music within audible range, balancing it perfectly with the rest of the music. Without boominess. Without resonance. It also electronically sums left and right signals below 70 Hz—virtually eliminating turntable rumble and record warp noise. And, because of the non-directional character of the low frequency sound, the Ultrabass can be placed almost anywhere in the room. Without any loss of three-dimensional imaging.

The Ultrabass pays one final dividend: it allows the two three-way speakers to be specialists, too.

They can concentrate on the top 95% of the music. (Listen to the whole system, and you'll hear what that means. Even at a ruggeling, rock concert loudness, you'll get a clarity, a smoothness, an enthusiasm for detail you've never heard before.)

Finally, you look for the monster amplifier that's driving all that sound. There isn't one. The L212 takes one fourth the power you'd need with a conventional low efficiency loudspeaker.

That's the story. What you've been reading about is, essentially, a no-trade-off loudspeaker system. Now we'll tell you the trade-off: The price is \$1740. (The L212 may take a little while becoming a household word.)

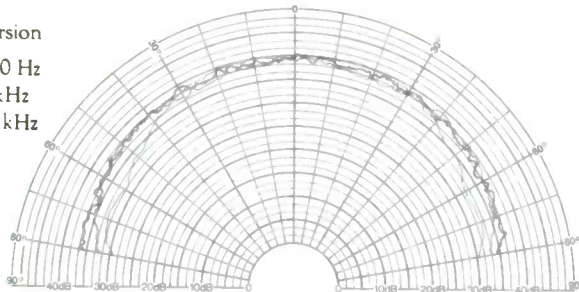
In the meantime we have two suggestions:

If you'd like a lot more technical information, write us and we'll send you an engineering staff report on the L212. Nothing fancy except the specs.

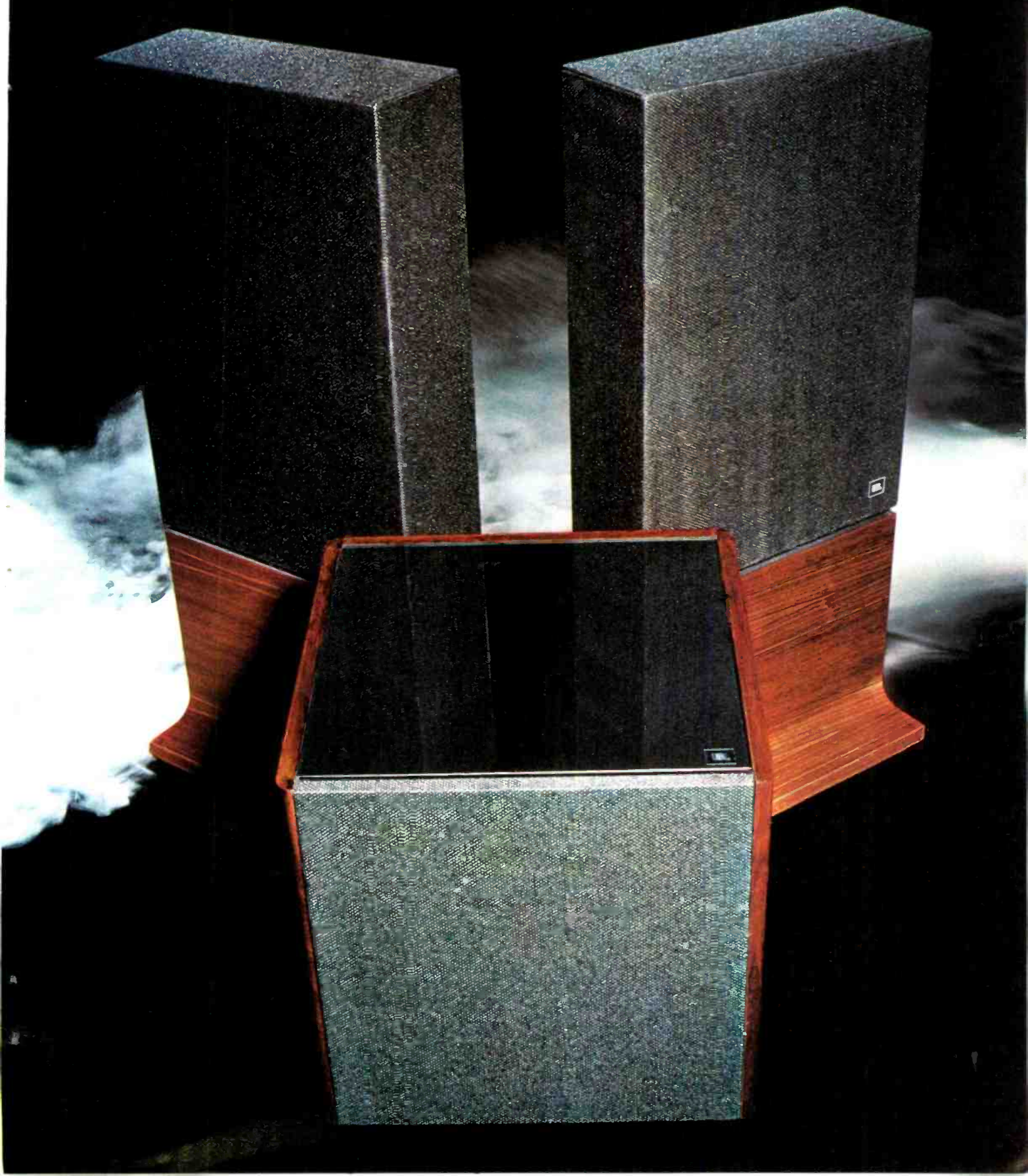
Or call your JBL dealer and ask him when you can hear the L212. You've never heard anything like it. Not from us. Not from anyone.

Frequency Dispersion

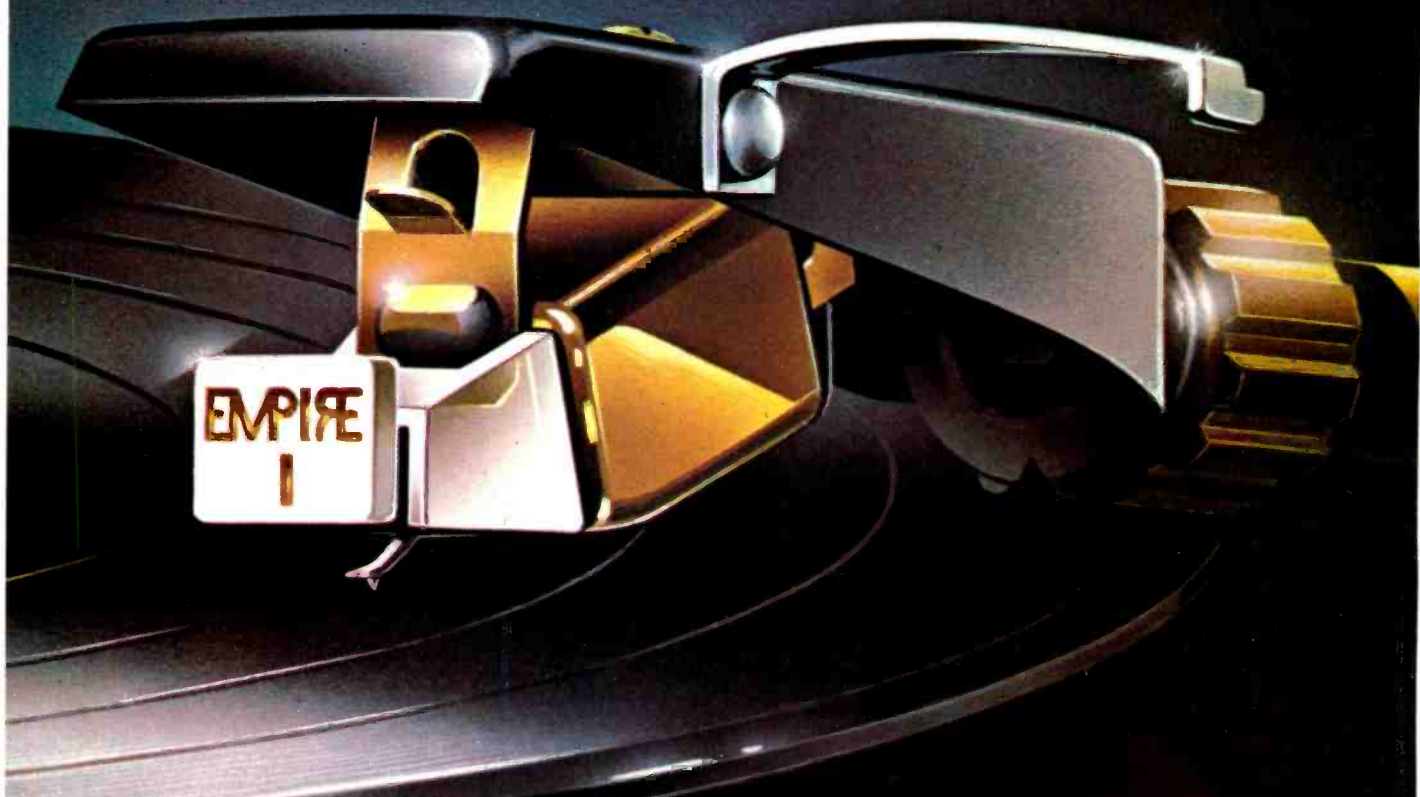
~~~~~ at 400 Hz  
~~~~~ at 2 kHz  
~~~~~ at 10 kHz



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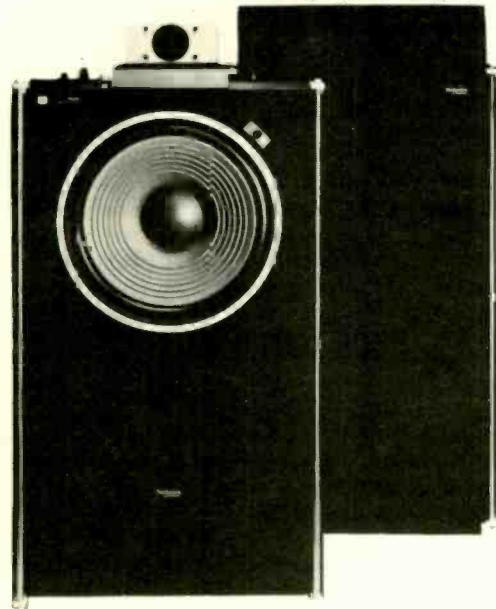


*We bring music to life*  
**EMPIRE**

A CONSUMER'S GUIDE

# New Equipment Reports

## Technics SB-6000A Lets You Dream You're Conducting



**The Equipment:** Technics SB-6000A floor-standing speaker system in wood case with black pebble-grain finish. Dimensions: 16 $\frac{3}{4}$  by 33 $\frac{3}{4}$  inches (front); 13 $\frac{3}{8}$  inches deep. Price: \$299.95. Warranty: "limited," five years parts and labor. Manufacturer: Matsushita Electric, Japan; U.S. distributor: Panasonic Division of Matsushita Electric Corp. of America, 1 Panasonic Way, Secaucus, N.J. 07094.

**Comment:** If the general appearance of the Technics SB-6000A does not convince you that it is a most unusual loudspeaker, removal of the grille cap that conceals the rearward offset tweeter and binding post for amplifier leads almost certainly will. The position of the tweeter identifies the speaker as a member of the Linear Phase series. Even the binding posts, to which bare wires are connected by inserting each into a hole and tightening a nut, are of a design we do not recall seeing elsewhere.

The SB-6000A has other uncommon characteristics, of course. One is its unusually high sensitivity—86 dB average omnidirectional sound pressure level at 1 meter across the range from 250 to 6,000 Hz from a 0-dBW (1-watt) pink-noise input. Complementing the sensitivity is good power-handling capability, which enables the unit to produce a steady-state level approaching 110 dB (on axis) at 300 Hz from an input of 17 $\frac{3}{4}$  dBW (60 watts) before objectionable distortion becomes apparent. Driven with pulses, the speaker reaches peak levels of 120 dB from a power input of 28 $\frac{1}{4}$  dBW (654.5 watts)—all the test amp could manage—without excessive distortion. A dynamic range such as this will, in a normal room, come close to, if not exceed, the limits of the ear.

Nominal impedance is 5.5 ohms, which is close to the rated value of 6 ohms. Excluding the peak at the low-frequency resonance, the impedance curve is smooth and lies

between 8 and 3.6 ohms through the audible band. In view of the fact that the curve reaches its minimum in the vicinity of 1 kHz, parallel connection of two of these speakers to a normal amplifier output is not recommended.

The tweeter level control (under the grille cap) varies the level of that driver from full off to full on, shelving the response above about 2.5 kHz by 4 to 6 dB downward when set to its center point. Interestingly, when the tweeter is full off the woofer response is almost precisely 3 dB down at the nominal crossover frequency (1.8 kHz). Precise control of crossover frequency seems to be an important factor for speakers meant to maintain "linear phase." (See Peter Mitchell's article elsewhere in this issue.)

From about 150 Hz upward, the Technics controls harmonic distortion very well. At a 0-dBW input both the second and third harmonics remain below—usually well below—1%. At a power input equivalent to 100 dB SPL at 300 Hz, the third harmonic is barely higher than in the 0-dBW case for frequencies from 200 Hz up. The second harmonic, a more tolerable intruder, rises significantly above 1% only between 5 and 10 kHz (the upper limit of distortion testing) and below 100 to 200 Hz, where the increasing excursion demanded of the woofer raises distortion fairly markedly. The low-frequency behavior of the speaker

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**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.

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is, nonetheless, quite reasonable, with distortion somewhat less than average.

Frequency response of the SB-6000A in the CBS anechoic chamber is relatively smooth from about 65 Hz to 10 kHz, rolling off with increasing frequency by about 7½ dB across that range with only about ±2 dB of variation in this basic response pattern. Low-end response seems to hold up well to at least 50 Hz and below that falls off smoothly at about 12 dB per octave—as does response above 10 kHz. The curves indicate that above 700 Hz or so the radiated energy is concentrated toward the forward on-axis direction. This characteristic is entirely in keeping with the special nature of a “linear phase” speaker and is there, we are certain, by design. Pulses at 300 and 3,000 Hz are cleanly reproduced; the 3,000-Hz pulse response in particular implies excellent synchronization of the woofer and tweeter near crossover.

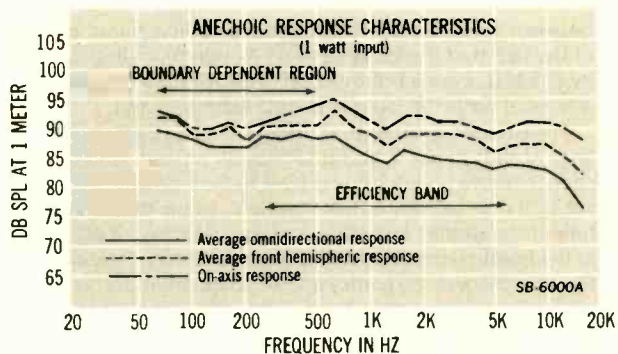
For listening, we positioned the speakers with their backs against the wall, several feet away from the corners. (It is probably wise to avoid placing the speaker so that the distance from the woofer to the floor or the vent to the floor is equal to or a low submultiple of the distance from the woofer to the side wall or the vent to the side wall.) The sound of the Technics is crisp and clear, with a rather etched-out definition of the high end. The bass end is solid and tight—and capable of reproducing orchestral fundamentals with authority. While we found no style of music in which the SB-6000A seems notably weak, the symphony orchestra is its natural habitat. Strings, winds, and percussion are convincingly reproduced, and none is favored at the expense of others.

And what of the “linear phase” (which is better called

uniform time delay)? As we have found with other models designed for this characteristic, the principal subjective effect is an enhancement of the front image—including its apparent depth—at the expense of hall ambience, but we hear it more in the Technics than we have heard it elsewhere. The sound is very pleasant, for our tastes especially so when the recording contains a large amount of reverberation. With a “drier” recording the sound becomes highly analytic, which should be very enjoyable for a listener seeking the perspective of the podium.

Like any loudspeaker, the SB-6000A has properties that must be evaluated by personal audition. One of these is its (relatively mild) coloration. Another, which is more striking, is its partiality to the front image. There is also the fact that the listening position is rather restricted—which is really a tradeoff for the accurate time response. But if being close to the music is important to you, this is a speaker that certainly can put you there.

CIRCLE 132 ON READER-SERVICE CARD



In this issue, HIGH FIDELITY is introducing a new format for loudspeaker frequency response curves. Readers familiar with the speaker graphs that formerly (until about a year ago) appeared in our reports will notice several differences—all calculated, in our present format, to forestall the questionable assumptions that we found readers might make on the basis of the old graphs. The curves are identified as “anechoic,” meaning that they reflect the behavior of the speaker in a totally nonreflective environment. The bass end of the curves stops at 63 Hz, which is about as far down as we can be reasonably confident of data taken in a chamber of the dimensions used at CBS. And response below 500 Hz in a real listening room will, as the graph suggests, vary from the anechoic response—perhaps drastically, depending on the size and shape of the room, its furnishings, and the position of the speaker. We will continue to discuss considerations such as these in the texts of our reports.

Also new is an improved measuring technique for distortion—which allows us to characterize it at all significant frequencies in the loudspeaker pass-band—and a revised form of efficiency (sensitivity) data; see “In the Loudspeaker Testing Lab” in this issue.

## The Baron Has a Wide Domain

**The Equipment:** KLH Model 355 The Baron floor-standing loudspeaker, in walnut-veneer enclosure. Dimensions: 14 by 35¾ inches (front), 12¾ inches deep. Price: \$399. Warranty: “limited,” five years parts and labor. Manufacturer: KLH Research & Development Corp., 30 Cross St., Cambridge, Mass. 02139.

**Comment:** Loudspeaker manufacturers have a way of appearing and (perhaps to a lesser extent) disappearing. KLH is one of the exceptions. It’s not the oldest loud-

speaker operation, to be sure, but in this fast-moving field, it does claim enough bottle age to be a rarity.

The new Baron (Model 355) is a tower-type, three-way system, well finished on four sides in oiled walnut veneer. It rests on a short recessed pedestal that serves to protect the color-coded three-way binding post connectors on the bottom. A black knit grille is readily removable to reveal the three drivers and the continuously variable midrange and tweeter level controls.

The driver complement consists of a 10¾-inch woofer in



a ducted-vent enclosure, a 1¾-inch domed midrange, and a 1¾-inch domed tweeter. CBS Technology Center reports a smoothly rising impedance curve from a minimum of 4¾ ohms, the nominal impedance (at 150 Hz), to a plateau of 11¼ ohms (between 2 and 10 kHz) to 14¼ ohms at 20 kHz. Over-all, the impedance probably averages close to the 8 ohms at which it is rated by KLH.

With the midrange and tweeter controls at their midpoints, the average omnidirectional response in the anechoic chamber is within ±1½ dB from 90 to 1,600 Hz. The response then shelves off rapidly by 4½ dB and remains within ±2 dB from 2 to 12.5 kHz after which it again falls rapidly. Below 90 Hz, the output rises to a 5-dB peak at 63 Hz before rolling off gradually. The response remains within ±5¼ dB from above 12.5 kHz down to somewhere in the region of 30 Hz—a very broad range. The 300-Hz pulse response is very good; the 3-kHz pulse response shows signs of overhang.

The efficiency of the Baron is somewhat below average with an 77½-dB average omnidirectional sound pressure level at 1 meter with a 0-dBW (1-watt) pink-noise input, 250 to 6,000 Hz. The system is very good in dynamic range, however; it accepts a full 20 dBW (100 watts) of power on a continuous basis without complaint, delivering a 105-dB SPL at 300 Hz. On pulses it easily develops more than 113½ dB peak SPL and can accept 28¾ dBW (750 watt) peak input, the limit of the lab amp's capability.

The second harmonic distortion at bass frequencies is about par for the course at low power levels—and just a trifle higher than average at levels near 100 dB SPL. However, the more annoying third harmonic is much better controlled than average at all power levels and makes up for the slightly increased second harmonic content at the higher levels. With a 0-dBW input, the second harmonic distortion is under 0.5% for frequencies above 140 Hz and barely exceeds 1% even at 30 Hz. Similarly, the third har-

monic content rarely exceeds 0.6% for frequencies above 45 Hz.

At higher power levels—equivalent to 100 dB SPL at 300 Hz—the distortion is more severe but still well controlled, especially in third harmonic content. In general, the third harmonic is below 1.5% from 70 Hz on up except around 500 Hz, where it reaches 2.5%. At 30 Hz, it is only about 3.5%, and is almost negligible above 2.5 kHz. Second harmonic content is more severe—about 5% at 60 Hz and 12 kHz; 3% or less from 160 Hz to 9 kHz.

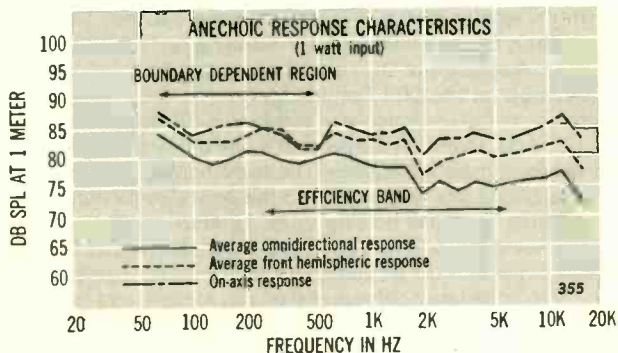
After some experimentation, we settled on listening to the Barons with the midrange control fully advanced and the tweeter control three-quarters of the way up. These settings provided the best over-all balance in our listening room for the majority of music, though with some pop music we preferred the tweeter control fully advanced.

The bass response of the Baron is solid and extended. The peak in the 63-Hz region is most noticeable in the lower organ registers and on string bass passages, where certain notes are accentuated somewhat. It also adds a bit of heaviness and overhang to the deeper drums. The rather gradual rolloff below the resonant peak, however, extends the usable response to a much lower frequency than most speakers are capable of, and the Baron reveals lower registers with a great deal of authority.

With the midrange control fully advanced, most of the higher voiced instruments—especially the woodwinds—are also reproduced quite well. The transient response is acceptable, but the strong suit of the Baron is its ability to create a realistic stereo illusion—wide and deep. This is an easy-listening system that should appeal to a broad cross-section of music lovers.

CIRCLE 133 ON READER-SERVICE CARD

KLH informs us that roughly forty units of The Baron with serial numbers in the range from A3550101 to A35501585 and B35501586 to B35504001 bear a manufacturing defect of the woofer cone that could cause failure and, conceivably, ignition at high levels of input power. If you own a Baron whose serial number identifies it as subject to this defect and you have not been contacted by the company, you are requested to write to: KLH Service Division, 30 Cross St., Cambridge, Mass. 02139. Alternatively, if you live outside Massachusetts, you may call the toll-free number 800-225-1157. Massachusetts residents may call 617-491-5060 collect.





## And in This Corner . . . David

**The Equipment:** Visonik D-50 loudspeaker system in plastic case. Dimensions: 4 $\frac{1}{8}$  by 6 $\frac{3}{4}$  inches (front), 4 $\frac{1}{2}$  inches deep. Price: \$109.50 (also available as mobile unit, D-502MO, \$122). Warranty: "limited," five years parts and labor (one year parts and labor for D-502MO). Manufacturer: Heco-Hennel and Co., West Germany; U.S. distributor: Visonik of America, Inc., 1177 65th St., Oakland, Calif. 94608.

**Comment:** With an obvious reference to the Biblical youngster who felled a giant, Visonik of America has announced the German-made David line of loudspeakers. The D-50, sharing honors for runt of the litter with the slightly more efficient D-30, constitutes a bare but hefty handful with a sound that belies its tiny size.

The cabinet is molded from a high-density, high-impact black plastic that appears very much like metal. A recessed slot on the back panel is provided so that the D-50 can be hung on a wall with a single screw. Connections are made via two binding screws on the rear with the polarity indicated by molded markings on the cabinet.

This is a two-way sealed system with a 3 $\frac{3}{4}$ -inch long-throw woofer and a  $\frac{3}{4}$ -inch soft-dome tweeter. No level controls are provided, but our listening tests (and the lab data) suggest that they are unnecessary. In the anechoic chamber at the CBS Technology Center, the average omnidirectional response was within  $\pm 3$  dB from 100 Hz to 12.5 kHz. Over that range, that's one of the smoothest response curves we've seen. The front hemisphere and on-axis curves are very similar to the omnidirectional curve, with the response holding up to 16 kHz—the limit of the test—and indicate very good dispersion. Below 125 Hz, the response falls off smoothly at roughly 12 dB per octave.

The impedance curve is reasonably smooth and remains between about 3 $\frac{3}{4}$  ohms (the nominal impedance) and 15 ohms across the entire audio band. The average imped-

ance of the system is more like 6 ohms (Visonik rates the speaker at 4 to 8 ohms), but we would caution against paralleling pairs of D-50s on a power amp not rated for a 2-ohm load.

In a speaker of this size, a smooth, extended response is not free, and (typically) the price is reduced efficiency. The average sound pressure level, measured omnidirectionally from a 0-dBW noise input, is only 72 $\frac{3}{4}$  dB, or about 10 dB below average. David obviously is as power-hungry as its Biblical namesake.

Fortunately for its dynamic range, the system can digest the power it gobbles—especially in the midrange and highs. On a continuous basis, the D-50 will accept almost 20 dBW (100 watts) and deliver a sound pressure level a bit over 95 dB at 300 Hz before showing signs of breakup. On pulses, the speaker accepts the full output of the lab amplifier—29 $\frac{3}{4}$  dBW (950 watts) peak—for a peak SPL of 105 dB.

While David does very well at reasonable sound pressure levels, its muscle is limited. This shows up in the distortion measurements. At 75 and 85 dB SPL (300 Hz), the third harmonic content is under 0.1%, much less than that of most speakers. Second harmonic is higher (0.22% at 75 dB SPL and 0.6% at 85 dB SPL)—about average. But at 95 dB, the D-50 does exhibit somewhat higher distortion than average and is subject to buzzing just beyond that. At a 0-dBW level, the combined second and third harmonic distortion remains below 1% at frequencies above 150 Hz. At 17 dBW (50 watts), the distortion stays below 6% at frequencies above 150 Hz. Below that (predictably, from the size of the woofer), the distortion increases sharply.

But small woofers have advantages to offset their limitations. The low mass improves transient response, and the small size approximates a point source radiator to a higher frequency. The D-50, for example, has an exceptionally accurate pulse response—in fact, one of the best we've seen.



In the listening room, it shows excellent dispersion and transient response—again, equaling some of the best systems we've heard.

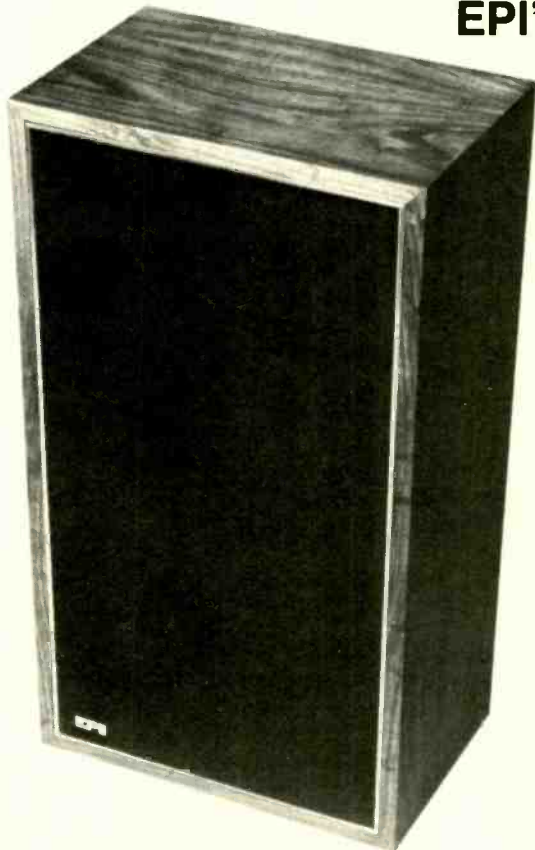
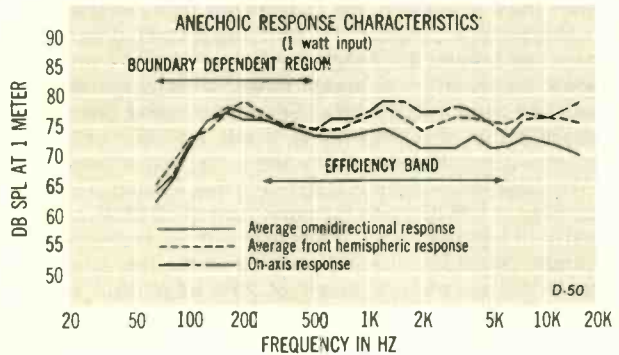
For our listening, we set the speakers flush against the front wall at about ear level. We found the amount of sound coming from those tiny boxes truly amazing. True, the lowest couple of octaves are missing and the distortion in the lower registers is more apparent than in many larger systems. But there isn't that much music in the very lowest octave, and the distortion apparently consists mostly of second and third harmonics, which are not particularly disturbing. Given a familiar harmonic array, the mind tends to fill in the fundamental even when it's not there. So these speakers subjectively have a lot more bass than test measurements would indicate, even though the lack of really low fundamentals is noticeable on timpani, organ pedals, and the like.

The midrange and treble are excellent, and the over-all balance is very smooth. Both male and female singing voices are very well reproduced, and reproduction of brushed cymbals and brass instruments is exceptional. The dispersion is excellent, and the stereo imaging has reasonable depth and fine lateral stability.

The David D-50 is an impressive loudspeaker, particularly in view of its compactness and price. It reproduces

the major portion of the music spectrum and does so extraordinarily well. That its roar cannot equal Goliath's and its bass depends partly on psychoacoustic sleight of hand barely detracts from the convincing musicality of its illusion. And in the size of room that welcomes the minuscule dimensions of this speaker, such limitations of loudness and range are easily less than paramount. Given a powerful sling—an amplifier capable of 17 dBW or more will suffice—David can worry many a giant.

CIRCLE 131 ON READER-SERVICE CARD



## EPI's 200: Simple, Basic —and Musical

**The Equipment:** EPI Model 200 loudspeaker system in oiled-walnut enclosure. Dimensions: 17 by 30½ inches (front), 11½ inches deep; intended for vertical use. Price: \$225. Warranty: "limited," five years parts and labor. Manufacturer: EPI Division of Epicure Products, Inc., 1 Charles St., Newburyport, Mass. 01950.

**Comment:** In an era of "special" loudspeaker designs, the new EPI 200 may seem a mite conventional: just a very good two-way speaker with a not very fancy price tag—which, as a matter of fact, is rather special in itself. Epicure is quick to point out that the woofer design marks a departure for the company (or for any company located within the citadel of acoustic-suspension design, if not for the industry at large) in that it employs a passive radiator for higher efficiency and more extended bass than has been the rule in past models. Another claim is lowered distortion. Both seem justified.

Efficiency (or sensitivity) is above average at 82½ dB of sound pressure level for the voltage equivalent of 0 dBW (1 watt) into the nominal impedance, measured omnidirectionally at 1 meter with the usual noise input employed by CBS. This may sound on the low side in comparison to the on-axis figures we have been showing in the past (it measures 88¼ dB by that method); it is certainly higher than one

would expect from an acoustic-suspension system. At the equivalent of 0 dBW input, harmonic distortion (both second and third) is in the neighborhood of 0.5% from 60 or 70 Hz up to about 2 kHz; above this range it subsides to an average of 0.2 to 0.3%, while below 40 Hz it rises sharply. At lower input levels, distortion continues to fall (to the neighborhood of 0.25% in the midbass and bass); at higher levels the second harmonic content rises more rapidly than the more objectionable third harmonic. By the time the speaker is driven to 100 dB (at 300 Hz) second harmonic distortion in the midrange is up to around 2%, while the third still is below 1%. At this input level, however, there is a sharp rise to relatively high distortion of both types at around 1.5 kHz. (We suspect that, driven this hard, the tweeter diaphragm may be pushing the limits of linear excursion in its lowest range, since crossover appears to be at about 1 kHz.) Second harmonic distortion above 3 kHz and third above 2 kHz are very well controlled—generally below 0.5% and 0.3%, respectively.

In steady-state testing, CBS found that it could drive the speaker to 108 dB (with the equivalent of 20 dBW, or 100 watts, of input, the limit of this test) without excessive distortion. On pulses, the 200 handled all the test amplifier could deliver—the equivalent of 29¼ dBW (857 watts) peak—and deliver 117¼ dB peaks without excessive distortion. This, combined with the very low distortion at low levels, documents the system's excellent dynamic range.

Before going on to factors that are more obviously related to listening quality, we must add a note about impedance. EPI specifies "4 ohms DC, 8 ohms nominal." The curve measured in the CBS anechoic chamber shows the typical double bass-resonance peaks of such a port-equivalent, passive-radiator system, followed by a dip to

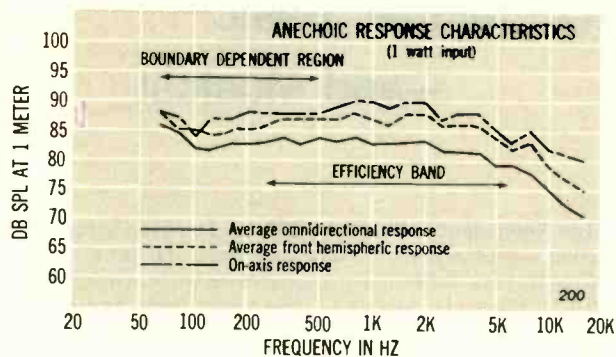
the lab's nominal impedance, at 4.2 ohms. In the mid-range the measured impedance rises to just over 8 ohms at around 1 kHz, only to fall again to a little under 4 ohms between about 4 and 10 kHz. Most musical energy (at least in classical music) tends to fall in the range between approximately 200 and 1,000 Hz—not squarely on the 8-ohm portion of the impedance curve. Conservative practice therefore would suggest that, in considering multiple-speaker hookups, you approach the 200 as a 4-ohm model (which precludes paralleled pairs across the outputs of most solid-state amps). And on synthesizer rock, with its very high high-frequency levels, the impedance dip in the treble may also prove troublesome in parallel hookups.

The anechoic response curves accurately represent what we hear in the listening room. This is a speaker of exceptionally smooth response—very flat (within only  $\pm 2\frac{1}{4}$  dB between about 100 Hz and 7 kHz, measured omnidirectionally) throughout the upper bass, midrange, and lower treble, with a slight emphasis to the bass just below this range and a gradual (a little less than 6 dB per octave) rolloff above it. Excellent dispersion is maintained out to at least 10 kHz.

On the back panel (along with color-coded, spring-loaded connections for bared leads) is a three-way tweeter-level switch: NORMAL/LOW/MEDIUM. The lab used the NORMAL position in testing, and we found we preferred it with most recordings. In MEDIUM, 3 dB is shaved off the tweeter response above about 2 kHz, which might be useful in a room with a hard acoustic edge (though correcting the acoustics themselves would seem preferable). The additional 2½ dB or so that is shaved off by the LOW position dulls the sound appreciably and offers no material advantage in the average acoustics of our test listening room.

At the low end, the sound is full and extended. EPI rates response to 34 Hz—a reasonable figure, in our estimation, on the basis both of listening and of the lab data. The hump at the 63-Hz-band anechoic response suggests the possibility of boominess, particularly if the 200 is placed in a corner; but mounted on a wall well above the floor, the speaker gives clean, true bass and excellent balance.

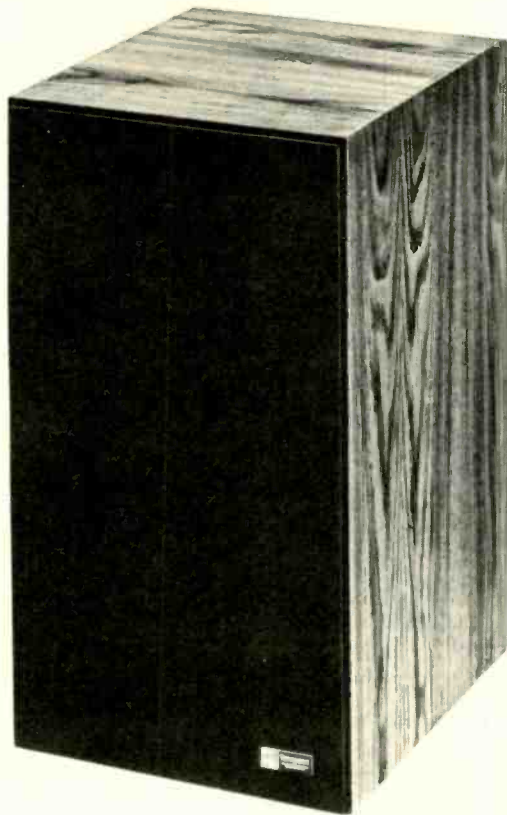
Generally speaking, the sound is exceedingly uncolored. At high listening levels, piano runs and similar material show a roughness that we ascribe to the aforementioned distortion that appears at the bottom of the tweeter's range when it is driven hard. Aside from this, the EPI 200 is self-effacing; there are no little oddities to nag nor characteristics to bemuse. Whatever the program material, we find ourselves listening to it, rather than the speaker. And that, to our mind, is just as it should be. In its entirely un-pectacular way, the 200 is a very fine loudspeaker indeed.



## ESS/Heil's "Power Ring" Tempest

**The Equipment:** ESS Tempest LS-5 loudspeaker system in wood case. Dimensions: 14 by 24½ inches (front), 14¼ inches deep; intended for use vertically as delivered, but tweeter may be realigned for horizontal use. Price: \$219; also available as Performance Series Model 5 in vinyl-finish cabinet and without controls, \$205. Warranty: "limited," three years parts and labor. Manufacturer: ESS, Inc., 9613 Oates Dr., Sacramento, Calif. 94827.

**Comment:** By now, most high fidelity aficionados have heard of, if not heard, the Heil AMT (air-motion transformer). This unique midrange-and-up driver that literally squeezes the air from its pleated diaphragm has been widely acclaimed for its transient response and power-handling capability. A new Heil AMT—dubbed the Power Ring—makes its appearance in the ESS Tempest LS speakers. The Power Ring radiates only to the front hemisphere



rather than being "bipolar" like its predecessor.

In the LS-5, the Power Ring is combined with a 10-inch woofer and a rear-mounted, 10-inch passive radiator in a stained oak-veneer cabinet of bookshelf dimensions. Power input is via a pair of spring-loaded, color-coded connectors mounted in a recess on the rear panel. A continuous control tailors the output of the Heil driver, through a range from 3 dB above "flat" response to totally off.

Measurements taken at the CBS Technology Center reveal a smooth, well-controlled impedance curve over the audio band. The nominal impedance measures 4.4 ohms, while a minimum impedance of 3.6 ohms occurs at about 150 Hz. From there on up the curve stays between 4.8 and 6.4 ohms. If two pairs of LS-5s are to be used, ESS advises a series rather than a parallel connection to most amplifiers.

The LS-5 is just about average in efficiency—80¼ dB average sound pressure level from a 0-dBW (1-watt) input measured omnidirectionally—and it doesn't flinch when driven hard. No untoward behavior is elicited by a 20-dBW (100-watt) 300-Hz signal, from which the unit delivers 108 dB SPL. On a pulse basis, the lab amp reached its limit (29 dBW) before the LS-5 did, so the peak SPL is above 117 dB.

Above 100 Hz, the second harmonic at a 0-dBW level is well controlled, averaging about 0.3% to 0.4% out to 2 kHz. Above 2 kHz, the distortion averages 1% to 1½% out to 10 kHz. Between 100 and 70 Hz, the second harmonic content increases to 2%. At a drive level equivalent to 100 dB SPL at 300 Hz, the second harmonic distortion in the midband and high end is not much different, but it is slightly greater in the bass, as one might expect. It averages about 0.6% above 125 Hz, with a few sharp peaks, and increases to 2% at 100 Hz and 5% at 67 Hz.

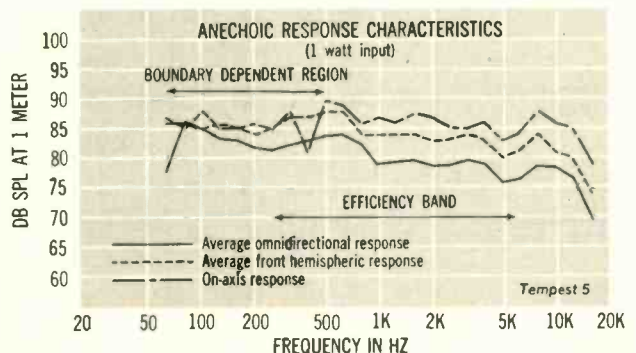
The third harmonic content is even lower—less than 0.6%, 60 to 2,500 Hz at 0 dBW, and less than 0.8% above 2,500 Hz—although below 60 Hz it increases rapidly. At 100-dB SPL (at 300 Hz), the third harmonic is still mostly below 0.6% from 82 to 2,500 Hz, increasing to 5% in the region of 35 to 70 Hz. If anything, the third harmonic in the high frequency region is even less at the higher level. The high-level THD of the Tempest LS-5 is much better than average in the treble and midbass regions.

The frequency response in CBS's anechoic chamber is quite smooth. Except for a 6½-dB depression around 5 kHz, the average omnidirectional response is within ±4 dB from 63 Hz to 10 kHz with the region above 1 kHz on average a few dB below the bass. On axis, with pure tones, some interference between the drivers is observable near the crossover frequency (2,400 Hz). This also shows up on the 3-kHz tone-burst test, where it appears that one driver "speaks" before the other.

As ESS points out in the well-written owner's manual, you should experiment with placement of the Tempest LS-5 in your listening room. With its rear-mounted passive radiator, the speaker cannot be placed flat against a wall. At least an inch of separation is required, and 3 to 5 inches produces the strongest bass response—perhaps excessive bass response for some tastes, with a bit of a tubby sound, although it adds "punch" to a kick drum. A position several feet out into the room appears to tighten the bass a good bit, as does raising the system above the floor and keeping it well out of corners. Thus, bookshelf placement might be a definite advantage. (Since the Power Ring has much better dispersion in one plane than in the other, it should be reoriented if the system is placed horizontally on a shelf; ESS provides an Allen wrench and instructions.) After some experimentation, we set the environmental control three-quarters of the way up, with a slight treble cut in the preamp.

The transient response of the Heil is superb, and this shows up most prominently on high-pitched percussion: cymbals, keys, castanets, etc. The low percussives that are handled by the woofer system are not as well rendered: The bass tends to be rich, dark, and sonorous, rather than clearly and sharply etched. The stereo imaging is fair but lacks depth and is a bit unstable. We note a slight edge on violins and also on singers, who are made to hiss a bit on sibilants.

Like most speakers, the Tempest LS-5 has a character of its own: rich, warm, solid bass and sparkling, almost etched treble, qualities that may be designed particularly to please rock and big-band jazz listeners. With its extraordinary ability to make loud music with reasonably low distortion, the LS-5 is ready to take on the type of large, absorbent listening room that simply overwhelms less powerful speakers. And for home disco use, it's a natural.



|   |     |   |     |   |     |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |
|---|-----|---|-----|---|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
| H | 1   | Q | 2   | Y | 3   |   | I   | 4   | J   | 5   | M   | 6   | N   | 7   | I   | 8   | W   | 9   | V   | 10  |     | U   | 11  | S   | 12  | O   | 13  | X   | 14  |     |  |
| F | 15  | B | 16  | D | 17  | H | 18  |     | C   | 19  |     | A   | 20  | K   | 21  | Y   | 22  | O   | 23  | I   | 24  |     | Q   | 25  | E   | 26  | S   | 27  |     |     |  |
| H | 28  | D | 29  | U | 30  |   | Y   | 31  | W   | 32  | V   | 33  |     | E   | 34  | J   | 35  | A   | 36  | M   | 37  | F   | 38  | B   | 39  |     | O   | 40  |     |     |  |
| G | 41  | H | 42  | N | 43  | V | 44  | Y   | 45  | D   | 46  | U   | 47  | F   | 48  | B   | 49  | M   | 50  | L   | 51  | Y   | 52  |     | W   | 53  | H   | 54  | Y   | 55  |  |
|   |     | D | 56  | W | 57  | T | 58  | U   | 59  | Y   | 60  | Q   | 61  | M   | 62  | X   | 63  | H   | 64  | B   | 65  |     | A   | 66  | I   | 67  |     | O   | 68  |     |  |
|   |     | W | 69  | S | 70  | J | 71  | B   | 72  | H   | 73  |     | M   | 74  | N   | 75  | L   | 76  | P   | 77  | W   | 78  | Q   | 79  | H   | 80  | V   | 81  | U   | 82  |  |
| S | 83  | Y | 84  |   |     | K | 85  | X   | 86  | E   | 87  | R   | 88  | Q   | 89  | M   | 90  | J   | 91  |     | Y   | 92  | H   | 93  | D   | 94  |     | F   | 95  |     |  |
| K | 96  | W | 97  | U | 98  | G | 99  | Y   | 100 | M   | 101 | C   | 102 | A   | 103 |     | S   | 104 | H   | 105 | F   | 106 | D   | 107 | O   | 108 |     | I   | 109 |     |  |
| R | 110 | E | 111 |   |     | Y | 112 | F   | 113 | M   | 114 | H   | 115 | B   | 116 | W   | 117 | G   | 118 | Q   | 119 | C   | 120 |     | N   | 121 | T   | 122 |     |     |  |
| Y | 123 | F | 124 | I | 125 | P | 126 | D   | 127 |     | W   | 128 | H   | 129 | M   | 130 | R   | 131 | Q   | 132 | A   | 133 | B   | 134 | D   | 135 |     | W   | 136 |     |  |
| S | 137 | U | 138 | F | 139 | I | 140 | M   | 141 | E   | 142 | V   | 143 |     | D   | 144 | R   | 145 | H   | 146 |     | U   | 147 | I   | 148 | M   | 149 | Y   | 150 |     |  |
| N | 151 | B | 152 | L | 153 |   | D   | 154 | A   | 155 | O   | 156 | G   | 157 | K   | 158 | M   | 159 |     | U   | 160 | Q   | 161 |     | S   | 162 | I   | 163 |     |     |  |
| J | 164 | W | 165 | D | 166 |   | R   | 167 | V   | 168 |     | M   | 169 | H   | 170 | O   | 171 | Q   | 172 | Y   | 173 | N   | 174 | B   | 175 | W   | 176 | G   | 177 |     |  |
|   |     | F | 178 | U | 179 | E | 180 | T   | 181 |     | B   | 182 | G   | 183 | J   | 184 | K   | 185 | X   | 186 | W   | 187 | N   | 188 | H   | 189 | M   | 190 | L   | 191 |  |
|   |     | S | 192 | Y | 193 | K | 194 | F   | 195 | A   | 196 | C   | 197 |     | O   | 198 | H   | 199 | M   | 200 | Q   | 201 |     | A   | 202 | K   | 203 |     |     |     |  |
| U | 204 | S | 205 | Y | 206 | X | 207 | D   | 208 | Q   | 209 | H   | 210 | M   | 211 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |

### 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 Input. Unless otherwise specified in the Input, 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 Output, reading down.

The answer to HiFi-Croctic No. 29 will appear in next month's issue of HIGH FIDELITY.

| INPUT                                                                                    | OUTPUT                                                          | INPUT                                                                                    | OUTPUT                                                      |
|------------------------------------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| A. Small Andean guitar made of an armadillo shell                                        | 36 155 133 20 66 196 103 202                                    | N. _____ Giordano                                                                        | 43 174 151 7 75 188 121                                     |
| B. Polish basso (1874-1946). Metropolitan star on early Columbia records (full name)     | 182 65 72 134 152 16 175 39<br>116 49                           | O. Spurious harmonics and hum added to a signal (abbrev.)                                | 171 198 23                                                  |
| C. Performed in an opera                                                                 | 120 19 102 197                                                  | P. With "distortion," signals from spurious interaction of simultaneous tones (abbrev.)  | 126 77                                                      |
| D. American brand of old German music publisher (full company name)                      | 46 56 208 17 144 29 166 135<br>154 127 107 94                   | Q. German-American opera impresario (1846-1919), built Manhattan Opera House (full name) | 13 201 89 68 132 2 156 40<br>25 209 119 108 79 172 61 161   |
| E. Less mellow or resonant                                                               | 87 26 180 111 142 34                                            | R. A _____ in Venice, Johann Strauss operetta                                            | 110 88 131 145 167                                          |
| F. Pamina in Bergman's <i>Magic Flute</i> (full name)                                    | 15 95 178 124 48 38 113 195<br>139 106                          | S. Verdi opera (2 lt. wds.)                                                              | 70 205 192 162 12 104 83 27<br>137                          |
| G. Life's work                                                                           | 183 41 99 118 177 157                                           | T. Isabelle _____, harpsichordist. Purcell suites on Oiseau-Lyre                         | 58 181 122                                                  |
| H. Mahler song cycle (Ger.)                                                              | 28 80 54 115 170 129 1 93<br>105 64 42 73 199 189 18<br>146 210 | U. American ragtime composer (1868-1917; full name)                                      | 204 59 179 30 47 147 98 11<br>138 160 82                    |
| I. Dutch jazz bass player (full professional name)                                       | 163 148 125 24 4 109 184 140<br>8 67                            | V. Haydn Symphony No. 92                                                                 | 81 10 44 168 33 143                                         |
| J. Chopin forte                                                                          | 35 71 5 164 91                                                  | W. Rosina aria in Rossini's <i>Il Barbiere di Siviglia</i> (4 lt. wds.)                  | 57 176 187 89 78 117 165 128<br>9 97 32 136 53              |
| K. Device with an indicator to show recording level (abbrev. and wd.)                    | 85 185 194 21 158 96 203                                        | X. "Well, hardly ever"                                                                   | 63 86 14 207 186                                            |
| L. British record label                                                                  | 76 51 191 153                                                   | Y. Operetta by Oscar Straus (3 Ger. wds.)                                                | 100 150 173 60 45 112 31 206<br>123 3 52 193 84 55 22<br>92 |
| M. English-born conductor who has been signed for his 100th-birthday concert (full name) | 90 50 37 74 130 190 169 159<br>200 62 6 114 141 211 149 101     |                                                                                          |                                                             |

Solution to last month's HiFi-Croctic appears on page 6.

# B-I-C VENTURI proudly announces two new speakers, and no big changes.

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and system design position between the 5 and 7. And the new Formula 3 fills a similar slot between the 2 and 4.

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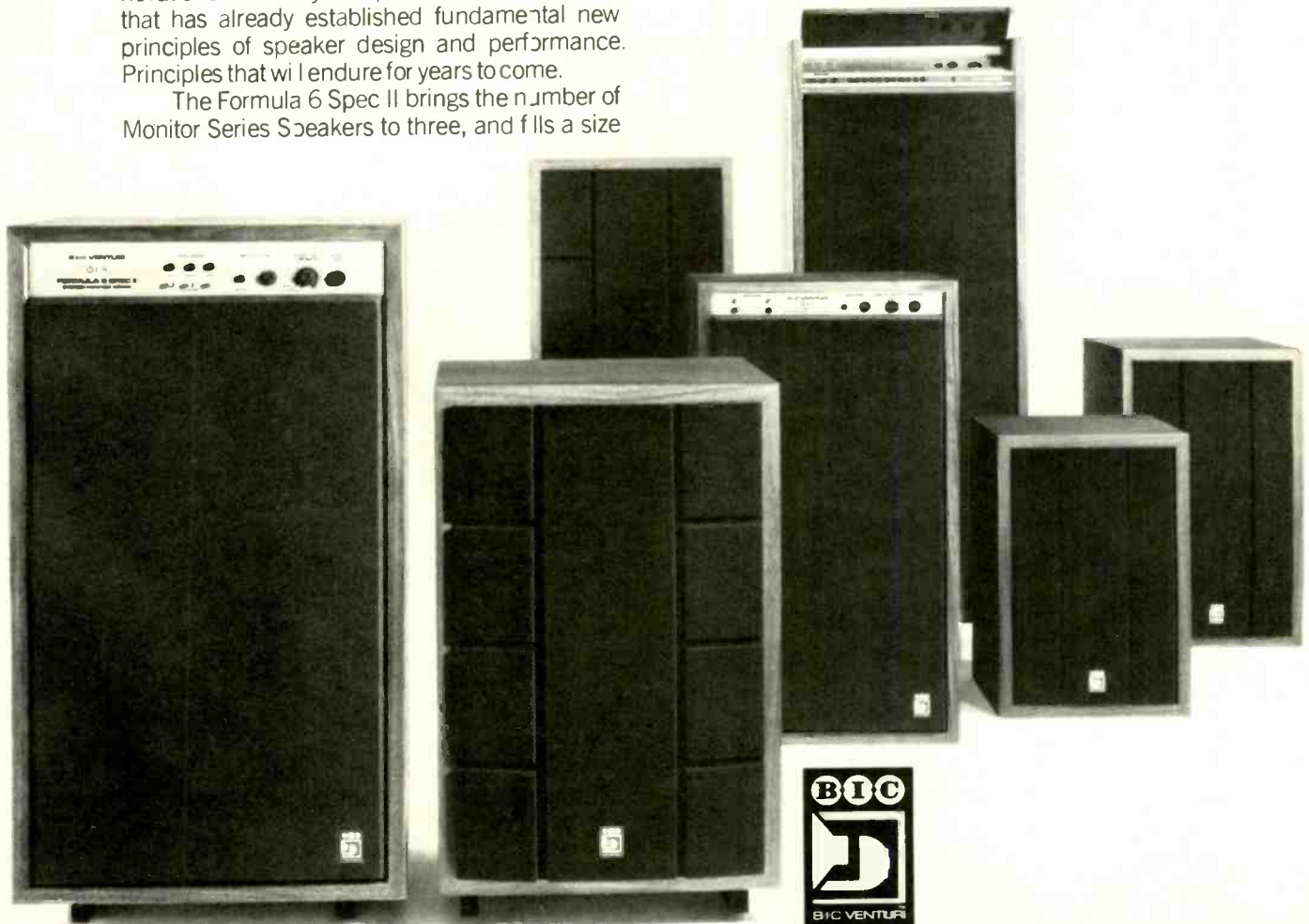
And there's a further significance, we think.

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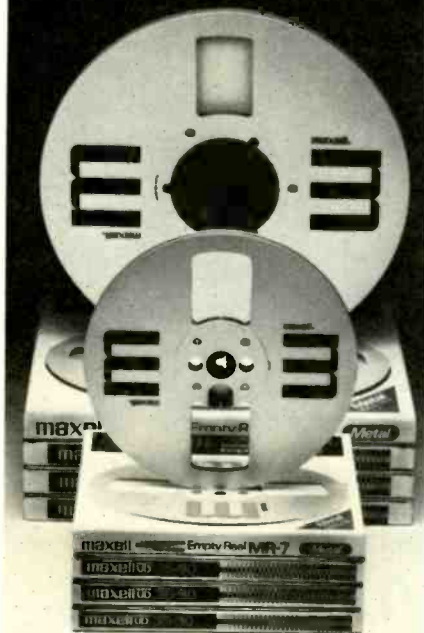
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CIRCLE 31 ON READER-SERVICE CARD

## Behind The Scenes

**Opera Rara.** We hope you read HIGH FIDELITY's classified ads as avidly as we do. Recently we were intrigued by the announcement of recordings by Opera Rara in London and wrote for more information. Along with detailed descriptive material, we received a long and informative letter from Opera Rara's Don White, explaining what the organization is and how the Opera Rara Record Club came to be. We quote in part:

"Opera Rara was formed in 1970, the brainchild of Patric Schmid of San Francisco and myself. In the past seven years Opera Rara has given the first modern revivals of Meyerbeer's *Il Crociato in Egitto* and *L'Etoile du nord*, Mayr's *Medea in Corinto* (in its original 1813 Naples edition), Mercadante's *Gli Orazi e i Curiazi* and Virginia, Offenbach's *Robinson Crusoe* and *Christopher Columbus*, Viardot's *Cendrillon*, Poniatowski's *Au travers du mur*, and Donizetti's *Maria Padilla*, *Maria di Rudenz*, *Rosmonda d'Inghilterra*, *Castello di Kenilworth*, *Torquato Tasso*, *L'Ajo nell'imbarazzo*, *Le Convenienze teatrali* (one-act version), and the Malibran edition of *Maria Stuarda*. Apart from *Medea in Corinto* (available on commercial disc), every one of these has turned up on pirate records!

"We therefore decided to beat the pirates at their own game by making the records ourselves, commercially. The biggest problem was, of course, how to pay for the recordings, when a three-disc set costs in the region of \$40,000 to package (even with young artists and conductors not well known to the record-buying public). Our answer was a subscription club, with the purchasers themselves paying for each recording in advance. Would it work? The response has been incredible. Our first recording, Donizetti's *Ugo, conte di Parigi*, is already paid for and will be done in July with Janet Price as Bianca, Yvonne Kenny as Adelia, Christian du Plessis as Folco d'Anjou, and Alun Francis conducting the New Philharmonia Orchestra (Bob Auger, probably the most famous British recording engineer, will be in charge of the technical

side) and will be available to members in mid-August. As there will be no public performance, there cannot be a pirate recording of it either! The second recording, Offenbach's *Christopher Columbus*, is nearly paid for [as of April 29].

"The other wonderful indication of interest is the response to the 'members' request' panel in our brochure. The most requested work is Donizetti's *L'Assedio di Calais*, and this will most definitely be in our second recording season. Not far behind are practically anything by Mercadante, Gomes' *Il Guarany*, Pacini's *Maria Tudor*... so there is no chance of our running out of ideas for the next hundred years!

"Opera Rara has also become famous for discovering new young talent, and our list of discoveries includes Christian du Plessis, Janet Price, Yvonne Kenny, Sandra Browne, Graham Clark, Bruce Brewer. Some have made their U.S. debuts already (Price in San Antonio's *Rienzi*, American-born Brewer with Beverly Sills in *Barber of Seville*); Brewer has sung in Rameau's *Indes galantes* for CBS, while Du Plessis is known for his Cecil in Sills's *Stuarda* and recently sang Mathisen in the *CBS Prophete*."

The plan is to record four operas a year (including one by Donizetti), with all members agreeing to buy at least three of the four. Planned for the first year, in addition to the Donizetti and Offenbach works (the latter in an English translation by White), are Meyerbeer's *Dinorah* and the Ricci brothers' *Crispino e la comare*. Each set will include three stereo discs and a full libretto, and each will cost £8.99 (or \$20 if you pay in dollars) plus postage. There are discount prices for prepayment of three or all four of the year's offerings: £24.28 (\$50) plus postage for three sets, £32.37 (\$65) plus postage for four. Postage for U.S. and Canadian members is \$5.70 per set surface mail, \$8.00 per set by air. Write to the Membership Secretary, Opera Rara Record Club, 8 Haverstock St., London N1 2DL, England.

**Early Music Group.** Reviewing the late David Munrow's "The Art of the Netherlands" in August, Susan T. Sommer had special praise for lutenist James Tyler, who was performing at the time with Munrow's Early Music Consort of London. Last year, however, Tyler—an American who began his career as soloist with the New York Pro Musica—formed his own group, appropriately enough called the London Early Music Group. Now

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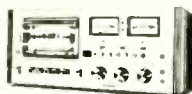
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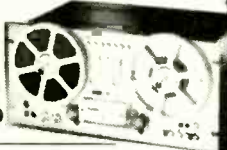
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CIRCLE 51 ON READER-SERVICE CARD

Tyler and his ensemble have been signed to an exclusive RCA contract, no doubt reflecting the increasing impact of the prebaroque in the marketplace. Already in the advanced planning stage, we are told, is an extensive series devoted to Byrd, Taverner, Dunstable, and other English composers of the period.

**Stoky/CBS: Year Two.** Leopold Stokowski celebrated his ninety-fifth birthday recording Brahms's Second Symphony with the National Philharmonic for CBS, his first recording of the work since his late-Twenties version with the Philadelphia Orchestra. The filler, the *Tragic Overture*, is apparently a Stoky recorded first (indeed the conductor didn't recall playing the piece since the Thirties).

For the second year of his six-year CBS contract, Stokowski has a number of projects firmly lined up—including a coupling of Mendelssohn's *Italian Symphony* and Bizet's *Symphony in C*, Rachmaninoff's *Second Symphony*, and Beethoven's *Pastoral*.

**Vladimir Ashkenazy, entrepreneur/conductor.** Gale Records (for first reviews, see page 112) is planning to record pianist Vladimir Ashkenazy as a conductor. We understand that one work being considered is Shostakovich's *Fifth Symphony*. Ashkenazy, who is a partner in the company, has appeared before the recording mikes as a conductor frequently, for both Decca/London and EMI. And, yes, Gale is the same Ira Gale whose turntable caused such a stir in the audio world a year or so back.

**Enticements from MHS.** Musical Heritage Society has put into effect a new price policy for all releases. The \$3.50-per-disc (\$4.95-per-cassette) price remains in effect for MHS members, but the price for nonmembers has been raised to \$4.95 per disc (\$6.95 per cassette).

That may, however, sound more onerous than it is, for MHS membership still involves neither cost nor obligation. Members now receive notice of new releases (among many other things) in the form of *Musical Heritage Review Magazine*, published eighteen times a year and sent free to MHS members. As always, members may buy as many or as few records as they wish. If that sounds like an irresistible invitation, you can get more information from Musical Heritage Society, MHS Building, Oakhurst, N.J. 07755.

**Dorati's Seasons.** Antal Dorati has recorded his second Haydn oratorio for

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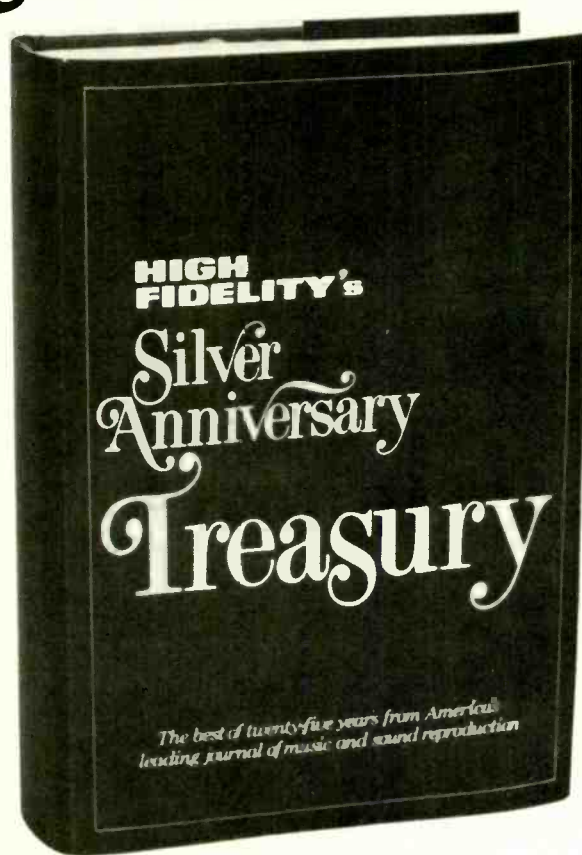
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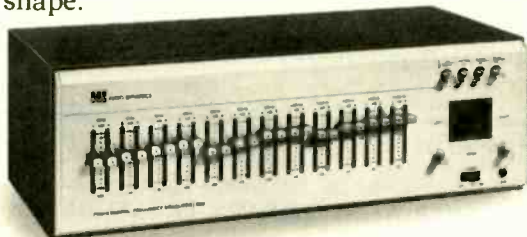
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Decca/London. Like the earlier *Creation*, *The Seasons* features the Royal Philharmonic and the Brighton Festival Chorus; the soloists are soprano Ileana Cotrubas, tenor Werner Krenn, and bass Hans Sotin. (For Decca/London, Dorati has also recorded his own Johann Strauss-derived ballet *Graduation Ball* with the Vienna Philharmonic; his new Beethoven-symphony cycle with the Royal Philharmonic is scheduled for domestic issue in the Mercury Golden Imports series.)

**Mrs. Dorati's Haydn.** Dorati's wife, pianist Ilse von Alpenheim, has also been recording Haydn—the piano sonatas, for Vox. The sessions in the Rosslyn Hill chapel, Hampstead, are being engineered by a Decca/London team; the latter company, of course, is nearing completion of its own Haydn series, by pianist John McCabe (issued domestically on the London Treasury label).

**Kontarskys signed.** The brothers Kontarsky, Alfons and Aloys, have signed an exclusive contract with Deutsche Grammophon, extending the relationship that has produced recordings of the four-hand piano works of Debussy and Ravel and the Brahms *Hungarian Dances*. Already on tape are works by Stravinsky and Bartók; future plans include works by Schubert, Brahms, and Schumann.

**Fitzwilliam Shostakovich.** It's now official: England's young Fitzwilliam Quartet—whose two Oiseau-Lyre discs of Shostakovich quartets (Nos. 7, 13, and 14 on DSLO 9, May 1976; Nos. 8 and 15 on DSLO 11, February 1977) have won high praise in these pages—is now under contract to complete the cycle.

**Boulez' Schoenberg.** With soprano Janis Martin and the BBC Symphony, Pierre Boulez has recorded Schoenberg's *Erwartung* for CBS. The likely coupling: an as yet unscheduled recording of *Die glückliche Hand*.

**Pavarotti's Pag.** Readers will recall our earlier report of Luciano Pavarotti's Decca/London recording of Mascagni's *Cavalleria rusticana*, into which Julia Varady stepped at the eleventh hour as Santuzza. (The Alfio was Piero Cappuccilli, the conductor Gianandrea Gavazzeni.) Now the tenor has added Leoncavallo's *I Pagliacci*, for issue in tandem with the *Cav*, though the two have only Pavarotti in common. In *Pag*, Mirella Freni sings Nedda, Ingvar Wixell is Tonio, and Giuseppe Patané conducts.

Recorded at the same time is a second "Pavarotti in Concert" recital of *arie antiche*.

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by Norman Eisenberg

## High Fidelity Pathfinders The Men Who Made an Industry

FRANK H. McINTOSH

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FOR AS LONG as many of us can recall, "Mac" audio equipment has enjoyed a reputation for quality as consistently high as any in the field. In great measure this stems from the perfectionist standards set by Frank H. McIntosh, founder and president of the company that manufactures Mac products.

He is both an astute technician and a musician—a combination that has characterized the genus "hi-fi nut" from the beginning. An acknowledged innovator in amplifier circuit design, McIntosh is an accomplished cellist who, while still a high school student in the early 1920s, performed with his brothers in the McIntosh String Trio over Radio Station WOAW (now WOW) in Omaha, their hometown.

"Our trio specialized in the light classics," he recalls. "I was offered a music scholarship, but I turned it down since I was more interested in engineering." He got a part-time job at WOAW, eventually becoming chief engineer. During this period McIntosh also taught math and radio at a YMCA school, wrote columns on radio for various newspapers, and did a stint as radio editor for *Popular Mechanics* magazine.

In 1929, feeling he was ready for his first "steady" job, he went to work for Bell Telephone Labs. This was a boom time for the radio industry, and McIntosh estimates that during his eight years with Bell he either installed or worked on the equipment for 235 radio stations. After a period spent with other firms, mostly working with broadcast equipment, he joined the Radio and Radar Division of the War Production Board early in 1942 and served until the war's end. In 1945 he started his own consulting business, and it was then that his interest seriously turned to high fidelity.

While working with Frank Stanton, then president of CBS, in setting up a subscription-music service in 1946, McIntosh became disenchanted with the quality of the amplifiers available. He decided to build his own—one that would provide both higher power and

lower distortion than ever before. Up until then it had been a tradeoff: You could have either relatively high power and high distortion, or low power and low distortion. McIntosh's solution, worked out over a period of about two years, was the "unity-coupled" circuit. He patented the circuit and in 1949 set up his own manufacturing company, McIntosh Laboratories, in Silver Spring, Maryland.

The amplifier that embodied the new concept was the Model 50W-1, which produced an unprecedented 50 watts output from 20 to 20,000 Hz at less than 0.3% distortion. It was built around a new transformer designed by McIntosh that used two primary windings in parallel instead of in series, as in the past. A detailed technical analysis was published in *Audio Engineering* magazine (December 1949) by McIntosh and a young associate named Gordon Gow, who today is the company's executive vice president and director of sales.

McIntosh recalls the combined enthusiasm and skepticism that greeted this prodigy when he first demonstrated it before a meeting of the IRE. A major skeptic was O. B. Hansen, then chief engineer for NBC. Hansen spent hours studying the amplifier and ended up ordering fifty of them. Another major order came from the Canadian Broadcasting Corporation, and McIntosh Laboratories was off and running.

But McIntosh was not entirely satisfied. The 50W-1's performance could be documented by measurements, but what was the effect on listeners? How important was it to provide power and distortion at levels that, in those days, were still psychoacoustic frontiers few had yet approached?

He began conducting his own A/B listening tests, and the results were some axioms that have since become basic to high fidelity sound—sometimes disputed, sometimes qualified, but always taken to be as near to gospel as anything can be in sound reproduction. One axiom was that inter-



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modulation distortion (the production by an amplifier of spurious sum-and-difference frequencies caused by the beating of two simultaneous original frequencies) is more noticeable and more objectionable than harmonic distortion (simple multiples of an original single frequency) even when both show the same measured value. Another was that any kind of distortion becomes detectable and objectionable when it rises by a quantity of 0.5% or more, even if the total distortion does not exceed 1%. (The upper and lower limits of distortion in McIntosh's early experiments were 0.2 and 0.7%.) Out of these tests also came the "two-to-one" theory: Any doubling of distortion can be heard as objectionable, and—conversely—a reduction of distortion by half can be heard as an improvement in the sound.

The 50W-1 amplifier was followed by the Model AE-2 preamp and a 20-watt power amp, the Model 20W-2. Among the better-known products that appeared later were the C-8 and C-20 preamps and the MC-75 and MC-50 power amps. McIntosh Laboratories' first venture into FM came in 1962, and in 1971 it launched its own speaker line. The present product line includes the MC-2300, a stereo basic amp designed to deliver 300 watts per channel.

A relative latecomer to solid-state ("we had to be sure of reliability since we were offering three- to five-year warranties on all our equipment"), the company showed considerable ingenuity with its clinics at retail outlets in the 1960s. McIntosh estimates that, thanks to these clinics, something like 94% of all Mac equipment sold in the past two decades is still in use. This stability is reflected too in the company's personnel roster, which with a handful of exceptions still includes everyone taken on since the early Fifties. It has a similar record with its dealers.

Today, at the age of seventy, Frank McIntosh still runs his company, located since 1954 in Binghamton, New York. His newest interest is room equalization. The staff for some time has been measuring the response of representative home listening rooms and is amassing data on acoustical conditions that can degrade the response of a sound system. This activity is expected to culminate in a new service-and-product offering: A trained dealer will analyze a listening room using a multiband pink-noise device and install a specially designed filter for the client's electronics. No date has been set for the program's official inception, but both the diagnostic and corrective equipment are being developed at the factory.

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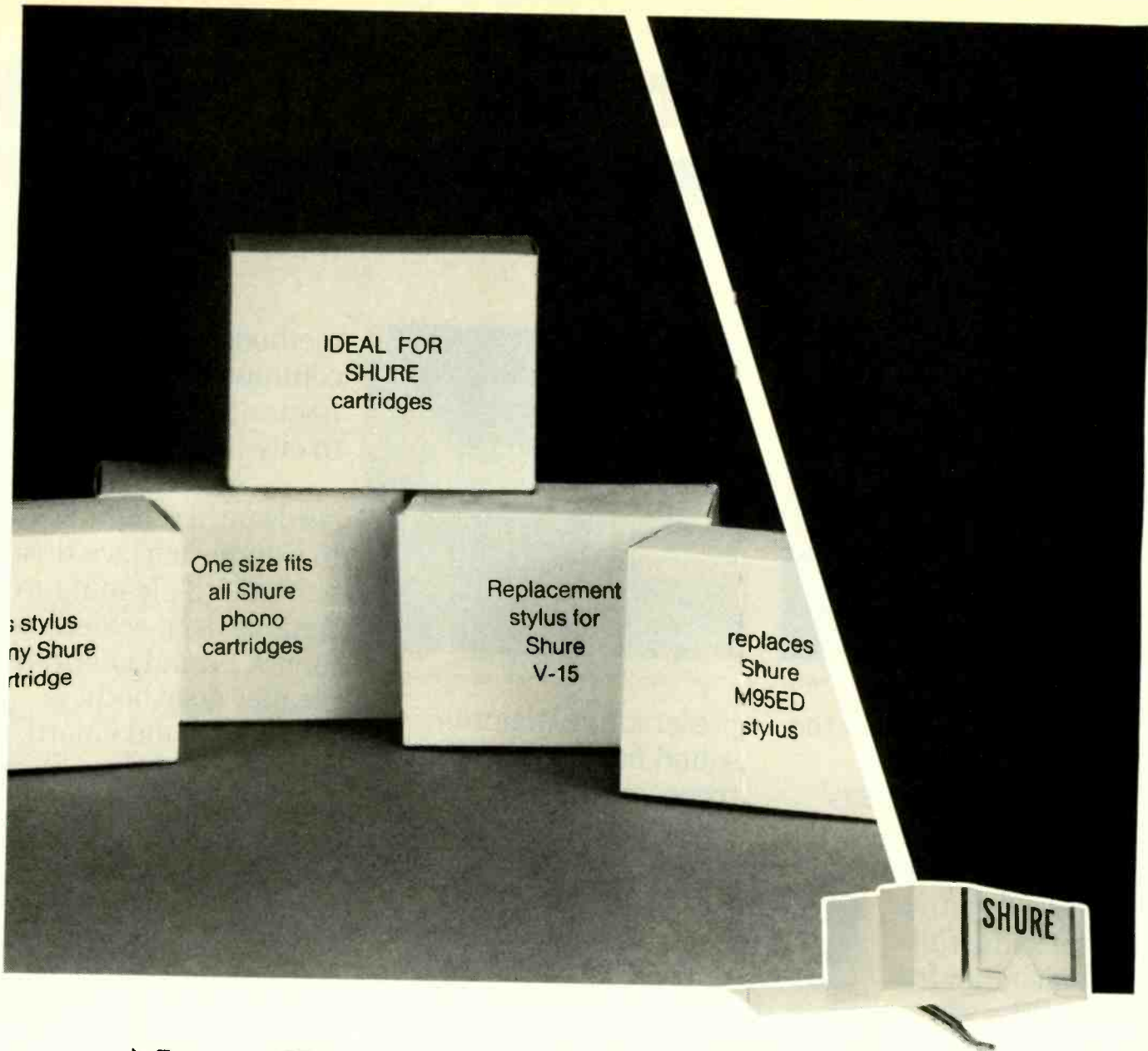
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# In the Loudspeaker Testing Lab

A close look at the up-to-date measurement techniques that underpin HIGH FIDELITY's speaker testing program

by Emil Torick

"IT TALKS. IT WHISPERS. IT SINGS." Thus proclaimed an advertisement, nearly a century ago, for one of the earliest commercial models of the Edison phonograph. It would have been difficult to make separate technical performance tests on the rudimentary horn loudspeaker of that device, integrally connected as it was to the rest of its mechanical reproducing apparatus. But it is undoubtedly true that it did talk, whisper, and sing—as well as shriek, grunt, scratch, and create myriad other sounds. Today, when we examine high fidelity loudspeakers, we hope that they will do none of these things, that they will not inject their own personalities into the reproduced musical performance, that they will simply and accurately convert an electrical signal into its exact acoustical equivalent. That is our hope, and to a first approximation all modern loudspeakers achieve that goal. Against more exacting criteria, however, significant differences immediately become apparent. This, then, is the purpose of the HIGH FIDELITY speaker test program—to identify and quantify those essential performance characteristics that distinguish notable reproducing systems from ordinary ones.

The accomplishment of this task requires the cooperative efforts of skilled engineers and critical listeners. At the laboratories of the CBS Technology Center in Stamford, Connecticut, each speaker system is subjected to a battery of technical measurements intended to "exercise" it both under normal operating conditions and near the limits of its capabilities. After the measurements have been completed, and the resulting data sorted and analyzed, the "golden ears" of the HF editors go to work in the listening room in Great Barrington, Massachusetts. No significant performance detail is overlooked.

Indeed, the human ear is in some respects still the most sensitive piece of test equipment yet in-

vented. It is possible to hear certain defects that are beyond the resolution capabilities of today's electronic test instrumentation. Conversely, the electronic tests provide a significant degree of repeatability and quantification of performance results. Furthermore, as currently implemented at CBS, the technical measurements are intended to predict what a listener will hear. Thus the subsequent listening tests provide a corroboration as well as an interpretation of the lab data.

Not all loudspeakers are designed to provide truly "high fidelity" response. Musical instrument speakers are a good example. The designer of an electric guitar system or an electronic organ considers the loudspeaker to be an integral part of the tone-generation system of his product. Nonlinear response that would produce distortion in a phonograph may be a source of the coveted "distinctive" sound in a musical instrument. In these applications, the paramount factors may be power-handling capability and frequency range, rather than such attributes as frequency response and pulse response. For high fidelity applications, however, all are important, and a worthwhile test program must provide a complete characterization of loudspeaker performance.

## Frequency Response

The first requirement of any audio reproducing apparatus is that it respond to all frequencies of excitation in a similar manner, unless such response is *intentionally* altered (as in an equalizer). Amplifiers have the easiest time of this, transducers a more difficult one. In a phonograph cartridge, for example, the various moving elements of the mechanical system exhibit their own resonances, which may interact with record groove modulations to produce a less-than-perfect response. In a loudspeaker system the goal becomes even more difficult to achieve. There are the same constraints associated with moving parts, but to this we must add the effects of the cabinet, the interactions of the low, midrange, and high frequency drivers (at various points in space), and the environmental effects of the listening room itself.

---

*Emil Torick supervises the HIGH FIDELITY test program at the CBS Technology Center, where he is director of audio systems technology. He is president-elect of the Audio Engineering Society and maintains an avocational interest in music as a symphony violinist and organist/choir director.*

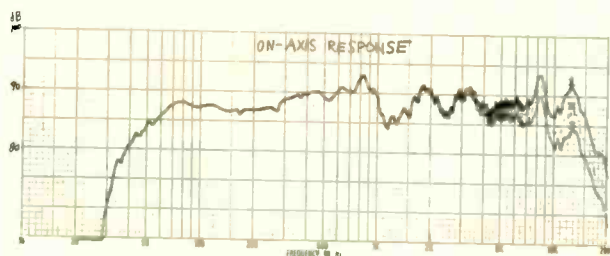


Fig. 1: On-axis pure tone response

This latter effect creates a salient problem in testing a loudspeaker. For a test procedure to be universally useful, the reported results must not be dependent on the response in any single environment. The data must be repeatable; they must provide a basis for comparison between various system approaches (for example, between direct radiation and reflection); and they should in general attempt to characterize all systems fairly. The listening room, then, is an uncontrollable factor facing both the designer and the evaluator of a speaker system. The designer may specify that a speaker should be mounted a certain distance from a wall to provide correct back reflections. He may specify that corner placement is essential to achieving adequate low-frequency response, or he may recommend a minimum height off the floor to prevent "boominess." What he does not specify is the room itself, obviously because one must accept what is available in this regard and also because room response cannot be accurately analyzed. As Frederick V. Hunt, head of the Acoustic Research Laboratory at Harvard University, said just a few months before his death in 1972, "We have finally learned to solve the equation of an empty, plain, hard-walled, rectangular room. But let someone put a single chair in that room, and we do not yet have the means to predict its effect."

Because of all the variables attendant in making loudspeaker measurements in a conventional

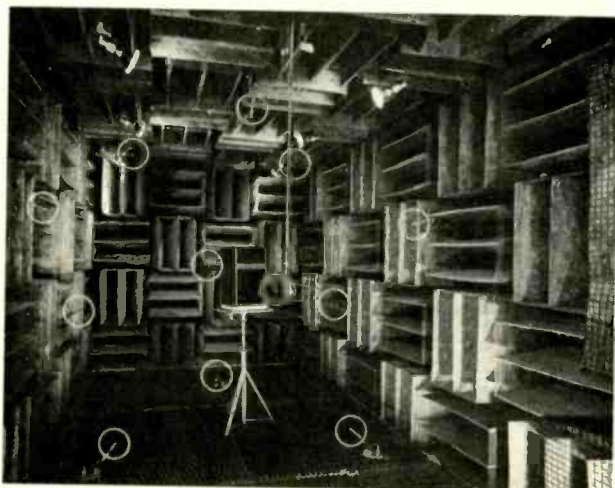


Fig. 2: Mike array in anechoic chamber

room, so-called free-field measurements are taken instead. In free-field measurements, the boundaries of the room are removed—acoustically speaking. These tests can be performed outdoors high above any reflecting surfaces but are more conveniently performed in an anechoic chamber. Literally a room without echo, the anechoic chamber has walls that are highly absorptive acoustically. Since there are no reflections, there are consequently no reinforcing (in-phase) nor canceling (out-of-phase) interferences. At the CBS Technology Center, the anechoic chamber is approximately 16 by 9 by 15 feet high and is constructed of 8-inch block walls with an 8-inch concrete floor and a 3-inch precast ceiling. The entire assembly is suspended top and bottom by springs at approximately a 3-Hz resonance to isolate the room effectively from external noise sources. Acoustic absorption is obtained with 45-inch glass-fiber wedges that line the entire interior surface. An open metal-grille platform supports personnel and equipment without affecting the absorption of the wedges or causing significant reflections.

The basic response measurement made on all loudspeaker systems is a pure-tone frequency sweep at a power level low enough to minimize distortion. A microphone, with calibration traceable to the U.S. National Bureau of Standards, is mounted 1 meter away from the front geometrical center of the speaker cabinet. The measurement registers automatically on a chart recorder synchronized to a variable-frequency oscillator. Fig. 1 shows a typical charted response. While this particular graph does not tell much about the absolute performance of the speaker itself, it does give a good picture of the relative response of any equalization controls (which are provided for the highs only on this example).

More meaningful frequency-response measurements are made using noise as the energizing signal. Random noise that has equal energy at all frequencies is called white noise. Since it is more convenient to use one-third-octave bands of noise, we use "pink noise"—which by definition has constant energy in all bands—to effectively average out insignificantly narrow peaks and dips in the response. Three response curves are plotted: The first is analogous to the on-axis response in Fig. 1; the second represents the total power radiated directly into the hemispherical space in front of the speaker; and the third represents the total power output for radiation in all directions.

In such measurement of total power output, we employ unique electroacoustic equipment and computer aids. The Loudspeaker Power Monitor, recently developed by the CBS Technology Center, uses a special algorithm to process simultaneously the outputs of twelve individual microphones. Fig. 2 shows these microphones in a

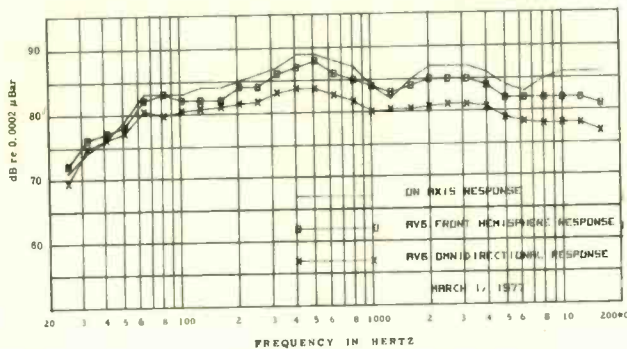


Fig. 3: Third-octave-band noise response

dodecahedron array surrounding a loudspeaker in the CBS anechoic chamber. With the new test procedure, the speaker is energized with a one-third-octave-band pink-noise sweep. The Power Monitor processes the microphone signals to yield the on-axis, front-hemisphere, and omnidirectional responses. The same measurement is then taken two more times, with the orientation of the loudspeaker adjusted each time so that the horizontal and vertical angles between adjacent microphones are cut into three equal parts. Thus, response data from a total of thirty-six locations about the loudspeaker are available for final computer processing and analysis. Measured frequency bands range from 20 Hz to 20 kHz—an interval encompassing thirty separate one-third-octave bands. With thirty-six locations for the omnidirectional response and eighteen locations for the hemispherical response, plus the single-location on-axis response, all times thirty frequency bands, a total of 1,650 data points must be processed. The computer handles this task easily, producing a final set of curves like the ones shown in Fig. 3.

Although the curves of Fig. 3 appear relatively easy to read, special care must be taken in interpreting them. The curve for omnidirectional response is the most significant, for it shows the total radiated energy that will ultimately react with the room to produce the final audible response. A good speaker will always show an even curve with only small peaks and valleys. Bass response should roll off smoothly, although we must recognize that radiation efficiencies at the lower frequencies will improve bass response by about 4 to 6 dB when a speaker is located in a corner of the room. Finally, a good sense of high-frequency dispersion may be gained by comparing the on-axis response with that of the other two curves. If the high-frequency contour of the on-axis response parallels that for the other two modes, the spectral balance within the treble region will remain essentially the same irrespective of listening position; if these contours converge or diverge markedly, it is an indication of irregular high-frequency dispersion—what is commonly described as “beaming.”

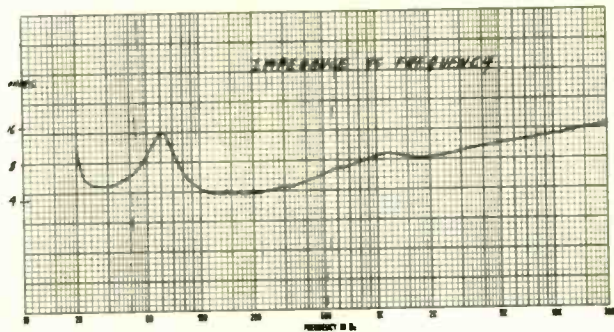


Fig. 4: Measured impedance curve

## Sensitivity and Impedance

You may have noticed that Fig. 3 also includes information about the sensitivity of the loudspeaker, which is, of course, related to its efficiency in converting electrical to acoustical energy. The vertical axis at the left margin of the chart is calibrated in units of sound pressure level (dB) to indicate what output level is produced when the speaker is driven with a voltage equivalent to a nominal 0 dBW (1 watt). Since most musical energy falls within the range from 250 Hz to 6 kHz and sound beyond these frequencies has relatively little influence on our basic perception of the over-all loudness of the sound, the sensitivity figure is the average sound pressure level achieved within this frequency range for a 0-dBW pink-noise input. The figure can be used as a guide in determining how much amplifier power will be needed to drive the speaker under test to any desired sound pressure level.

Until recently the sensitivity figure was derived from the on-axis measurements. But since the important criterion is the total acoustic energy delivered into the listening room—not just that delivered in the on-axis direction—we now use the omnidirectional response data as the basis. For this reason, sensitivity ratings of front-firing speaker systems will be several dB lower than with the on-axis measurement, while designs that radiate much of their energy in other than the on-axis direction will, for that reason, exhibit higher sensitivity figures than formerly.

Wattage readings usually are not made directly; they must be inferred from a knowledge of the voltage applied and the impedance of the loudspeaker. Since the actual impedance of a speaker system is not constant at all frequencies, we choose to use a factor called *nominal impedance*. The determination of nominal impedance is actually the first measurement performed in a loudspeaker test, for it provides the basis for level setting in all subsequent measurements. The nominal impedance may or may not be the same as the manufacturer's rated impedance. The former value is determined quite accurately, while the lat-

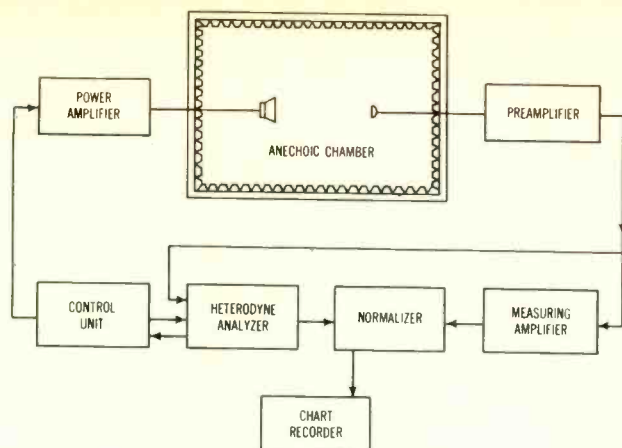


Fig. 5: Distortion measurement system



Fig. 6: An engineer measuring distortion

ter is usually rounded out to some familiar number like 4, 8, or 16 ohms.

To determine the impedance of a loudspeaker system, we insert a high value of resistance (actually 2,500 ohms) in series between the power amplifier and the speaker terminals. Using Ohm's law, we can plot the impedance ( $Z$ ) curve as a function of frequency from the voltage across the speaker and the current through the resistor. Fig. 4 shows the impedance curve for a typical multi-element loudspeaker. The rise at low frequencies is caused by the primary resonance of the woofer unit in its enclosure. (Sometimes we may see two peaks here if the system employs a vented-box configuration.) Just above the woofer resonance, the impedance curve dips to a low level. The value at this point is defined as the nominal impedance. At higher frequencies, the impedance curve may exhibit additional peaks and valleys. Small variations are of little concern; modern amplifiers take them in stride. But significant dips below rated or nominal impedance, especially over a broad frequency range, should be viewed with some concern. The lower the actual impedance, the more risk it poses of drawing excessive current from the output of the amplifier. The situation will be aggravated, of course, if two similar speakers are connected in parallel across the amplifier.

## Distortion

The measurement of distortion in any transmission or reproducing system continues to be one of the most important performance tests. In the most common procedure, distortion is measured by driving the system under test with a single tone at some specified level. The output signal is then processed, either by filtering or cancellation, to remove all traces of the original tone, and what remains are various harmonics of the original signal, created by the undesirable nonlinear processes in the system. This remnant signal, termed total harmonic distortion, is usually expressed as a percentage of the original driving signal. In another common technique, two driving frequencies are

used, either closely spaced in frequency or far apart. These signals are then processed in a manner similar to the first method to produce a measurement of intermodulation distortion—sum and difference tones of the two original signals. In the HIGH FIDELITY test program we use a third technique that is a variation of the harmonic distortion method. Most revealing for phonograph pickup and loudspeaker tests, this last method uses a sharply tuned bandpass filter to detect the level of specific harmonics—usually the second and third.

The question of which driving frequencies to use is especially difficult in a speaker test because of the uneven frequency response of most systems (remember Fig. 1!). Consider a test with a 1,000-Hz fundamental driving frequency (whose second and third harmonics are at 2,000 and 3,000 Hz). In testing an amplifier with a ruler-flat frequency response there would be no question about the validity of the level of the 2,000- and 3,000-Hz signal components. With a loudspeaker it is an entirely different matter. These harmonics (or even the fundamental) may fall on peaks or valleys in the response or coincide with cabinet resonances or even fall where a driver is being rolled off by a crossover network. So the test results obtained clearly may be influenced by the frequency selected for the test.

In the past we have usually chosen 80 and 300 Hz as relatively useful for loudspeakers. Now, in a major step forward, and using a specially designed setup illustrated in Figs. 5 and 6, we are able to make a continuous frequency sweep for each distortion measurement. Typical results are shown in Figs. 7 and 8 for second and third harmonic measurements, respectively. The frequency scale represents the fundamental driving frequency, and the distortion level is read directly in per cent on the vertical axis. Two driving levels are used—one watt at nominal impedance, and a higher level that will result in an average output of 100 dB SPL in the region of 300 Hz.

Note the widely varying distortion levels. This degree of detail would be impossible to achieve in spot frequency measurements. Note, too, the gen-

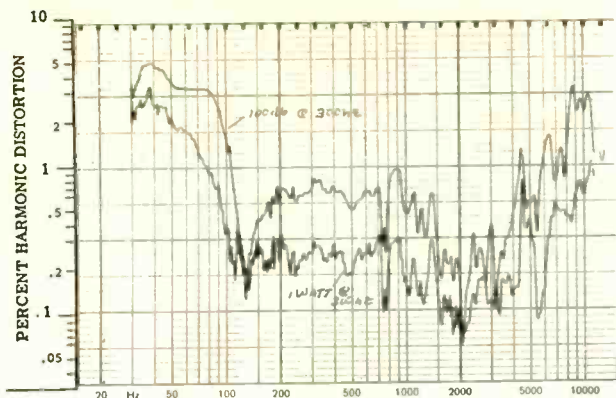


Fig. 7: Second harmonic distortion

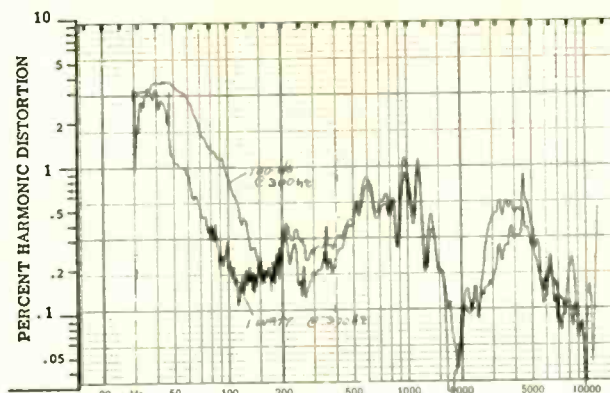


Fig. 8: Third harmonic distortion

eral but not consistent increase in distortion at the higher signal level. It is not unusual for distortion to be greater at lower levels. A sharp, high peak at a single frequency probably indicates a resonant buzzing of some component in the cabinet.

### Power Handling

There are times in the life of any music-reproducing system when it is called upon to perform to its full limits. At such times, the stresses on each component may be quite severe, and it is especially useful to know in advance what the limitations are. Consequently, we subject a phonograph pickup to the tortuous tracking requirements of a test record and drive an amplifier hard to just below (we hope) the point where the smoke begins to seep out. And loudspeakers get similar treatment in a combination of steady-state and pulse-power measurements.

In the steady-state measurement we determine the ability of a speaker to handle 100 watts of continuous power at 300 Hz. As the power is increased from a lower level, if the speaker begins buzzing or if the output distortion reaches 10%, we halt the test and note the power and output levels. Sometimes, on speakers with built-in protection, the test is halted automatically when a circuit breaker is thrown or a fuse blows. On other occasions a manufacturer may specify greater than 100-watt capability, and that too will be checked out. In all cases, the speaker—or, rather, its output—is watched very closely to avoid the kind of overheating that would permanently damage it.

There is less danger from overheating when pulse measurements are employed, permitting even higher power levels than with the steady-state measurement. It is possible to use various pulse waveforms for such a test, but the signal that best simulates the wave shapes produced by musical instruments is one that provides the simultaneous application of all frequencies in a one-third-octave band of frequencies. The actual waveform is shown in Fig. 9. It is generated by passing a square unit pulse through a one-third-octave filter.

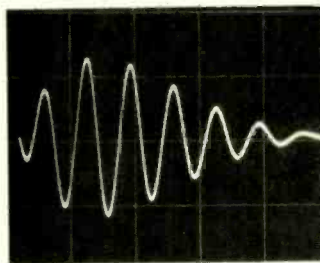


Fig. 9: Pulse waveform on oscilloscope

and it can be proven mathematically that all frequencies within the octave band are present and at the same power level. As the pulse signal is applied at ever-increasing levels, the output of the loudspeaker is observed on an oscilloscope. The point at which visible distortion begins to occur is considered the upper limit of the system, both in terms of peak power-handling capability and peak sound-level output.

### A Final Assessment

What do the results of all these measurements mean? Only the experienced eye and ear can tell. If it is the sound that counts and we accept the physiologist's definition of sound as "that which is heard," then the correct interpretation of the technical data requires that listening tests be performed as well. That otherwise-impressive one-third-octave noise response curve may show a small level change somewhere across the frequency band. If the bass frequencies are higher in level, does this indicate a too-heavy bottom or a deficiency in highs? Only the ear can tell. Or if the highs are more pronounced in level, does this imply too much brightness or a deficiency in bass? Only the ear can tell. Is the sound quality acceptable or is that distortion peak giving an objectionable edge to the sound? Only the ear can tell.

And so it goes—the happy marriage of two techniques, each complementing the other. The net result? A test report that is as accurate as state-of-the-art technology permits, and one that is as meaningful and relevant as informed audition can make it. ●

by Harold A. Rodgers

# COMPUTER TECHNOLOGY

IF THE CONTEMPLATION of computer-aided design applied to speakers and speaker systems fills your mind with terrifying images of some 2001 in which a malevolent HAL conjures up components suited to the taste of mechanical (tin?) ears, you can relax. That's not the way it is at all. The most important decisions made by the designer of a piece of audio gear are musical and psychoacoustic—and barring radical changes in the nature of human hearing, they are likely to remain so. And since matters of this type are not particularly amenable to mathematical solution, of what use, you may ask, is the computer?

To answer that, it is necessary to realize that, in comparison with electronics, loudspeakers—which are more complex to begin with—are in a relatively primitive state of development. Consider, for example, a power amplifier. Generally, it is not too hard to make one whose response curve is flat across the audio band—plus, often, a large safety margin—give it almost any maximum power we choose, and make its distortion negligible (although the criteria for what is negligible have become ever more stringent through the years). But things are not so simple when we design a speaker. We cannot within practical limits of cost and size design for the total audio bandpass plus a safety factor (certainly not with flat response) nor can we reduce distortion to negligible levels—and if high power output without sacrifice of bandpass is important we come rather quickly to the question of efficiency. What this all means is that it is necessary to juggle literally dozens of interacting parameters and put the glitches where they will do the least audible harm. The computer can be of much help in defining physical limits, providing that the interactions can be described in mathematical terms.

Let's take a peek into a speaker design lab and watch how a computer helps an engineer analyze a woofer. The first step is to activate the computer and answer its "housekeeping" questions about the date, ambient temperature, height above sea level, and barometric pressure. When this has

been done, the machine poses a series of questions concerning the driver under test, such as: "How is the driver identified? Is the driver connected to the test apparatus? Is the driver in free air?" This continues until all necessary conditions are satisfied; a portion of the test is then run and the data stored by the computer. Then some more questions: "Is the driver mounted on a box? What are the dimensions of the box?" Once the engineer has typed in acceptable answers to these and a few other questions, the test proceeds. In a few seconds, the computer types out a table of alignments—basic relations between the woofer and its enclosure classified in terms of applicable filter theory—giving enclosure volume, cutoff frequency, dimensions of the vent (if any), electrical source resistance, and other parameters.

This is a somewhat simplified description of a system that has been used by Dr. J. Robert Ashley of the University of Colorado (who acted as design consultant for the Koss CM series) and others. Its beauty is that it tells the designer exactly what can be gotten from a particular woofer—and how to get it. He need only decide what he wants; the computer does all the busywork.

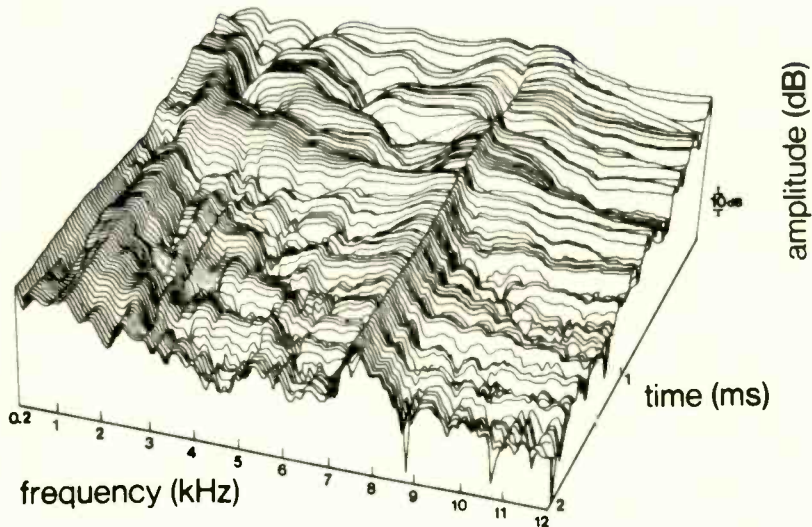
Another notable use of the computer, pioneered by KEF Electronics of England, is in determining the response of a speaker to an impulse of very short duration. The measured data from such a test give information not only about transient response and time dispersion, as might be expected (see Peter Mitchell's article on p. 76), but about frequency response as well. The problem in making this measurement has been that, in order that the test pulse contain the full range of audible frequencies, it must be very short and, therefore, will contain little energy, even when its amplitude is made rather large. This, in turn, means that the signal-to-noise ratio available for the test is poor.

Computer analysis solves this nicely by having the processor repeat the test many times, typically from 64 to several hundred (which a human tester could not do without horrendous tedium and probable error), and average the results, thereby lessening the noise component. Since an impulse response can be interpreted as equivalent

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# TRANSFORMS SPEAKER DESIGN



Cumulative decay spectrum shows how amplitude (vertical axis) falls off with time (back-to-front) at frequencies from 200 to 12,000 Hz (left-to-right) after speaker is excited by an impulse, and summarizes all tone-burst responses across that bandwidth. The ridge near 7 kHz is a characteristic resonance of the system under test.

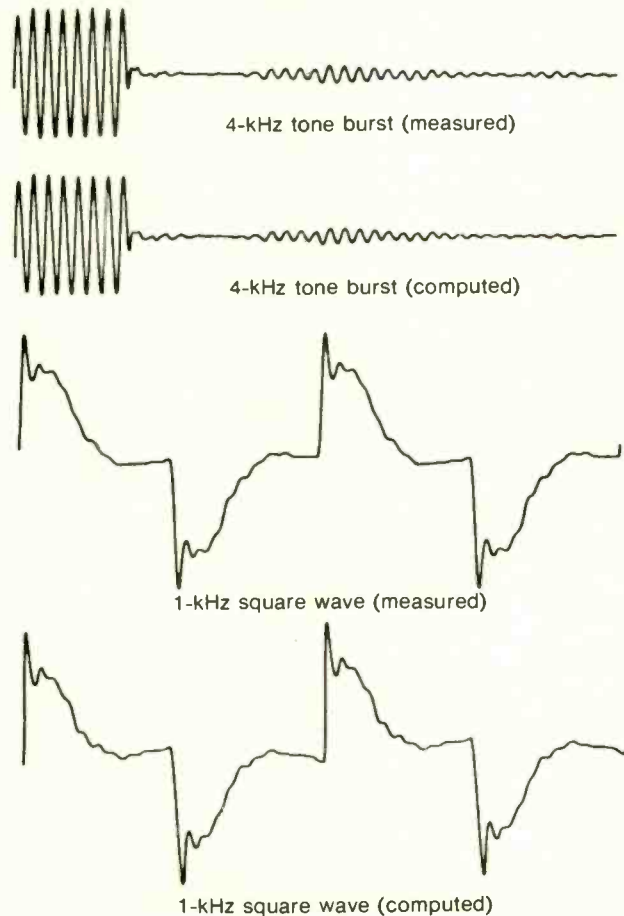
to all possible tone-burst responses (the response to any tone burst, square wave, or other signal can be computed from the impulse response), the data is sometimes displayed as a three-dimensional plot of amplitude, time, and frequency that shows how each frequency component decays with time.

Interestingly, the impulse response for a multi-way system is the sum of the impulse responses of the individual drivers, provided that correction is made for their relative positions and for the cross-over network. Thus, if a library of impulse responses of existing drivers is kept, it is possible to model entire speaker systems via the computer. Variants of this technique are used by companies as diverse as B&W Loudspeakers and Acoustic Research and, of course, by KEF.

These examples do no more than scratch the surface. The possibilities of computer-aided design applied to loudspeakers are vast. The limits that exist are in areas (such as room interactions) where precise mathematical models either do not exist or cannot be made sufficiently general to be useful. (For what room shall the model be made?)

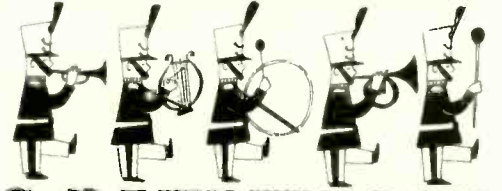
It is not precisely true to say that computers make it possible to do things that are impossible otherwise: In principle, what can be done with a computer can be done without one. The reality is more nearly that computers can make practicable endeavors that are otherwise impracticable. To the consumer this will mean ultimately that more performance is available from a loudspeaker, and at lower cost, than otherwise. ●

## Measured responses vs. computed responses



by Peter Mitchell

# THE GREAT PHASE-COHERENT, TIME-COMPENSATED, LINEAR/SYNCHRONOUS BANDWAGON



or, What's All This about Time Dispersion in Loudspeakers?

IF YOU ENTER the premises of an audio dealer and admit that you are shopping for loudspeakers, the likely outcome is that you will be shown at least one model with its drivers offset in space to achieve "phase coherency," "linear phase," "time compensation," or some other abstruse-sounding desideratum. Actually, the reality underlying these terms (manufacturers can't agree on one) represents one of the most interesting and controversial topics in loudspeaker design today. What it involves is constructing the speaker so that the original phase relationships of all the frequency components in the input signal are maintained in the acoustic output. To put it another way, the goal is to have the waveform of the input signal (as seen on an oscilloscope) emerge unchanged in the acoustic output.

The worthiness of this endeavor is a matter of some debate. It is represented by its partisans as a real improvement in performance, while its detractors see it as a costly waste of time at best, and more likely as a ploy designed to provide a marketing advantage. Who is right? The answer to that question requires careful consideration of the way the resulting waveforms are heard by the human ear—which, in turn, demands answers to numerous additional questions, all of which must be formulated with precision.

## What Is Phase?

Phase is a physicist's or engineer's way of relating a continuous signal (one that theoretically has always existed and will always exist) to an arbitrary point in time. Take our old friend the sine wave. If we examine it at some freely chosen instant of reference and see how far along it is in executing one

complete cycle, we can call that fraction of a cycle its phase. Now, if we know the frequency of the wave and its amplitude, the wave is defined for all time. (Times earlier than the reference instant will be considered negative.) Since one complete cycle of a wave can be interpreted as an angle of 360 degrees, we will consider any fraction of the total one-cycle waveform as a phase angle equal to the appropriate fraction of 360 degrees. From a mathematical point of view such a definition of phase leaves much to be desired, but it is good enough for present purposes.

For a speaker to be linear with respect to phase, we require that, if one frequency is reproduced with its original phase angle (this can be ensured by a suitable choice of reference instant), all other frequencies must be as well. Our first key question is: Will a speaker that has this characteristic sound any different from one that does not? In trying to answer it meaningfully, we must use test signals long enough and steady enough to avoid transient effects. (Remember the signal is assumed to have existed infinitely.)

## The Effect of Phase on Tone Quality

In recent years many controlled experiments aimed at defining the phase sensitivity of the human ear have been performed. Typically these tests are conducted with electrostatic headphones, or with loudspeakers in an anechoic chamber, to provide the cleanest possible signals with the least interfering noise and the fewest extraneous factors to confine the interpretation of the results.

One type of experiment involves the use of an "all-pass" filter, a circuit that delays each frequency by a different amount but does not alter the frequency response. Despite amounts of phase shift similar to or far exceeding that found in normal audio components, listeners have consistently

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*Sometime astrophysicist Peter W. Mitchell is a well-known audio designer, consultant, and commentator.*



reported that the all-pass filter produces no perceptible change in the quality of continuous musical sounds or test tones. Mark Davis at MIT has demonstrated an extreme form of this experiment in public: A square wave, with harmonics spanning the audio spectrum, is sent through thirty one-third-octave filters wired in parallel, covering the audible frequency range. Each filter (because of its sharp cutoff) causes phase shifts much greater than any conventional audio component would yield. In this test, the filter set functions as an all-pass filter, preserving the amplitude of the square wave's harmonics while scrambling them in time and thus severely altering the waveform. Listeners, in A/B comparisons, describe the difference in sound between the undistorted and scrambled versions as barely perceptible or non-existent.

Another experiment involves playing a square wave and periodically phase-shifting the third harmonic by 180 degrees. This, too, produces a radical alteration of the waveform, yet listeners find it extremely difficult to identify any change in the sound. Many researchers have arrived independently at the same conclusion: The human ear does not operate as a waveform detector for continuous tones; amplitude and time information are detected separately.

Consider, however, an experiment that has confused some audiophiles because it seems at first to be similar but yields startlingly contrary results. Begin with a continuous tone at 1,000 Hz containing a harmonic overtone at 3,000 Hz (and perhaps other harmonics as well). Add a second tone at 1,500 Hz with similar harmonics at 3,000 Hz, 4,500 Hz, etc. Now shift the phase of the second tone. One can hear a clear difference in the quality of the combined tone. You might be tempted to conclude from this that the ear is sensitive to the phase of harmonically related frequencies. In fact, what the ear is responding to is an amplitude difference—the varying level of the 3,000-Hz component. As the tones are varied in relative phase, their 3,000-Hz overtones mutually reinforce or cancel. But when the composite of the two tones undergoes phase shift (as by means of an all-pass filter), the difference in perceived sound disappears because there no longer is reinforcement or cancellation of component overtones.

Yet there are certain special continuous signals to which the ear genuinely appears to be phase-sensitive. The phenomenon requires complex tones containing closely spaced frequencies. For instance, when presented with pure tones of 950, 1,000, and 1,050 Hz simultaneously, and when the phase of the 1,000-Hz component is changed by as little as 30 degrees, the ear hears a change in the texture of the composite. Even so, these effects are

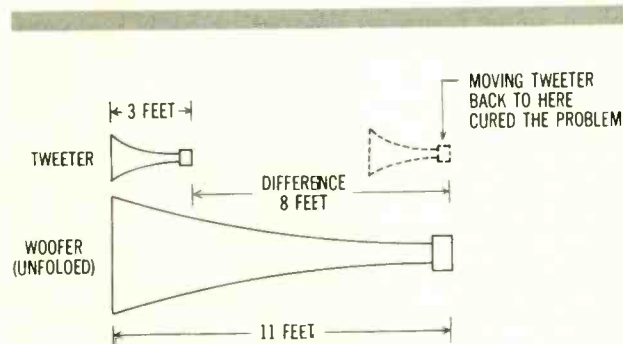
reported to be fairly subtle and can be masked by normal amounts of room reverberation, background noise, or the presence of other frequencies in the sound.

As a practical matter, then, we are left with the conclusion that Hermann von Helmholtz announced nearly a century ago: The subjective quality of a continuous tone depends only on its spectral (frequency) content and is independent of phase. And since, as we have noted, "phase" has meaning only for continuous tones, the answer to the old question "Is phase audible?" must be "No."

### Transients and Nonuniform Delay

Helmholtz has oftentimes been blamed for the widespread neglect of time and phase effects in sound reproduction, but in fact he was careful not to apply his conclusion to transients—the beginnings and ends of sounds. When transients are involved, the notion of phase is no longer applicable or convenient, so we must refer to time directly. The reason is not hard to see.

Consider a loudspeaker linear in phase along with a second similar speaker in which each frequency is delayed by an amount equal to its period—that is, shifted in phase by 360 degrees. In



### It's not really a new concern

New discoveries are sometimes just old ideas dusted off. In 1935 motion-picture sound engineer John K. Hilliard found that recorded tap dancing had a falsely resonant quality when reproduced via the finest laboratory reference loudspeaker of the era. This giant two-way speaker system had a folded-horn woofer with an air column length of 11 feet, plus a horn tweeter 3 feet in length. MGM recording director Douglas Shearer, brother of actress Norma Shearer and the creator of the "Munchkin sound" for *The Wizard of Oz*, suggested that the time-delay due to the woofer's extra 8-foot depth might cause the echo. Realignment of the woofer and tweeter yielded accurate reproduction of the transients in Eleanor Powell's tap dancing.

any steady-state test these two speakers are indistinguishable, though in the first there is no relative time delay between frequencies while in the second the delay will be proportional to wavelength—that is, higher frequencies will emerge sooner than low ones. We must conclude, therefore, that phase linearity does not uniquely define the time response of a loudspeaker.

But what happens when the frequency components of a transient are subject to a nonuniform delay? Can the effect be heard? Imagine an extreme situation, where the bass frequencies of a Beethoven symphony emerge from the loudspeaker now and the higher frequencies emerge several seconds or minutes later. The music will be distorted beyond recognition. So the question now is not "Can time dispersion be heard?" but rather "What is its threshold of audibility?"

One way to find out is to create the sharpest, shortest transient sound possible—an instantaneous pulse lasting only a few millionths of a second. Alternate it with a second signal composed of two simultaneous weaker pulses whose combined strength equals the intensity of the previous pulse. The single pulse and the equally intense double pulse sound identical—as they are. Now start spreading the two smaller pulses apart in time, and compare their combined sound with that of the single pulse. When this is done it is found that they can be separated by as much as 0.001 second (1 millisecond) and still sound identical to the single pulse. With larger time separations the character of the sound begins to change: the "tick" becomes a "thud." When the delay between the two pulses becomes large (30 to 60 milliseconds, depending on the listener), they can be heard separately.

With the sharpest, shortest transients generated by laboratory equipment, the audibility threshold for time smear is about 1 millisecond. With less demanding test signals (including spoken voice and most music) the threshold increases to several milliseconds. In the early 1930s, telephone engineers found that when voice frequencies were dispersed in time by 10 to 15 milliseconds (due to nonuniform delays in long-distance lines), speech began to sound garbled; so compensation to hold time smear to less than 5 milliseconds became standard in telephone systems. In Hollywood, listening tests with a variety of music and special sound effects indicated that a 2-millisecond delay between woofer and tweeter could not be detected, and that limit was adopted in 1938 as the maximum permissible time spread in theater speakers. In recent years numerous experiments have confirmed that delays of 1 to 2 milliseconds between woofer and tweeter produce no clearly identifiable effect in monophonic sound systems.

In conventional two-way and three-way dynamic loudspeaker systems the maximum woofer/tweeter delay is about 1 millisecond. In a few large horn systems the woofer is 2 to 3 milli-

seconds behind the midrange and tweeter. Of course in a biamplified system in which the woofer, midrange, and tweeter are mounted in separate cabinets in different locations, larger amounts of time smear can occur.

When a large time dispersion is present, its audible effect on transients is quite dramatic. For example, if Mark Davis' experiment with the one-third-octave filter set (which showed that gross waveform distortion of a continuous square wave is inaudible) is repeated with sharp pulses, one actually can hear a rapidly descending frequency sweep due to the time dispersion of the thirty narrow filters. And synthesizer engineer Dennis Colin has shown that an all-pass filter with a steep phase shift at about 600 Hz markedly alters the reproduction of piano sound. The sustained portions of the notes are unaffected, but the attack is softened and muddled.

Since the maximum time dispersion of a conventional loudspeaker is typically about 1 millisecond, one would expect the effect on the sound of transients to be at the threshold of audibility. In the "live vs. recorded" demonstrations that Acoustic Research conducts before various audiences, listeners have reported that most of the time it was impossible to tell when percussionist Neil Grover was playing and when he was pantomiming while the speakers played an anechoic recording that he had taped earlier. The striking fact is that, although the AR-10 $\pi$  speakers used in these demonstrations are not conspicuously of the "linear-phase" type, the attack transients of the percussion instruments are accurately reproduced with no apparent softening or veiling, not even in the case of the brilliant bell-like cymbal included in the percussion set.

The conclusion that a time smear of 1 millisecond or less has no audible effect on the reproduction of musical transients is widely accepted by psychoacousticians and speaker designers. But some designers believe otherwise, and credit for this probably belongs to V. Hansen and E. R. Madsen of Bang & Olufsen in Denmark. About five years ago they conducted a series of experiments suggesting that substantially smaller time shifts can be heard. The key to this result is the discovery of a special test signal. It consists of a sine wave with a DC offset (making it asymmetric) and with every second cycle switched off. As the sine wave is switched off and on, its DC offset is also switched. If the sine-wave frequency is 1,000 Hz, then each second of the test contains 500 1-millisecond segments of offset sine wave alternating with 500 1-millisecond gaps. Mathematical analysis shows that this signal is equivalent to three continuous sine waves at 500, 1,000, and 1,500 Hz, "misaligned" in phase so that their phase angles are proportional to the amount of DC offset. When listeners heard this signal they found that, as the DC offset changed, they could hear a change in

timbre. Hansen and Madsen interpreted this to mean that the ear can hear phase shifts of less than 10 degrees at 1,000 Hz, corresponding to time shifts on the order of 30 *microseconds* (0.03 millisecond). At higher frequencies the threshold is about the same, while at lower frequencies the permissible time shift increases rapidly.

This experiment has not been repeated or verified by other researchers, but despite criticism for its methodology, interpretation, and use of a test signal unlike anything encountered in music, it appears to have been one of the principal stimuli for the recent surge of "linear phase" loudspeakers.

### The Effect of Time Smear in Stereo Imaging

In examining the psychoacoustic evidence regarding the effects of time smear on perceived tonal quality and on transient response, we have reached essentially negative conclusions. With continuous tones—even square waves—waveform fidelity appears to be irrelevant. The phase sensitivity of the ear is subtle at best and can be demonstrated only with very specialized test signals.

But these conclusions are essentially applicable to monophonic reproduction. In stereo, time dispersion is no longer trivial. Consider the familiar fact that when the phase of one loudspeaker in a stereo pair is shifted by 180 degrees (by reversing its leads), stereo localization becomes next to impossible. Clearly the relative phase of the speakers of a stereo pair influences stereo localization.

Localization depends essentially on the relative intensity of signals arriving at the ears and the relative timing of those signals. An imbalance of ½ dB in level produces a perceptible image shift, and the dependence on relative timing is amazingly critical. According to N. V. Franssen of Philips, trained listeners in laboratory conditions have detected image shifts due to an interaural time difference as small as 1 *microsecond*. A more typical value for the average listener is 30 *microseconds*, corresponding to a spatial angular resolution of about 3 degrees. So, although we have established that a frequency-dependent time smear of up to 1 millisecond is probably inaudible in a single speaker, the two speakers of a stereo pair must be identical in time-shift to within tolerances some thirty times smaller. The two speakers must be synchronized at all frequencies if the finest details of the stereo field are to be preserved.

Here, perhaps, is the principal advantage to be gained from "linear-phase" or "time-corrected" speakers. The effort to reduce the time dispersion to zero also makes it likely that there will be no significant differences in timing between the two speakers in a stereo pair. The details of a stereo recording are thus accurately retained and transmitted to the listener unaltered.

If this conclusion is accepted, then a useful corollary may immediately be drawn. Since stereo

## Time Compensation: Some Pros and Cons

### ADVANTAGES

- Depth.** Stereo, as originally conceived, implied a sound field in which voices or instruments could be localized at different apparent distances from the listener as well as at various lateral positions. Listeners to time-compensated speakers consistently report hearing a stereo image with unusual—sometimes startling—depth.
- Resolution.** The stereo image is reproduced precisely, each voice or instrument having its proper place and width. In complex sound sources, such as a symphony orchestra, individual instruments can be resolved with unexpected clarity.
- Separation of ambience.** With loudspeakers whose stereo image is slightly blended due to time smear, any hall ambience or reverberation in the recording tends to become slightly mixed with the instrumental sounds, causing coloration of those sounds. Consequently, with such speakers, the high definition of closely microphoned recordings tends to add a needed clarity to the sound, particularly where the forward image is concerned. With time-corrected loudspeakers, the extra clarity of the front image "dries up" the ambience a bit, allowing greater enjoyment of recordings made in highly reverberant spaces.

### DISADVANTAGES

- Restriction of listening position.** In order to get the maximum benefit of a time-corrected system listeners must be located close to the stereo axis, equidistant from both speakers. With some systems an optimum height is also specified. In the KEF 105, for instance, an alignment light is built in: you and the speaker are optimally aligned only when you can see the light in the speaker.
- Exaggerated depth.** For a typical listener in a concert hall, the instruments on-stage are at only slightly different distances. But when recording microphones are placed near the front of the orchestra, the relative distances of the instruments at the back of the orchestra are exaggerated, as is the relative prominence of various annoyances such as bow scrape and the clatter of bassoon keys. Loudspeakers that reproduce this perspective do not necessarily provide a realistic sound. Some listeners will prefer speakers whose time smear flattens the exaggerated depth.
- Poor recordings ruthlessly exposed.** A time-corrected speaker may be too analytical: It may reveal that many recordings do not contain a genuine stereo image. Many actually sound more pleasant with a less analytical speaker, especially one that adds its own spaciousness to the sound. (Of course the overly dry sound of many recordings as heard through time-corrected speakers can be improved with the aid of a time-delay ambience-synthesis system.)

Localization is primarily a mid- and high-frequency phenomenon, it follows that there is little to be gained by eliminating time smear at low frequencies. If the woofer crossover is fairly low in frequency (around 500 Hz or below), it is sufficient to design just the midrange and treble sections for minimum time dispersion and unit-to-unit consistency.

This was confirmed recently by Henning Möller of B&K, a leading proponent of linear-phase design. In experimenting with staggered-driver speaker systems, he found that midrange/tweeter alignment dramatically affects the sound but that changes in woofer alignment are very hard to hear. So, as a practical matter a time-compensated loudspeaker need not look like a pregnant kangaroo.

### What Causes Time Dispersion?

If we are going to suggest that time-dispersion differences in loudspeakers should be minimized, it may be useful to review some of their causes.

In general, nearly every departure from flat response, in any audio component, has an associated time shift. Examples include the rolloffs at the low-frequency and high-frequency limits of microphones, tape recorders, phono pickups, tuners, amplifiers, and speakers, as well as all frequency-response alterations with tone controls, filters, and equalizers. To the extent that these are identical in both stereo channels, they should not degrade the stereo imaging. In general, if a frequency-response error in one component is compensated by equalization, the associated time shift is as well.

Any sharp resonance, too, will yield substantial time shifts within the octave band above and below the resonance frequency. Examples include the fundamental driver resonances and resonances associated with cone breakup.

Loudspeaker crossover networks are also filters, and they can cause time smear, sometimes amounting to hundreds of microseconds. Some manufacturers do not control crossover tolerances very precisely, so it is not uncommon to find that two successive speakers off a production line have crossover frequencies that differ by 20% to 30%. The differences in the resulting time shifts (about 100 microseconds in the crossover region) may degrade stereo imaging if these two speakers are used as a stereo pair. On the other hand, tight tolerances for crossovers and driver resonances may be expected to improve stereo imaging.

Driver placement is the aspect of loudspeaker time compensation that has received the most obvious attention. When all drivers are mounted on one conventional baffle, the woofer's sound emerges after that of the tweeter because of the depth of the woofer cone. Typically the delay is a few hundred microseconds, comparable to that

caused by the crossover. It is the desire to compensate for this delay that has led to speakers with tilted front panels and other cabinet shapes intended to make the effective acoustic positions of all drivers equidistant from the listener. Incidentally, a biamplified system can be time-corrected, using electronic time-delay circuits, without physical realignment of the drivers. If the woofer is flat rather than conical, it will have little geometrical time shift anyway; similarly, flat-panel radiators such as full-range electrostatics and planar magnetics have little woofer offset, though they may still require crossover correction.

If the drivers are side by side in the cabinet, then the images of voices or instruments usually are broadened in proportion to the spacing of the drivers. So the sharpest stereo image usually is obtained with the drivers aligned vertically rather than horizontally. (As noted earlier, it is the alignment of midrange and tweeter that counts most, since low frequencies contribute little to stereo localization.) Likewise, a loudspeaker in which two or more laterally spaced drivers operate in the same frequency range may not produce as sharp and detailed a stereo image as a system employing only one driver for each range. The same problem can occur when a strong reflection is produced by placing a single driver close to a reflecting surface.

These considerations lead to some interesting conclusions. One is that a loudspeaker with staggered drivers in a bulging cabinet may not in fact be accurately time-compensated. Elimination of time smear requires close control over crossover circuits, driver resonances, and lateral driver geometry. And since these factors yield time differences comparable to those resulting from woofer depth (and since low-frequency time shift is relatively unimportant anyway), it is likely that some conventional rectangular-box loudspeakers are better aligned in time than some staggered-driver systems. Support for this view is found in reports that certain conventional-looking speakers image with unusual depth and resolution.

### Is It Worth the Bother?

As with many issues in sound reproduction, it's up to you to decide whether the reduction of time dispersion in loudspeakers is worthwhile. The prosaic fact is that a speaker's sound still depends mainly on its frequency response and its angular dispersion; time-dispersion effects are subtle by comparison. However, speakers having similarly good frequency response and angular dispersion characteristics differ considerably in time smear. You will have to depend mainly on your ears, at least until standard lab tests for loudspeaker time smear (and for sample-to-sample uniformity in time behavior) are generally adopted. ■

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Jim Jonson, a Connecticut resident, has produced paintings for *Saturday Evening Post*, *Sports Illustrated*, *Fortune*, *Reader's Digest*, *Boys' Life*, and other journals and has fulfilled commissions for corporations ranging from Capitol Records to American Airlines and the Ford Motor Company. His work has been exhibited in the Denver Art Museum, Art Museum of Sport, and the Los Angeles County Art Museum, among others, and his one-man shows have been seen in many major galleries. A portfolio of Mr. Jonson's drawings and paintings was recently published by Prentice-Hall.

The Discwasher Group is proud to present the fourth and last of this distinguished artist's portrayals of "100 Years of Recording."

# 100 Years of Recording

## The Microgroove Era

The Beatles (for the record, that's Paul McCartney, top, then clockwise Ringo Starr, George Harrison, and John Lennon) and a high fidelity system dominate Jim Jonson's final painting in this series. The English foursome, more than any other single organization or talent, produced and still symbolizes the revolution not only of musical style but of marketing that overtook the recording industry in this era. Within only a few years music—rock music—and recordings became the core of a generation's life-style.

Dramatic technical change too was implicit in this revolution, when young people would often forgo other amenities and even necessities to acquire high-quality music-playing equipment. Multichannel component systems found a market undreamed of at the beginning of the period, when high fidelity was an esoteric pursuit and HIGH FIDELITY a struggling new magazine. Tape was intrinsic to recording throughout the era but grew immensely in complexity, from single-track mono to 16 or 24 tracks as standard and from a simple matter of repeated takes until a good one was captured to the extreme elaboration of overdub and mixdown sessions, sometimes long after the initial recording session.

Behind the stereo system appears a seminal figure of the rock revolution: Elvis Presley, whose overt sensuality and insistent beat—and commercial success—were major factors in turning an essentially ethnic music into a phenomenon pervading global culture. Bob Dylan (to the right of McCartney) brought a new synthesis of rock with the social and political consciousness of folk music that would eventually have repercussions throughout American society. Continuing clockwise, Duke Ellington, always in the forefront of jazz innovation, found in the LP the medium for the large forms in which he had long been interested and to which the three-minute sides of his 78s were totally unsuited.

Next we come to three figures who represent their respective classical fields on LP. Conductor Leonard Bernstein has been protean in both the variety and the sheer volume of music he has committed to disc; in addition, his colorful personality, many TV appearances, and importance as a Broadway composer (e.g., *West Side Story*) make him probably better known to a wider audience than any other contemporary master of the podium. Baritone Dietrich Fischer-Dieskau is similarly catholic in his musical coverage—from Lieder to oratorio to opera to symphony (as conductor)—and possibly has made more LP recordings than any performer, classical or popular, in history. Pianist Glenn Gould, who has forsaken live concerts, epitomizes the artist who performs exclusively for the electronic media and who takes as much care with the techniques of recording as he does with his own playing. His microphone here, incidentally, is one of the Neumann condenser models that have dominated recording during this era.

The seminal figure behind the scenes was Dr. Peter Goldmark, shown as he appeared at the introduction of the LP on June 21, 1948, next to a tower of 78s and holding its musical equivalent on 33 $\frac{1}{3}$  discs, the result of technology developed by a team working under his direction at CBS Labs (now CBS Technology Center). How the LP came to be used is another matter. Columbia's Goddard Lieberson conceived of it as a unique communications medium and brilliantly grasped the opportunities its time continuum offered to, in particular, the recording of musical shows and operas, of which his *Porgy and Bess* was an outstandingly original and creative—and influential—early example. Facing him across an elaborate studio board is fellow producer (for Decca/London) John Culshaw, whose monumental first integral recording of Wagner's *Ring* convinced the musically sophisticated public of the artistic potential of stereo.

The LP also brought a revolution in recorded musical repertoire, which seemed to expand geometrically each year during the Fifties. Representing this phenomenon is Hermann Scherchen, among the most prolific and daring conductors in the early years. Scherchen was both artist and technician and maintained his own laboratory in which then-arcane pursuits laid important groundwork for future developments in recordings. He and Soviet violinist David Oistrakh were among a host of musicians whose names became household words in this country solely on the basis of their recordings. (Oistrakh's were often pirated from Soviet discs before his concert and studio careers assumed global proportions.) Looming above Oistrakh and Scherchen is Maria Callas, whose immense interpretive talents made her *prima donna assoluta* of operatic recordings and whose performances sparked the revival of bel canto.

But though the technical upheaval that began in 1948 represented overwhelming cultural gains, they were in many respects dependent upon commercial growth, based squarely on the popular-music market. The introduction of the cheap pocket radio and the 45-rpm single were first steps in that inordinate advancement. On the performing side, the husband-and-wife team of guitarist Les Paul and singer Mary Ford (shown to the right of the 45-rpm player and the young man engrossed in his "transistor") began creating overdub technology almost as soon as the first tape recorders appeared.

The growth of the market and the immense broadening of popular taste that went with it made possible the emergence as major musical forces of performers whose backgrounds would once have limited them to purely specialist audiences. The gospel singing of Mahalia Jackson (between Ford and Lennon) became big business, though she steadfastly refused the secular repertoire and the fortune it might have brought her. Sitarist Ravi Shankar introduced untold millions to the sound of traditional music from India. Chet Atkins (upper left) was a major figure—as both star performer and RCA executive—in the country music boom that not only profoundly influenced other areas of popular music, but made Nashville a musical and recording mecca. The recordings of trumpeter Miles Davis' "cool jazz" made him probably the outstanding new jazz personality of the 1950s. From these roots sprang the present period of fruitful, if often bewildering, musical eclecticism.

ROBERT LONG



**A Letter**

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Japan 1945: Only the Imperial voice could  
authenticate surrender, and some Japanese warriors were ready  
to die to prevent that voice from being heard . . .

# The Recording that Ended World War II

by Faubion Bowers

IT WAS A HOT and steamy week of Japanese summer, that mid-August 1945. The days were clear of clouds, and the nights suitable for harvest-moon-viewing, a pleasure suspended by nightly fire-bombings. Not a tree remained in downtown Tokyo—only a few grotesquely charred and barren hulks, like naked scarecrows pointing blackened arms at the devastation in mute lament.

The vast acreage of the Imperial Palace, off limits to American bombers by order of Washington, still shone with greenery. The contrast of this bright verdure with the charred wasteland that was the rest of Tokyo astonished each caller who entered the palace gates.

This was Dr. Shimomura's strong impression as he arrived at 1:00 in the afternoon of August 9, a Thursday, for an audience with His Imperial Majesty. Shimomura, formerly an editor of the *Asahi* newspaper, was director of the Cabinet's Information Bureau with ministerial rank. His meeting with Emperor Hirohito lasted two hours instead of the customarily allotted thirty minutes.

It was on that day that the U.S. dropped its second atomic bomb, on Nagasaki—three days after the first fell on Hiroshima—and that the Soviets broke their Vow of Friendship with Japan and invaded Manchuria. The Japanese anticipated a third A-bomb (Tokyo, perhaps?), but we didn't have one and wouldn't for another six months. Although Japan had been making secret overtures for peace since early June 1945, the Cabinet suffered a paralysis of division. While half the government "planned peace," the other half "shouted war." Everybody knew Japan had lost the war, but fifty-seven-year-old General of the Army Anami,

*As aide-de-camp to General MacArthur, Faubion Bowers first met Emperor Hirohito in 1945. He has written numerous books and television programs about Japan.*

the war minister, led a significant faction. These ultranationalists fed the populace with frantic slogans: "100 Million Suicides with Honor"; "Sleep on the Ground, Eat Stones, Fight with Sharpened Sticks."

Dr. Shimomura's mission was to ask Hirohito, the 124th emperor of Japan, to address the nation personally by making a recording for broadcast. Although in two and a half millennia of history no emperor had ever spoken to his people at large, how else convey the reality of defeat to a country nurtured on the mystical belief in invincibility? Only the Imperial voice could authenticate surrender. Besides, it was the one hope of quelling jingoist fanatics who preferred glorious death to dishonorable life.

Emperors in Japan have always been shrouded in mystery. They do not "die" but, it is said, "hide in the clouds." Nor do they talk to anyone of low rank. An emperor's voice is called *gyokuon*, "the jewel sound," and such a phrase as "word from the Throne" can only be said euphemistically as "the Voice of the Crane." (Traditionally, the call of this bird can be heard long after it has disappeared from sight in the sky.)

Startling as Dr. Shimomura's suggestion was, it had already been approved as "expressive of the Imperial Wish." In Hirohito's twenty years as figurative ruler, His August Mind, like that of his ancestors, had never been confronted with a problem nor been asked to make a decision. The government officials approached him only after reaching unanimity; then he—without saying *yea* or *nay*—simply would sign and seal the Imperial Command. That was how it had been in 1941, when General Hideki Tojo was prime minister and war was declared.

At ten minutes to midnight on August 9, the

forty-four-year-old Emperor walked from his residence to the cramped underground bomb shelter where the Supreme War Council of top-ranked ministers awaited him. He wore a long-tailed morning coat with striped trousers and carried a shiny black top hat. He listened to argument on the proposal for the first time, although the seventy-seven-year-old prime minister, Admiral Kantaro Suzuki, considered it "an affront to the Throne." General Anami asserted that "the battle of Japan cannot be known until it is fought." The Emperor interrupted, "I [he used the uniquely Imperial word *chin*, written by combining the ideograph "moon" with that for "heaven"] believe a continuation of the war offers nothing but continued destruction. . . . The State can be restored only if the roots remain alive."

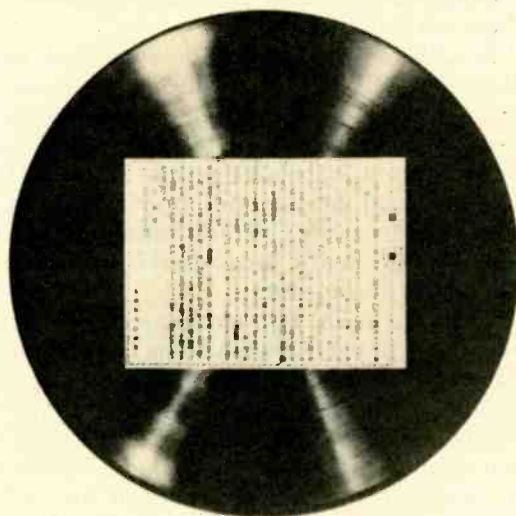
Five days later, August 14, at 10 in the morning, the Emperor spoke again to a still deliberating Cabinet. This time he wore full military uniform, that of a generalissimo. The gold screen behind him was embroidered with lions. After reproving Anami, he said, "I desire the Cabinet to prepare as soon as possible an Imperial Rescript announcing the termination of the war." The room filled with the sound of weeping. He added that he was prepared to go before the microphone and record the message. His protective advisers, knowing his shyness and uncertainties, could never risk a "live" performance like that of, say, his friend Edward VIII when he abdicated.

General Anami returned to his huge War Ministry a short distance from the palace grounds in Ichigaya Heights. On his desk was a telegram from the commander in chief of the Expeditionary Forces in China: "We should fight for the realization of our war aims even if it means the death of all our troops." Anami summoned the entire Ministry personnel and grimly told them of the Imperial Order, as well as of the recording the Emperor was preparing to make. "We now have no alternative but to abide by the Emperor's decision," he said.

A handful of Young Tigers, as they would later be known, members of the War Ministry's nerve center, the Military Affairs Bureau, silently found the command unacceptable. They already had been plotting a fight to the finish in order to block the humiliation of surrender. Now they must thwart any imperial performance on record that would immortalize a demand for the end of war—by capturing the palace to prevent the recording session or, if the record were already made, to seize it. "How can we be disobedient to the Emperor," they reasoned among themselves, "if what we do is for the good of the country?"

That afternoon Dr. Shimomura summoned the top executives of the Japan broadcasting corporation, NHK, and instructed them to report to the palace's Imperial Household Ministry by 3:00 with the requisite equipment and technicians. One of the men would later write of the moment, "I felt a

## The Record Itself



Here is the cause of all the trouble—and of the peace. The official translation of the surrender Rescript is at right.

To Our good and loyal subjects:

After pondering deeply the general trends of the world and the actual conditions obtaining in Our Empire today, We have decided to effect a settlement of the present situation by resorting to an extraordinary measure.

We have ordered Our Government to communicate to the Governments of the United States, Great Britain, China and the Soviet Union that Our Empire accepts the provisions of their Joint Declaration.

To strive for the common prosperity and happiness of all nations as well as the security and well-being of Our subjects is the solemn obligation which has been handed down by Our Imperial Ancestors, and which We lay close to heart. Indeed, We declared war on America and Britain out of Our sincere desire to ensure Japan's self-preservation and the stabilization of East Asia, it being far from Our thought either to infringe upon the sovereignty of other nations or to embark upon territorial aggrandizement. But now the war has lasted for nearly four years. Despite the best that has been done by everyone—the gallant fighting of military and naval forces, the diligence and assiduity of Our servants of the State and the devoted

thrill of awe and sacrilege. The Emperor's decision was sublime, but the carrying out of it was somehow blasphemous. For him to go before the lowly, humble, and familiar microphone—."

Four engineers quickly assembled the best available materials: two K-type No. 14 recording machines geared to run at 78 rpm, two sets of recording amplifiers, and a Matsuda A-type standing microphone, as well as six blank twelve-inch reprocessed discs. At 2:49 Domei News Agency flashed a bulletin to the outside world that the Allied terms of surrender would shortly be accepted by Imperial Message. At 3:00 the NHK team began installing the equipment on the second floor of the Imperial Household Ministry. The microphone was placed in the large Imperial Administrative Office, a room where the Emperor went over his papers each morning. The adjacent smaller audience chamber was transformed into a control room.

By 8:30 in the evening the last quibbles over the wording of the majestic Rescript had been settled. Words as coarse as "surrender" or "defeat" had been avoided and one reference to "the Sacred Treasures" deleted on the grounds that "Japan's unique national polity is beyond the understanding of foreign nations." The finished document consisted of 815 characters. Court numerologists noted that the number coincided with the date of the broadcast, August 15.

At 10 an American bombing began, but an hour



Distraught Japanese kneel in front of a neighborhood radio set as they listen to the broadcast of their emperor's recording.

later the Emperor, in military dress, drove in blackout from the residence to the Ministry in his battered Mercedes Benz decorated with a gold chrysanthemum. "How loudly should I speak?" he asked Dr. Shimomura, and there was some confusion over whether His Majesty should be subjected to a common voice-level test. Chamberlain Toda, whose own high-pitched, somewhat

service of Our one hundred million people—the war situation has developed not necessarily to Japan's advantage, while the general trends of the world have all turned against her interest. Moreover, the enemy has begun to employ a new and most cruel bomb, the power of which to do damage is indeed incalculable, taking the toll of many innocent lives. Should We continue to fight, it would not only result in an ultimate collapse and obliteration of the Japanese nation, but also it would lead to the total extinction of human civilization. Such being the case, how are We to save the millions of Our subjects; or to atone Ourselves before the hallowed spirits of Our Imperial Ancestors? This is the reason why We have ordered the acceptance of the provisions of the Joint Declaration of the Powers.

We cannot but express the deepest sense of regret to our Allied nations of East Asia, who have consistently cooperated with the Empire towards the emancipation of East Asia. The thought of those officers and men as well as others who have fallen in the fields of battle, those who died at their posts of duty, or those who met with untimely death and all their bereaved families, pains Our heart night and day. The welfare of the wounded and the war-sufferers, and of those who have lost their homes and livelihood, are

the objects of Our profound solicitude. The hardships and sufferings to which Our nation is to be subjected hereafter will be certainly great. We are keenly aware of the inmost feelings of all ye, Our subjects. However, it is according to the dictate of time and fate that We have resolved to pave the way for a grand peace for all the generations to come by enduring the unendurable and suffering what is insufferable.

Having been able to safeguard and maintain the structure of the Imperial State, We are always with ye, Our good and loyal subjects, relying upon your sincerity and integrity. Beware most strictly of any outbursts of emotion which may engender needless complications, or any fraternal contention and strife which may create confusion, lead ye astray and cause ye to lose the confidence of the world. Let the entire nation continue as one family from generation to generation, ever firm in its faith of the imperishableness of its divine land, and mindful of its heavy burden of responsibilities, and the long road before it. Unite your total strength to be devoted to the construction for the future. Cultivate the ways of rectitude; foster nobility of spirit; and work with resolution so as ye may enhance the innate glory of the Imperial State and keep pace with the progress of the world.

HIROHITO



A re-enactment (for the Japanese film *The Emperor and the General*) of the troops, deceived by a forged order, seizing the palace grounds, thus aiding the search for the hidden records.

pinched tones most closely resembled the Emperor's, volunteered to stand in briefly.

Then came the time to record, and Shimomura signaled the Emperor with a white glove. In four minutes and forty seconds, the two recording needles had etched their grooves. "Was it all right?" the Emperor asked.

It was not. He had muffed a few words. The engineers whispered in trepidation. The Emperor himself thought he had pitched the Crane's Voice too low. Actually, it was too high. He read again. Very quickly it became clear that this take was worse. Nerves had made the Emperor's voice even higher, more tremulous. His eyes had filled with tears, and he skipped a word. "I am quite willing to make a third," the Emperor said. Technicians, chamberlains, and ministers all agreed, however, that the ordeal would be too much. The Emperor left. At midnight the engineers listened to the recording for the first time. The discs were remarkably scratchy, but it was decided to broadcast the first take just as it was at noon the next day.

Each of the two sets of two records was placed in a metal film can. The lids did not close properly. They were wrapped for additional safekeeping in eighteen-inch khaki-colored bags used for storing individual air defense uniforms. Since rumors had reached the palace that the Young Tigers would attempt to stop the broadcast, Chamberlain Tokugawa undertook to hide the records in a wall safe, behind a row of books, in one of the smaller offices belonging to ladies-in-waiting to the Empress.

The Tigers did indeed arrive. Headed by Major Hatanaka, a pale and rather effeminate extremist, and abetted by bellicose Tojo's equally bellicose son-in-law, Major Koga, the conspirators put their plan into operation. They went first to General

Mori, the guardian-general of the Emperor's bodyguards, the Imperial Guards Division, and shot him when he refused to join them. With his seal they forged a strategic order authorizing that the palace be surrounded, palace police disarmed, and gates closed. By 2:00 a.m. the imperial grounds were in the insurgents' hands. The Tigers imprisoned Shimomura, the NHK officials, and all the lord chamberlains they could find, and they ransacked the Imperial Household Ministry looking for the recordings. They then went to NHK and threatened to kill everyone if the discs were not produced. No one knew where they were. Hatanaka tried to make a broadcast himself, announcing that Japan was now under military rule, but the air alert was still on and microphones were inoperative.

General Tanaka, commander of the Eastern District Army responsible for the safety of Tokyo, arrived at the palace, branded the rebellious Tigers as "traitors and traitors," and largely by the sheer force of his raging personality stunned the rebels into silence and obedience. The deceived guards removed the identifying white armbands and sheathed their bayonets.

Learning that the coup had failed, and galled at not finding the records, Major Hatanaka shot himself. His cohort, Lieutenant Colonel Shiizaki, slit his belly. Major Koga committed harakiri next to the corpse of General Mori, taking responsibility for Mori's murder. And General Tanaka shot himself, taking responsibility for the fact that there had been an insurrection within his area of command. General Anami, at his home facing the Imperial Palace, slit his stomach and stabbed the carotid artery on the right side of his neck, so as not to have to hear the broadcast. His last written words were, "I believe in Japan's sacred indestructibility."

Chamberlain Okabē, disguised as a workman toting a lunch pail and with a cloth package slung over his shoulder, carried the first-take records to NHK. Another chamberlain hid the emergency take in the underground broadcast studio in the Dai Ichi Building, which later would be General MacArthur's headquarters. At 11:45 a.m., Wednesday, August 15, 1945, Studio 8 at NHK went on alert. At noon the announcer spoke: "A broadcast of highest importance is about to be made. All listeners please rise." Some did, but many knelt as if in prayer. At first people could not understand the stratospheric language. Then the sense of the words dawned. The awed nation of Japan burst into tears.

The Emperor listened at home next to an old RCA portable radio. Along with his people, he heard the Voice of the Crane for the first time. Now, after four years of war, the green of the palace ground could gradually return to the whole country. ●

# Bach on the Piano? Why Not? After All, He Was a Piano Salesman

by Rosalyn Tureck



BACH'S INVOLVEMENT with the piano was brought to light in recent years by way of an incontestable document: a voucher dated May 9, 1749, recording the sale of a Silbermann "Piano et Forte" to Count Branitzky of Bialystok for 115 Reichstaler. The receipt is signed with a confirmed signature of the salesman—Johann Sebastian Bach! This significant discovery was first revealed in the Polish music journal *Muzyka* ten years ago. In the July 1971 *Musical Quarterly*, Dr. Christoff Wolff brought it to the attention of a wider group of scholars. Yet I find that many professional musicians as well as the international music public are not aware of it. It is high time that Bach's relationship to the piano was more widely known.

He was thoroughly familiar with the pianoforte. This fact was rather lengthily documented in a news report in the *Spencersche Zeitung* of Berlin, May 11, 1747, which recorded Bach's famous visit to Frederick the Great four days earlier. It is well known that Bach tried and played several pianos Frederick possessed, but his knowledge of the piano extended over many years previous to this visit. His pupil Johann Friedrich Agricola wrote of Sebastian's interest in Silbermann himself. And the following excerpt from notes from a 1768 treat-

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*On October 11 at Carnegie Hall, Rosalyn Tureck, celebrating her fortieth anniversary this year as a concert artist, will play Bach's Goldberg Variations on both harpsichord and piano. In June, she became the fourth American woman to receive an honorary doctorate in the history of Oxford University.*

ise on the organ and other instruments by Jacob Adlung (translated by Arthur Mendel) includes an account of Bach's acquaintance with Silbermann's pianos:

One of them was seen and played by the late Kapellmeister Johann Sebastian Bach. He had praised, indeed admired, its tone; but he had complained that it was too weak in the high register, and was too hard to play. This had been taken greatly amiss by Mr. Silbermann, who could not bear to have any fault found in his handiworks. He was therefore angry at Mr. Bach for a long time. And yet his conscience told him Mr. Bach was not wrong. He therefore decided—greatly to his credit, be it said—to think all the harder about how to eliminate the faults Mr. Bach had observed. . . . He worked for many years on this. . . . I myself heard it frankly acknowledged by Mr. Silbermann. Finally when Mr. Silbermann had really achieved many improvements, notably in respect to the action, . . . he had the laudable ambition to show one of these instruments to the late Kapellmeister Bach and have it examined by him; and he received in turn complete approval from him.

Too much attention has been paid to Kapellmeister Bach's criticism of the piano and too little to the final sentences of this excerpt, in which it is so definitely stated that the Silbermann piano received his approval. Yet, not only is recognition of Bach's connection with the piano gradually impressing itself upon contemporary scholars, but more attention is being given to his connection with compos-

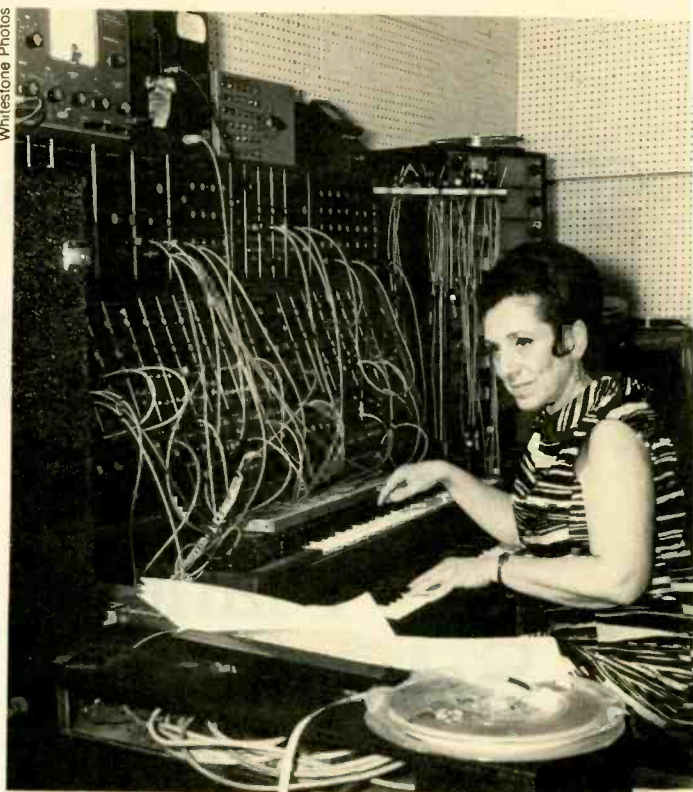
ing styles that extend well beyond the varied stages of the baroque. Besides discussing Bach's acting as a sales agent for the Silbermann piano, Dr. Wolff establishes from external and internal structural evidence that the keyboard part of the *Musical Offering* was conceived and originally composed not for the harpsichord, but for the piano. In the July 1976 issue of the *Musical Quarterly*, Dr. Robert Marshall of the University of Chicago presented some convincing material about Bach's adoption of the more advanced keyboard composing styles, as evidenced in the *Goldberg Variations*.

From my studies of original written sources and Bach's structural styles, I have always been fully convinced that he understood sonorities of every type, including the piano, and that his branching out in composing styles embraced not only those considered advanced in his time, but clearly further into the future. The G sharp minor and B minor Preludes of *The Well-Tempered Clavier* (Book II) are closer in style to Mendelssohn's piano writing than to any facet of the "baroque." Arnold Schoenberg once told me that "Bach was the first twelve-tone composer," referring to the B minor Fugue of Book I.

Reproduction of antique instruments in the twentieth century has been very beneficial in increasing our knowledge of historical performance practices. It has also contributed greater insight into the type of sonorities native to the keyboard instruments, strings, winds, and brass of the seventeenth and eighteenth centuries. The increasingly refined art of recording has been of inestimable value in bringing performance on these instruments to the international public. But while these areas of activity must continue to spread insight into the world of antique sound, they have fostered a habit of thinking that specific instruments and their sonorities are indispensable to the reproduction of a musical style. Although this focus is regarded by many as an absolute standard, it represents a contemporary and not an eighteenth-century attitude. I find it amusing that while today's "sophisticated" concertgoer may look askance at Bach played on the piano, he accepts with enthusiasm the same music played on a Moog synthesizer. (I have joyfully performed Bach on electronic instruments myself. But when I do, I do not go electronically haywire, but perform with the original structures and textures in mind.)

Bach's own works show that he did not think in terms of stamping an exclusive sonority upon his music. Substitution of instruments was a standard practice in his day. The study of his cantatas, of the orchestral or solo concertos, and even of the solo instrumental works demonstrate irrefutably that Bach's flexibility in envisioning and performing the same music with widely differing instrumental timbres and textures was virtually limit-

Whitestone Photos



Before a concert at the Library for the Performing Arts at Lincoln Center, the author, obviously relishing the prospect, poses at a Moog synthesizer upon which she is to play Bach.

less. Norman Carrell has enumerated in great detail the many and varied types of instrumental, vocal, and choral transfers in his admirable book *Bach, the Borrower*.

Among the hundreds of such examples is the famous D minor Clavier Concerto. Its first and second movements appear in the first two movements of Cantata No. 146, "Wir müssen durch viel Trübsal," with a solo keyboard setting for the organ. The first movement is virtually identical in both works. The solo part in the second movement of both is also unchanged, except for a few minor variants of embellishment, but in the cantata Bach superimposes a four-part choral setting over the organ part. This addition does not alter his treatment of the solo material for the organ despite the fact that the cantata movement's over-all sonority, texture, volume, and tonal balance with the orchestra, organ, and chorus is entirely different from that of the concerto with solo harpsichord and orchestra. We are quite sure that a setting for solo violin was made, though no manuscript is extant, and we cannot know for which instrument the original was composed; but any violinist can spot extensive sections of passagework in the outer movements that utilize the violinistic technique of alternating stopped notes with the open E, A, and D strings. A violin version again presents a totally different set of solo and interacting so-

norities, textures, and general tonal balance. No more greatly differing techniques and their aural results can be conceived than those of organ, violin, and harpsichord. Does this frequent practice of Bach's bespeak the intention on his part to assign to a composition the sonority and texture of a single instrument? If the realization of his intentions were so confined, he would not have continually set fresh versions in opposing sonority groupings.

It is equally revealing to consider the most famous of Bach's collections for solo instrument—*The Well-Tempered Clavier*. For well over a century this title was wrongly translated into English as *The Well-Tempered Clavichord*. For a long time the error produced the impression in the minds of teachers and performers that the forty-eight preludes and fugues were conceived specifically for the clavichord and that they should be played in imitation of its intimate style. Unfortunately too little was known about the true nature of the clavichord's touch and subtle tonal qualities. The result was frequently a drearily simplistic performance style of very complex music. Alternatives ranged from varying degrees of Romantic pianistic approaches to pedantically dry and stiff performance. In more recent times it has been fashionable to think that the "clavier" in the title means the harpsichord. "Clavier" is a generic term, which simply means "keyboard." In Bach's era interchanging clavichord and harpsichord was commonplace—and still was in Mozart's time. Mozart himself performed on either the harpsichord or the piano, but he was the last major composer and performer to do so. Musicians of his period were already imprisoning themselves in single-minded instrumental approaches to both composition and performance.

One of the chief concerns of the nineteenth century was the development of color and timbre in association with musical structure. When a composer conceives motives of a work in colors and timbres and his entire structural organization is built within these color relationships, the musical mind—whether of composer, performer, or informed listener—loses the capacity to separate the colors from the motives and organization. The contemporary composing mind tends to base its motivic structures and musical organization almost entirely on color, timbre, and their rhythmic combinations. It is difficult—perhaps impossible—for many musicians to dissociate structure from color. But this association is one upon which Bach was not dependent.

We tend today to insist too narrowly on the use of the harpsichord for all of Bach's keyboard music. The clavichord has been greatly neglected chiefly because it is a most impractical instrument for use in the current ambience of public performance. Our concert halls are too large for its fragile

tone to be heard. Recording has brought harpsichord tone successfully to everyone's ears, but the clavichord still presents problems. Another difficulty is the nature of clavichord tone production: The instrument requires vibrato touch. Modern performers too often eschew this indispensable type of touch, or they exhibit too little skill in the subtleties of finger and hand vibrato. On the clavichord gradations of tone are not only possible, but required within single notes as well as phrases. Thus the entire style of playing Bach is altered, when performed on the clavichord, to one of acute sensitivity to every nuance and degree of tonal quality. The harpsichord is mechanically regulated in its changes of color and texture. A skilled harpsichordist can make some fine differentiations with the fingers, but essentially the instrument is dependent for its differentiation of volume and quality on mechanical means, either by transfer of the hands from one keyboard to another or by the use of registration. The organ is similar in this respect. The clavichord alone is wholly receptive to and dependent on the fingers' touch. And it is unarguable that the clavichord is very closely related to the eighteenth-century piano.

On the subject of the interchangeability of keyboard instruments, C.P.E. Bach says in his *Essay on the True Art of Playing Keyboard Instruments*: "Every keyboardist should own a good harpsichord and a good clavichord to enable him to play all things interchangeably. A good clavichordist makes an accomplished harpsichordist, but not the reverse."

His comment on clavichord touch also applies to piano touch: "Those who concentrate on the harpsichord grow accustomed to playing in only one color and the varied touch which the competent clavichordist brings to the harpsichord remains hidden from them."

Thus it is clear that musicians expected variety of touch and dynamics, regarding them as the most desirable devices of performance style. This variety is the keystone of pianism. I cannot forget the misguided comment made by one member of the audience after a piano recital of Bach: "Isn't it wonderful how he can play for almost two hours and make it all sound the same!"

The great fault lies, then, not with the instrument itself, but with the musical attitudes, techniques, and aesthetic vision of performers. I have heard unstylistic performance on clavichords and harpsichords as well as on pianos. The solution to authentic performance lies not in the medium employed, but in the totality of deeper factors. The fulfillment of Bach's intentions must be the product of the individual's historical knowledge and instrumental skills combined with an artistic achievement that derives from psychological identification with Bach's musical orientation. ●

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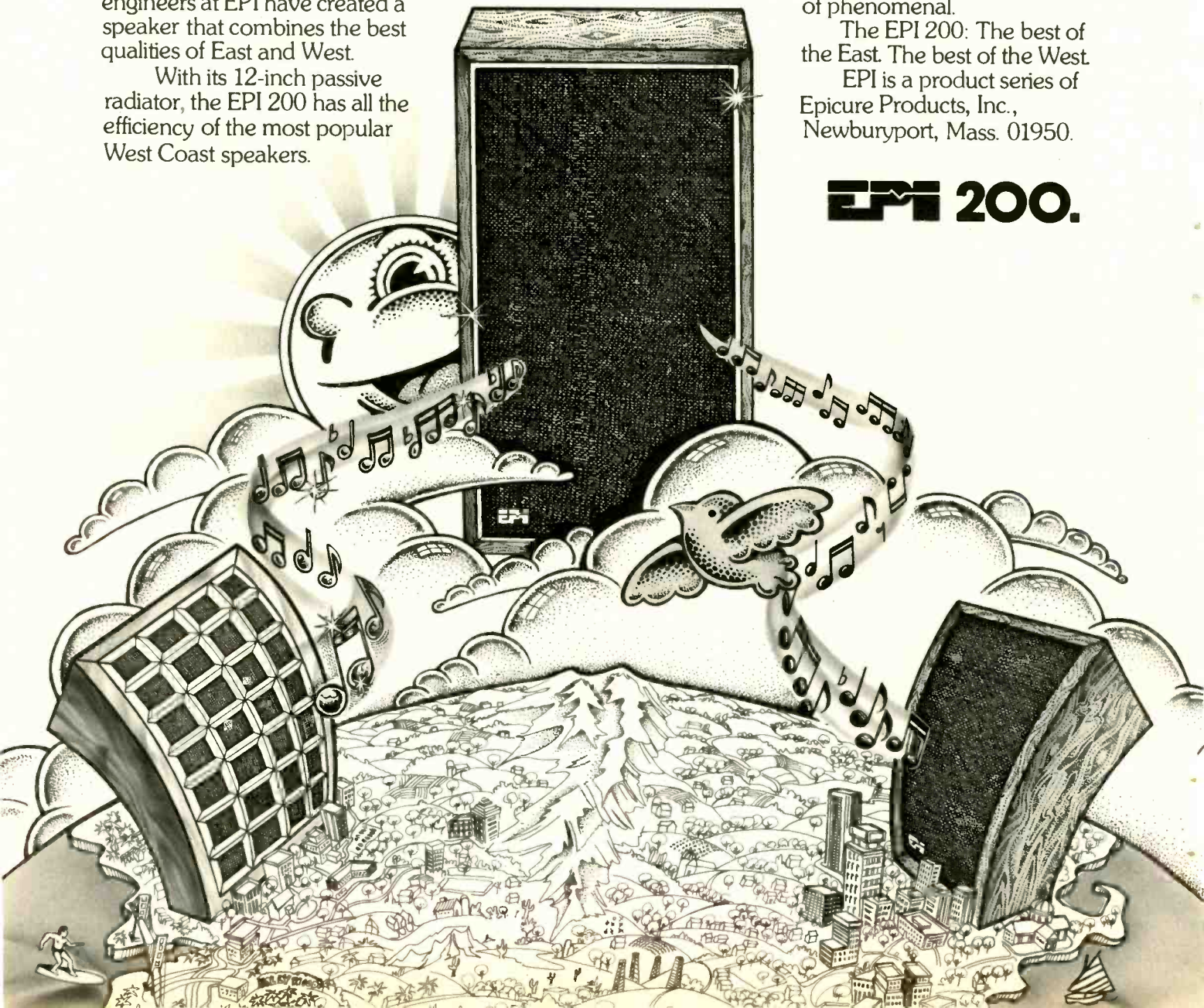
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## EPI 200.







An artist's rendering of a typically spectacular operatic stage setting of Lully's time

## A Window on Lully's Operatic World

*Columbia's recording of Alceste offers great music tied to the trappings of French classic theater.*

by Paul Henry Lang

JEAN-BAPTISTE LULLY (1632-87), Florentine by birth but as French as escargots with garlic sauce, was one of the most formidable musical personalities in the history of music: head of Louis XIV's musical establishment, absolute ruler of opera in France, the first great conductor (inaugurating disciplined and well-rehearsed ensemble playing), an excellent violinist and founder of the French school of violin playing.



Jean-Baptiste Lully—engraving by Edelinck

an able actor and dancer, and a superbly gifted man of the theater who not only composed and conducted his operas, but was also his own competent stage director.

As a composer, he dominated the scene for a hundred years, founding French opera, reforming the ballet, creating the stately French overture and the orchestral suite, the latter eagerly adopted by all musicians, Bach and Handel included. His operas were immensely popular long after his death, and not only Rameau, but even Gluck, a century later, studied them and borrowed here and there.

Yet despite Lully's unprecedented fame, Columbia's new *Alceste* is the first integral recording of one of his operas. The reason for this curious situation is that, unlike Monteverdi's and Cavalli's even earlier operas, which can be revived successfully for twentieth-century audiences, Lully's pose too many grave problems.

His was the age of Corneille, Racine, and Molière (all three of them at one time or another Lully's librettists, surely an honor no contemporary can boast), of the classical French theater, and of the supreme literary lawgiver, Boileau. No wonder that to the French, who always begin with literature, the libretto was what mattered most in an opera. They called their music drama "tragedy in music" or "lyric tragedy," not opera, and they expected the libretto to stand on its own as a play to be read.

Also, French opera having among its predecessors the court ballet, which they insisted on retaining in the music drama, the *tragédie lyrique* was a sumptuous spectacle to which the French *théâtre à ma-*

*chines* was well adapted. Rousseau, in his *Dictionary of Music*, says that "magic and the *merveilleux* became the foundations of the lyric theater." Unfortunately, no modern theater can duplicate these splendors; of course we do not have a Sun King to foot the exorbitant expenses. It is clear, too, given the extraordinary importance of the visual and the literary element in the *tragédie lyrique*, that no recording could do justice to it.

Lully, a sharp observer and even sharper entrepreneur, studied the dramatic performances in the Comédie Française and gave the French what they wanted: rhetorical recitation (he created the French recitative) of rolling alexandrines, the literary cothurnus of French drama, set to music in which every note and interval was adjusted with unexampled skill to the scansion and inflections of the French language. This narrative melody originated from the inner laws of the French language (Rousseau called it "discourse in music"); it is still alive in *Pelléas et Mélisande*. Unfortunately, it can become terribly boring, especially when the words are not those of a great dramatic poet. During the opera war in the next century the partisans of Italian opera called Lully's tragedies "a sort of psalmody."

Lully's principal librettist, Philippe Quinault, slipped into the interregnum between Corneille's temporary retirement and Racine's appearance on the scene; he was a minor playwright but thoroughly indoctrinated in the French classical tradition. Though both Boileau and Racine raked him mercilessly, he was greatly admired, even elected to the French Academy; to us, however, he is merely a manufacturer of correct alexandrines who butchered Euripides' great drama.

His little lyrics for solos, duets, and trios are not bad, and it is here, in these little *ariettes*, that Lully's music instantly picks up and becomes attractive to us. There are some fine dramatic scenes in *Alceste*, a great deal of delectable dance music, and many superbly set choruses; Lully may be a little frosty and precious, but he was a great composer.

The long orations, the exaggeratedly formal, pathetic rhetoric of the French national drama, are exacerbated by the profusion of appoggiaturas on which conductor Jean-Claude Malgoire seems to insist, making every little sentence full of *soupirs*, a mannerism that after a while becomes trying. The twenty-one (!) roles are sung by ten singers, a practice that, though sanctioned by seventeenth-century usage, only contributes to a lack of individual characterizations; in a recording without the visual aid of the stage, it nullifies what little action there is in the drama. The employment of a wind machine and other stage noises adds very little to the scenic feeling.

The singing is generally good. Of the large cast, I should single out soprano Renée Auphan (who takes four roles) and baritone Max van Egmond (two roles); the latter enunciates French beautifully though he is a Dutchman. The chorus is superb, exquisitely balanced, and very well recorded, but the orchestra is mediocre; the overture is a bit messy, and some of Lully's charming vignettes, the *ritornels*, especially those after the choral numbers, are mori-

bund. Malgoire's rhythm is soft, and his sense of drama and color seem somewhat limited; there is more life in this music than he finds in it.

Malgoire's article in the accompanying booklet (which is not a specimen of the printer's art) is rather unsatisfactory; neither his commentary nor that of François Lesure, a distinguished scholar, is well served by the anonymous translator—this sort of near-fractured English is embarrassing. All in all, however, we should be thankful that this landmark opera is finally available, for there is much admirable music in it.

**LULLY: Alceste.**

|                                                             |                           |
|-------------------------------------------------------------|---------------------------|
| Alceste                                                     | Felicity Palmer (s)       |
| Nymph de la Seine; Thétis; An Afflicted Woman; Diane        | Renee Auphan (s)          |
| Gloire; Céphise                                             | Anne-Marie Rodde (s)      |
| Nymphes des Thuilleries, de la Marne, de la Mer; Proserpine | Sonia Nigoghossian (s)    |
| Admète                                                      | Bruce Brewer (t)          |
| Lychas; Apollon; Alecton                                    | John Elwes (t)            |
| Phères; An Afflicted Man; Pluton                            | Pierre-Yves Le Maigat (b) |
| Alicide; Eole                                               | Max van Egmond (bs-b)     |
| Straton                                                     | Marc Vento (bs)           |
| Licomedes; Cleante; Charon                                  | François Loup (bs)        |

Maîtrise Nationale d'Enfants, Raphael Passaquet Vocal Ensemble, Grande Ecurie et Chambre du Roy, Jean-Claude Malgoire, cond. COLUMBIA M3 34580, \$23.98 (three discs, automatic sequence).

by R. D. Darrell

## Heinz Holliger: Now *That's* Charisma

*The Swiss oboist's latest Philips disc as usual blends dazzling virtuosity with irresistible personal magnetism.*



Bart Mulder/Phonogram

A RARE BIRD indeed is the instrumentalist who combines technical near-perfection with distinctively individual appeal—the mysterious but irresistible magnetism for which the often misused term “charisma” for once applies exactly. The only current one I’m sure about is the extraordinary, not-yet-forty Swiss oboist Heinz Holliger. Everything I have heard from him comes as close as humanly possible to my aesthetic as well as technical ideals, and the present program—deftly accompanied and beautifully recorded (not too closely, but with grippingly vivid presence)—again offers oboe playing and musicianship at its finest. It also represents musicassette as well as disc processing at their current best.

Only the Bellini E flat Concerto, a diverting little

curio, is familiar, at least to specialists; Holliger himself has recorded it twice before (for Monitor and Deutsche Grammophon), but those versions date back more than a decade. The other three works are, as best I can tell, recorded firsts, at least on this side of the Atlantic. For that matter, I’ve never before encountered anything by one (Bernhard Molique) of these three German composers, all of whom are roughly contemporary with Mendelssohn, are more or less influenced by him, and generally share his more classical than Romantic aesthetic orientation.

Moscheles’ F major Concertante of 1830, probably inspired by the flute/oboe duo-concerto by his teacher, Salieri, is lightweight but disarmingly lilting when played as well as it is here with Holliger’s virile lyricism happily married to the feminine grace of Aurèle Nicolet’s elegant fluting. The G minor Concertino by the now-forgotten Molique (1802–69) betrays the influence not only of Spohr, but also of Mendelssohn and Beethoven. What gives it distinction is its dreamy Adagio, with a heart-twistingly poignant solo part that might have been written with Holliger’s artistry in mind. Yet for me the prime discovery here is the relatively short but prodigally varied F minor *Konzertstück* by Julius Rietz (1812–77), with its haunting first-movement arioso, infectiously zestful intermezzo, and vivaciously bravura finale.

There is far more in the music here, to say nothing of the incomparable solo performances, than warrants restriction to specialists’ ears and libraries only.

**HEINZ HOLLIGER AND AURÈLE NICOLET:** *Orchestral Works with Oboe and Flute.* Heinz Holliger, oboe; Aurèle Nicolet, flute; Frankfurt Radio Symphony Orchestra, Eliahu Inbal, cond. PHILIPS 9500 070, \$7.98. Tape: ●● 7300 515, \$7.95.

**BELLINI:** Concerto for Oboe and Orchestra, in E flat. **MOLIQUE:** Concertino for Oboe and Orchestra, in G minor. **MOSCHELES:** Concertante for Flute, Oboe, and Orchestra, in F. **RIETZ:** *Konzertstück* for Oboe and Orchestra, in F minor, Op. 33.



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# Classical



Vittorio Negri—matching Albinoni's infectious verve

**ALBINONI:** Concertos (12), Op. 7. Hans Werner Wätzig, oboe; Berlin Chamber Orchestra, Vittorio Negri, cond. PHILIPS 6747 138, \$15.96 (two discs, manual sequence).

We really know very little about Tommaso Albinoni (1671-1750), an extremely prolific composer of the late baroque with more than forty operas and reams of instrumental music to his credit. Yet he was, with his friend Vivaldi, the most important Italian composer of the period, one whom Bach regarded highly, urging his pupils to study the Italian master's music.

Albinoni shows the same exuberant kinetic energy that so irresistibly propels Vivaldi's music, and his fluent and transparent polyphonic part-writing must have been what attracted Bach. These concertos of Op. 7, composed somewhere between 1713 and 1717, are superb examples of late baroque ensemble music; Albinoni's formal security is admirable, his invention is rich and gracious, and there is a pleasant Lullian touch, especially in the dancelike final movements. The set consists of groups of concertos—for strings alone (ripieno concertos), for strings and two oboes, and for oboe solo and strings.

Though in the seventeenth century most concertos still belonged in the *da camera* field (and so still do Bach's *Brandenburg Concertos*), now the orchestral character is unmistakable. Albinoni's concertos can stand a fairly large orchestra (in his time, especially in Rome, very large string ensembles were not rare), and he is patently seeking an ample and colorful sonority. Vittorio Negri and his excellent Berlin Chamber Orchestra hit just the right tone and style. The conductor knows that any vacillation in tempo, thrust, and mood is out of the question, and he matches Albinoni's infectious verve. The two oboes, played by first-class artists, fit perfectly within the ensemble, but there is the usual trouble with the inaudible harpsichord. And when in the

quiet movements it is faintly heard, it is busy filling out every rest with the modern continuo player's tiresome stereotypes that any eighteenth-century musician would smile at.

On the whole, however, the vigor, the bracing rhythm, and the precise ensemble playing make us forget this blemish. The sound is very good, albeit a mite too open and forward; a little attenuation would help. Now we impatiently await a similar lively and enthusiastic recording (with two audible harpsichords for the continuo) of Albinoni's Op. 9 concertos, which are even more remarkable than the attractive ones recorded here. P.H.L.

**BACH:** Chamber Music, Vol. 2: Flute Sonatas. Leopold Stastny and Frans Bruggen\*, flutes; Alice Harnoncourt, violin\*; Nikolaus Harnoncourt, cello; Herbert Tachezi, harpsichord. TELEFUNKEN 26.35339. \$15.96 (two discs, manual sequence).

Sonatas for Flute and Harpsichord: No. 1, in B minor, S. 1030; No. 3, in A, S. 1032. Sonatas for Flute and Continuo: No. 2, in E minor, S. 1034; No. 3, in E, S. 1035. Trio Sonatas: for Two Flutes and Continuo, in G, S. 1039\*; for Flute, Violin, and Continuo, in G, S. 1038\*

If Oscar Wilde was right in claiming that nothing succeeds like excess, it need be no

surprise that the surely excessive purism of the present *Das alte Werk* program turns out to be so stimulatingly successful. An insistence on the use of appropriate period or replica instruments of course isn't unusual nowadays, but one scarcely anticipates hearing as marked tonal differentiations as those demonstrated to exist between any modern flute and Leopold Stastny's delectably distinctive Grenser *Querflöte* of c. 1750. But I suspect that in this instance, as in so many others, the instrument itself is less significant than the sure musicianship, enlivened with personal relish, with which it is played.

It is this kind of infectious executant zest, shared here by harpsichordist Herbert Tachezi in particular, that is only too rarely displayed by such devout specialists in old music as those associated with Nikolaus Harnoncourt and his Vienna Concentus Musicus. Here their musicological piety goes so far as to exclude several standard Bach flute sonatas—presumably on grounds of questionable authenticity, although no case for so high-handed a procedure is argued in the otherwise extremely detailed trilingual notes by Christopher Wolff (on the music itself) and Harnoncourt (on the performances).

It is not unreasonable to exclude the early, questionably spurious S. 1020 Sonata, for violin or flute, and in a collection of ensemble chamber works there may be some justification for omitting the S. 1013 Sonata (or partita) for unaccompanied flute, although most Bach flute-sonata collections do include these. But deleting S. 1031 and S. 1033, respectively one of the standard three flute/harpsichord and three flute/continuo sonatas, is unprecedented. I'd like to hear the scholarly arguments for casting into outer darkness these two long-esteemed sonatas, the authenticity of which is unquestioned in the Schmierer catalog of Bach's works. If you want to hear all four of the works disclaimed here, you'll

## Explanation of symbols

### Classical:

- B** Budget
- H** Historical
- R** Reissue

### Recorded tape:

- Open Reel
- 8-Track Cartridge
- Cassette

find them well-nigh flawlessly played on a modern flute in the special-priced Rampal collection on RCA (CRL 3-5820, July 1975), with more interpretative personality in Paula Robison's Vanguard set (VSD 71215/6, March 1977), as well as by others.

Regardless of content differences, the present set cannot properly be compared with any using modern instruments—although I can assure you that it's endlessly fascinating, however mind-boggling, to play each movement of each sonata in three or more versions before going on to the next. No two listeners, Bachian specialists or otherwise, are likely to grade the various versions similarly. Whatever one's personal ratings, there's likely to be general agreement that these beautifully clean recordings of Stastny's fluting and Tachezi's performances on properly lightweight Skowronek replicas of French and Italian period harpsichords are consistently stimulating both to one's ears and mind.

Frans Brüggen is an admirable partner for Stastny in the S. 1039 Trio Sonata; Harnoncourt, playing a 1744 Castagneri cello, is no less worthy a partner for Tachezi in the continuo parts. Alice Harnoncourt provides the violin part in the S. 1038 Trio Sonata on a 1665 Stainer (presumably with the curved bow of the period, as in the violin sonatas of Vol. 1 of this Bach chamber music series, Telefunken 26.35310, March 1977)—authentically, no doubt, but with characteristic period stylistic and tonal qualities that lack Stastny's persuasive magic.

The production itself deserves praise: The two discs are handsomely boxed with a twelve-page booklet that includes a reproduction of Tachezi's inspired reconstruction of S. 1032's first movement, which has been preserved only in a mutilated autograph. In addition, there is a sixteen-page booklet with the scores of all six works (edition unspecified and not necessarily identical to Tachezi's realization of the harpsichord continuo parts). R.D.D.

**BACH:** Chorale Preludes (arr. Mytsalski)—See Bruckner: Symphony No. 3.

**BACH:** English Suites (6), S. 806–11. Glenn Gould, piano. [Andrew Kazdin, prod.] COLUMBIA M2 34578, \$15.98 (two discs, automatic sequence).

**BACH:** Partitas for Harpsichord. Alexis Weissenberg, piano. CONNOISSEUR SOCIETY CS 2117 and 2118, \$7.98 each.

CS 2177: No. 1, in B flat, S. 825; No. 2, in C minor, S. 826; No. 3, in A minor, S. 827. CS 2118: No. 4, in D, S. 828; No. 7, in B minor, S. 831 (French Overture).

**BACH:** Partitas for Harpsichord: No. 1, in B flat, S. 825; No. 2, in C minor, S. 826. Igor Kipnis, harpsichord. [George Sponhaltz, prod.] ANGEL S 36097, \$7.98.

Like almost everyone in my generation, I first got to know Bach's clavier works in piano versions, most memorably on records by such justly esteemed specialists as Ed-

win Fischer, Harold Samuel, and Myra Hess. Nowadays, of course, "everyone" knows that only the harpsichord (or, for smaller pieces, the clavichord) is the proper vehicle. Nevertheless, it's good for oldsters to be reminded, and youngsters to learn, that the essential spirit of this music—if not Bach's own tonal embodiments of it—still can be evoked by at least some pianists.

The egregious Glenn Gould is perhaps the most notable of these. Idiosyncratic, mannered, and exasperating as he may be, he is also immeasurably stimulating and at his best immeasurably rewarding. Anyone familiar with his earlier Columbia sets of the six partitas and the six French Suites (together with the French Overture) will know what to expect of his English Suites—to love them or hate them, in either case immoderately. Gould's ubiquitous obligato vocalization is likely to drive many listeners up the wall; others will just drown it out by humming along even louder. And the playing itself surely never has been more buoyant or pointed (with moments of sheer magic like the dream Sarabande of S. 806); nor has it ever been more cleanly and attractively recorded.

This kind of sensitive Bachian pianism is a far cry from an old-style virtuoso's (a Petri's or Rachmaninoff's, say) transcriptions, or even a present-day virtuoso's literal-score piano performances. Weissenberg's brilliantly recorded, supremely bravura playing is spectacular indeed in four of the partitas and the French Overture. (His other two partitas appeared almost a decade ago in Angel S 36437.) Yet while it's impossible not to be impressed, especially by the jeweled articulation of the lively dances, it's no less impossible to ignore the constrained stiffness of the slower passages, the constant tendency to rush, and the complete lack of genuinely Bachian stylistic understanding or empathy.

To hear what the partitas were intended to sound like, one must hear them on a good-sized two-manual harpsichord, but unfortunately the fine Kirkpatrick/Archiv and Richter/Telefunken performances are now out of print in this country. Hence the aching need for Angel's Kipnis series in progress since his S. 831 Seventh Partita (French Overture) appeared last January in S 36096, where it was coupled with the Italian Concerto (as it was by the composer in his 1735 publication of the *Clavierübung*, Part II). Now we get the first two of the six partitas (published in 1731 as Part I of the *Clavierübung*) in glitteringly bright, robustly sonorous recorded performances on Kipnis' magnificent Rutkowski & Robinette harpsichord. The best-known First Partita again reveals—as did the earlier S. 831—Kipnis at the height of his matured artistry. But the larger-scaled grandeurs of the Second tempt him into moments of overvehementness and heavy-handedness that, sonically impressive as they certainly are, are less satisfyingly enjoyable for the repeated home listening that the music demands. The lighter moments here are inexhaustibly rewarding, and even for them it's advisable to reduce the playback level. After all, it isn't necessary to take too literally Forkel's 1802 remark that the set of partitas "made in its time a great noise in the musical world."

R.D.D.

## Critics' Choice

The best classical records reviewed in recent months

- BACH:** Cantatas, Vols. 15–16. Harnoncourt. TELEFUNKEN 26.35305 (2), 26.35306 (2), Aug.
- BEETHOVEN:** Piano Concerto No. 4. Pollini, Böhm. DG 2530 791, Sept.
- BEETHOVEN:** Symphonies Nos. 8, 9. Weingartner. TURNABOUT THS 65076/7 (2). Symphonies Nos. 3, 5, 9. E. Kleiber. LONDON TREASURY R 23202, 23232, 23201 (3). Symphony No. 6. De Sabata. EMI ODEON SH 235, Sept.
- BRAHMS:** Ein deutsches Requiem et al. Karajan. ANGEL SB 3838 (2), Sept.
- DEBUSSY:** La Mer; Prélude à l'après-midi. RAVEL: Bolero. Solti. LONDON CS 7033, Aug.
- DELIUS:** Violin Concerto; Violin/Cello Concerto. Menuhin, Tortelier, Davies. ANGEL S 37262, Sept.
- DUSSEK:** Piano Sonatas, Vols. 1–2. Marvin. GENESIS GS 1068, 1069 (2), Sept.
- FRANCK:** Symphony (with Fauré: Pelléas). A. Davis. COLUMBIA M 34506. Symphonic Variations; Les Djinns (with D'Indy: Symphony). Ciccolini, Strauss. ANGEL S 37247, Aug.
- GERSHWIN:** Porgy and Bess. Dale, Albert, DeMain. RCA ARL 3-2109 (3), Sept.
- HANDEL, A. SCARLATTI:** Vocal and Instrumental Works. Blegen, Cooper, Schwarz. COLUMBIA M 34518, Aug.
- HAYDN:** La vera costanza. Norman, Ahnsjö, Dorati. PHILIPS 6703 077 (3), Aug.
- HINDEMITH:** Organ Sonatas (3). Baker. DELOS FY 026, Sept.
- IVES:** Concord Sonata. Kalish. NONESUCH H 71337, Sept.
- MAHLER:** Symphony No. 9. Giulini. DG 2707 097 (2), July.
- MONTEMEZZI:** L'Amore dei tre re. Siepi et al., Santi. RCA RED SEAL ARL 2-1945 (2), Aug.
- MONTEVERDI:** Vespro della Beata Vergine. Soloists, Ledger. ANGEL SB 3837 (2), Aug.
- PUCCINI:** Suor Angelica. Scott, Horne, Cotrubas, Maazel. COLUMBIA M 34505, July.
- PURCELL:** Come ye sons of art; Love's goddess sure. Soloists, Munrow. ANGEL S 37251, Aug.
- RACHMANINOFF, GLINKA:** Songs. Vishnevskaya, Rostropovich. DG 2530 725, July.
- THOMSON:** The Mother of Us All. Santa Fe Opera, Leppard. NEW WORLD NW 288/9 (2), July.
- WAGNER:** Die Walküre (in English). Hunter, Bailey, Goodall. ANGEL SELX 3826 (5), Aug.
- BAROQUE CONCERTO IN ENGLAND.** Dobson. CRD 1031, Sept.
- WILHELM KEMPF:** Bach, Handel, and Gluck Arrangements. DG 2530 647, Sept.
- DAVID MUNROW:** Music of the Gothic Era. ARCHIV 2710 019 (3), July. Art of the Netherlands. SERAPHIM SIC 6104 (3), Aug.



János Ferencsik—musical, fleet performances of Beethoven symphonies

**BACH:** A Musical Offering, S. 1079. Stuttgart Chamber Orchestra, Karl Münchinger, cond. [James Mallinson, prod.] LONDON CS 7045, \$7.98. Tape: ●● CS5 7045, \$7.95.

Münchinger again plays his orchestral version of the *Musical Offering* with earnest, almost devout eloquence, and there must still be many home listeners, innocent or disdainful of musicological ideals, who remain willingly susceptible to his evangelistic fervor. For that matter, it is hard for anyone not to be moved by it, and his performance sequence is a convenient one for nonpurists, placing their likely favorite sections, the engaging Trio Sonata and the mighty Ricercare à 6, by themselves on the disc's (and cassette's) second side.

But for Bach's presumed own sequence and for executant styles nearer those of his time, one must turn to the versions by Harnoncourt (Telefunken 6.41124), Leonhardt (ABC Classics/Seon ABCL 67007), and Richter (Archiv 198 320)—the last of which I find the most felicitous reconciliation of stylistic authenticity and interpretative vitality. To be sure, I stand red-faced in now abandoning some of my previous reservations about keyboard (harpsichord or organ) performances of the Ricercare à 6. Only last March, reviewing the first ABC/Seon releases, I still wrote that "this perhaps greatest of all Bach fugues always demands (for me) the lucidity and breadth of the Edwin Fischer string-orchestra arrangement in which I first encountered it." That was memory speaking. Actually rehearing Münchinger's (essentially the same) version for strings, whether or not his reading is less virile than Fischer's own, I find that I no longer feel the necessity of having Bach's inner drama explicitly externalized. R.D.D.

Although the New Hungarian Quartet's playing isn't spectacular, or even markedly individual, it is an intelligent and remarkably well-balanced group, performing the Bartók quartets with great ease and a sense of freedom that indicates intimate knowledge of the music. These works remain among the technically most difficult in the entire literature, yet here they sound like solid repertory pieces, executed with the sort of security taken for granted in the performance of earlier music but all too often absent in difficult twentieth-century literature.

The New Hungarian's approach differs markedly from that of the Juilliard, whose Bartók cycle is for me one of the highlights of the entire discography of twentieth-century chamber music. The New Hungarian's more relaxed approach is particularly effective in slower, more reflective movements, such as the first of No. 1 or the third of No. 4, or in the grotesque, yet almost whimsical, middle movements of No. 6. The ensemble is not as tight and polished as the Juilliard's, but it is nevertheless quite good and, on the positive side, perhaps somewhat more flexible. These readings do, however, lack the Juilliard's bite in more driving passages, as in the opening sections of Nos. 4 and 5, and they do not communicate an equal intensity in those extremely fast sections—e.g., the final portion of the middle part of No. 2—where the individual parts are absorbed into a generalized sound tapestry of great textural complexity.

But for those who prefer a somewhat softer edge, the more flowing, less percussive quality of the New Hungarian performances will no doubt be appealing. The sound is good, and a program book is included. R.P.M.

**BEETHOVEN:** Sonatas for Piano: No. 1, in F minor, Op. 2, No. 1; No. 7, in D, Op. 10, No. 3. Sviatoslav Richter, piano. [John Mordler, prod.] ANGEL S 37266, \$7.98 (SQ-encoded disc).

Richter's performances of these early so-

nas are fascinating. The sonority is lean and transparent, and on first hearing the phrasing seems wholly clear and objective. Listening again, however, one notices a delicate inflection here, a tiny stress there, a rainbow of color. In terms of textual fidelity, these are as close to urtext performances as one is likely to get; sometimes the care verges on obsessiveness—note the clipped *appoggiatura* in the second subject of the first movement of Op. 10, No. 3, and even the double repeats in the outer movements of Op. 2, No. 1, are observed.

For the most part, however, this excellently recorded coupling provides some of the strongest Beethoven playing I have yet heard from Richter. Tempos are mostly right on (the two exceptions are the third movement of Op. 2, No. 1, and the first movement of Op. 10, No. 3—both too slow), and rhythmic scansion is perfectly gauged. In fact, "perfect" is not a bad description of this disc, though some may prefer the more abandoned—and less perfect—Schnabel performances of both pieces or Arrau's more deeply introspective Op. 10, No. 3. H.G.

**BEETHOVEN:** Symphonies: No. 2, in D, Op. 36; No. 4, in B flat, Op. 60. Hungarian State Orchestra, János Ferencsik, cond. [István Juhász, prod.] HUNGAROTON SLPX 11891 (No. 2) and 11894 (No. 4), \$7.98 each.

Ferencsik first recorded these symphonies with the Czech Philharmonic for Supraphon more than a decade ago, before he began his Hungaroton Beethoven series. With these re-recordings that cycle is now complete.

No. 2 is much as I remember it from the earlier version: a fastidiously pointed introduction in the eighteenth-century manner and an otherwise disciplined but unhurried account of the balance. No. 4, though, is a little different this time. The first-movement introduction seems a little faster than before—more akin to Weingartner than to Toscanini, one might say—and the exposition repeat, formerly observed, is not here. But the chief difference, I suspect, is due less to any drastic change on the podium than to the divergences of the two orchestras. The Czech Philharmonic is a razor-sharp, tautly virtuosic orchestra very close to the American taste; the Hungarian State sounds more genial and perhaps smaller in size. Its work, nonetheless, is precise, musical, and expressively nuanced—perhaps a mite raw in the clarinets, but never bothersomely so.

Both symphonies can be warmly recommended in these musical, fleet performances, though it ought be noted that the absence of any fillers (the Czech discs contained bonus overtures) makes these uncommonly expensive versions. H.G.

**BERLIOZ:** *Lélio*, Op. 14b.

Lélio  
Horatio  
Captain  
Jean Topard (spkr); Nicolai Gedda (t)  
Charles Burles (t)  
Jean van Gorp (b)

ORTF Chorus, Orchestre National de l'ORTF, Jean Martinon, cond. [René Challan, prod.] ANGEL S 37139, \$7.98 (SQ-encoded disc).

**B** **BARTÓK:** Quartets for Strings (6). New Hungarian Quartet. [Joanna Nickrenz, prod.] Vox SVBX 593, \$10.98 (three discs, manual sequence).

Comparison:  
Juilliard Qt

Col. D3S 717

Looking for a way to capitalize on the earlier success of the *Symphonie fantastique* and consolidate his position in the Parisian avant-garde when he returned in 1832 from his Prix de Rome tour, Berlioz hit upon the idea of stringing together a number of earlier pieces that had been sitting in his desk drawer. In this sequel (originally entitled *The Return to Life*), a narration by the artist-protagonist of the *Fantastique* provides the framework for, respectively, an 1827 song with piano, a chorus reworked from the unsuccessful 1829 Rome Prize cantata on Cleopatra's death, a brigands' song for baritone, chorus, and orchestra originally composed around 1828, a song with orchestra (and a short echoing orchestral movement) using material from the 1827 Rome Prize cantata, and an 1830 Fantasia on Shakespeare's *The Tempest*. The *Fantastique's* *idée fixe* is twice introduced, but it can hardly be said to increase the unity of this notably heterogeneous farrago—the narration has to carry that burden, with its extravagant Romantic rodomontade, its adoring references to Shakespeare, and its jeering gibes at critics. *Lélio* (as it became known sometime before its slight revision and publication in 1855) can't be called a successful piece, but the individual numbers are mostly strong and characteristic.

If it's to make any effect today, I believe, *Lélio* has to be taken at its own valuation, not watered down—and I'm afraid that is what happens on Martinon's new recording. The hero whispers to us confidentially, rather than proclaiming his miseries, his enthusiasms, his passions to the world at large. And, although the first five movements are supposed to be performed from behind the curtain, which rises to show the orchestra and chorus only before the *Tempest* Fantasia, (when *Lélio* arises to conduct them after first giving them some musical advice), the acoustic haze that one hears at the start persists right through to the end, as if someone forgot to raise the curtain. In other words, this distant, fuzzy perspective isn't an intentional realization of Berlioz' spatial effect, it's just misconceived engineering (or, perhaps, a botched mixdown by the Capitol folks who mastered the Angel edition from Pathé-Marconi's tapes).

By comparison, it could be argued that the sound of those first five movements in the Boulez version (first released in a boxed set with the *Fantastique*, it's now available as a single) is too clear and present—but at least you can hear what's happening in the orchestra and chorus, and it sounds vastly livelier and more precise than the work of the ORTF forces. Before the final movement, when Berlioz indicates that the curtain should be raised, the Boulez recording has sounds of tuning up, to good effect; too, its speaker, Jean-Louis Barrault, is more characterful, more extravagant, with a wider range of vocal color than Topard.

The only numbers in which Martinon comes out ahead are the solo songs—first, because he uses two different tenors (the two songs are sung by different characters), and second, because, though neither Charles Burles nor Nicolai Gedda is ideal, both are more idiomatic and gentler of tone than John Mitchinson. But this is a rela-



Hector Berlioz  
His *Fantastique* spawned a farrago

tively minor advantage when the performance as a whole misses the point so completely. The powerful cross-rhythms in the Chorus of Shades are pretty nearly lost. The brigands' chorus is exceptionally tame, with the soloist almost inaudible—a bore, especially when set next to Boulez' brilliant account, forcefully sung by John Shirley-Quirk and crisply played by the LSO. In the striking Aeolian Harp movement, which echoes the preceding song in faint wisps, Boulez gets much cleaner playing, and the high-treble scoring (featuring two pianos in the orchestra) at the beginning of the last movement is appropriately crystalline and focused. Both sets include complete texts and translations, and I'd say there's no contest. D.H.

**BERLIOZ:** *Symphonie fantastique*, Op. 14. Budapest Symphony Orchestra, Charles Munch, cond. [László Ujházy, prod.] HUNGAROTON SLPX 11842, \$7.98 [recorded 1966].

**B** **BERLIOZ:** *Symphonie fantastique*, Op. 14. North German Radio Orchestra, Pierre Monteux, cond. TURNABOUT TV-S 34616, \$3.98 [recorded 1962].

The *Fantastique* was something of an *idée fixe* for these distinguished conductors, each of whom made no fewer than five recordings. Both made their first with a French orchestra: Munch with the Orchestre National (a version I have never heard); Monteux with the Paris Symphony, a passionate, finely controlled performance (his own favorite, according to Doris Monteux's book, *It's All in the Music*) that I hope will be reissued. Both conductors subsequently directed an American orchestra, where each made two recordings. Monteux's San Francisco versions suffered from excessive hall resonance and rather coarse orchestral execution; Munch's first Boston version was also rather hysterical and coarsely extroverted, but the 1962 remake

(made as his final gesture as departing music director) was a substantial improvement, if rather formally inhibited alongside some of the inspired live performances I remember hearing from him.

In 1959 Monteux taped another *Fantastique*, with the Vienna Philharmonic—a poetic but rather mild-mannered performance, well played in an unidiomatic way. He was reportedly unhappy with the result, which would explain how he came to redo the work in Hamburg in 1962, the performance here issued by Turnabout. His approach stressed the classical rather than the hysterical aspects of the score, and again he presents the music with clean, unaffected phrasing and firmly established basic tempos for every movement. There is warmth in his reading but not much whimsy. He discouraged such effects as the downward glissandos in the last movement (which, rather surprisingly, Munch too eschews in the newly issued Budapest recording). His Vienna and Hamburg *Fantastiques*, for all their musical probity and strength, are slightly staid, and both orchestras are unidiomatic—the brass, for instance, has a rounded, euphonious sonority at odds with the cutting edge required by Berlioz' orchestration. The North German Radio Orchestra, however, is less polished than the Vienna Philharmonic, which proves something of a blessing: This is a more rugged performance.

Munch's last *Fantastique*, made in 1967 with the newly formed Orchestre de Paris, was less skillfully played than his second Boston recording and still a bit constrained, by his concert hall standard. The Hungarian disc originates from Budapest rehearsals in 1966. The Hungarian Radio was experimenting with stereo, and its technicians recorded many concerts and orchestral rehearsals without any thought of public release. At the *Fantastique* rehearsal, Munch played through a movement at a time and then stopped to make suggestions (not included on the disc!). Performance flaws notwithstanding (there are a few, none serious), I am grateful to have this reminder of Munch in informal dress. This is an utterly crazy, utterly inspired *Fantastique*. The tempos are hauled about with manic intensity, yet there is a convincing chop-logic at every turn. The Budapest Symphony responds with a sense of life-and-death urgency, and I am tempted to call this the most exciting performance on records.

The Hungarian recording is lustrous and detailed, with a tremendous dynamic range and shimmer. The Turnabout sound is agreeable and well balanced save for congested tutti (traceable as much to the orchestra as to the engineering, I suspect). Both versions omit the optional cornet parts and the repeats, and both have a side break in the "*Scène aux champs*." For all the "big gun" *Fantastiques* currently available—the newer Karajan/Berlin (DG 2530 597, February 1976), the Davis/Concertgebouw (Philips 6500 774, May 1975), and the Martinon/ORTF (Angel S 37138, January 1977)—there is always room in the catalog for two as interesting as these. H.G.

**B** **BRAMMS:** *Orchestral Works*. Utah Symphony Orchestra, Maurice Abra-



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anel, cond. [Seymour Solomon, prod.] VANGUARD CARDINAL VCS 10117/20, \$15.92 (four discs, manual sequence).

Symphonies: No. 1, in C minor, Op. 68; No. 2, in D, Op. 73; No. 3, in F, Op. 90; No. 4, in E minor, Op. 98. Variations on a Theme by Haydn, Op. 56a. Academic Festival Overture, Op. 80. Tragic Overture, Op. 81.

If you've had it with portentous, somber Brahms performances, Abravanel's survey should provide a healthy shot of adrenaline. Tempos really crackle along. In the Second Symphony, for example, the finale goes with a headlong drive I don't recall on records since the mono readings of Walter and Furtwängler. The *Tragic Overture* wings its way at one basic speed, if not in a single surging and seamless line. The Third Symphony is joyous and impish, without precluding tenderness in the middle movements, and indeed none of this implies rigidity or feverishness. Transitional phrases breathe, and I like Abravanel's liltily hesitant upbeats in the third movement of the Second Symphony. The *Academic Festival Overture*, filled with fun and sauciness, seems just about to jam on the brakes before the coda, but it proves only a little *Luftpause* before the "Goudeamus igitur" returns proudly in tempo.

Since the Utah strings are not a lush group, they never threaten to swamp the rest of the orchestra, and there is a wealth of detail. If some find the string tone undernourished in the juicier tunes of the Second and Third Symphonies, there is no lack of *dolce* feeling, and the general light texture is all to the good in the First and Fourth,

which are so vulnerable to stodgy, overripe treatment. The violins do seem hard-pressed at times in the upper register, but the wonderfully disciplined violas are dark and rustic in sound. The cellos lack a fat sonority, but they know how to sing. The woodwinds are subtle and full of character and charm (the oboes are especially good), and the Utah horns as heard here could easily pass muster in the Big Five. The trumpets and trombones are okay when they can be heard, but it is disappointing, for example, nearly to lose the trombones' angry peroration beginning at bar 273 of the Fourth Symphony's finale.

Since the only other budget-priced stereo set offering the symphonies, both overtures, and the *Haydn Variations* is Sawallisch's (Turnabout TV-S 34453/6), rather similar in approach but less skillfully realized, the attraction of the Abravanel set should be obvious. The sonic ambience is smooth as velvet, somewhat distant in perspective. The disc mastering is at a relatively low level, but fortunately the quiet surfaces assure that that's no great problem. One minor mastering flaw in the *Academic Festival* will, I hope, be corrected: Two separate takes of measure 269 appear to have been spliced together. A.C.

**B** BRUCKNER: Symphony No. 3, in D minor. Moscow Radio Symphony Orchestra, Gennady Rozhdestvensky, cond. WESTMINSTER GOLD WGS 8327, \$3.98.

**B** BRUCKNER: Symphony No. 9, in D minor. BACH: Chorale Preludes (13;

arr. Mytsalski). Moscow Radio Symphony Orchestra, Gennady Rozhdestvensky, cond. WESTMINSTER GOLD WGS 8347-2, \$7.96 (two discs, manual sequence).

These performances hardly sound like the work of the same performers. The Ninth is tentatively played and murky recorded, with the brasses especially recessive. Rhythmic pulse doesn't gel; tempos get pulled around out of restless uncertainty rather than an intuitive feel for this brand of rhetoric. I like Rozhdestvensky's deliberate tempo for the scherzo, but others (e.g., Haitink, Barenboim) have followed the same course within a more convincing over-all framework. The fourth-side Mytsalski arrangements of thirteen Bach chorale preludes are inoffensive but no great attraction. The Ninths of Barenboim (DG 2530 639), Mehta (London CS 6462), and Haitink (Philips 835 381) are not challenged here.

In the Third, to begin with, the acoustics are live and rich—violas full and warm, horns dark and round. Stereo clearly highlights antiphonal strings. Rozhdestvensky allows the symphony to unfold naturally. The pulse is firm. Phrases sing reasonably, and climaxes are unleashed with considerable power, allowing for the brasses' Russian-style vibrato and some less than impeccable playing from other sections. As a bargain Third, Rozhdestvensky's version is preferable to the somewhat flaccid Schuricht (Seraphim S 60090). Böhm's magisterial reading (London CS 6717) remains my first choice for the 1889 (Nowak) Third,

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**Nakamichi**

though all Bruckner fans should also get the extremely different 1878 (Haas) edition, available only from Haitink (Philips 835 217). A.C.

**BRUCKNER:** *Te Deum*. \* **MOZART:** *Mass in C, K. 317 (Coronation)*.† Anna Tomova-Sintov, soprano; Agnes Baltsa, mezzo; Peter Schreier\* and Werner Krenn\*, tenors; José van Dam, bass-baritone; Rudolf Scholz, organ; Vienna Singverein, Berlin Philharmonic Orchestra, Herbert von Karajan, cond. [Michel Glotz, Hans Hirsch, and Magdalene Padberg, prod.] DEUTSCHE GRAMMOPHON 2530 704, \$7.98. Tape: ♪ 3300 704, \$7.98.

Comparisons—Mozart:  
Davis/London Sym. Phi. 6500 234  
Grossmann/Vienna Cathedral Orch. Phi. 835 187  
Ristenpart/Saar Chamber Orch. None H 71041  
Horenstein/Vienna Pro Musica Turn. TV-S 34063  
Kubelik/Bavarian Radio DG 2530 356

No sooner have I praised the dramatic contrasts delineated in Martin Stephani's Bruckner *Te Deum* (Telefunken 6.42037, June 1977) when along comes Karajan's performance, which is postively startling in its juxtaposition of spine-chilling pianissimos and roof-raising fortissimos. The chorus phrases in crisp, staccato units and at a strict tempo, while the soloists sing with a plastically molded legato. The Berlin brasses thunder forth with ominous warnings of heavenly might. For many listeners, this will be the most thrilling performance in the work's discography, and I was certainly swept along by the power and originality of Karajan's concept. But then I won-

der a bit: Is this a Credo or Passion, or rather a setting of joyous affirmation of the Lord's greatness?

Mozart's festive yet intimate 1779 Coronation Mass (for the unveiling of a painting of the Virgin) also brings forth the theatrical side of Karajan's personality. Again, the soloists seem to be granted a more flexible beat than the chorus (which, as in the Bruckner, is more backwardly recorded than the rest of the forces). And again, there are extremes of dynamics, tempo, phrasing, and texture that I can hardly imagine having been employed in Mozart's time: the highly prominent timpani, the generous ritard into "Et incarnatus," the brutal "Hosanna," the slow and effusive Agnus Dei. But Karajan's slicker side also appears, as in the many instances where the legato singing all but obliterates evidence of consonants.

None of the older versions of the Bruckner are anything like Karajan's. Some are fine: as I've indicated before, the couplings may ultimately swing the buyer's choice. Each of the other recordings of the Mozart has attractive features. Grossmann offers boy singers. Ristenpart has a clearly audible positive organ in the Sanctus, lovely work from soprano Teresa Stich-Randall, and churchly acoustics. Horenstein gives a serious, even dour, reading—not badly engineered considering its origin—and perhaps has the best of the solo quartets. Kubelik comes to life mainly in the Benedictus, one of Mozart's most delectable inspirations, whose opera buffa spirit is flawlessly realized. Davis does almost as well there, and

his recording is my over-all first choice. For the faultlessly integrated tempo scheme, the stylistic alertness, and the clean and ideally balanced engineering. A.C.

**CHOPIN:** Piano Works. Krystian Zimerman, piano. DEUTSCHE GRAMMOPHON 2530 826, \$7.98.

Andante spianato and Grande polonaise brillante, Op. 22. Etude in F, Op. 10, No. 8. Mazurkas: in G minor, Op. 24, No. 1; in C, Op. 24, No. 2; in B flat minor, Op. 24, No. 4. Preludes, Op. 28: No. 17, in A flat, No. 18, in F minor. Scherzo No. 4, in E, Op. 54. Waltz in A flat, Op. 34, No. 1.

At the time of the 1975 Warsaw Chopin competition, the winner, the young Polish virtuoso Krystian Zimerman, was eighteen. Now DG has issued a live recording of his first two programs at the competition (recorded by Polskie Nagrania), and I will be very surprised if it doesn't turn out to be an important document in years to come. Apparently DG, which has already signed Zimerman to a long-term exclusive contract, is of the same mind.

To be sure, there are gaucheries of the kind that crop up when a relatively inexperienced player is recorded without benefit of retakes. No matter: This is patently the playing of an exciting musical personality, breathtaking as well as breathless. His performance of the E major Scherzo (in many respects the most subtle and pianistically difficult of the four scherzos) tends—like the 1936 studio recording by the relatively young (in his thirties) Vladimir Horowitz—toward wild extroversion, with biting accentuation and certain metric surprises and

adjustments to the otherwise evenly maintained basic tempo.

In the other works too Zimerman has a tendency to make his already impetuous tempos even faster in technically knotty passages—he is a fiery executant and yet maintains digital incisiveness and a certain poised detachment that result in extreme clarity and a texture constantly enlivened by individuality of voicing. The *Grande polonaise brillante* emerges with jolting explosiveness and yet manages to keep its architectural shapeliness. The three mazurkas are very personally (and personally) played, but I am less enthralled with the F major Etude and the A flat Waltz, both a little hard-pressed and lacking in relaxed proportion (note the way Zimerman fails to dwell lovingly over detail in the central part of the etude as Horowitz did, for example, particularly in his later recording).

But here, for once, is a new pianist who really does remind one of Horowitz. This is one of the most impressive debut discs I have ever had the opportunity to review. The sound reproduction is a trifle hard and bleak but quite realistic, and the processing is first-rate.

H.G.

**DAQUIN:** Book of Noëls. **MARCHAND:** Organ Works. Arthur Wills, organ of Ely Cathedral. [Ted Perry and Martin Compton, prod.] SAGA 5433/4, \$13.96 (two discs, manual sequence; distributed by CMS Records).

The newly rebuilt organ in England's Ely Cathedral has proved to be a musical medium of rare versatility, with a chameleon-like ability to sound persuasive (and even wholly authentic) in a surprising range of literature. It has (as does organist Arthur Wills) a special affinity for French music, and rarely can a modern organ have captured so definitively the sounds of the eighteenth-century French instruments: The cornets are cohesive and politely aggressive, the trumpets are at once brilliant and richly foundational, the *plein jeu* has the appropriate fullness, and the balances among the various standardized stop combinations have been handled most sensitively.

The sounds, then, are perfect for these works of Daquin and Marchand, and Wills plays with evident relish. He manages to "civilize" the less presentable moments of the *noëls*—they do represent, after all, the incipient decadence of the whole French classical school of organ music—while capturing all the grandeur of the Marchand pieces. His registrations are scrupulously authentic (while the 16- and 32-foot pedal tones heard in the Marchand works were rare in the eighteenth century, they were available on the largest instruments), and he demonstrates particular care with the "grouped" phrasing and articulation inherent in the eighteenth-century favoring of the three middle fingers. My only reservation concerns his use of *pointé* unequal values in passages written with notes of equal value—a subtler *louré* approach would have been more defensible—but I'm willing to concede that the Daquin pieces justify some exaggeration.

The sounds of the Ely Cathedral organ and its spacious acoustical setting have



Krystian Zimerman  
An exciting recording debut

A. Ginsburg/DG

been vividly captured on disc, although the surfaces of the review copy were marred by a somewhat excessive incidence of scattered pops and swishes. The attractive double-fold record jacket contains notes on the music, a complete history and specification of the organ, and, on the cover, a breathtaking color photo of Ely's nave and crossing.

S.C.

**DVOŘÁK:** Quintet for Piano and Strings, in A, Op. 81. Emanuel Ax, piano; Cleveland Quartet. [Peter Dellheim, prod.] RCA RED SEAL ARL 1-2240, \$7.98. Tape: ●● ARK 1-2240, \$7.95; ●● ARS 1-2240, \$7.95.

**DVOŘÁK:** Quintet for Piano and Strings, in A, Op. 81; Bagatelles for Harmonium and Strings, Op. 47. Rudolf Firkusny, piano and harmonium; Juilliard Quartet. [Steven Epstein, prod.] COLUMBIA M 34515, \$7.98.

These recordings are the latest, but by no means the last, words on the subject of Dvořák's piano quintet. Indeed, both RCA and Columbia have more distinguished versions to their credit (the former's Rubinstein/Guarneri and Heifetz et al., the latter's Curzon/Budapest).

Of the two, though, Ax and the Cleveland Quartet come far closer to the mark. Their genial, expansive reading captures reasonably well the music's songful lyricism and coloristic possibilities. They also observe the first-movement repeat, the first time I recall hearing it. The failings aren't serious. Sometimes, as in the first-movement coda, Ax and his colleagues are a trifle subdued (this ought to move ahead with greater abandon), and sometimes the first violin's vibrato thins out or stops completely in an exposed high melody line. Also, some of the internal ensemble is a bit loose, although the basic spirit is always sympathetic. If you are looking for this type of interpretation, the Rubinstein/Guarneri (RCA LSC 3252) gives it with rather more finesse.

The Firkusny/Juilliard collaboration might be described as a Czech and a stalemate. Every time the pianist tries to get things moving, the stiff, angular, self-conscious phrasing of the strings effectively nails the performance to the ground. The awkward, stolid cello solo at the very beginning unfortunately gives accurate indication of what comes later. Furthermore, the sound is flat and cramped, without depth, body, or impact. The piano is tinkly and hard as nails—not at all an accurate replica of Firkusny's sound as I know it from the concert hall—and the acid, disagreeable string tone suggests chalk squeaking on a blackboard. In the Op. 47 Bagatelles, the almost ferocious-sounding harmonium effectively negates the folksy charm of these lovely miniatures.

If you favor the more straitlaced approach to the quintet, Heifetz and company (RCA LSC 2985) do it consummately. My favorites, though, are the Curzon/Budapest version (in Odyssey 32 26 0019) for refined, beautifully organized string playing, the later Curzon/Vienna (London CS 6357) for the most characterful pianism (Curzon's playing with the Budapest is a bit stodgy and inhibited), and the virile Schnabel/Pro Arte interpretation (in clear but ancient sound).

H.G.

**GRANADOS:** Goyescas. Alicia de Larrocha, piano. [James Walker, prod.] LONDON CS 7009, \$7.98. Tape: ●● CS5 7009, \$7.95; ●● CS8 7009, \$7.95.

**GRANADOS:** Goyescas. Francisco Aybar, piano. [E. Alan Silver, prod.] CONNOISSEUR SOCIETY CS 2091, \$7.98.

**GRANADOS:** Piano Works, Vol. 1. Marylène Dosse, piano. [Heinz Jansen, prod.] Vox SVBX 5484, \$10.98 (three discs, manual sequence).

Goyescas; Prelude and Six Pieces on Popular Spanish Songs; Estudios expresivos (6); Impromptus (2); Danza lenta; Allegro de concierto; Cuentos para la juventud; Barcarola; Aparición; Estudio; Capricho español.

De Larrocha triumphantly reasserts her interpretive primacy in this opulent re-recording of *Goyescas*. The rich color scheme, rhythmic aliveness, precision of detail, and sheer sensuous subtlety bring her performances as close to perfection as anyone is likely to hear this side of heaven. And her new *Goyescas*—unlike her most recent Albéniz *Iberia*, which lacked some of her earlier spontaneity—is if anything freer and more vivid than before. London also deserves a good mark for including "El Pelele," since that piece rightfully belongs among the *Goyescas*. (Granados in fact included it in his operatic reworking.)

The stodgy and gesturesome Aybar *Goyescas* can be passed over quickly, with a nod to Connoisseur Society's superbly rich, impactful sound and excellent processing, but the playing of the young French-born Marylène Dosse, while not yet in the De Larrocha class, has much to recommend it. Her pianism has fine articulation, intensity, and temperament. She gives an especially fine account of No. 3 of the *Goyescas* set, the "Procession by Candlelight," where some might actually prefer her intense angularity and biting *ostinato* to De Larrocha's lighter, more subtly shaded approach, and while she cannot quite equal

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De Larrocha's supple phrasing and color in the popular "Lament of the Maiden and the Nightingale," there can be no doubt that her playing of that piece has shapeliness and comprehension (not to mention impressive pianistic scope). Only in the opening "Flirtation" does Dosse sound a bit too fragmented and ill at ease.

The Vox album, in addition to its low price, has the obvious merit of offering lots of music one might never otherwise hear. The notes draw an analogy between the *Cuentos para la juventud* and Schumann's *Kinderszenen*, but the real model was the latter's *Album für die Jugend*: Note the uncanny resemblance between Granados' "The Beggar" and Schumann's "First Sorrow." Dosse plays all of this fare with wit, charm, and—when called for—technical brilliance; and the sound, if a little hard and constricted, is perfectly serviceable. I look forward to hearing Vol. 2 of this project.

H.G.



Marylène Dosse

A fine start for a Granados project

**HAYDN:** Piano Works, Vol. 4. Dezső Ránki, piano. [János Mátyás, prod.] HUNGAROTON SLPX 11625/7, \$23.94 (three discs, manual sequence).

Sonatas: No. 54, in G; No. 55, in B flat; No. 56, in D; No. 57, in F; No. 58, in C; No. 59, in E flat; No. 60, in C; No. 61, in D; No. 62, in E flat. Variations: In C, H. XVII:5; In F minor, H. XVII:6. Fantasy in C, H. XVII:4.

Hungaroton continues its remarkable program of presenting all of Haydn's keyboard music. These people not only are imaginative and thoroughly aware of the latest contributions of musicological research (they commendably use Christa Landon's excellent edition of the sonatas), but seem to have an inexhaustible reservoir of bright and capable young Hungarian artists. The works in Vol. 4, composed between 1782 and 1795, are all conceived for the developed hammer piano, and the last three, composed in London, were palpably inspired by the outstanding English instruments, as can be seen not only from the virtuosic writing, but from the five-and-a-half-octave compass demanded.

Two distinct types of sonatas are discernible. The "lady sonatas" (Nos. 54, 55, 58, and 59), so called after Emanuel Bach's designation of some of his sonatas as "for the use of ladies," are indeed dedicated to able amateur-pianist lady friends of Haydn. Though lighter and avoiding complexities both in texture and technique, they are composed with the same care and uncompromising artistry as the greatest of the sonatas. The other type, called "concert sonatas" by László Somfai, the editor and commentator of the series, in fact requires a consummate command of pianism. Nos. 60 and 62 are prime examples of this style, while No. 61 is somewhere between the two. (No. 57 was a publisher's unauthorized compilation and is partly spurious.)

It was not only the excellent instruments that inspired Haydn during his London visit, but also Clementi's sonatas; Haydn, like Beethoven, greatly admired the Anglo-Italian pianist/composer/publisher/manufacturer. As we listen to these splendid works, superbly adapted to the genius of the piano, whether a Broadwood or a Steinway, we wonder why they have failed to become staples in the pianists' repertory. Of the twelve works recorded here, only

Nos. 59 and 62, in addition to the great F minor Variations, are generally known and occasionally performed, yet nearly all the others are masterpieces as well. Perhaps this fine recording will bring home to us their infinite riches.

This is a most satisfying recording. The young pianist Dezső Ránki (born 1951) is undoubtedly on the way to stardom; he is remarkably mature, with a sense for style, tempo, phrasing, and dynamics worthy of the most seasoned masters of the keyboard. He has a beautiful tone, light yet substantial in the pianos, never shrill or heavy in the fortes. His rhythm is as sharp as it is varied, his nonlegato runs sparkle clean and neat no matter how fast the pace, and his left-hand work is spectacular. Imitations and complementary sentences passing from hand to hand are beautifully equalized. Nowhere in these three records does Ránki slip or slacken his concentration, nor is there a single lapse in taste and aplomb.

Hungaroton has provided this able artist with first-class engineering and has included an elegant booklet containing the detailed and informative notes by Somfai, one of the foremost Haydn scholars. Somfai also coached the performers appearing in the four volumes—no wonder that everything clicks in this laudable enterprise.

P.H.L.

**HAYDN:** Quartets for Strings, Vol. 2. Aeolian Quartet. [Michael Bremner, prod.] LONDON TREASURY STS 15328/32, \$19.90 (five discs, manual sequence).

Op. 0: In E flat. Op. 1: No. 1, in B flat; No. 2, in E flat; No. 3, in D; No. 4, in G; No. 6, in C. Op. 2: No. 1, in A; No. 2, in E; No. 4, in F; No. 6, in B flat.

In 1757 the young Haydn, invited to a music-making party at Count von Fünberg's estate in Weinzierl, wanted to contribute a piece of music to the occasion. Taking advantage of the available musicians, a violinist (the local priest), a violist (the count's estate manager), and a cellist (none other than the equally young Albrechtsberger), and playing the other violin part himself, he delivered a "string quartet." The piece was so well received that Haydn immediately followed it up with several others, and thus the string quartet, the epitome of chamber

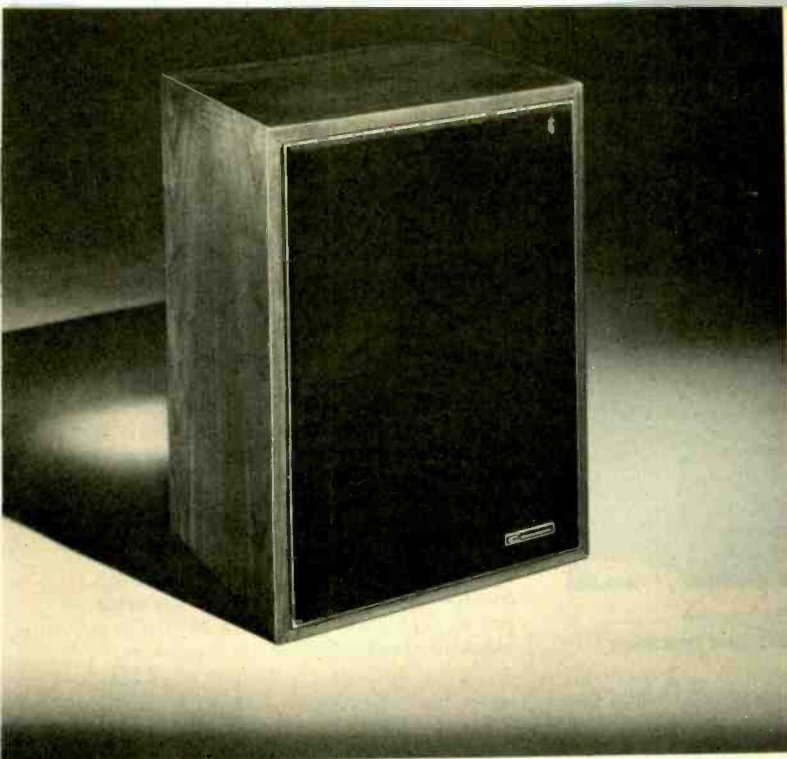
music, was started. It became very popular as "house music," more than 150 sets of quartets, three to six works to the set, being published between 1765 and 1800 in Paris alone. Soon the professionals also became interested; Viotti gave weekly quartet concerts beginning with 1785, while Ignaz Schuppanzigh, later to be known as a foremost interpreter of Beethoven, formed a concertizing quartet in 1792 (at the age of sixteen!).

Now this brief and engaging history of the string quartet seems quite simple, but are the works recorded here actually string quartets? Yes and no. Haydn himself called them *notturmi* and *divertimenti*, and such indeed they are; we must not confuse a medium, four strings, with a genre. While we still encounter views that, because of this confusion, carry the quartet back to the seventeenth century, it was unquestionably an entirely new genre, the work of Haydn, who reconciled baroque polyphony, style *galant*, *Empfindsamkeit*, and Storm and Stress to create what we know as the classical style. But the pieces in this album do not yet add up to a genre with firm contours: they are experiments with a view to creating one.

In Op. 1 there is no difference between the fast movements, which are virtually interchangeable; repeatedly one is aware of the shadow of the trio sonata, the principal chamber music form of the previous era, and perhaps some of these quartets even used a continuo. Then again some movements lean toward the concerto (frequent in the *divertimento*), the first violin lording it over the rest as in the fine Adagio of Op. 2. No. 2. There are tiny sonata constructions, dances, and genuine *divertimento* finales, but there are also moving adagios and sweet Italian serenades with pizzicato accompaniment.

It is clear that Haydn was searching for a way to bring order into this plenitude of elements, and it is surprising that despite his uncertainty we often hear the typical quartet sound, as for instance in the astonishing first movement of Op. 1, No. 3. He is still searching in Op. 2, but it is plain that there is a definite artistic will at work here: he now makes the first movement the principal one, the viola is a partner rather than a filler, and the inner parts begin to have a life of their own. Haydn must have realized that the next step required study and regrouping, so there ensued a decade's pause in quartet writing, until in Op. 9 he returned to the task with a much clearer concept of the genre. Op. 3 has been proved to be not his work, and Haydn himself wished his quartets listed as beginning with Op. 9.

Nevertheless, while offering slight though pleasant music, this recording is most welcome to all serious lovers of music. The Aeolian Quartet is a fine group and improves as the recording proceeds from disc to disc. The occasional metallic harshness of the first violin and the robust attacks that do not fit these miniatures disappear with the second disc; they are probably due to the openness and closeness of the sound, which definitely improves from there on. While the Aeolians do make the usual mistakes (the perfunctory trills on fast notes, wrong auxiliary notes, etc.), they are careful with grace notes and show excellent judgment as to what to repeat, *tempos* are judicious, and tuning and ensemble



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work are unexceptionable.

They also accept and follow the results of recent musicological research. Op. 1, No. 5, was not recorded because it has been proved to have been originally a symphony with two oboes and two horns; similarly, Op. 2, Nos. 3 and 5, which circulated all over Europe as "sextets" for quartet and two horns, are omitted. It is hoped that these will eventually be recorded in a sort of appendix. P.H.L.

**HAYDN:** Symphonies: No. 44, in E minor (*Trauer*); No. 49, in F minor (*La Passione*). English Chamber Orchestra, Daniel Barenboim, cond. [Günther Breest and Hans Weber, prod.] DEUTSCHE GRAMMOPHON 2530 708, \$7.98.

**HAYDN:** Paris Symphonies. English Chamber Orchestra, Daniel Barenboim, cond. [Suvi Raj Grubb, prod.] EMI/CAPITOL SLS 5065, \$23.94 (three discs, manual sequence; distributed by Capitol Imports).

Symphonies: No. 82, in C (*The Bear*); No. 83, in G minor (*The Hen*); No. 84, in E flat; No. 85, in B flat (*La Reine*); No. 86, in D; No. 87, in A.

Barenboim's Haydn may not please those who prefer Leonard Bernstein's robust approach or Antal Dorati's crisply cool readings. However, these four records represent a deeply thought-out approach that I have found increasingly persuasive.

Throughout these eight performances there is extraordinary polish and precision in the playing of the English Chamber Orchestra, with which Barenboim has been closely associated. The sound (much the same with EMI and DG) is warm and deeply lustrous: the string vibrato is beautifully controlled, just short of excess for this music. What Barenboim asks from the orchestra is, as noted, quite different from what other recent Haydn conductors have wanted. In certain respects, his mellow approach to the "Paris" symphonies, for example, recalls Ansermet's (London Treasury STS 15213/5), but Barenboim flows much more smoothly from one idea to the next and integrates them far more effectively into a whole. His gentler articulation substitutes for Bernstein's earthy robustness a geniality and a sensitivity that tend to make Haydn more human, more civilized and urbane, and his expressive plan readily encompasses the intense feeling of the two *Sturm und Drang* symphonies on the DG disc.

One would expect Barenboim to be at his best in Haydn's slower writing—the first-movement introductions and the slow movements—and he certainly plays such passages very expressively, rising to a very special height at the beginning of *La Passione*. He is less successful with the more decorative slow movements, especially the variations in the "Paris" symphonies. His faster tempos are beautifully articulated, with long phrasing and subtle rhythmic attack. If the minuets lack their expected snap and if the peasant humor of some of the finales is toned down, everything is placed in a fully thought-out sense of proportion. P.H.

**HAYDN:** Symphony No. 104—See Schubert, Symphony No. 5.



Daniel Barenboim  
*Haydn with polish and precision*

**KHACHATURIAN:** *Gayane* and *Spartacus*: Excerpts. London Symphony Orchestra, Aram Khachaturian, cond. [John Willan, prod.] ANGEL S 37411, \$7.98 (SQ-encoded disc). Tape: ●● 4XS 37411, \$7.98.

**KHACHATURIAN:** *Gayane*: Suites Nos. 1–3. National Philharmonic Orchestra, Lorin Maazel, cond. [Charles Gerhardt, prod.] RCA RED SEAL CRL 2-2263, \$8.98 (two discs, automatic sequence).

The onetime popularity of Khachaturian's *Gayane*, *Masquerade*, and *Spartacus* ballets, long on the wane, was scarcely restored by the full-length Bolshoi Theater production of the last-named score that appeared only two years ago on Columbia/Melodiva (D4M 33493, November 1975). But perhaps there remains some interest in both these new releases.

The composer is just as slapdash a conductor of his own "Sabre Dance" and other *Gayane* hits as most interpreters have been and, indeed, as he was in a mid-'50s mono Angel disc and his still available 1963 *Gayane* and *Spartacus* Suites (London CS 6322). But now his suites are somewhat differently constituted: The *Gayane* newcomers are the "Lullaby," "Storm," "Mountaineers' Dance," and "Invention"; the *Spartacus* newcomers are the "Variation of Aegina" and the "Entrance of Harmodius and Adagio of Aegina and Harmodius." But what's more interesting than any of the selections is that these performances presumably represent the septuagenarian composer's final versions: They were recorded on his visit to London earlier this year. And the recording is gleamingly transparent, with enhanced atmospheric ambience in quadraphonic playback.

The RCA release is something else again. It is, to the best of my knowledge, the most extensive recording of *Gayane* to date—not the complete ballet in any of its versions, but a three-suite series of twenty-four selections from the original 1942 production score. Far more importantly, it is performed with a surety of control, rhythmic precision, freedom from vulgarization, and above all imperious authority that the music has surely never enjoyed before. Right from the arresting percussion and trum-

Angel

pets opening to the blazing windup of the final scene one is consistently held transfixed—less by the theatrical music itself (although I've never heard it sound better than it does here) than by the truly high-voltage, electrifying orchestral playing and superbly strong, clean, and open recorded sonics.

Whether or not you want even the biggest and best recorded *Gayane*, you may well buy this album for the conductor. Lorin Maazel is an Iranian of Armenian descent (hence his special empathy for the Armenian folk materials Khachaturian draws upon here), who studied for some years in this country. He has composed a number of large-scale works, conducted the Teheran Opera, and in recent years guest-conducted in England, where he now lives. British RCA already has released his Tchaikovsky *Pathétique* and Sibelius Fourth and Fifth Symphonies, but the *Gayane* set marks his record debut in the U.S., and he makes a magisterial, even charismatic impression. R.D.D.

**LULLY:** *Alceste*. For an essay review, see page 95.

**MARCHAND:** Organ Works—See Daquin, Book of Noëls.

**MARTINŮ:** *Toccata e Due Canzoni*; *Sinfonietta La Jolla*. Zdeněk Hnátek, piano; Prague Chamber Orchestra. [Pavel Kühn, prod.] SUPRAPHON 1 10 1619, \$7.98.

While not on the level of Martinů's Double Concerto and Second Cello Sonata, both works on this disc generally maintain their drive at a satisfying pace, offering along the way intriguing chordal, instrumental, and rhythmic configurations.

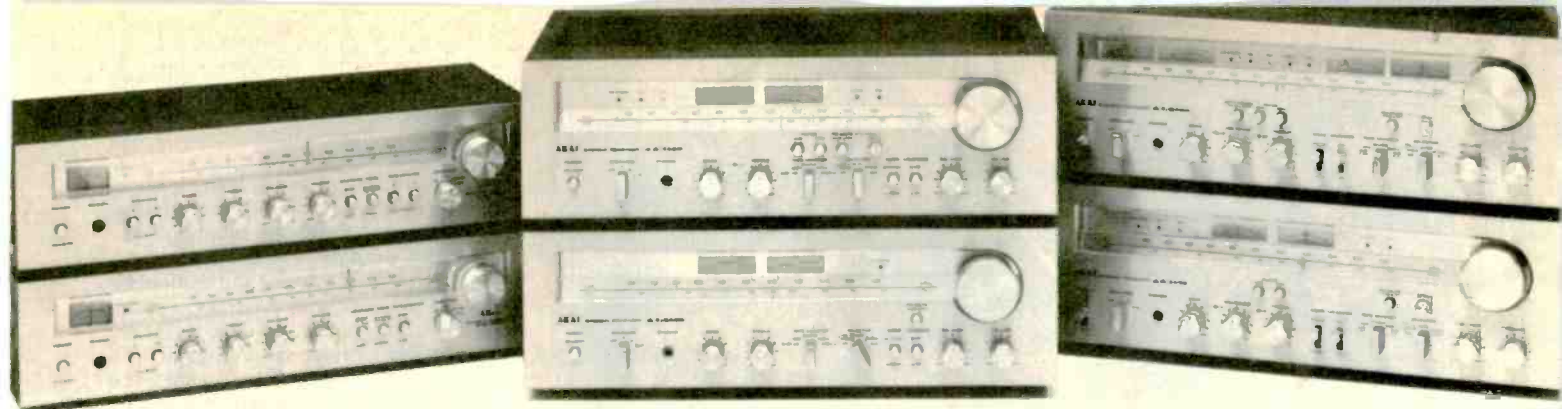
The *Toccata e Due Canzoni*, composed for Swiss conductor Paul Sacher in 1946, represents a novel approach to constructing a work in movements, with a rhythmically obsessive opening *Toccata* offset by a pair of more lyrical movements. Yet the *canzoni* title for those final movements is misleading: although both stress melody more than the *Toccata*, neither is exactly songlike. In the second movement, multi-hued figures form like crystals around a hypnotically repeated, self-enclosed piano motive, while the finale sprawls into three major parts, including another *toccata* in the middle and a gloomy closing.

The *Sinfonietta La Jolla* was composed in 1950 for the Musical Arts Society of La Jolla, California. Like the *Toccata e Due Canzoni*, this three-movement work has a prominent piano part and sounds more symphonic than chamberlike in conception. But the *sinfonietta* never settles into one mood before changing into another: Nervous, dramatic ostinatos give way to bright cadences; at the opening of the second movement, ominously thick and dissonant harmonic textures announce nothing more earthshaking than an ingenuous piano theme.

This new release supersedes Su-

Continued on page 114





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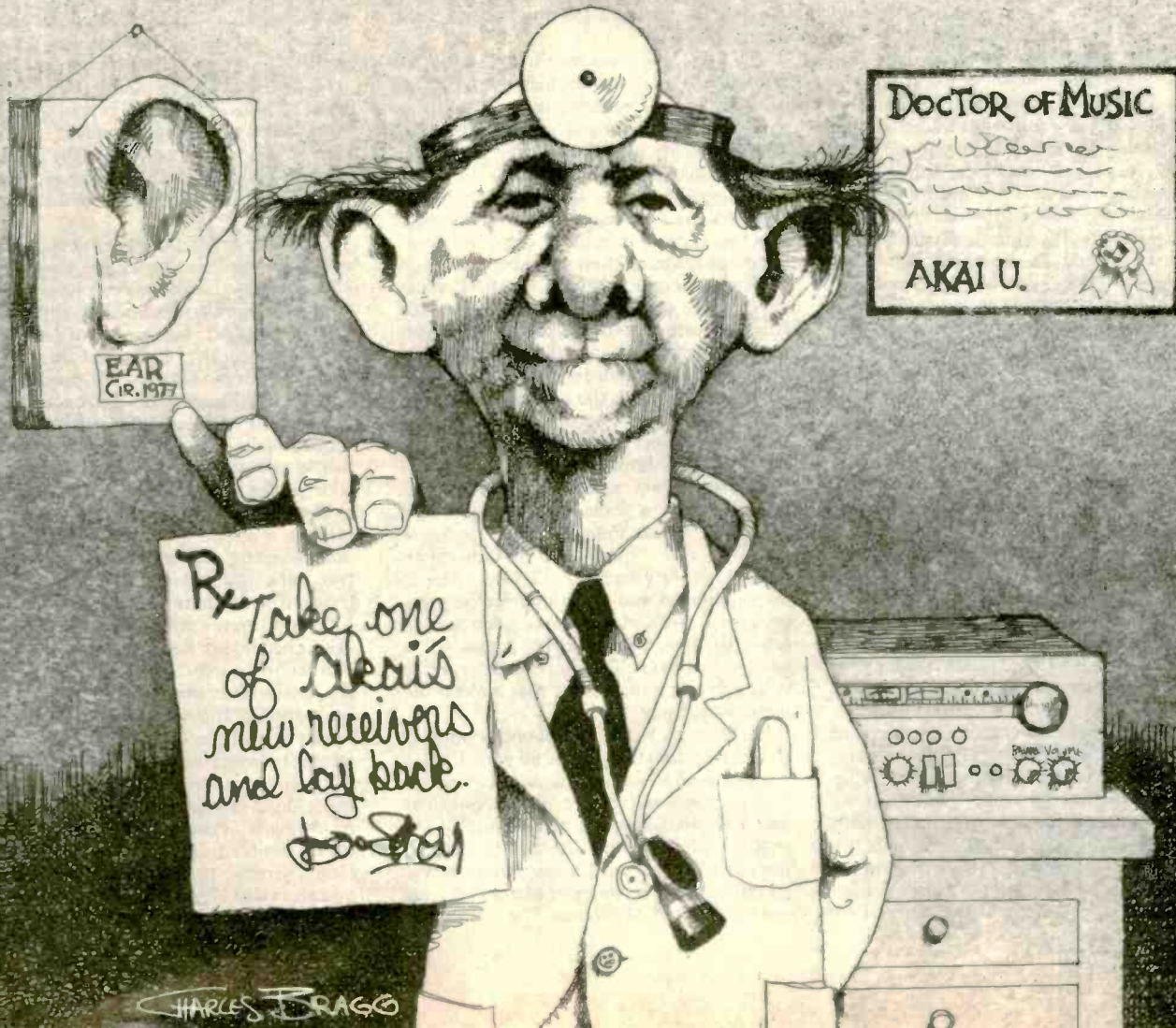
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## INTRODUCING SIX WAYS TO IMPROVE YOUR HEARING.



CHARLES BRAGG



From the Gale album "17th Century Italian Music"

## Denon/Reference/Gale Recordings: Art Weds Technology

by Harold A. Rodgers

DIRECTLY CUT DISCS are all the rage now—and not without reason—but the tape-transfer process is not quite ready to roll over and play dead yet, not even in the field of limited-edition specialty records. After all, tape still allows editing, which in lengthy and/or complex music is almost always necessary to preclude permanence in false notes and heart attacks in recording engineers. Attesting to the new life in the old process are several releases from Gale and from Reference Recordings and an impressive catalog from Denon of Japan, selections from which are being imported by Discwasher. Each of these recording companies has developed its own refined tape process, which differs markedly from usual studio practice. If none of the discs achieves quite the sparkling clarity of a direct cut, they all come very close indeed.

Denon's PCM (for pulse code modulation) recordings circumvent the nonlinearities of tape by recording signals thereupon in digital form only. The tape cannot in theory affect the recorded sound at all—unless it happens to contain a really gross dropout. Denon's sound approaches that of direct-cut discs more closely than anything I have ever heard.

Maria João Pires uses the wide dynamic range the PCM method permits to excellent advantage in a very dramatic approach to Mozart's piano music. Pires seems to home in on Mozart's romantic leanings rather than his classical roots. She carries this off especially well in the C minor Fantasy, K. 475, and its companion C minor Sonata, K. 457.

Two multiple concertos of Mozart are played by the Jean-François Paillard Chamber Orchestra on another Denon PCM disc. Paillard conducts the violin/viola Sinfonia Concertante and C major Concertone with his usual sense of style. The precision of the solo work in the Sinfonia (the match in articulation between Gérard Jarry's violin and Serge Collot's viola is exemplary) does

not quite get matched by the ripieno. This may be because of the echoey acoustics of Notre-Dame du Liban, Paris, where the recording was made, but somehow the ensemble in the Concertone better measures up to the high level of playing of Jarry and Jean-Jacques Kantorow, the second solo violinist.

The title "Virtuosos for Strings" presumably refers to the approach used by the Sofia Chamber Orchestra under Vassil Kсандjiev in its reading of works by Purcell, Gluck, Vivaldi, and Haydn. The playing is accurate and especially energetic—at times even aggressive. The string tone is bright and perhaps a bit hard, although I suspect that this is more a result of close-in microphone positioning than anything else.

*Pictures at an Exhibition* (in the Ravel orchestration) encompasses a range of sonics from delicate woodwind textures to massive brass choruses and offers a formidable challenge to any recording process. Denon's PCM rises nicely to the occasion, handling both extremes with no sense of strain. But the over-all effect is relatively bland despite the orchestral fireworks. Perhaps the cultural route from a Russian pianist/composer through a French orchestrator and conductor (Louis Frémaux) to a Japanese orchestra (the Tokyo Metropolitan Symphony) is overly long. At any rate, some of the excitement and wry humor in the piece get lost. Ravel's own *Pavane pour une infante défunte*, interestingly, comes off a good deal better. The work is interpreted with a finesse and subtlety that make it unusually touching.

Beethoven's Ninth Symphony is another Denon selection that comes off well. Václav Neumann chooses tempos relaxed enough to allow the fine structure of the music to be heard without seeming to lose any of the energy and drive. The Czech Philharmonic does its part well, and the result (which was recorded at a live concert) exploits the accuracy of the PCM process. The chorus gets

through its ordeal with relative ease. The four soloists, soprano Jarmila Smičková, alto Věra Soukupová, tenor Vilém Přibyl, and baritone Richard Novák, turn in lackluster performances, Novák being particularly disappointing (and a little out of tune) at the opening of the choral section.

The stated purpose of Reference Recordings is to provide the dealer and audiophile with a set of tools for evaluating playback equipment. Fortunately, the discs go far beyond this and provide recordings of true musical worth. On the technical side, the master disc, cut at half speed, is prepared from the master tape as soon as possible, in order to avoid the signal degradation that Reference feels takes place as the tape ages. Similarly, the master is subjected to plating at the earliest possible time. (Unplated masters begin to deteriorate after only a few hours.) The maximum number of mothers made from each original is three, and a maximum of five stampers is made from each mother.

Steven Gordon plays Chopin and demonstrates, besides his excellent technique, the abundant dynamic range of the recording and the realism of the reproduced piano tone. Gordon's interpretation is characterized by careful scholarship as well as musical empathy and avoids the all-too-common error of projecting the physical frailty of the composer onto the music. That this is Chopin played with grandeur and scope is most apparent in the reading of the B flat minor scherzo.

Kôtékan, a new percussion ensemble with a penchant for the exotic, plays a pleasant miscellany of short pieces, adding soprano and flute in two of them. The special flair of the group is displayed especially well in *Dreaming of Another* by Richard Kvistad, which, like the name of the group, is modeled on Balinese music. Dynamic range of the disc is excellent. The precision of the recorded transients approaches, but does not quite equal, that of a direct-cut disc.

Chamber music too benefits from Reference Recordings' care, as the James Carter Chamber Ensemble demonstrates clearly in works by Hoffmeister, Loeillet, and Mozart. Carter, a violist, teams up with his sister Deborah, a flutist, clarinetist Philip Fath, pianist Sharon Mann Polk, and harpsichordist William Smith, the associate conductor of the Philadelphia Orchestra. The Mozart Trio in E flat, K. 498, is played neatly and yet with jocularly and sparkle, forming the high point of the disc.

The Gale recordings are made with clusters of microphones rather than single units, thereby avoiding the monophonic effect that single units give when panned to a location somewhere between left and right. Judging from the sound of these discs, the mike clusters are kept reasonably far from the sound sources, for the brilliance and sharpness often produced by close miking seem absent. The sound is brilliant enough, however, and the conflict that can arise in mixing between close-in sound and a realistic perspective is nicely circumvented. Mixing is done in real time—that is, while the recording is actually being made—and the result recorded onto a two-track tape machine. Signal processing of any kind—equalization, compression, etc.—is shunned. In the balance of the manufac-

turing process special precautions are taken at every stage. Gale warrants each disc for a minimum of three years—up to ten provided the record remains in print—and offers to replace any disc that becomes defective for any reason for one-third of the current retail price.

"Music for Percussion, Volume I" certainly exploits the dynamic range of the recording process. Carlos Chavez' Toccata for percussion is well played by the Tristan Fry Percussion Ensemble under John Eliot Gardiner but loses a good deal of potential excitement to its insistence on relatively straightforward rhythms. Like the Chavez, Alan Hovhaness' Bacchanale and October Mountain for percussion sextet seem to concentrate primarily on timbre and secondarily on rhythm, thus making a curiously static impression. Only in José Serebrier's Symphony for percussion (most notably in the final movement) is the ensemble permitted to generate the driving rhythmic energy that makes percussion music so engaging.

On Volume I of "Seventeenth Century Italian Music," Christopher Hogwood and the London Early Music Ensemble insist on instruments that are replicas of those actually in use at the time, all of which seem to be less loud and brilliant than their modern counterparts. Strangely, for a recording aiming at such authenticity, the improvised ornamentation characteristic of the baroque seems barely, if at all, present. Even in the Baldassari Sonata in F for cornett (an instrument using a brass-type mouthpiece and woodwind fingering), strings, and continuo, where Michael Laird does a fine job with the solo cornett, little is to be heard in the way of embellishments and cadenzas.

A third Gale disc is devoted to Beethoven's Waldstein and Appassionata sonatas, played by Peter Frankl. The reproduced piano sound is good and has sharp, clear transients—better than those on most discs, but not quite as precise as those on the Reference and Denon recordings. Frankl comes over as a thoughtful rather than a bravura interpreter of Beethoven and gives the listener a series of well-wrought details to consider rather than sweeping him away with a pianistic rush. The tempos are a trifle deliberate, especially in the first movement of the Waldstein, though not unpleasantly so.

In Bach's Flute Sonatas, S. 1030-35, Christopher Taylor's flute sounds neither quite like a modern nor like a baroque instrument. In the B minor Sonata, S. 1030, the flute dominates the harpsichord and in that respect sounds quite modern, although the tone has a certain antique flavor. It is not clear whether this is by musical design or whether it is an artifact of the way the music is recorded. In those sonatas where the cello doubles the continuo's bass line, the flute takes on a slightly less prominent character in relation to the whole.

These discs are obviously of interest because of the advanced techniques used in recording and manufacturing, but the effort spent in producing them would have been in vain were not music well served. Even though not all the performances are brilliant nor all the selections equally engaging, and occasional manufacturing defects—ticks, pops, "once-around" rumble, etc.—appear as well, the present batch of recordings demonstrates an unusually suc-

cessful working partnership between art and technology.

**MOZART:** Sonatas for Piano: in C minor, K. 457; in C, K. 545. Fantasy in C minor, K. 475. Maria João Pires, piano. DENON PCM OX-7057-ND, \$12.

**MOZART:** Sinfonia Concertante for Violin, Viola and Orchestra, K. 364; Concertone for Two Violins and Orchestra, K. 190. Soloists; J. F. Paillard Orchestra, Jean-François Paillard, cond. DENON PCM OX-7022-ND, \$12.

**SOFIA CHAMBER ORCHESTRA:** Virtuosos for Strings. Sofia Chamber Orchestra, Vassil Kсандjiev, cond. DENON PCM OX-7044-ND, \$12.

**PURCELL:** Suite for Strings, in E minor. **GLUCK:** Sinfonia, in G. **VIVALDI:** Sinfonia, No. 3, in G. **HAYDN:** Divertimento, in E flat, H. II-6.

**MUSSORGSKY:** Pictures at an Exhibition (orch. Ravel). **RAVEL:** Pavane pour une Infante défunte. Tokyo Metropolitan Symphony Orchestra, Louis Frémaux, cond. DENON PCM OX-7072-ND, \$12.

**BEETHOVEN:** Symphony No. 9, in D minor, Op. 125. Soloists; Prague Philharmonic Choir; Czech Philharmonic Orchestra, Václav Neumann, cond. DENON PCM OB-7333-4-ND, \$24 (two discs).

**CHOPIN:** Scherzo in B flat minor, Op. 31; Barcarolle in F sharp, Op. 60; Ballade in G minor, Op. 23; Nocturne in C sharp minor, Op. posth.; Waltz in C sharp minor, Op. 64, No. 2; Etude in C minor, Op. 25, No. 12. Steven Gordon, piano. REFERENCE RECORDINGS RR-2, \$12.

**MOZART:** Trio in E flat, K. 498. **HOFFMEISTER:** Duo Concertante in F. **LOEILLET:** Trio Sonata in E minor. James Carter Chamber Ensemble. REFERENCE RECORDINGS RR-4, \$12.

**KÔTEKAN:** Percussion and . . . Kôtekan Percussion Ensemble. REFERENCE RECORDINGS RR-3, \$12.

**MUSIC FOR PERCUSSION, VOLUME I.** Tristan Fry Percussion Ensemble, John Eliot Gardiner, cond. GALE GMFD 1-76-004, \$12.95.

**CHAVEZ:** Toccata. **HOVHANESS:** Bacchanale; October Mountain. **SEREBRIER:** Symphony.

**SEVENTEENTH CENTURY ITALIAN MUSIC, VOLUME I.** Works by Baldassari, Pittoni, Poglietti, Massaino, Legrenzi, Gabrieli, Buonamente, Frescobaldi, Cima, Mainerio. London Early Music Ensemble, Christopher Hogwood, cond. GALE GMFD 1-76-001, \$12.95.

**BEETHOVEN:** Sonatas for Piano: No. 21; in C, Op. 53 (Waldstein); No. 23, in F minor, Op. 57 (Appassionata). Peter Frankl, piano. GALE GMFD 1-76-005, \$12.95.

**BACH:** Sonatas for Flute and Harpsichord, S. 1030-35. Christopher Taylor, flute; Leslie Pearson, harpsichord; Dennis Vigay, cello. GALE GMFD 2-76-002-3, \$19.95 (two discs).

Denon: distributed by Discwasher, Inc., 1407 N. Providence, Columbia, Mo. 65201.

Reference Recordings: distributed by Sumiko, Inc., P.O. Box 5046, Berkeley, Calif. 94705.

Gale: 348 E. 84th St., New York, N.Y. 10028.

(All the records are available through selected audio dealerships. Prices are suggested retail values. Addresses of the companies are provided only as sources of information.)

## GUITARIST EXTRAORDINARIO



At age 3, Angel Romero's affinity for the guitar was clearly evident. At six, he debuted as a professional artist in the company of the esteemed Romero family of guitarists.

In 1964 at age 18, he made his formal American solo debut in the Hollywood Bowl playing the U.S. premiere performance of Rodrigo's *Concierto de Aranjuez*. "Angel inspired unreserved admiration for his disciplined, incisive rhythm, his authority, surety and taste and the manner in which he projected fragile tones in one of the world's largest amphitheatres." L.A. Times.

His New York solo debut in 1973 was again with the *Aranjuez*. "A gashing interpretation with Romero winning the audience completely, as much with his personal charm as with his deft and masterly playing." N.Y. Times.



S-37440 \*

With the Quartet he is "a star among virtuosos." N.Y. Times. As a soloist, in concert and on record, Angel Romero is *guitarist extraordinario*. His *Concierto de Aranjuez* is at last recorded. *Fantasia para un gentil-hombre* is handsomely partnered. Both are played with the inimitable Romero authority and skill. Friend and colleague André Previn is the eloquent collaborator for both orchestral rich pieces.

On two solo recital LPs, another facet of Romero's immense virtuosity is displayed.

S-36093 \*



\*Tape available

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praphon's mono coupling of these works. The sound is bright and beautifully defined, and the performances by the Prague Chamber Orchestra and pianist Zdeněk Hrnáč have energy, commitment, and, for the most part, nice precision. R.S.B.

**MOZART:** Mass in C, K. 317—See Bruckner: Te Deum.

**MOZART:** Serenade No. 10, in B flat, K. 361. Soloists of the Marlboro Music Festival, Marcel Moyse, cond. [Mischa Schneider, prod.] MARLBORO RECORDING SOCIETY MRS 11, \$7.50 postpaid (Marlboro Recording Society, 5114 Wissioming Road, Washington, D.C. 20016).

Along with other veteran collectors, I remember Marcel Moyse with nostalgic affection as a soloist—a concert and recording flutist as prolific and outstanding in the 78-rpm era as Rampal is nowadays. With his flute recordings ever harder to find, it's especially good to have him reappear as a conductor. (He also conducted a Marlboro Beethoven Octet, currently available in Columbia M 33527.)

As a reading of the *Gran Partita* for thirteen instruments (all reeds and horns except for the double bass Mozart had to use for lack of a double bassoon), Moyse's is more outspokenly romantic in its expressiveness than most younger Mozartians are likely to approve today. And the playing of the festival group of notable soloists demonstrates much of the best along with a bit of the worst characteristics of similar more or less ad hoc ensembles: on one hand an infectiously fervent relish of their own music-making; on the other, seldom entirely assured attack precision and mutual tonal adjustments. But while I must give strictly musical preference to the famous 1963 Brymer/London Wind Soloists version for London (newly reissued in a five-disc Treasury wind-music set) or, with some reservations, the 1974 De Waart/Netherlands Wind Ensemble version for Philips, the present disc ranks high for its exceptionally vivid and lucid yet expansive recording, made at a live festival performance. R.D.D.

**RACHMANINOFF:** Symphony No. 3, in A minor, Op. 44. Aleko: Intermezzo and Women's Dance. London Symphony Orchestra, André Previn, cond. [Christopher Bishop, prod.] ANGEL S 37260, \$7.98 (SQ-encoded disc). Tape: ● 4XS 37260, \$7.98.

**Comparisons:**  
Previn/London Sym.  
Ormandy/Philadelphia  
Stokowski/National Phil.

RCA Gold AGL 1-1527  
Col. MS 7081  
Desmar DSM 1007

Given the growth evident between Previn's two recordings of the Rachmaninoff Second Symphony, I'm somewhat surprised not to find the new Angel Third more clearly superior to the nine-year-old RCA version, now available on the midprice Gold Seal label. In both performances Previn shows himself more scrupulously attentive to the score than those veteran erstwhile associates of the composer, Stokowski and Ormandy, both of whom retouch scoring (e.g., violas added in the opening bars) and are somewhat cavalier



Herbert von Karajan  
*An Unfinished that joins the select list*

about tempos. (Ormandy also ignores the first-movement repeat.)

In the slow movement, only Previn opposes the cantabile mood of the outer sections with a vigorous allegro for the central march—and indeed that episode, like some sections of the finale, was even wilder in the RCA version. Previn also helps maintain that movement's position as the symphony's expressive center of gravity by phrasing the first movement's lyrical cello tune almost casually, thus lightening the load it carries. His over-all grasp of the score is on a par with that of Rachmaninoff himself (with the Philadelphia Orchestra in RCA ARM 3-0296, mono) and Sanderling (with the Leningrad Philharmonic in Everest 3363/3, rechanneled), though the London Symphony lacks that last measure of tonal and virtuosic glitter heard in the playing of the Philadelphia and Leningrad orchestras.

In addition to its lower price, the old Previn recording offers a more substantial filler, the tone poem *The Rock*, although I have no complaints about the Angel filler, lilting readings of the two best movements of the *Aleko Suite*. RCA's sonics are drier, allowing the brasses a bit more thrust than they have in the Angel edition (I have not heard an imported version), and the timpani are crisper and more clearly defined on the older recording. Angel's bass, however, is tighter and clearer. A.C.

**SCHUBERT:** Symphony No. 5, in B flat, D. 485; Minuets and Trios, D. 89. Moscow Chamber Orchestra, Rudolf Barshai, cond. WESTMINSTER GOLD WGS 8335, \$3.98.

**SCHUBERT:** Symphonies: No. 5, in B flat, D. 485; No. 8, in B minor, D. 759 (*Unfinished*). Concertgebouw Orchestra, Bernard Haitink, cond. PHILIPS 9500 099, \$7.98. Tape: ● 7300 512, \$7.95.

**SCHUBERT:** Symphony No. 8, in B minor, D. 759 (*Unfinished*). **HAYDN:** Symphony No. 104, in D (*London*). Berlin Philharmonic Orchestra, Herbert von Karajan, cond. [Michel

Glotz, prod.] ANGEL S 37058, \$7.98. Tape: ● 4XS 37058, \$7.98.

**SCHUBERT:** Symphony No. 9, in C, D. 944. Concertgebouw Orchestra, Bernard Haitink, cond. PHILIPS 9500 097, \$7.98. Tape: ● 7300 510, \$7.95.

A wide interpretive spectrum can be found on these overlapping discs. One might expect the Moscow Chamber Orchestra to stress the small-scaled chamber-music aspects of the early Fifth Symphony, but just the opposite occurs: With full-bodied, close sound, red-blooded and expansively Romantic phrasing, easygoing tempos, and an insistence on every repeat (even in the finale), Barshai's interpretation almost seems like a misguided attempt to swell the charming little work to the dimensions of another Symphony No. 5 in B flat, Anton Bruckner's. It does seem a bit bloated (though hardly as turgid as the Bruckner monstrosity!), and I take exception to a bit of dynamic hanky-panky (why, for instance, the tricky fadeout for the final cadence of the exposition in the first movement?), but in the end the performance is winning because Barshai obviously cares deeply for the music and shows it with a plentitude of affectionate nuancing. This beautifully played, well-produced version is warmly recommended. The filler, the early D. 89 minuets and trios (presumably the same performance once available on Angel coupled with the Mozart Symphony No. 40) hardly has the stature of the extra symphony usually found coupled with this music, but it is good to have these often creative, charming juvenilia available in so expert a performance.

Haitink also gives more than the usual quota of repeats, but he stops short of Barshai. His interpretations of the Fifth and *Unfinished* are a bit problematical, and I still haven't completely made up my mind about them. Three movements of the Fifth are rather brisk and objective, apparently stressing the structural rather than the sentimental side of the music, but other conductors (Toscanini, Van Beinum, and—in a very different way—Klemperer) have pursued a similar course with greater success. I do in fact prefer a cogent classical view of the work to a formless "Romantic" one (Bruno Walter's, for instance), but phrases must sing, rapid runs must be articulated with air between the notes, and rhythms, however stringently maintained, must have spring and flexibility. The Concertgebouw plays excellently, but its dark sonority lacks elegance.

Haitink, for all his earnest sincerity, sounds tightly unimaginative here, and surely the graceless way the double basses bump the accompaniment to the last movement's second theme cannot wholly be blamed on their excessive proximity in the recorded balance. Furthermore, the Minuet sounds outrageously solemn (is Haitink trying to make it akin to the equivalent movement of Mozart's K. 550?), with annoying pauses before and after the central trio section. I am hoping for a reissue of the beautiful old Van Beinum recording in London's Treasury series. In the meantime, the Fifth Symphony is well served by the Barshai, the rustic, solid, leisurely Klemperer (Angel S 36164, coupled with an outstanding *Unfinished*), the taut, quicksilver Toscanini (in the undoctored German mono issue, AT

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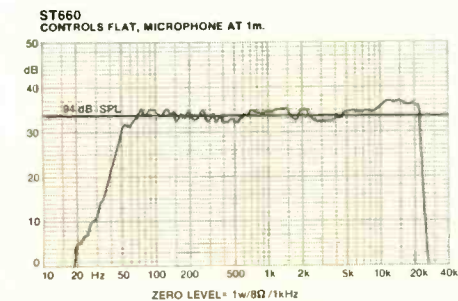
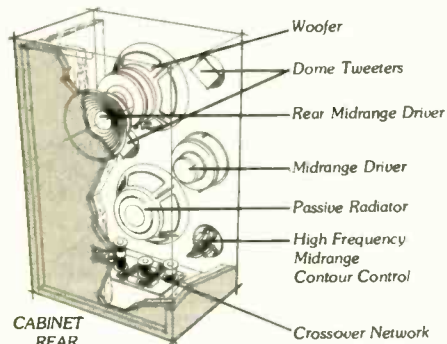
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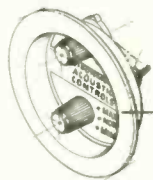
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123), and—the best general recommendation—the Fischer-Dieskau (Angel S 36965), a bracing middle-of-the-road compromise between *Gemütlichkeit* and classicism, beautifully played and smoothly recorded.

Haitink's *Unfinished* is measured, scrupulous to detail, and again rather matter-of-fact. Here the Concertgebouw's somber ensemble tone is more appropriate, but if you want this haunting work in yearning, Romantic, opulent splendor, be warned: Haitink is interested in bars, phrases, and structures, not metaphysics. One curious detail calls for comment: Like Szell, he opts for an iconoclastic reading of the text that keeps the B natural in the second-bassoon part at bars 109 (exposition) and 327 (recapitulation). According to the Norton criti-

cal score, Schubert crossed out the C sharp usually found in its place. I think that the idea of a pedal point is an inspired one; I also believe that a composer's instructions ought to be carried out. That B natural, however, just doesn't work. The resultant chord becomes excruciatingly sour because the instrumental balance is off. Had Schubert heard this work performed (it wasn't premiered until 1865, thirty-seven years after his death), he would almost certainly have had second thoughts about this miscalculation.

Karajan's new *Unfinished*, better even than his fine DG version (139 001, still available), certainly joins those of Casals, Cantelli, Jochum, Klemperer, and Toscanini on my select list. His interpretation has

changed only slightly in its externals; the new performance is fractionally slower and less unanimous than its predecessor. But, paradoxically, the tiny imprecisions increase the spiritual communicativeness of the great Berlin ensemble's still extraordinary playing. And Angel's SQ-encoded quadraphony reproduces the performance with less gloss and more patina than the slightly soupy, overglamorous DG sound. (In conventional folded stereo, it may seem opaque with some systems.)

The Haydn Symphony No. 104 is equally marvelous. Again, the sound of the orchestra is spacious, dark, and resonant, but the tempos are mostly lively, well sprung, and unpretentiously light-footed. This is Haydn with power, vigor, and (by no means a regular feature of Karajan's work) humor. One odd detail: In Karajan's old Vienna Philharmonic version (now on London Treasury), he shortened the grand pauses in the minute from two bars to one. In the new performance, the first of these is given its full value, but the last two times around Karajan takes only five beats of silence. Strange are the ways of great conductors (or not-so-great tape editors?).

Haitink's account of the "Great" C major is one of the better modern versions. His first-movement introduction is a shade slow, and I wish that he hadn't bowed to tradition with that senseless accelerando into the Allegro. The second movement too is a bit sedate, but the rhythmic scansion is good enough to preserve the *alla marcia* feeling. The orchestral playing has the Concertgebouw's customary dark magnificence, though I would prefer greater articulation and detail. Otherwise the interpretation is sound and without bothersome eccentricity. Karajan's Berlin version (DG 139 043) is still my favorite modern account, and Toscanini's recently revived 1941 Philadelphia performance (in RCA CRM 5-1900) is an interpretation of overwhelming propulsion and lyrical magnificence. It should be noted, however, that his 1953 NBC recording has reappeared in an imported German RCA edition (AT 151) with sound so vastly improved over the original domestic issue that that performance now becomes a serious rival to the Philadelphia account. H.G.

**SCHUMANN:** Liederkreis, Op. 39; Frauenliebe und Leben, Op. 42. Jessye Norman, soprano; Irwin Gage, piano. PHILIPS 9500 110, \$7.98.

**SCHUMANN:** Liederkreis, Op. 39; Frauenliebe und Leben, Op. 42. Mildred Miller, mezzo-soprano; John Wustman, piano. [Daniel Nimetz, prod.] MUSICAL HERITAGE MHS 3556, \$4.95 (\$3.50 to members) plus 95¢ postage. Tape: ♡ MHC 5556, \$6.95 (\$4.95 to members) (Musical Heritage Society, MHS Building, Oakhurst, N.J. 07755).

Despite the popularity of these song cycles, really first-rate performances are hard to come by on records. For my taste only Elly Ameling (Philips 6500 706) among contemporary singers can offer the right blend of intelligence, feeling, and vocal persuasiveness in *Frauenliebe und Leben*. Sad to say,

# COLIN DAVIS

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# ADVERTISING INDEX

| Key No. | Page No.                                                             |                |
|---------|----------------------------------------------------------------------|----------------|
| 1       | Acoustic Research                                                    | 59             |
| 2       | Acoustiphase                                                         | 128            |
| 3       | ADC Professional Products, a Division of BSR Consumer Products Group | 21             |
| 4       | ADC Professional Products Group, a Division of BSR (USA) Ltd.        | 62             |
|         | ADS, Analog & Digital Systems Inc.                                   | 64             |
|         | Advent Corp.                                                         | 66             |
|         | Akai America Ltd.                                                    | 111            |
| 5       | Attec                                                                | 153            |
| 6       | Angel Records                                                        | 113            |
|         | Audioanalyst                                                         | 159            |
| 8       | Audio Discount Warehouse Sales                                       | 162            |
|         | Audio Technica U.S. Inc.                                             | 4              |
| 9       | Avid Corp.                                                           | 15             |
| 10      | Bang & Olufsen of America                                            | 66             |
|         | BASF                                                                 | 107            |
|         | Bolivar Speaker Works                                                | 157            |
|         | Bose Corp.                                                           | 7, 10          |
| 11      | British Industries                                                   | 57             |
| 12      | Carston Studios                                                      | 159            |
|         | Classified Ads                                                       | 164, 165       |
| 13      | Dahlquist                                                            | 109            |
|         | Deutsche Grammophon                                                  | 126            |
| 15      | Discount Music Club                                                  | 163            |
|         | Discwasher, Inc.                                                     | 81, 85, 86     |
|         | Dixie Hi-Fi                                                          | 166            |
| 17      | Dual                                                                 | 41             |
| 16      | Dynaco, Inc.                                                         | 20             |
| 62      | Electro Voice Inc.                                                   | 151            |
| 18      | Empire Scientific Corp.                                              | 48             |
| 19      | Epicure Products, Inc.                                               | 94             |
| 20      | Fisher Corp.                                                         | 115            |
| 61      | Fuji Photo Film U.S.A., Inc.                                         |                |
|         | Magnetic Tape Division                                               | 149            |
|         | Harman-Kardon Inc.                                                   | 24, 25         |
|         | High Fidelity's Test Reports                                         | 42             |
| 21      | Hitachi Sales Corp.                                                  | 18             |
| 22      | Icelandic Airlines                                                   | 156            |
| 23      | Illinois Audio                                                       | 166            |
| 24      | Infinity Systems, Inc.                                               | 23             |
|         | Jensen Sound Laboratories                                            | 36             |
| 60      | J&R Music World                                                      | 161            |
| 25      | JVC America, Inc.                                                    | 31             |
|         | Kenwood                                                              | Cover IV       |
| 26      | Klipsch & Assoc.                                                     | 12             |
| 27      | Koss Corp.                                                           | 45             |
| 28      | Koss Corp.                                                           | 154, 155       |
|         | Lansing, James B., Sound, Inc.                                       | 46, 47         |
| 30      | Le-Bo Products Corp.                                                 | 152            |
|         | Lux Audio of America Ltd.                                            | 98             |
| 31      | Maxell Corp. of America                                              | 58             |
| 32      | Maxell Corp. of America                                              | 43             |
| 33      | McIntosh Laboratory                                                  | 60             |
| 34      | Mitsubishi Audio Systems                                             | 32, 33         |
| 35      | Musical Heritage Society                                             | 103            |
|         | Music Listener's Book Service                                        | 121, 124       |
|         | Nakamichi Research (USA), Inc.                                       | 104, 105       |
|         | Nikko Audio                                                          | 65             |
| 39      | Ohm Acoustics                                                        | 39             |
| 40      | Olympus Corp. of America                                             | 28             |
| 58      | Onkyo                                                                | 63             |
| 41      | Peavey Electronics Corp.                                             | 130            |
| 42      | Phase Linear Corp.                                                   | 11             |
| 43      | Phonogram, Inc.                                                      | 116            |
| 44      | Pickering & Co., Inc.                                                | 2              |
| 29      | Pioneer High Fidelity                                                | Cover II, 1    |
|         | Radio Shack                                                          | 14             |
| 46      | RCA Records                                                          | 44             |
| 47      | RTR Industries                                                       | 27             |
| 48      | SAE, Inc.                                                            | 125            |
| 37      | Sansui Electronics Corp.                                             | 8, 9           |
| 49      | Shure Brothers, Inc.                                                 | 68             |
|         | Sonic Research                                                       | 19             |
| 50      | Sony Corp. of America                                                | 16, 17         |
|         | Sound Guard                                                          | 67             |
| 51      | Sound Reproduction                                                   | 60             |
| 52      | Stereo Corp. of America                                              | 161            |
|         | Studer Revox America, Inc.                                           | 123            |
|         | Superscope, Inc.                                                     | 168, Cover III |
| 53      | TDK Electronics                                                      | 117            |
|         | Teac Corp.                                                           | 26             |
| 54      | Technics by Panasonic                                                | 29             |
| 63      | Technics by Panasonic                                                | 141            |
| 64      | Technics by Panasonic                                                | 143            |
| 65      | Technics by Panasonic                                                | 145            |
| 66      | Technics by Panasonic                                                | 147            |
|         | 3 M Company                                                          | 34, 35         |
|         | Time-Life Records                                                    | 5              |
| 55      | Top Discount Audio                                                   | 163            |
| 17      | United Audio Products                                                | 41             |
| 56      | Vanguard Records                                                     | 122            |
| 11      | Venturi                                                              | 57             |
| 57      | Wisconsin Discount Audio                                             | 162            |
|         | Wyeth Press                                                          | 61, 127        |
|         | Yamaha Audio                                                         | 13             |

there is no Ameling recording of the Op. 39 *Liederkreis*, and until one becomes available the best bet is probably Fischer-Dieskau's (Angel S 36266).

Of the new versions, Jessye Norman strikes me as decidedly the less good. Not only is the soprano in uneasy voice (though she sounds better in the *Liederkreis* than in *Frauenliebe*), but she is also remarkably bland in her interpretations. Irwin Gage, moreover, is nowhere near as poetical as these accompaniments ideally require, and in certain songs (for example, "Süsser Freund, du blickest" from *Frauenliebe* and "Auf einer Burg" from *Liederkreis*) he is deadly slow. On the whole, in fact, the Norman/Gage performances are underutilized as well as undercharacterized.

Mildred Miller and John Wustman are more communicative and engaging. Miller's performance is full of illuminating details, as in the phrase "phantastische Nacht" in "Schöne Fremde," where she captures to perfection the speaker's sense of wonderment by means of a judicious emphasis on the adjective. Similarly, at the end of "Waldesgespräch," when the Lorelei addresses her words of doom to the lonely traveler, Norman sounds singularly unthreatening, Miller strikingly baleful.

Miller's drawback is her present vocal state. Not only is the tone often squeezed and the breath control imperfect, but there is an annoying tendency to deal with as many of the technical problems as possible by means of intrusive aspirates ("Du Ring an meinem Fi-hin-ger," and so forth). Even so, there isn't any doubt in my mind that for all her vocal faults Miller is closer to the essence of Schumann's Lieder than Norman.

Philips' sound is rather close for my taste, though the pressing is flawless and there are texts with translations. Musical Heritage offers a better acoustic ambience, a less fine pressing, and no texts. D.S.H.

**SCHUMANN:** Sonatas for Piano: in F sharp minor, Op. 11; in G minor, Op. 22. Lazar Berman, piano. [Valentin Skoblo, prod.] COLUMBIA/MELODIYA M 34528, \$7.98.

Berman's recording of the F sharp minor Sonata has greater control and beauty of detail than his Carnegie Hall performance in November 1976, but many of my reservations still stand. To begin at the beginning, I find his playing of the introduction deficient in organic comprehension: The rubato, mostly agitation followed by waiting for the next beat, sounds rupturing and inelastic, and many of the quirky rhythmic, textural, and harmonic turns are smoothed over with a hard efficiency that quells the rapturous, soaring quality of the writing. Pollini's performance (DG 2530 379), ostensibly of similar style, was far more organic and effective, and while many—myself included—find Arrau's reading (Philips 802 793) tortured and nit-picking, it does achieve a depth of character beyond the reach of either Berman or Pollini.

The G minor Sonata, which Berman has probably been playing longer (indeed he has recorded it before), seems somewhat more native to his instincts. But again he sounds entirely too comfortable in the scurrying outer movements (which are marked "as

fast as possible" and then in turn "faster" and "still faster") and his cantabile in the slow movement sounds pale alongside the singing of Kempff (DG 2530 348, deleted), Arrau (Philips 6500 394), Gelber (Connoisseur Society CS 2085), Engel (in Telefunken 46.35039), and Argerich (DG 2530 193).

Berman, in short, provides some accomplished piano playing, but Schumann asks for more in the way of poetry and dangerous risks. The Soviet reproduction, though, is far superior to that of the Beethoven sonatas (Columbia M 34218, March 1977) recorded last year in the U.S. H.G.

**STRAUSS, R.:** Burleske for Piano and Orchestra; Concerto for Violin and Orchestra, in D minor, Op. 8. Malcolm Frager, piano; Ulf Hoelscher, violin; Dresden State Orchestra, Rudolf Kempe, cond. [David Mottley, prod.] ANGEL S 37267, \$7.98 (SQ-encoded disc).

Angel continues to dole out single discs drawn from Kempe's great four-volume, fourteen-disc Richard Strauss orchestral-works legacy. The present example, like last November's horn concertos (S 37004), is a needed new recording of less-familiar concerted works. The 1881-82 violin concerto, incredibly the product of an eighteen-year-old gymnasium (high school) graduate, is particularly welcome. For one thing, this orthodox, often Brahmsian, music has been unjustly belittled by admirers of the far more individual later tone poems and operas. Considered more objectively on its own merits and for its own time, it is notable for an already magisterially assured technique, both in composition and orchestration, and as a brilliantly effective bravura showpiece. For another, the work has been recorded rarely, and never before as impressively—in both performance and engineering—as it is here by Hoelscher and Kempe.

The *Burleske* of 1885-86 (three years before the first tone poem, *Don Juan*) has fared much better on discs, but the new Frager/Kempe version has at least a slight edge in performance over the Serkin/Ormandy, if only for its more zestful humor, and a big advantage in recording that demonstrates the technological progress made since 1970. Convincingly natural big-hall warmth and spaciousness are evoked almost as well in stereo as they are in quad playback. R.D.D.

**STRAUSS, R.:** Don Quixote, Op. 35. Samuel Mayes, cello; Joseph de Pasquale, viola; Philadelphia Orchestra, Eugene Ormandy, cond. RCA RED SEAL ARL 1-2287, \$7.98. Tape: ●● ARK 1-2287, \$7.95, ●● ARS 1-2287, \$7.95.

Ormandy's third recording of *Don Quixote* lacks, for me at least, not only any real sense of personal involvement, but also any real dramatic point, integration, and conviction. Soloist Samuel Mayes seems to be permissively allowed to go his own—mostly easygoing, often mannered and even sentimental—way, while conductor and orchestra follow routinely along. And the over-all absence of definition is heightened (or at least not contradicted) by the rich, warm,



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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  |
| 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  | 25  | 26  | 27  | 28  | 29  | 30  |
| 31  | 32  | 33  | 34  | 35  | 36  | 37  | 38  | 39  | 40  | 41  | 42  | 43  | 44  | 45  |
| 46  | 47  | 48  | 49  | 50  | 51  | 52  | 53  | 54  | 55  | 56  | 57  | 58  | 59  | 60  |
| 61  | 62  | 63  | 64  | 65  | 66  | 67  | 68  | 69  | 70  | 71  | 72  | 73  | 74  | 75  |
| 76  | 77  | 78  | 79  | 80  | 81  | 82  | 83  | 84  | 85  | 86  | 87  | 88  | 89  | 90  |
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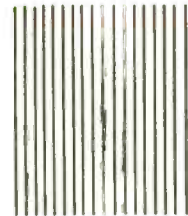
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but patently soft-focused nature of the recorded sonics, identical in the well-processed Dolby cassette edition when its somewhat lower modulation level is compensated in playback to match that of the disc.

For an extraverted, even flamboyant, Don Quixote, you must turn to the Angel version by Rostropovich and Karajan (S 37057, August 1976). For my own ideal realization of the Don's nobility and humor as well as picaresqueness, in a 1961 recording that continues to defy technological aging, I still cling to the Fournier/Szell masterpiece (Odyssey Y 32224).

R.D.D.

**TCHAIKOVSKY:** Symphony No. 4, in F minor,

Op. 36. Vienna Philharmonic Orchestra, Claudio Abbado, cond. [Rainer Brock, prod.] DEUTSCHE GRAMMOPHON 2530 651, \$7.98.

**TCHAIKOVSKY:** Symphony No. 4, in F minor, Op. 36. London Symphony Orchestra, George Szell, cond. LONDON CS 6987, \$7.98.

Either of these new records of the Tchaikovsky Fourth would be a welcome addition to the composer's recorded repertoire; to have them arrive simultaneously is an added bonus.

The Szell and Abbado approaches may well define permissible extremes in interpreting Tchaikovsky's symphonies. The Szell performance—recorded in the early Sixties but only now released domestically (it first appeared in 1972 in Britain, at

budget price!)—is cool and almost classical, avoiding any exaggeration of Tchaikovsky's expression and in fact underplaying some of it. His reading has solid musicianship, but it is also rather bloodless. For those who prefer Tchaikovsky stripped of his almost hysterical emotion, Szell's reading would be a first choice, although the sound does show its age, especially alongside the fullness of the Abbado record.

Abbado's is, to put matters directly, the best all-round version of the Fourth currently available. Devotees of other conductors—Karajan, Bernstein, Klemperer, or Ormandy—may quibble over details, but for me Abbado most successfully strikes the balance between fidelity to the score and intensity of expression. Whereas Szell underplays Tchaikovsky's emotion, Abbado intensifies it without falsifying or exploiting it. His superb rhetorical handling of the finale is especially thrilling—intensely projected but never violating the letter and spirit of Tchaikovsky's score.

Moreover, Abbado has established such rapport with the Vienna Philharmonic that it plays better for no one else today, as reflected in the extraordinarily pure intonation of the strings: the soaring clarity of the cellos, the precision of the basses, and the way the violins sound sweet and lyric without excessive vibrato. I am also impressed by the woodwinds; the all-important oboe solo in the second movement does not have the dry sound once so annoying in this orchestra—the Vienna oboist is in fact fuller in tone and more precise rhythmically than his LSO counterpart under Szell. P.H.

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**TELEMANN:** Overtures. Academy of St. Martin-in-the-Fields, Neville Marriner, cond. [Michael Bremner and Chris Hazell, prod.] ARGO ZRG 837, \$7.98. Tape: ●● KZRC 837, \$7.95. Overtures: in C (*Hamburger Ebb und Fluth*); in G (*Des nations anciens et modernes*); in C.

Telemann has long suffered for his reputation as one of the most prolific composers of all time, but his remarkable versatility and the true stature of his best works are gradually coming—primarily via modern recordings—to be generally recognized. An earlier Marriner/Argo program (ZRG 836, October 1976), which featured the *Don Quichotte Suite* and *Viola Concerto*, also included the magnificent late (1765) *Overture in D*. Now Marriner brings us three more overtures, no less fascinating for their own well-varied musical attractions, yet perhaps particularly valuable for their general similarities to and distinctive differentiations from Bach's four overtures (or orchestral suites). And one of these Telemann overtures, also known as his *Water Music*, of course invites illuminating comparisons with the more extensive *Water Music* of another giant contemporary, Handel (who was a special correspondent/friend and admirer of Telemann).

The *Overture in C of 1723* (subtitled "Hamburg Ebb and Flow") and the undated *Overtures in C and G* (the latter subtitled "Of the Ancient and Modern Nations") have all been recorded before (Archiv, Nonesuch, Telefunken), but none of the versions I've heard can match either the present performances (especially notable

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for their pungent oboes) or Argo's robustly expansive and brilliant recorded sonics, which seem absolutely identical on both tape and disc. And to frost this delicious cake, there are exceptionally informative and detailed notes—supplied for the tape as well as the disc edition—by Christopher Hogwood. R.D.D.

**VIVALDI:** Stabat Mater\*; Nisi Dominus\*; Concerto for Orchestra, in G minor. James Bowman, countertenor\*; Academy of Ancient Music, Christopher Hogwood, cond. [Peter Wadland and Raymond Ware, prod.] OISEAU-LYRE DSLO 506, \$7.98.

These solo cantatas call for "alto solo," which, given the composer, the time, and the place, unequivocally means a *female* alto. As resident maestro at the Pietà, one of the famous Venetian orphanage-conservatories for girls, Vivaldi most certainly composed such works for those admirable young musicians who won the praise of every visitor to their concerts. Yet Christopher Hogwood gives the alto part to a countertenor.

This is quintessentially *bel canto* music, the golden, warm, sensuous, and insinuating melody of the south—qualities totally missing in the cold, characterless, hooty voice of the countertenor, an English specialty recently resurrected from the shadows of history. James Bowman, though apparently a good musician, has a voice devoid of any color, warmth, and resonance; when he sings a  *messa di voce*, the touchstone of the *bel canto*, he simply pushes his voice harder, making it sound like a wooden trumpet. (Unfortunately he is also a bit closely miked.)

This is fine music and these are capable musicians: why don't they just sit down and make music *con amore*, as they show they can in the good performance of Vivaldi's G minor Concerto *a quattro* on the same disc, and not by following a ritual based on nebulous historical facts and figures? P.H.L.

## Recitals and Miscellany

**AMERICAN REVOLUTIONARY WAR SONGS.** Arthur F. Schrader, vocals; David Robertson, Janet Robertson, Edward Olsen, and Kenneth Lemly, vocal and instrumental accompaniment. FOLKWAYS FH 5279, \$6.98.

Arthur F. Schrader may not be any Caruso, but he is a scholar of integrity interested in the American topical song of long ago who is not afraid to sing. Since 1961, he has presented and directed historical-music programs at Old Sturbridge Village in Massachusetts and has performed at hundreds of schools, museums, and historical societies.

This recording (and its meticulously researched notes) grew out of a conference in May 1973 on early music in Massachusetts sponsored by the Colonial Society of Massachusetts in which Schrader participated. All sixteen "Songs to Cultivate the Sensations of Freedom" included here are absolutely authentic (including the four-letter words). The texts are taken verbatim from newspapers and magazines that appeared between 1765 and 1779 with a single exception, *Lady Washington*, for which the earliest text Schrader was able to find dates from 1804. The same meticulous effort went into the difficult matter of identifying the tunes to which these inflammatory lyrics were sung (if they were, in fact, sung) in the homes, in the taverns, and in the streets of Colonial America.

In most instances, the songs are sung here without accompaniment, although Schrader's "assistants" join him in singing some of the refrains in unison. In "Yankie Doodle's Intrenchments Near Boston," he is accompanied by fife and drumsticks on table, a practice that he documents from a contemporary source. The "Address to the Ladies" is sung by Janet Robertson; occasionally David Robertson helps out with a harpsichord.

These are unbuttoned comments on the social, economic, political, and military events of the day sung with spirit and conviction. In listening to them, I did not miss the finesse of the trained vocalist or even (thanks to the full texts included) the polished diction and strong projection of the elocutionist. In all probability, the roughness of Schrader's treatment of these ditties simulates accurately the manner in which they were originally sung.

The title of the disc is taken from an entry in John Adams' *Diary* dated August 14, 1769: "Dined with 350 Sons of Liberty at Robinsons, the Sign of Liberty Tree in Dorchester. We had two Tables laid in the open Field by the Barn, with between 300 and 400 plates. . . . After Dinner was over and the Toasts drank we were diverted with Mr. Balch's Mimicry. . . . We had also the Liberty Song—that by the Farmer, that by Dr. Church, and the whole Company joined in the Chorus. This is cultivating the Sensations of Freedom." I.L.

**JANET BAKER: Vocal Works with Orchestra.** Janet Baker, mezzo-soprano; London Philharmonic Orchestra, Adrian Boult, cond. [Christopher Bishop, prod.] ANGEL S 37199, \$7.98 (SQ-encoded disc).

**BRAMMS:** Alto Rhapsody, Op. 53 (with John Alldis Choir members). **R. STRAUSS:** Ruhe, meine Seele, Op. 27, No. 1; Liebeshymnus, Op. 32, No. 3; Das Rosenband, Op. 36, No. 1; Muttertändelei, Op. 43, No. 2. **WAGNER:** Wendenonck Lieder (orch. Mottl).

Richard Strauss began orchestrating his Lieder so that his wife, a soprano, could share his conducting engagements. One of those that Janet Baker sings on this disc, "Liebeshymnus," is from the very first group, made in 1897, and another, "Das Rosenband," was originally composed to an orchestral accompaniment in the same year. Later, he turned his hand to scoring songs now and again even up to the last year in Montreux: The splendid, slightly extended version of "Ruhe, meine Seele" was

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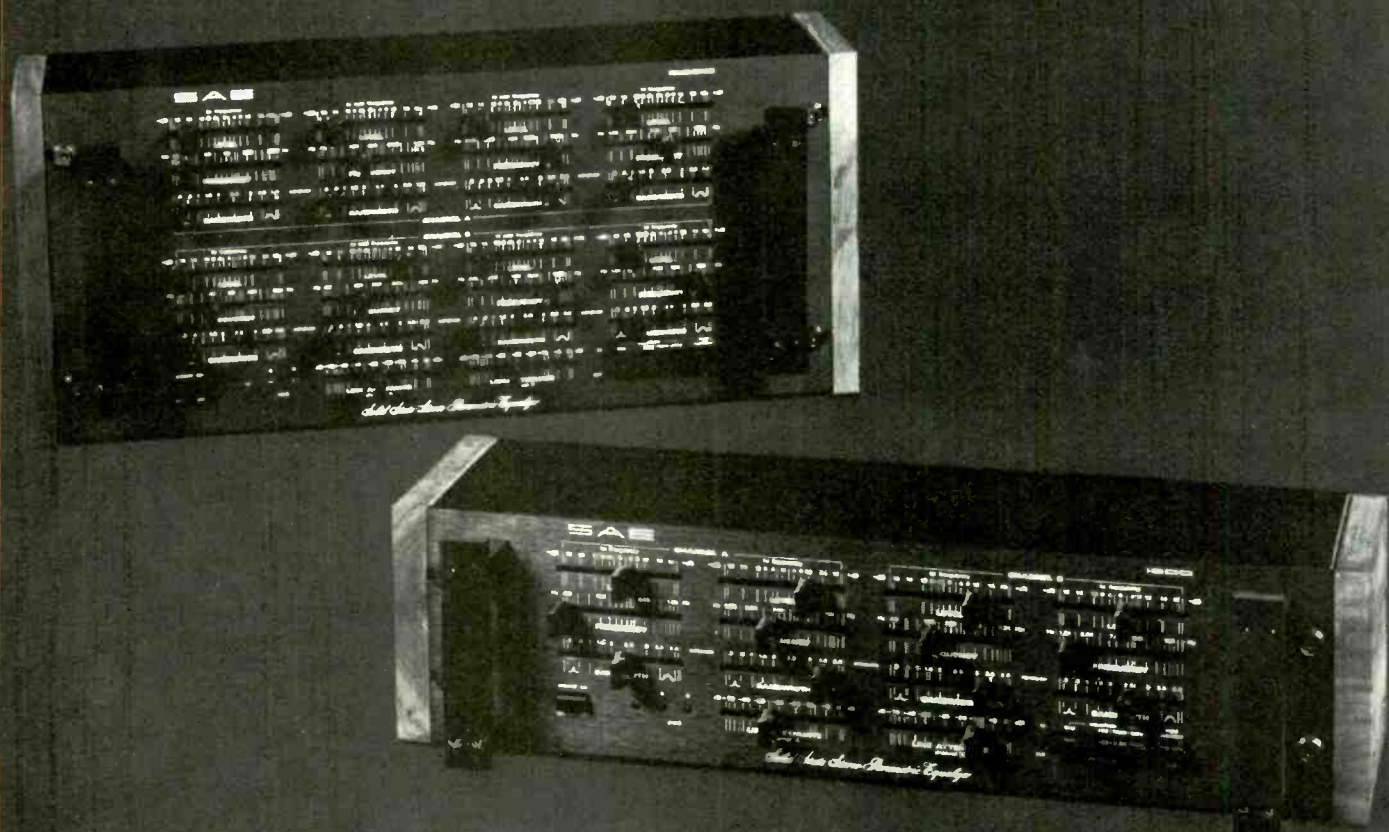
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completed in June 1948, between the composition of "Im Abendrot" and "Frühling," the first two of the *Vier letzte Lieder*.

The fulsome "Liebeshymnus" hasn't been recorded with orchestra since Heinrich Schlusnus did it in 1943; the other three are to be found on Elisabeth Schwarzkopf's two Angel discs (S36643 and 36347), the accompaniments carefully detailed by George Szell's expert baton and somewhat more clearly registered than on this new disc. I'm not a fan of Schwarzkopf's rather calculated performances, but they are undoubtedly steadier, more focused than Janet Baker's work here: The spirit is fervent, but the voice is spread and occasionally tremulous. (Schwarzkopf does get the right ironic tone to make bearable the prattling

mother of "Muttertändelei," overcoming the saccharine effect of the almost gaudy scoring better than either Baker or Elisabeth Schumann, who recorded this setting in 1928 with a notably scrappy band.)

The negative report on Miss Baker's singing extends to the *Wesendonck Lieder* as well, and becomes inevitable when one hears the older recording of the *Alto Rhapsody*, where the voice is firmly pointed, compact, and square on every note. I appreciate Angel's intention to offer this lovely recording (in which Boult shapes the middle section exceptionally well, bringing out the triple-duple ambiguities) in a form more attractive to Baker fans. It was previously filler to Boult's warm, transparent Brahms Second, and you will, I think, get

better value with that coupling (still listed on Angel S 37032). Texts and translations are provided. D.H.

**MONTERRAT CABALLÉ:** Dramatic Soprano Arias. Montserrat Caballé, soprano; Barcelona Symphony Orchestra, Armando Gatto\* and Anton Guadagno\*, cond. LONDON OS 26497, \$7.98. Tape: OS5 26497, \$7.95. **CATALANI:** La Wally; Ebben? neandrò lontana.\* **GIORDANO:** Andrea Chénier: La mamma morta.\* **MASCAGNI:** Cavalleria rusticana: Voi lo sapete.\* **PONCHIELLI:** La Gioconda: Suicidio.\* **PUCCHINI:** Turandot: In questa reggia.\* **VERDI:** Macbeth: Nel di della vittoria... Vieni, t'affretta... Or tutti sorgete (with Juan Pons, bass)\* **Il Trovatore:** Che più t'arresti?... Tacea la notte... Di tale amor (with Cecilia Fondevila, soprano)\*

A record to forget—one that would have been better left in the relative obscurity of the Spanish Columbia catalog where it originated. In every aria, in fact, there are beautiful passages. This Turandot and this Gioconda seize every opportunity for poignant lyricism, and the lovely voice moves gently, smoothly, tellingly through a tender phrase. But then Caballé remembers that she is singing Dramatic Soprano Arias, and either opens up to high notes that, in the *Turandot* aria, become unsteady screams, or bears down in vulgar chest tones. Rhythmic clumsiness puts all these interpretations out of court. Lady Macbeth is heavy and strenuous. In the *Trovatore* scene (this is the only piece from Caballé's regular repertory) the tone is beautiful, but the phrasing is often perfunctory. "Suicidio" is sluggish.

Since there are many other records in which Caballé's vocal virtues, of which no one could be more appreciative than I am, are deployed in consistently musical and shapely executions, these sloppy, self-indulgent, half-baked performances need detain no one—least of all Caballé's admirers.

A.P.

**HEINZ HOLLIGER AND AURÈLE NICOLET:** Orchestral Works with Oboe and Flute. For an essay review, see page 97.

**PETER HURFORD:** Chorale Variations. Peter Hurford, organ of Our Lady of Sorrows Church, Toronto. [Chris Hazell, prod.] ARGO ZRG 835, \$7.98.

**BACH:** Chorale Partita: O Gott, du frommer Gott, S. 767. **BULL:** Røvenant. **BUXTEHUEDE:** Chorale Fantasia: Wie schön leuchtet der Morgenstern; Trauermusik (with Marion Rowlett, soprano). **GRIGNY:** Veni Creator.

In a stimulating program of hymn variations composed between the end of the sixteenth century (Bull) and the beginning of the eighteenth (Bach), Peter Hurford once again proves a uniquely persuasive performer. What is most compelling about his playing is the profound sense of rhythm and its subtleties—a sense all too many organists lack: He knows how to admit the most sensitive agogic accents without vitiating the continuity of the basic rhythmic impulse.

He is a bit stiff in the Grigny *Veni Creator*, but in the Bach chorale partita his agogic refinements give new life to a work that too often sounds rather empty and jejune. He also responds with real sympathy to Buxtehude's *Trauermusik*, written upon

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the death of the composer's father in 1674. This little-known work has four sections, corresponding to the four verses of the chorale *Mit Fried' und Freud' ich fahr dahin* (which serves as the cantus firmus), rounded off by a *Klagelied* for high voice and organ accompaniment. In this Hurford is joined by soprano Marion Rowlett, whose voice is probably more "authentic" than genuinely beautiful to the ears.

On the other hand, the twenty-five "voices" (stops) of the 1965 Casavant tracker-action organ in Toronto's Our Lady of Sorrows Church are nothing if not beautiful, especially with the enhancement of a sympathetic acoustic. The instrument's voicing is vivid and yet refined, and Hurford uses its colors with taste and imagination; only in the Grigny does it betray a lack

of some crucial sonorities. The recorded sound is in every way exemplary, and the surfaces are immaculate. Furthermore, we are given some very fine program notes by Felix Aprahamian and the organ's specification. S.C.

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Communion Hymn by John Hus. The Liturgical Year, Moravian Chorale Cycle. **ANTES:** Three Chorales. **CRUSE:** Three Sonatas.

One of the more fascinating aspects of the American Moravian tradition is that of the trombone choir. Following the tradition in

Europe, dating back to the Middle Ages, of the use of *Stadtpfeifer* to announce civic and religious events and to warn of fire or invasion from the towers of walled towns, the use of the trombone choir can be documented in Bethlehem, Pennsylvania, as early as 1754. The instruments were played from church steeples to announce festivals, communion services, love feasts, deaths—any significant occurrence in the life of the community. Indeed, they continue to be used in this fashion even today, and this recording made under the direction of Jeffrey Reynolds, trombonist of the Los Angeles Philharmonic and music director of the Downey (California) Moravian Church, is a timely contribution to the preservation of an almost unknown byway of the American musical tradition.

Of special interest are the three chorales by John Antes (1740-1811), a Pennsylvania-born Moravian, and the three sonatas by one Cruse (first name unknown) that reached Salem, North Carolina, late in 1785 along with a shipment of musical instruments from Germany. The reverse side is devoted to performances of chorales familiar within the Moravian denomination, in which the unsung words call up in the minds of the listeners the ideas the music was intended to convey.

The documentation included with the disc is rather comprehensive, although not too clearly organized. The engineering is reasonably well done, and the performance by the trombone choir leaves little to be desired. This recording is best absorbed, however, if you don't try to swallow it at a single gulp. Take it in several sittings, and it maintains some of its original freshness and charm. I.L.

**ANDRÉ PREVIN:** Showpieces, Album 2. London Symphony Orchestra, André Previn, cond. [Christopher Bishop, prod.] ANGEL S 37409, \$7.98 (SQ-encoded disc). Tape: ●● 4XS 37409, \$7.98.

**BARBER:** Adagio for Strings. **BUTTERWORTH:** The Banks of Green Willow. **DEBUSSY:** Prélude à l'après-midi d'un faune. **FALLA:** The Three-Cornered Hat: Three Dances. **GLINKA:** Russian and Ludmila: Overture. **J. STRAUSS II:** Emperor Waltz, Op. 437.

Labeled "Album 2" of a "Showpiece" series, this symphonic-pops program should not be prejudged by its "Romantic Orchestral Music" predecessor (Angel S 37157). That included several movements from larger works, whereas Previn now chooses works that can better stand by themselves and that are much more rewardingly varied. Each of the six pieces represents a different national provenance—the U.S., England, France, Spain, Russia, Austria—and each has distinctive appeals.

Both Previn and his London Symphony players are better represented here too. They are less often overintense or overvehement, if still with some lack of grace in the Falla *Three-Cornered Hat* dances and the Strauss Emperor Waltz. But in compensation for that the mellifluous Barber Adagio and the delectable Butterworth *Banks of Green Willow* are notably well done. The EMI recording is robustly full-blooded yet lucidly detailed in stereo, expansively enhanced in quad. R.D.D.

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CIRCLE 2 ON READER-SERVICE CARD

**Vox, no longer clamantis in deserto.** Over the years, the rich Vox/Candidate/Turnabout catalogs have been represented only haphazardly on tape. There were some Phonotapes as well as Vox open reels long ago, a couple of the earliest Dolby cassettes in 1971, the promising but apparently soon aborted SMG/Vox series of late 1975, and some older and out-of-print recordings have been licensed for tape issue by the Classical Cassette Company and others. But it's only now that Vox itself boards the music-cassette bandwagon with a big release featuring both brand-new and older recordings budget-priced at \$4.98 each, yet all in Dolby and including brief, small-print notes.

Admirably representative of the most recently recorded programs are the still too little-known Dvořák piano concerto in CT 2145 and three fine wind-instrument concertos by Haydn in CT 2147. The former is the latest version by the music's most fervent exponent, Rudolf Firkusny, expansively and richly recorded with the St. Louis Symphony under Walter Susskind (also of Czech birth). The latter, in more gleamingly transparent sonics, includes not only the familiar trumpet concerto (Gerard Schwarz soloist), but also the less-familiar Horn Concerto No. 1 (Martin Smith) and an oboe concerto (Ronald Roseman) that may not, but should, be by Haydn—all deftly accompanied by the Philharmonia Virtuosi of New York under Richard Kapp.

And I'm happy to see, however belatedly, Brendel's 1964 set of all eight Schubert impromptus—readings that many connoisseurs prefer to his more recent versions for Philips—in recordings that show their age only in their rather dry acoustical ambience (CT 2130).

**Dolby: si! Notes: comme çà, comme ça.** Now that Angel, RCA, and Everest/Olympic have gone Dolby, this blessed advance surely can be taken for granted. From here on, I'll mention it only for unlikely releases that are not Dolby-processed. That leaves musicassette connoisseurs' next crusade to be for more and better notes—or for at least some where they're not supplied at all, a sin of which such giants as Angel, Columbia, and RCA, as well as some budget- and bargain-priced labels, are indefensibly guilty.

**Varieties of musicassette experience.** One of the easiest ways of expanding one's own musical range, with better assurances of success than venturing into wholly foreign realms, is to move gradually from the familiar works of

by R. D. Darrell

## The Tape Deck

your favorite composers to some of their previously unheard or unknown compositions. For example: the novelties in the last two volumes (Angel 4XS 37068 and 37124, \$7.98 each, no notes) of the quintessentially Gallic Martinon/French National Radio Orchestra Debussy series. Vol. 5 includes (besides an exceptionally languorous *L'Après-midi d'un faune*) two *Roi Lear* excerpts, the sprightly *Marche écossaise*, and the enigmatic but fascinating *Khamma*; Vol. 6 couples a graciously evocative reading of the relatively familiar *Printemps* with the graciously balletic, seldom-heard *Boîte à joujoux*. Together with the first four volumes ("Tape Deck," March), which also contain some rarities, this series richly rewards exploration.

As a partial relief from the perennial Liszt *Préludes*, another tone poem, *Tasso*, is welcome enough, but still more novel and far more rewarding is the last of the series, *From the Cradle to the Grave of 1883*. Solti and the Chicago Symphony play them (along with the familiar *Mephisto Waltz*) in as dramatically thrilling recorded versions as you're ever likely to hear (London CS5 6925, \$7.95). And as a delightful change from "big" Beethoven and Mozart masterpieces, try some of their march and dance miniatures played with infectious zest and humor by Edo de Waart and the Rotterdam Philharmonic (Philips 7300 479, \$7.95).

In the world of opera, what fun it is not to stop with the bubbling overture to Wolf-Ferrari's *Segreto di Susanna*. The complete one-act opera appears on tape for the first time in a superbly vivacious version starring Maria Chiara and Bernd Weikl with the Royal Opera House Orchestra under Lamberto Gardelli (London OSA5 1169, \$7.95). The catch is that there are no texts, only a synopsis of the "story."

**Still further off the beaten paths.** Exceptionally novel and impressive, both musically and for their "black bass" Slavic voices, are two Slavonic Orthodox liturgy programs spell-bindingly sung by unaccompanied Bulgarian choirs under Georgi Robev and Mikhail Milkov in the incredibly reverberant Alexander Nevsky Ca-

thedral in Sofia. The two programs are combined in the ninety-six-minute CCC CP 52, \$7.95 (brief notes, no texts), and are also available separately in CCC AP 53 and 54, \$5.95 each. If you're unfamiliar with this music, I suggest you try the AP 53 program first. While of exceptional musicological interest, the other (Bulgarian chants) is somewhat less aurally magical. (By mail order only from the Classical Cassette Company, 118 Route 17, Upper Saddle River, N.J. 07458.)

You may have heard of Georg Muffat, but how about his son Gottlieb (1690-1770). Bach's slightly younger contemporary from whom Handel borrowed freely? Well, he proves to be not only historically important as a contributor to the baroque suite form, but a charmingly witty personality in his own right in the first complete recording of his 1739 *Componimenti musicali* (seven multimovement suites) by harpsichordist Susanne Shapiro (Musical Heritage MHC 5548/9, \$13.90 list, \$9.90 to members; lamentably no notes). The playing is infused with a genuine sense of Muffatian humor, and it is brilliantly if rather closely and drily recorded. (Musical Heritage Society's address is MHS Building, Oakhurst, N.J. 07755.)

**Also, in brief.** Some of the other current releases featuring highly relishable, more-or-less novel musical fare are:

- RCA Red Seal CRK/CRS 2-2212, cassette/cartridge, \$8.95 each, no notes: a double-play (one side lute, one side guitar) Julian Bream anthology of musical, executant, and sonic delights. And RCA Red Seal FRK/FRS 1-8081 (\$7.95, no notes) proffers an imaginatively varied Telemann chamber music program—concerto, sonata, partita, trio-sonata—starring trumpeter André, flutist Rampal, recorder-player Duschenes, and harpsichordist Veyron-Lacroix.
- Sine Qua Non SQN 7776, "suggested" price \$4.98, but sticker-priced \$2.98: resurrects a 1965 Erato program of brass-ensemble fanfares and short works ranging from the sixteenth century to Dukas, Roussel, and Schmitt. The French players under Paillard are superb; the recording is still a miracle of sonic brilliance.
- Everest 3403, \$5.98, no notes: revives via Duo-Art "reproducing-piano" rolls, Maurice Ravel playing five of his own pieces (*Pavane*, "Le Gibet," etc.). He wasn't an especially good pianist, but his idiosyncratic phrasing and tempos are uniquely illuminating. But why sadden further the "Oiseaux tristes" by a side break? ■



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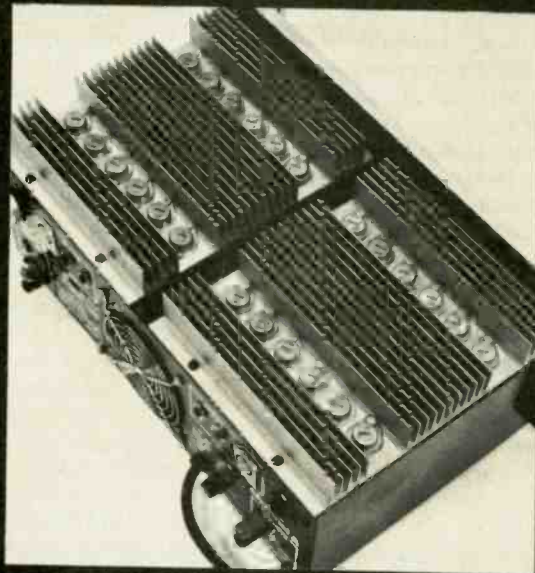
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# Backbeat



## Emerson, Lake & Palmer— Gnomes + Gongs + Tanks

by John Storm Roberts

**T**hese days you pretty much expect anything in the shape of electronic jazz/rock to get lousy press. Still, the almost universal critical slogging received by Emerson Lake & Palmer's comeback album and tour does appear to be a little confusing, given the group's high aims and stellar background.

They seem a logical outgrowth of the Sixties British progressive scene: Keith Emerson played keyboards (and was among the first to use the Moog synthesizer in rock) with the Nice, Greg Lake—the only

member of the band with no "classical" training—was singer and bass guitarist with the original King Crimson, and Carl Palmer was drummer with the Crazy World of Arthur Brown. The group went public in England in 1970 and took off immediately. By 1974, they had made six million-selling albums and with that accomplishment, ceased all touring and recording activity until March of this year, when they released the rather pompously titled "Works" (see BACKBEAT, July). The double album augments their six hard six

feet, one larynx, and impressive array of electronics with a full symphony orchestra, which they took along in its entirety for their followup summer tour.

Originally, this freshly recruited set of fifty-nine American musicians was to play every town on the tour from Knoxville to New York. But in mid-June, less than three weeks in, three outdoor shows were canceled at a loss of \$2 million in potential revenue. Set against a projected total cost of at least \$4 million, put up by the members personally, this posed two simple options. Either the tour would collapse in financial disaster or the orchestra, which cost over \$200,000 a week, would have to be dropped for all but the largest concerts—New York, Chicago, and Detroit among them.

**“The common critical tag of ‘classical rock’ . . . is not one they accept.”**

Did that matter? Financially the orchestra didn't make much sense. The technological problems of balancing fifty-nine acoustic instruments against an electric trio were overcome successfully enough, but at huge expense. Whether it was worthwhile musically depends on your view of ELP's music, which falls—quite roughly—into five categories.

First are adaptations of classical works. Most of these—the Bach/Palmer Two-Part Invention in D minor, Emerson's adaptation of the fourth movement of Ginastera's First Piano Concerto (*Toccata*), and Copland's “Hoe Down”—are essentially ELP transcriptions/arrangements. But occasionally a piece is augmented beyond this: Copland's *Fanfare for the Common Man* was used as bookends for a blues jam, and in their hugely popular modification of Mussorgsky's *Pictures at an Exhibition*, they added vocal and instrumental movements.

Separate from these are a series of long original compositions built out of several small movements or contrasting sections, and blending jazz, rock, and con-

temporary conservatory ingredients. Aside from the early *Take a Pebble*, a lyrical ballad by Lake that brackets a long, largely acoustic instrumental section, these mostly have a vaguely apocalyptic/sci-fi/pop-philosophy theme. The album “Tarkus,” for example, is a suite about a mythical half-tank half-armadillo, and *Karn Evil 9* uses the common symbol of society as a kind of perverted freak show.

Third, Greg Lake will occasionally philosophize in a shorter song like *Knife-Edge* or *Hallowed Be Thy Name*, but most of ELP's briefer numbers are less weighty than these, with Lake contributing simple, largely acoustic ballads.

Latter-day music hall numbers like *Benny the Bouncer*, the instrumental *Nutracker*, and *Jeremy Bender* comprise the fourth category. These contain the only straight-out rock that the band permits itself (and that only in parody). Finally, the group plays a number of heavy-metal jazz/rock numbers with some conservatory touches, like the very popular *Tank* or *Bitches Crystal*.

Essentially, their recent comeback represents more of an adding on to extant ideas than a branching out. Besides the use of a symphony orchestra and the fact that they perform as a group on only one side of “Works,” with each member doing his own thing on the other three, there's nothing conceptually new here except Emerson's *Piano Concerto No. 1*. Its form is totally traditional, despite a lot of jazz phrasing in the piano part, and it reflects an era and ethos—roughly Brahms to Vaughan Williams—previously untouched by the group. But even that piece makes use of ideas Emerson was exploring before their time-out in '74. “It started as a series of piano variations and gradually grew,” he explains. “Whereas the first movement was pieced together, the third was written in one big go. By that time I had the actual concept of the concerto in my mind, so I think that musically and harmonically it flows quite easily, whereas the first movement still sounds like variations.”

On their own sides, Lake and Palmer stick to familiar territory, using the orchestra to enrich their well-established tastes. Palmer opens with a move-

|                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Emerson, Lake &amp; Palmer</b><br/>Cotillion SD 9040 (1971)</p> <p><i>The Barbarian</i><br/><i>Take a Pebble</i><br/><i>Knife-Edge</i><br/><i>The Three Fates</i><br/><i>Tank</i><br/><i>Lucky Man</i></p>         | <p><i>The Endless Enigma</i> (2)<br/><i>From the Beginning</i><br/><i>The Sheriff</i><br/><i>Hoedown</i><br/><i>Trilogy</i><br/><i>Living Sin</i><br/><i>Abaddon's Bolero</i></p>                                                                                                                                                                                                        | <p><i>The End/Nutracker</i></p>                                                                                                                                                                                                                                                                                             | <p><b>Works</b><br/>Atlantic SD 2-7000 (1977)</p>                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <p><b>Tarkus</b><br/>Cotillion SD 9900 (1971)</p> <p><i>Jeremy Bender</i><br/><i>Bitches Crystal</i><br/><i>The Only Way!</i><br/><i>Infinite Space</i><br/><i>A Time and a Place</i><br/><i>Are You Ready Eddy?</i></p> | <p><b>Pictures at an Exhibition (Mussorgsky)</b><br/>Cotillion ELP 66666 (1972)</p> <p><i>Promenade</i><br/><i>The Gnome</i><br/><i>Promenade</i><br/><i>The Sage</i><br/><i>The Old Castle</i><br/><i>Blues Variation</i><br/><i>Promenade</i><br/><i>The Hut of Baba Yaga</i><br/><i>The Curse of Baba Yaga</i><br/><i>The Hut of Baba Yaga</i><br/><i>The Great Gates of Kiev</i></p> | <p><b>Brain Salad Surgery</b><br/>Manticore MC 66669 (1973)</p> <p><i>Jerusalem</i><br/><i>Toccata</i><br/><i>Still . . . You Turn Me On</i><br/><i>Benny the Bouncer</i><br/><i>Karn Evil 9</i></p>                                                                                                                        | <p><i>Piano Concerto No. 1</i><br/><i>Lend Your Love to Me</i><br/><i>Tonight</i><br/><i>C'est la Vie</i><br/><i>Hallowed Be Thy Name</i><br/><i>Nobody Loves You like I Do</i><br/><i>Closer to Believing</i><br/><i>The Enemy God Dances with the Black Spirits</i><br/><i>L. A. Nights</i><br/><i>New Orleans</i><br/><i>Two-Part Invention in D Minor</i><br/><i>Food for your Soul</i><br/><i>Tank</i><br/><i>Fanfare for the Common Man</i><br/><i>Pirates</i></p> |
| <p><b>Trilogy</b><br/>Cotillion SD 9903 (1972)</p> <p><i>The Endless Enigma</i> (1)<br/><i>Fugue</i></p>                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                          | <p><b>Welcome back, my friends, to the show that never ends—Ladies and Gentlemen</b><br/>Manticore MC 3-200 (1974)</p> <p><i>Hoedown</i><br/><i>Jerusalem</i><br/><i>Toccata</i><br/><i>Tarkus</i><br/><i>Take a Pebble</i><br/><i>Piano Improvisations</i><br/><i>Jeremy Bender/The Sheriff</i><br/><i>Karn Evil 9</i></p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |



Photos by Neal Preston

Keith Emerson, Greg Lake, Carl Palmer

ment from Prokofiev's *Scythian Suite*, "The Enemy God and the Dance of the Black Spirits." He kept the score pretty much as written but cut the orchestra from eighty to sixty players to get a tighter sound, then successively overdubbed timpani, xylophone, and drums. He took more liberties with Bach's Invention, transcribing it for vibraphone, percussion, and marimba, and slowing it in tempo.

"It's meant to be fast. But for me it's such a pretty tune it goes past too quickly that way, and if you play the vibraphone too fast, it sounds like milk bottles. I wanted to get the tonal quality of the instrument, and I wanted the chords to come through, so it had to be slow."

Lake is unwilling to talk about his side of the LP in detail. "It should and does speak for itself. It is it, right?" But like Palmer's, it hews to his proven musical strengths. He did mention his favorites as being *C'est la Vie*, which re-creates the French *chanson* style down to an accordion accompaniment complete with a 6/8 *java* section, and *Closer to Believing*, a supper-club number with pretty-ballad strings and a chorus

"When I played  
*Toccata* to Ginastera, he said,  
'That's exactly how I want  
to hear my music played.'"

vaguely reminiscent of Vaughan Williams' *Flos Campi*, of all things.

One of the more surprising things about "Works," and about ELP's work as a whole, is how well it hangs together despite all the different elements and personalities. The reason is simple: Regardless of who initiates an idea, everybody has to be behind it or it won't be used. "We have to have a unanimous decision on anything, because it's the only way a group like this could survive," Palmer says. "You can't get the best from anybody who isn't happy, and you can't have a weak link in a three-piece band!"

The common critical tag of "classical rock," earned through their penchant for conservatory numbers, is not one they accept. Emerson claims the only piece of classical rock they play is *Nutcracker*, a tear-away boogie onslaught on Tchaikovsky's *Nutcracker*, which, as he says, is "a very tongue-in-cheek thing. I do it to try to show some sort of contrast between 'classical rock' and how we treat the classics."

As to criticism of "messing with the classics," Emerson refuses to be defensive. "In all cases where I have met the composers, they've been delighted. I've been very nervous beforehand, but when I played *Toccata* to Ginastera, he said, 'That's exactly how I want to hear my music played.'"

In Copland's case, Emerson first sent him a tape of ELP's *Fanfare for the Common Man*, leaving out the blues jam that is two-thirds of their version. Copland objected to the fact that they'd added nothing, so Emerson sent the whole piece. "He said, 'Now I like it! Now it's got yourself in it!' He couldn't understand



what went on in the middle—he couldn't see what relationship it bore to his music—but he thought it was great!"

Keith Emerson's use of the Moog synthesizer at a Nice concert with the Royal Philharmonic in 1968 made him among the first rock musicians to use it in performance. But he is no prophet of the instrument as Ultimate Ax. "I use it for effect more than anything else. I don't really like to use it to imitate other instruments like a lot of people do. I like to get distinctive sounds from the synthesizer. Otherwise it would become confused with all the other keyboards.

"I guess in the future I may use it less, because synthesizers are extremely complicated. I like to go onstage and just concentrate on the music. I don't think you can beat acoustic instruments, really. They're so direct!"

Carl Palmer's percussion is as important to

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**"I want to bridge the gaps between the great technician, the great timp players, and the great vibes players."**

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ELP's total sound as Emerson's keyboards. But he doesn't see himself as a drummer in the traditional sense: "I'm after getting away from the bashing. A lot of drummers do that very well. For me, that is only half the job. That's why I enjoy the instrument, because there are so many different ways you can go.

"I don't think I play like a drummer. I play like a third member who just happens to have drums in front of him instead of a vibraphone. I play so many syncopated runs with Keith that we work out note for note. And I try to play as many tuned percussion instruments as possible. Glockenspiels. Krotars, a bit of vibraphone. . . .

"I want to bridge the gaps between the man who's a great technician, like Buddy Rich, the great timp players like Saul Goodman, and the great vibes players like Milt Jackson or Gary Burton."

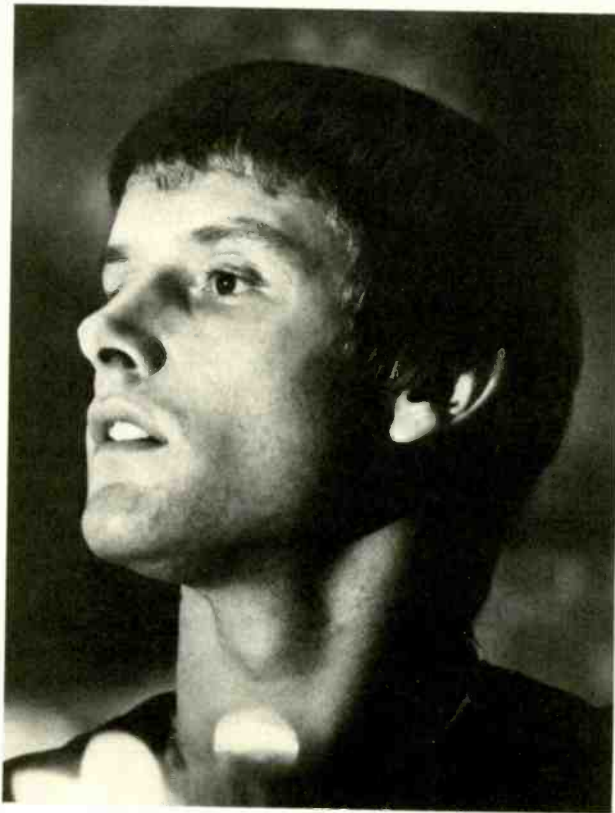
Superficially, bassist Greg Lake is the most conventional of the three. What can you say about a man who just stands still, singing ballads with a sense of restraint that seems to come from outside rock & roll and playing admirable, lucid acoustic and electric guitar? Palmer and Emerson see themselves as entertainers as well as musicians. Lake is a performer, rather than an entertainer. But onstage and on record he is an equal, and his very stillness and simplicity are important foils for his comrades' junketings.

Given their relatively esoteric music, ELP gets across to an extraordinarily wide range of people, from fellow musicians to teenage nonmusicians who you'd expect to be floored by Prokofiev. Part of their appeal to "the kids" probably comes from their visual carryings-on. Emerson was one of the earlier practitioners of rock-as-theater in the 1960s, attacking his instrument, leaping over it. Even today, despite Palmer's revolving drum stand with its computerized light show and dragon-bedecked gongs, Emerson provides most of the spectacle. The link between the mu-

sic and the visual is his Moog, a splendid object that looks like an electronic kitchen cabinet. During the show's climax he abandons it, leaving it to play alone and ultimately lash itself into an explosive self-destruct—authentic and effective fun.

The theatrics certainly add to the group's outreach. The question is whether they defeat ELP's very purpose. Palmer claims they don't: "The visual aspects stem from the musical qualities. Whatever happens visually is another way of climaxing the music. If we're writing a piece and for some reason we can't climax it, we'll think about using a visual as a very last resort, just to give it that extra. If it's a way of getting the music across, we'll do it."

Of course, to blow up a synthesizer because you can't figure out an ending could be seen as a weakness. But an occasional trick is neither here nor there. For ELP's music does have a fundamental weakness, and



peaking is only part of it. Ironically, despite the magnificent moments and serendipitous stretches, their favored long multisectioned opuses rarely work as consistent musical entities. Rather, they are at their best in the shorter ballads and comic numbers. And, perhaps again ironically, it's the group's basic rock & roll chops that make up for their failure at the conceptual heart. In the beginning, Palmer says, "the reason we all got off was the playing together. You might have four or five fabulous players together, but they might not have that chemistry. We did, and we recognized it, and we established it quite quickly with the public."

ELP does have that chemistry. What they lack is a hardhearted outsider behind the soundproof glass, finger poised over the talk-back button ready to holler. "Enough already!"



## At the Crest of the Air Waves: Syndicated Radio

by Jim Melanson

As last month's story on automation pointed out, radio is pretty slick these days. How many of the millions of listeners would even guess that their favorite show and disc jockey are someone else's favorites too—someone else who lives a thousand miles away and listens to a different station? Not many. But take for instance *American Top 40*, a weekly program featuring the top singles on *Billboard's* chart. It's produced in Hollywood, but broadcast independently by more than 400 stations in the U.S., not to mention the 400-plus overseas outlets of the Armed Forces Radio Network.

Many other shows are available to local stations from the dozens of radio syndication firms around the country: *King Biscuit Flower Hour*, *British Biscuit*, *Sugar Hill*, and *Live from the Bottom Line*, all products of the New York-based company DIR; London Wavelength's *BBC Rock Hour*; *Rock Around the World*; and Earth News Inc.'s celebrity-interview series, *Daily Planet*. Also, many of those sports fea-

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**"It's slick and it's powerful,  
accounting for tens of millions  
of dollars in sales annually."**

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tures you've been listening to are syndicated, as is a wide range of radio programming from ecology roundtables to "how to" advice spots.

While the majority of syndicators supply specific shows, companies like Drake/Chenault in Los Angeles offer twenty-four-hour programming formats, complete with prerecorded music of any variety, announcer tracks, time tapes, and station jingles. The idea is to provide stations of limited resources with as professional a sound as possible, thereby boosting local ratings without enormous overhead. Drake/Chenault's fee ranges from \$500 to \$5,000 and is based on market size, ad revenue, and ratings. It's estimated that the firm completely programs 250 stations nationwide.

Syndication has come a long way in recent years. It's slick and it's powerful, accounting for tens of millions of dollars in sales annually. But it hasn't always been that way. In fact, like automated radio, it is

mostly a product of the Seventies. True, there were forerunners in the Fifties—Earl Nightingale's advice show aired in hundreds of markets—and Sixties, but it wasn't until the likes of *American Top 40* and the *King Biscuit Flower Hour* came along that the boom began. Until then, radio was rooted to local tastes and, for the most part, oblivious to the advertising revenue that successful syndication could tap.

Starting the ball rolling wasn't easy either. Tom Rounds, president of Watermark, Inc. (*American Top 40's* parent company), says, "The show originally started as a barter deal [a syndicator sells national spots to an advertiser and gives the program to stations for free], but we went \$250,000 in the hole trying to make it work." Financial success came when the company began selling the show outright, with the role of peddling commercial time relegated to each station. Price for the program varies from market to market, depending on the size audience the station may reach. "It's in the range of a few hundred dollars per station, per show," Rounds explains.

At DIR, founder Bob Meyrowitz recalls that it was little more than a year after *American Top 40* first aired in July 1970 that the seed for the *Flower Hour* and DIR's other programs was sown. "I was with the NBC radio network at the time, and I felt that radio could do tremendous things with programming that television couldn't do," he says. His idea was to air a "one-of-a-kind concert" featuring Three Dog Night. Permission was granted by NBC. The result: "A total flop," says Meyrowitz. "It was done as wrong as possible, and I still remember thinking that, if you did it so wrong, what would happen if it were done right?"

He soon exited NBC to pursue the notion of broadcasting live concerts by top-name acts. Eight months and many dollars later, DIR's first show went on the air, featuring Mahavishnu, Blood, Sweat & Tears, and Bruce Springsteen—a virtual unknown at the time. Cost of the show was \$50,000, which, co-principal of DIR Peter Kauff says in retrospect, was "totally inefficient." He explains that today's shows run anywhere from \$15,000 to \$20,000 to produce.

Syndication costs—recording, advertising, duplicating, and shipping among them—are high, there's no getting around it. But for the successful syndicators

the ends more than justify the means. According to Rounds, Watermark totals "a little over \$2 million in sales a year," including revenues from *Country Music Countdown* (similar to *American Top 40* but pegged to *Billboard's* country chart) and the *Robert W. Morgan Special of the Week*, a one-hour celebrity-interview show. Meyrowitz says that DIR produces "a couple of million dollars in sales a year."

Risks are always there too, both for companies on top and for those looking to break in. It takes the perfect combination of creativity and savvy to program

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**"You have to base it  
on its own merits—what kind  
of market you're in."**

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the kind of entertainment that will catch on with the necessary millions of listeners. Imitation may be the sincerest form of flattery, but in syndication it'll more than likely be the kiss of death. "You have to base it on its own merits—what kind of market you're in," observes Scott Muni, well-known disc jockey and program director at New York's WNEW-FM, a leading station on the progressive-music front. "I've turned down far more shows than we're carrying." He also feels, however, that even with the high-risk factor "syndication is extremely healthy for the country."

It's also extremely healthy for stations that carry the more successful shows. Meyrowitz claims that many of the 300-plus stations airing the hour-long *King Biscuit Flower Hour* triple their audience during the time of its broadcast. The show is given free to stations, with DIR selling commercial time to national advertisers (\$5,000 per minute) without cutting in the

station. But since the rating game for radio translates average size of listening audience into advertising rates, clients gladly take the presold *Flower Hour*.

Watermark leaves the selling to local stations, so Rounds's version of the syndication success story is told in terms of ad dollars for his clients. Marketing reports stress that those who carry *American Top 40* have little difficulty selling out the show's spots to local advertisers. A station in a sizable market can gross upwards of \$50,000 annually with *Top 40*, which runs three hours with approximately seven minutes of commercial time an hour.

To make sure that our "someone else" isn't just down the street listening to the same show on a different station, syndicators guarantee their clients market exclusivity. Watermark ensures fifty miles, while DIR and others such as London Wavelength and Ed Kritzer's *Rock Around the World* (his firm and show have the same name) simply tie exclusivity to a particular station's market. DIR goes one step further and specifies the time period that a show can be aired, probably because they sell their own commercial time. It also forbids rebroadcasting a show without permission.

"On any given Sunday night, approximately five million people listen to the *Biscuit* series," says Meyrowitz. He adds that research shows Sunday night to be the only time of the week when FM—*King Biscuit's* medium—outrates AM.

How does it all happen—from syndicator to radio station? Each firm has its own method, but generally what's involved is preproduction, production, and shipping of either tapes or discs. Nikki Wine, *American Top 40* producer, explains that she gets advance chart information from *Billboard* on a Wednesday, and preproduction planning starts the same night. Thurs-



*At the Record Plant in New York: Bob Meyrowitz, Peter Asher, engineer Harry Maslin, James Taylor, Peter Kauff*



day is devoted to recording the song cuts and voice tracks by disc jockey Casey Kasem, who is usually on an open mike six or seven minutes during each of the show's three hours. "In a large sense, the show is wall-to-wall music," says Wine. "We try not to stop the music for any longer than a minute." Once Thursday's tapes are transferred to discs (a three-record package for each station), they are shipped on Saturday so that the stations will have them by Monday or Tuesday.

London Wavelength's Michael Vaughan explains that the *BBC Rock Hour* shows are edited versions of live concerts broadcast by the BBC, with his company being the exclusive U.S. licensee of the British network's radio concerts. The show usually airs only once a month, making production lead time for editing, duplicating, and shipping several weeks.

It can get a bit more complicated at DIR, primarily because all of their music shows are recorded right

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### "Stations have been very suspicious of syndicated radio."

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at the scene of the concert. Once dates are arranged and clearances secured from artists and/or their managers, DIR staffers contact one of several local recording studios they deal with around the country to secure remote equipment. Following the recording, tapes are edited and mixed, duplicated, and shipped to participating stations. DIR's lead time, from the actual concert to the time a station receives the tape, is usually six weeks.

"We feel that we do better remotes than anyone else," says Meyrowitz. Producing two *Flower Hours*, one *British Biscuit* (a U.K. version of the *Flower Hour*), and one *Best of the Biscuit* each month should certainly give them all the experience they would need. And he can back his point: Some DIR shows have been used by artists for "live" album releases—the Bee Gees, Emerson, Lake & Palmer, and Rod Stewart among them. (All three LPs have gone gold.)

Remote recording situations can get pretty hectic. Both Meyrowitz and Kauff tell the story of how the road manager on a Rod Stewart tour tried to confiscate the tapes after the show without realizing that DIR had a signed contract. "We wouldn't give them to him," Meyrowitz says, "and he wouldn't let the remote truck and crew go. He had his road crew surround our truck with semis, and we couldn't move. It was a standoff. Finally, after an hour or so, someone found Stewart's personal manager, and he cleared up the situation."

Talk formats have also proven to be quite lucrative. "We once did a two-hour show with Woody Allen, which was extremely successful," says Meyrowitz. "Prior to that, it was unthinkable for 230 stations to broadcast two hours of nonmusic. But audiences are no longer limited to music." DIR's interview program, titled *Conversations*, has included such guests as George Harrison, Elton John, Grace Slick, Peter Frampton, Brian Wilson, and Ringo.

Earth News Inc.'s *Daily Planet* is a four-minute interview show carried on some 150 stations. General

manager Bill Haniford feels that "people need news and public-affairs programming. Our basic thought is that we can produce good relevant programs better than local stations. We consider the *Daily Planet* a nonwire network."

Music, interviews, news—all part of an auspicious beginning for syndication. But what about the future? Can syndication continue to grow without taking on the taste you'd associate with processed food? Opinions are divided.

"Overall, the field has great promise," says



Casey Kasem in the studio at Watermark

Rounds. "I think that it's only the beginning." Adding that Watermark will be introducing a half-hour science-fiction series this fall, he says. "You need consciousness expansion. There needs to be more courage in the radio business; stations have been very suspicious of syndicated radio. But don't underestimate audiences—it's been proven that people will go outside of their listening habits."

Heather Shoen of Earth News is not so optimistic. "Radio is basically regional and local; syndication is national. It's never going to work. It's very difficult for national syndicators to appeal to local tastes." Nonetheless, the more successful shows have access to upwards of ninety percent of the listening public. With that kind of exposure, syndication certainly has the potential to take off. And, in Muni's words, it is healthy for the country, especially in providing an outlet for more diverse music to be heard in these days of shrinking AM playlists. ■

# Input Output

Instruments and  
Accessories

As serious listeners have known for some time, recorded programs often don't "travel well." This can mean that your just-mixed priceless master tape sounds sensational in your control room and just so-so in someone else's. How come?

For one thing, everyone's listening room is different, and, as any acoustician will tell you, the vagaries of room construction often play havoc with the sounds reproduced therein. Each surface has its own effect, and size and shape—even the furnishings—all play a part in determining the total sound. You may not even recognize your favorite speakers when you move them to another room.

Given the variety of environments in which your recordings will eventually be heard, then, it doesn't make much sense to spend a fortune chasing that illusory "true" sound for your control room. Buying expensive monitors or elaborate bi- and tri-amplification systems or hauling in egg cartons and time-delay units may help, but they still won't create the Ultimate Standard.

One of the most important things to consider in attempting to alleviate the problem is reverberation time. Often abbreviated as  $T_{60}$ , it is the time required for the sound level to drop by 60 dB, once the sound source has ceased. Every room has its own characteristic  $T_{60}$ , which—to further complicate matters—usually varies significantly with frequency.

The problem is that your room's reverberation time comes on top of the reverberation already on the tape. If you are adding artificial reverberation to a recording the room may be misleading you in judging the effects. In the typical small control room, low-frequency reverberation time may be long, as compared with the  $T_{60}$  at higher frequencies. As a result, reproduced sounds may have an unpleasantly muddy character when heard elsewhere.

Corrective monitor equalization may help, although many test procedures do not take  $T_{60}$  into account. As a result, the steady-state noise source used in the test checks out, while program material does not. What is needed is a convenient method of analyzing the reverberation

time vs. frequency of the listening room. Then steps may be taken to achieve a reasonably flat  $T_{60}$  across the audio frequency spectrum. Once this has been done, normal room equalization tests will yield more useful data.

The **Acoustilog 232 Reverberation Timer** measures reverberation times of up to 9.99 seconds. A series of eight pushbuttons allows the user to measure the  $T_{60}$  of any room within each of seven one-octave bands (center frequencies of 125 Hz to 8 kHz) or across the full audio-frequency bandwidth (FLAT).

To make measurements, the Timer's built-in noise generator is used as the input for the system under test. An omnidi-

rectly directional microphone (not supplied) picks up the reproduced noise signal. Calibration is very simple: The front panel SEND LEVEL and RECEIVE LEVEL are adjusted until the decimal point in the LED readout is illuminated. As long as you can see the decimal point, the Acoustilog is ready to measure your room's system. Then, when COUNT is depressed, the noise source ceases and the three-digit LED registers the  $T_{60}$ . Timing accuracy is  $\pm 3\%$  and  $\pm 0.03$  seconds.

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The Timer's microphone input will accept any standard low-impedance microphone, and an auxiliary input is included for an external signal source. It measures 19 by 1 $\frac{3}{4}$  by 10 inches. It is available on a daily rental basis from the manufacturer or may be purchased directly for \$1,000. If you don't want to tackle the job yourself, your local acoustical consultant should have a Model 232 by now and can probably provide the service for you. If he doesn't know what  $T_{60}$  means, hang up.

CIRCLE 121 ON READER-SERVICE CARD

**Arp 2720 Pro/DGX Digital Synthesizer.** For those who find instant gratification a particular source of pleasure, the Pro/DGX will be a source of delight. This

amazingly compact keyboard offers thirty preset voices, including all the wind and string instruments of the orchestra, plus two kinds of fuzz guitar, banjo, sax, and some less conventional sounds like Space Reed, Telstar, Song Whistle, Noze, Pulsar, and Comic Wow. If that's not enough for you, the left side of the console incorporates four sliding pots—VOLUME, BRILLIANCE, TOUCH SENSITIVITY, and PORTAMENTO SPEED—plus an OCTAVE TRANSPOSE (up or down) switch.

The keyboard is touch sensitive, with normal pressure producing the plain preset sound, and a heavier touch engaging any or all of the "Touch Sensor Effects"—Pitch Bend, Wow, Growl, Brill-

iance, Volume, and Vibrato—that you have selected. Depth of those effects is determined by TOUCH SENSITIVITY. When REPEAT is engaged, it is controlled by the same rotary pot that controls vibrato: VIBRATO/REPEAT SPEED. PORTAMENTO ON activates the glide effect, whose character is determined by the appropriate slide pot. Although the normal position is in the center of the slider's travel, the area near the bottom produces virtually no results, while all the way up produces a smooth portamento.

A handy thing, indeed, is the Pitch Bend facility, which acts as a half-step transposer, so if the rest of the band is playing in A flat and you want to play in G (you never did find the time to practice those scales, did you?) you simply depress the Pitch Bend halfway, and your sound is transposed up.

Although the Pro/DGX we reviewed was perfectly in tune (according to a reliable strobe tuner), Arp does provide a tuning control that can alter pitch of the entire instrument over the range of a whole step in either direction. This facilitates playing with other instruments that can't tune on the spot, such as an organ, as well as providing compatibility with off-speed tape machines.



Acoustilog 232 Reverberation Timer



Arp 2720 Pro/DGX



Located on the back panel is a 1/4-inch phone jack for output to an amplifier, the portamento footswitch (supplied) jack, and an XLR female connector to plug into a recording console. The signal to our console was clean, strong, and relatively free of electronic noise, as was that to the amplifier.

Some of the voices were wonderfully realistic, such as Tuba, French Horn, Bass, and Clarinet, while others fell somewhat short of accurate simulation. In no way does their Oboe sound like an oboe, Cello like a cello, or Sax like a sax. Since Arp's 2490 String Ensemble is the best sounding string machine around, it was surprising to hear such uninspired voices here—especially the Cello. But Cosmic Wow, Telstar, and all those other oddball effect voices are great for novelty sounds. In fact the Space Bass turns out to be the funkier clavinet sound since the clavinet. Fuzz Guitar I is not terrific, but Fuzz Guitar II is and so is Steel Drum. And Noze—well, if my noze sounded like that I'd drink lots of liquids and get plenty of rest.

The Pro/DGX measures 33 1/4 by 5 by 12 inches deep and weighs 19 pounds, making it extremely portable. This, along with the function controls, convenience of the presets, and endless sound possibilities, makes it a valuable addition to any keyboard player's instrument group. Price of the 2720 is \$1,295.

CIRCLE 122 ON READER-SERVICE CARD

**KIK Mixer Boxes.** This is a line of mixing and switching boxes whose foremost feature is simplicity of design and construction. All ten boxes are sturdy, die-

cast aluminum measure 1 by 2 by 4 inches, and use high quality components. Prices range from \$20 to \$40.

First is a trio of mixdown boxes, each with four phone-jack inputs and one phone-jack output. When a four-channel tape recorder is used, it is sometimes helpful to be able to "bounce" tracks to provide additional space for recording extra material. Feeding three prerecorded channels into the mixdown box and recording the composite sound on the fourth channel makes the three original channels once again available for recording (i.e., overdubs or special effects material). The Model 4/1-10K (\$20) is designed for use with medium output-impedance tape recorders and the Model 4/1-100K (\$20) for high output-impedance models. The Model 4/1-Dual Z (\$35) accommodates both impedances with four high/low toggle switches to match any equipment you may own.

The 4/2 Quad-to-Stereo Mixdown Box (\$40) mixes down four taped channels to a stereo output with full continuous panning on each of the four channels. The RFI Filter Box (\$20) contains four radio-frequency interference filters to reduce buzz from SCR light dimmers. It can be used with all four-channel tape recorders.

The second group of products includes two A/B Boxes, a Monitor Box, a Solo Box, and the 4-to-1 Mixer. The mixer (\$35) has four inputs, each with its own volume control, and these are summed to the single output. The primary application would be to balance several musical instruments or microphones that are to be fed to a single stage amplifier, or as a compact, convenient submixer for a PA system.

The Monitor Box (\$25) can be driven directly from the power amp of a PA system and contains a resistive network to drive two sets of stereo headphones for monitoring without blowing the

headphones (or your ears).

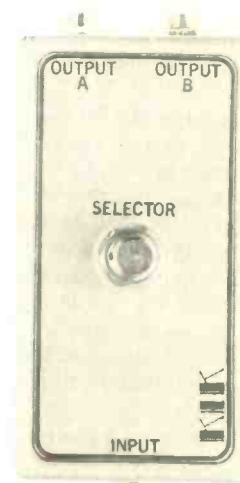
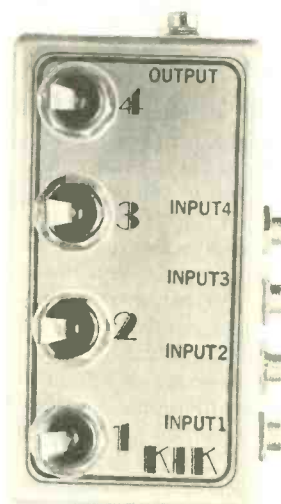
The A/B Footswitch and A/B Toggle Switch (\$25 a piece) each has a single input that can be routed to either of two outputs—for example, to two amplifiers or speakers for a dramatic panning effect, or between two channels of a guitar amplifier. You also can plug a box in backwards to put one source on standby while activating the second source.

The Solo Box (\$25) incorporates a switchable volume control, so that a guitarist may preset levels for lead and rhythm playing, and effect the change in volume needed for these two styles by simply pressing the footswitch.

The workmanship and design of the KIK series is quite good. The boxes fill a need that was previously satisfied by homemade and/or more expensive commercial equipment. Uniform design is an added feature, making the boxes easily distinguishable from other signal-processing devices you might have in your collection.

FRED MILLER

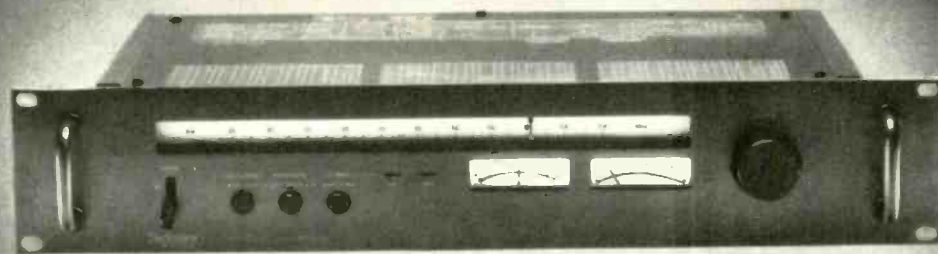
CIRCLE 123 ON READER-SERVICE CARD



Top: KIK 4/1 Dual Z Mixdown Box  
Bottom: KIK A/B Footswitch Box

CIRCLE 63 ON READER-SERVICE CARD →

# Introducing the Technics ST-9030 tuner. Purists would feel better if it cost over \$1,000.



To some, tuners that offer 0.08% THD, 50 dB stereo separation, a capture ratio of 0.8 dB and waveform fidelity should demand a price tag of over \$1,000. But with the ST-9030 this performance can be yours for under \$400\*

That's quite a feat for a tuner. But then the ST-9030 is quite a tuner. It has two completely independent IF circuits: A narrow band, for ultra-sharp selectivity. And a wide band, for ultra-high separation and ultra-low distortion. It even selects the right band, depending on reception conditions, automatically.

Both bands give you the same extended flat frequency response. Because, unlike conventional tuners, the ST-9030 utilizes an electronic pilot cancel circuit that cuts the pilot signal, without cutting any of the high end. It's ingenious. And a Technics innovation.

The Technics ST-9030 has one of the quietest, most sensitive front ends of any tuner. With an advanced linear frequency 8-ganged tuning capacitor and 3 double-tuned circuits, plus dual gate MOS

FETs in the 2-stage RF amplifier and balanced mixer circuit. What's more, there's a servo tuning circuit that locks into the tuned frequency, regardless of minor fluctuations. The result: Negligible drift distortion and maximum stereo separation.

Technics ST-9030. Compare specifications. Compare prices. And you'll realize there's really no comparison.

THD (stereo): Wide—0.08% (1kHz). Narrow—0.3% (1kHz). S/N: 80 dB. FREQUENCY RESPONSE: 20Hz—18 kHz +0.1, -0.5 dB. SELECTIVITY: Wide—25 dB. Narrow—90 dB. CAPTURE RATIO: Wide—0.8 dB. Narrow—2.0 dB. IF, IMAGE and SPURIOUS RESPONSE REJECTIONS (98 mHz): 135 dB. AM SUPPRESSION (wide): 58 dB. STEREO SEPARATION (1 kHz): Wide—50 dB. Narrow—40 dB. CARRIER LEAK: Variable —65 dB (19 kHz). Fixed —70 dB (19 kHz, 38 kHz). SUGGESTED RETAIL PRICE: \$399.95\*

Technics ST-9030. A rare combination of audio technology. A new standard of audio excellence.

\*Technics recommended price, but actual retail price will be set by dealers.

**Technics** Professional Series  
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# Records

KEN EMERSON

JOHN STORM ROBERTS

TODD EVERETT

SAM SUTHERLAND

DON HECKMAN

NICK TOSCHES

TOBY GOLDSTEIN

JOHN S. WILSON

JIM MELANSON

## Carole King: Optimistic Craftsmanship

by Don Heckman

**Carole King: Simple Things.** Carole King & Norm Kinney, producers. *Capitol SMAS 11667, \$7.98. Tape: 4XW 1167, 8XW 11667, \$7.98.*

Few performers are more aware of the double-edged qualities of success than Carole King. "Tapestry" was, by almost all accounts, one of the best-selling LPs in record-chart history. For the IRS and King's bank account, that's terrific. But the huge penetration of that album has hung like a cloud over everything she's done since. Her follow-ups on the Ode label—"Music," "Fantasy," "Really Rosie," and "Thoroughbred" among them—were solid, respectable outings, each with a single or two that most performers would be delighted to have. Yet measured against the success of "Tapestry," they seemed lacking.

Now on a new label, working with a new producer, new backup musicians and—on a few tracks—a new lyricist, she appears primed to put her career into a new phase. But the music is still well-crafted and still utterly generic to the Carole King style, despite an occasional unusual chord or even some remarkably un-Kingian melodic twists on the song *Labyrinth*. And, if success can be measured by something more than sales and airplay, "Simple Things" is a successful musical album even if it won't match the dollar performance of "Tapestry."

Certainly it's hard to argue with the persistently optimistic thrust of both King's and Rick Evers' lyrics, which overflow with phrases like "the secret of living is life" (*Simple Things*), "live in the name of love forever" (*In the Name of Love*), "faith and lovin' energy will free your mind" (*Labyrinth*), and "a tree is one—the earth is one—the universe is one/I am one—we are one" (*One*).\* The

things-will-turn-out-alright quality has always been part of her work, but this time out she seems bubbling over with high spirits.

In the hands of most composers, such lyrics could become maudlin beyond belief. But one of the appeals of King's mu-

sic is its ability to transcend words, often with a dark tone that both enlivens and threatens their surface quality. (A good example is the extremely effective shift from minor to major in *You've Got a Friend*.) *In the Name of Love*, a bit reminiscent of the "Tapestry" title track, uses a classical sounding melody with flute counterpoint to take the edge off the goopy lyrics. *Simple Things* is saved by some heavy production and a bright melody, *Hold On* by effective 12-string strumming, a roving electric guitar, and as much rock rhythm as you're ever going to hear on a Carole King recording. And *Labyrinth*'s uncharacteristic melody has a roving, flatted fifth and unprepared modulations, all of it coming together



King—something to be said for consistency

\*© 1977 by Colgems-EMI Music, Inc.



Introducing all the features you'd expect from a graphic and a parametric equalizer. At a price you don't. Under \$450.



A radical departure in circuit principles, Technics SH-9010 stereo universal frequency equalizer offers the experienced technician and demanding audiophile the flexibility of both a graphic and a parametric equalizer.

The five bands of each stereo channel have a center frequency that's independently variable. By turning the control knob below each slide pot, the center frequency can be varied up or down by as much as 1.5 octaves. So, unlike conventional equalizers with a fixed-center frequency, the SH-9010 has no frequency "blind spots." What's more, each band of the SH-9010 can adjust to overlap the adjacent band to further boost or attenuate a selected frequency width.

Incredible for the price? You're right. But what's even more incredible is that variable center frequency is just one of the SH-9010's advantages. Variable "Q" or bandwidth is another. With it you can broaden or

narrow any frequency band. Independently or both at the same time. Which means you can balance an entire string section or eliminate an annoying little hum

Technics SH-9010. Compare specifications. Compare prices. And you'll agree there's no comparison.

THD: 0.02%. FREQUENCY RESPONSE: 10 Hz-20 kHz (+0, -0.2 dB), 20 Hz-70 kHz (+0, -3 dB). GAIN:  $0 \pm 1$  dB. S/N: 90 dB (IHF-A). BAND LEVEL CONTROL: +12 dB to -12 dB (5 elements x 2). CENTER FREQUENCY CONTROL:  $\pm 1.6$  oct. to  $\pm 1.6$  oct. BANDWIDTH (Q) CONTROL: 0.7 to 7.0. CENTER FREQUENCIES: 60 Hz (Variable 20 Hz ~ 80 Hz), 240 Hz (Variable 80 Hz ~ 720 Hz), 1 kHz (Variable 333 Hz ~ 3 kHz), 4 kHz (Variable 1.3 kHz ~ 12 kHz) and 16 kHz (Variable 5.3 kHz ~ 48 kHz). SUGGESTED RETAIL PRICE \$449.95\*

Technics SH-9010. A rare combination of audio technology. A new standard of audio excellence.

\*Technics recommended price, but actual retail price will be set by dealers.

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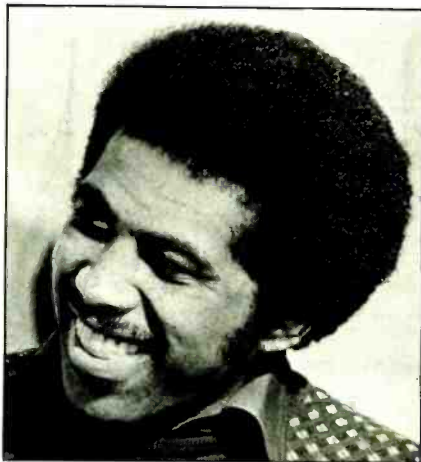
like updated Kurt Weill. Ironically, the only two songs that can even remotely be described as downers are two of the more interesting tracks: *God Only Knows* and *You're the One Who Knows* (hmm, I hope there's a contradiction there).

The album's first single, *Hard Rock Cafe*, is a familiar paen to the joys of the neighborhood tavern and an obvious good choice for Top-40 airplay. What makes the song work, however, is an off-the-wall calypso rhythm and a memorable chorus hook between voice and horns. *Time Alone* is one of those now-classic descending-bass-line-and-hanging-melody tunes that everybody tries to write but that only King and Neil Sedaka can bring off properly. On *To Know That I Love You*, another ballad, she sings with that nasal honk that should sound weird but that somehow always works. But interjections from her back-up group, Navarro, are superfluous and dissipate some of the feeling in what would otherwise be a lovely performance. *One* has the feel, but not the impact, of *So Far Away*.

In sum, a typically professional Carole King recording. And, in retrospect, pretty much what she has been giving us all along. "Tapestry" was a kind of freaky convergence of the right time, the right lyrics, and the right cultural receptivity. But it wasn't all that different from the albums before and after it. King has been writing songs for a long time now and she does it very well, indeed. There's something to be said, after all, for consistency. ●

**Average White Band & Ben E. King: Benny and Us.** Arif Mardin & Jerry Greenberg, producers. *Atlantic SD 19105, \$7.98. Tape: ●● CS 19105, ●● TP 19105, \$7.98.*

Many disappointments have made me leery of albums that unite black veterans with admiring and successful rock &



Ben E.—putting on the power

rollers. The recent Muddy Waters album ("Hard Again" on Blue Sky) with Johnny Winter was a magnificent exception to the rule of fizzling mergers, but "Benny and Us" is not. The Average Whites is an average, tight pop/r&b group; Ben E. King is an average, good soul singer from way back. And while they live up to their own reputations they don't help each other peak. Which makes their joint album—well, average.

King is at his best putting on the power in the shouting midtempo pop/soul *Fool for You Anyway*. It is a few kilometers on the soul side of Bobby Bland territory, and it works. From much the same area comes the only other strong track, *A Star in the Ghetto*, a rather over-lush studio production in contemporary slow-soul vein with AWB backing that eases King along quite nicely. The other decent tracks, *The Message* and *What Is Soul*, are both basically light and punchy dance-alongs—okay as long as you don't listen too closely and detect the lack of anything interesting happening. But the rest of the album is pretty arid: the boring single *Git It Up for Love*, a couple of blah ballads, and a final track, *Keepin' It to Myself*, which has all the ingredients but just doesn't cook.

"Benny and Us" is not an awful album, but it's no gem either: passable for partying, though not approaching a fistful of younger and hungrier bands for drive and do-it-up, and too often giving off a faint but fatal odor of going through the motions. J.S.R.

**Count Basie and His Orchestra: Prime Time.** Norman Granz, producer. *Pablo 2310 797, \$7.98. Tape: ●● K10 797, ●● S10 797, \$7.98.*

This set documents Basie's return to his band last January after having spent five months recuperating from a heart attack. That absence is most noticeable here on *Ya Gotta Try*, a piece that features Nat Pierce on piano. Pierce, who filled in for Basie while he was away, is one of the Count's better emulators, though not a slavish one. The texture of his playing is a bit thicker, although he does have the rhythmic feeling and that quality seems to transfer to the band when he is at the piano. The delicacy and suaveness that they exhibit when the Count is in the piano chair, running things with his effortless finger flicks, is missing here. Most of the rest of the set suggests that the Basie machine rolled smoothly along in his absence and that he simply picked up where he left off on his return.

All the originals and arrangements are by Sam Nestico. He is deliberately writing in a mannered style, so even with his skill and creativity, one piece tends to sound much like another. There are,



The Basie machine

however, three efforts to get away from the cookie-cutter similarities. One is the totally un-Basieish *Bundle o' Funk*, with a Fender bass in place of Basie's characteristic acoustic and a complex interplay of sections and instruments that builds almost imperceptibly in brief jagged passages. It's an interesting piece and provides a change of pace, although without a single note of the Basie piano, it might be any skillful band that is playing. Nestico's other attempts at variety are his arrangements of two old standards, *Sweet Georgia Brown* and *Ja-Da*, neither of which one would expect from Basie. The first comes out strong and swinging, with Butch Miles kicking the band along gloriously at the drums, but *Ja-Da* resists Nestico's efforts to decorate it with Basie mannerisms and just hunches lamely along. J.S.W.

**Dave Frishberg: Getting Some Fun Out of Life.** Carl E. Jefferson, producer. *Concord Jazz 37, \$6.98.*

Dave Frishberg is one of the more fascinating adjuncts of contemporary jazz. He is not a committed jazzman in the musical sense, though at one time he worked with Ben Webster, Kenny Davern, and Bobby Hackett and played piano at the Half Note in New York. A sometimes journalist, his pleasure with words has led to such songs as *Peel Me a Grape, I'm Hip* (a catalog of aware expressions), and *Van Lingle Mungo*, that strange hit a few years ago with a lyric consisting of nothing but names of baseball players. He has also written an affectionate tribute to Bix Beiderbecke, *Dear Bix*, which he sings on this record, his dry, high, slightly nasal voice adding a distinctively personal quality.

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He is also a delightfully light-fingered pianist who finds his own way into a variety of traditions and a stimulating accompanist, as Anita O'Day and Carmen McRae have found. And beyond all this, he takes joy in jazz, holding nothing sacred but giving everything the respect it is due.

This collection is an overview of a good deal of Dave Frishberg. One side is unaccompanied piano solos. The other, played by a splendid quintet, is a blend of John Kirby and Duke Ellington that enables Frishberg to cut loose both as a group pianist and as a singer. It is, moreover, a provocative demonstration of his imaginative choice of material and his equally imaginative treatment. *Wonderful One*, a romantic chestnut from the '20s, is a piano solo, played as a waltz over a stride foundation—an unnerving conjunction that has a quietly manic effect. *Stevedore Stomp*, an Ellington tune, is given a crisp, Kirby-like attack by the quintet. An obscure Billy Strayhorn piece written for Johnny Hodges, *Violet Blue*, features Marshall Royal's lighter-toned but equally singing alto. There is Ellingtonian misterioso in an old movie tune, *Lotus Blossom*, and an exultant band performance of *Old Man Harlem* (composed by an odd couple, Hoagy Carmichael and Rudy Vallee) that is simultaneously loose and tight. Frishberg's variations on Waller and Morton are filled with unexpected changes on the familiar.

The touching setting of *Dear Bix* features Bob Findley playing a trumpet role, which, aside from an opening and closing that are deliberately and evocatively Bixian, is strikingly nonBixian in a manner that somehow manages to suggest the musical qualities of Bix. That may sound perverse, but it's part of Frishberg's sense of fun. Another part of his fun is that it all sounds very natural, very easy. No sweat. Just getting some fun out of life. J.S.W.

**Geils: *Monkey Island*.** J. Geils Band, producers. *Atlantic SD 19103, \$7.98.*  
Tape: ●● CS 19103, ● TP 19103, \$7.98.

A two-year hiatus from recording has clearly been a glimpse over the brink for the J. Geils Band. Their breakout from Boston's lively club circuit in the late '60s derived from the septet's regenerative love for urban r&b in an era when white rock was threatening to flounder in its own self-importance. But their own ebullience gradually lapsed into a boogie lockstep that made caricatures of Peter Wolf's howling singing and the band's frantic rhythm arrangements.

On "Monkey Island," they signal their first comprehensive revision of style by truncating their performing name while

broadening their base to include harder rock and softer ballads, with an increased instrumental emphasis showcasing Seth Justman's keyboards and the rhythm section of Danny Klein (bass) and Stephen Jo Bladd (percussion). Yet the production credit and the yellow and black re-creation of the original '50s Atlantic label (a touch the group has used since their third album, reminding us of that company's early investments in r&b) are a complement to several lively soul romps that serve as the major link to the band's past.

If Geils seem to be moving against the current—now that the rock establishment is softening up and retreating to the good-timey pulse that seemed almost reactionary at the time of their first sets—their daring pays off. Despite the kinetic drive of a Motown cover, *I Do*, or the disco-with-muscle punch of *Surrender* (which features a terrifically sexy faceoff between Wolf and guest vocalist Cissy Houston, who dramatize sexual conquest with fevered traded lines), the album's mood is set by two uncharacteristic ballads that allude convincingly to the band's threatened breakup prior to this record's conception.

The title tune and *Wreckage* are both laced with a desperation that goes beyond the primarily sexual hunger of earlier albums. The former slips from Latino buoyancy to hushed midnight terror; the latter matches the weary, somnambulant atmosphere of the Stones's *Moonlight Mile* or *Memory Motel*. The Stones are also an inevitable standard of comparison for the slashing *Somebody*, an economical fable of betrayal and violence that recalls *Hand of Fate* and other Stones street scenes without parroting them.

The mix also includes a Wonder-tinged love song (*You're the Only One*) and a raucous remake of Louis Armstrong's *I'm Not Rough*, yet the greater range of material is vindicated by Wolf and Justman's most consistent writing in years and the overall vehemence of the playing. As their first self-produced effort, "Monkey Island" is clearly a personal triumph snatched from the jaws of professional despair. It's also one of the best albums so far this year, and the Geils band's best since "Bloodshot," their most successful record to date. S.S.

**Paul Horn: *Inside the Great Pyramid*.** Paul Horn & David Greene, producers. *Mushroom MRS 5507, \$11.98 (two discs).*

There is a category of music—an increasingly active one—that can best be described as ingenuous. It is music that is made neither for commercial nor, particularly, for esthetic reasons. Like *mantras*, meditation, and yoga, its purpose is to

reach past the intellect, past consciousness, and into the inner person. As with all of those methods, sometimes it works and sometimes it doesn't.

Paul Horn, a long-time professional jazz musician who has never demonstrated a particularly strong vision in his "pure" jazz work, has found a much broader perspective for his art in the paradoxically smaller confines of this kind of music. Several years ago he recorded a quite remarkable set of solo improvisations in the Taj Mahal. He now has taken that concept one step further with a two-disc set of improvisations recorded in two of the great pyramids of Gizeh near Cairo, Egypt (three sides from the massive Cheops Pyramid and one from the somewhat smaller burial pyramid of Cheops's brother Kephren).

There are many similarly exotic recordings available, of course, for those whose tastes are so inclined—shakuhachi music, sitar and sarod music (not necessarily by Indian classical musicians), wooden flute music, singing whales, howling wolves, the outdoor sounds of Bucks County, and the raging surf. The difference here is what Horn, as a professional, brings to the music. His encounter with these enormous, spiritually potent structures from the past obviously moved him deeply, and he has approached the project with appropriate awe, possibly even a bit too much in places. He uses the chambers as a flexible shell—a moving, breathing, expanding, and contracting space for his music.

The results are altogether admirable. Starting tentatively, as though concerned that he might intrude upon past territorial imperatives, he builds as he moves on, his musician's ear telling him how to respond to the extraordinary echo (surely seven to eight seconds long), how to play successive notes against notes, how to build cascading waterfalls of



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sound and, sometimes, how to marvel in the pure clarity of a single cry echoing into infinity.

Although each of the four sides has been given a title—*Initiation, Meditation, Enlightenment, Fulfillment*—it seems apparent that Horn's improvisations were determined far more by the urgencies and intersections of the moment, by the flow of the music itself, than by arbitrary titles. There are clear differences, however. At times he is content to let the echoes play him, to respond to the reverberating overtones of his long, held flute notes. At other times he seems to be confronting the antiquity that surrounds him with snatches and fragments from the Baroque era, from Ravel, and from the contemporary avant-garde.

Certainly this is perfect music to create an environment for the exercises, meditations, dances, etc. associated with finding the new consciousness and tapping human potential. But there is more. It would be wrong to place this work into some sort of mildly exotic cul-de-sac, because what Horn plays has plenty of merit on its own terms as pure music. Dull moments, secondhand melodies, and a slackening of the imagination? Sure there's some of that, as one would expect in four twenty-minute improvisations from a solo flutist. More often though, Horn is playing right on the razor's edge of his abilities and producing some of the finest soloing—regardless of the surroundings—of his long career. D.H.

**Kiss: Love Gun.** Kiss & Eddie Kramer, producers. *Casablanca NBLP 7057, \$7.98. Tape: ●● NBL5 7057, ●● NBL8 7057, \$7.98.*

"Love Gun" is going to, upset Kiss-haters. It used to be easy for aging rock purists to call the well-oiled Kiss machine superficial, thin-voiced, and boring on record. But the band's latest output tackles those weaknesses head on and emerges a laughing giant. "Love Gun" glues itself together with the energy of studio skill and red-hot production, and coats its charged body with the obvious but long-neglected major facility of Kiss—humor.

Particularly in the personae of Gene "Lizard" Simmons and Paul "Watch-Me-I'm-Beautiful" Stanley, Kiss is a comical exaggeration, reinforced by the manufacture of their own comic book. When Simmons does a deadpan voice-over on *Christine Sixteen* and comments in his own Queens-Jewish brogue, "When I saw you coming out of school that day . . . I knew . . ." one is reminded more of a Borscht-belt comedian than a fire-breathing threat. For the first time, all four members of Kiss get a chance to do lead vocals, which allows "Space-



*Kiss—well-oiled Borscht-belt comedians*

Ace" Frehley to beg "my insulation's gone/you make me overload . . . shock me." Drummer Peter Criss trades his tender *Beth* ballad of the last LP for a barely printable tune, *Plaster Caster*.

Clearly, the constant input of life on the road coupled with the rewards of superstardom provide Kiss numerous occasions for looking at themselves and engaging in the resultant belly-shaking. Of course Ace Frehley will never be a threat to Jimi Hendrix. Of course Simmons and Stanley gargle and pitch as often as they sing in tune. But the only necessary judgment ought to be how sincerely do they rock: "Love Gun" fulfills the breathlessness that the group has always delivered onstage. Acclaimed engineer Eddie

Kramer, working as coproducer, has emerged with a disc that might have been recorded on a runaway train. The band's imperfect voices are not hidden under electronic clatter or a boys' choir, as on past mistakes. Rather, they are encouraged to thunder as vibrantly as any of their stage props.

It is fitting that "Love Gun" concludes with a non-Phil Spector-sounding cover version of the Crystals *Then (S)he Kissed Me*. Kiss's adolescent story-telling of a dream date sounds authentic fifteen years after the original recording, and their self-made "wall of sound" should satisfy any rocking fantasizer who longs for a past-into-future blend. T.G.

Continued on page 152

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## The Rumour: Up from Pub Rock

by Sam Sutherland

That the five musicians comprising the Rumour have marshaled a lively, world-class album from classic rock & roll sources shouldn't surprise aficionados of promising, if obscure, early '70s bands. Although primarily known here as songwriter/performer Graham Parker's studio and stage support, all are beneficiaries of the short-lived pub rock circuit that flourished briefly at the turn of the decade. Like most of their ilk, they rejected the hyperbolic, progressive-rock canon then dominating British rock, choosing instead to preserve elements of vintage rock and r&b. The Rumour has carried that reverence beyond mere emulation and achieved its own style, and, much like the Band's "Music from Big Pink," its first album demonstrates how the supporting role has further seasoned their playing.

When they first recorded the demo that helped Parker snare a recording contract, the Rumour was a virtual pub alumni association. Guitarist Brinsley Schwarz and keyboard player, singer, and songwriter Bob Andrews had been mainstays of Brinsley Schwarz, arguably the best and most consistent group of the circuit's regulars; Martin Belmont had been lead guitarist, singer, and occasional songwriter with the rougher-hewn Ducks Deluxe; and drummer Stephen Goulding and bassist Andrew Bodnar comprised the rhythm section for Bontemps Roulez. Their collective roots ranged from early r&b and rockabilly to mid-'60s pop and rock, but all shared a salty irreverence that carried their performances beyond the more literal pub stylists, without undercutting their obvious affection for their sources.

It was a refreshing approach within the context of progressive rock, wisely valuing the economy of song form and the strength of tight ensemble playing over the more flamboyant excesses of technocratic flash and extended solos. But their very subtlety and intelligence also helped restrict their appeal to an

older cult audience. Parker's impassioned writing and singing, however, provided a focal point for their skills: Whereas Brinsley Schwarz covered a wide range of material and musical ideas, Parker enforced a more coherent style. More crucially, his charisma as front man supplied a new gravity to their work, one in line with the rock mythology of Parker's own highly allusive songs.

On their own, the Rumour doesn't attempt to cover for his absence. The resulting mix strikes a more light-hearted vein, evoking the pub origins more clearly than their records with Parker. Yet "Max" clearly displays the fruits of the association. Belmont and Schwarz, both superb guitarists on their own, form a stunning team whose sense of restraint only amplifies the taut power of their playing. In lieu of solo showcases, their ornamental lines and interlocking rhythm parts mesh neatly with Andrews' surging organ fills and rippling piano, and the sleek, energetic horns of four

guest musicians. The confidence of the playing is itself ample justification for the album: When they swing into the chorus of Nick Lowe's opening song, *Mess with Love*, their ebullient declaration, "We both know that we can mess around with anything but love," invites the substitution of the word "rock" for "love."

Lowe's presence is another link with the past, given his role of principal songwriter for Brinsley Schwarz. But the strength of much of that band's material is matched by Belmont's and Andrews' originals. If the lyrics lack Parker's intensity, the melodies compensate, with Belmont's moody *Airplane Tonight* and driving *Looking After No. 1*, and Bodnar's *Hard Enough to Show* among the most convincing examples. At least as compelling are two covers. A properly slack-jawed reading of the Russell/Ellington chestnut *Do Nothing 'Til You Hear from Me* dovetails neatly with the band's own songs, as does a romping Motown workout, *I Wanna Make Her Love Me*. If the shared lead vocals don't reach the Parker mark, they are still richly evocative and shaded by strong backing harmonies.

Production, by the band and Robert John Lange, is deceptively naturalistic, using the warmer, slightly gritty ambience of the Parker albums to showcase musicianship rather than studio technique. And the title alone (heard the new Fleetwood Mac album lately?) deserves a Grammy for Best Display of Healthy Cheek by a New Band.

**The Rumour: Max.** Robert John Lange & the Rumour, producers. *Mercury SRM 1-1174, \$6.98. Tape: ●● MCR4-1174, ● MC8 1-1174, \$7.98.*



*The Rumour: Schwarz, Belmont, Bodnar, Andrews, Goulding*



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Continued from page 148

**Melissa Manchester: Singin'.** Vini Poncia, producer. *Arista AL 4136*, \$6.98. *Tape: ●● 5301 4136, ●● 8301 4136*, \$7.98.

Evidently the Big Thing about this album is that most of the songs weren't written by Manchester. We can take that any way we want to, I suppose, but what's probably intended is a showcase for her interpretive skills.

It doesn't work too well. For in order to judge interpretation, you need something to measure it against. Most of these

songs are new—selected perhaps to expose the lesser known works of some of Manchester's pals. But Neil Sedaka (*Sad Eyes*) and James Taylor (*You Make It Easy*) don't need the help. The best-known exceptions are Sly Stone's *Stand* and the Brian Wilson/Mike Love *Warmth of the Sun*, the latter being well suited to Manchester's wimpy treatment.

Aside from proving that there are lots of people around who can write pretty, characterless, and inoffensive songs, there's nothing particularly wrong in performance with "Singin'." The ar-



*Melissa—a swell performance*

rangements and production are swell, and Manchester sings well enough. But unlike some of her contemporaries, she can't get away with insipid material—she simply can't rise above it. T.E.

**Jimmy McPartland & Bobby Hackett: Shades of Bix.** Compiled by Leonard Feather. *MCA 24110*, \$7.98 (two discs). *Tape: ●● MCAC 24110, ●● MCAT 24110*, \$9.98.

Dixieland has been relegated to tired, stereotyped performances for so long that it comes as a shock to hear the vitality, individuality, and polish of some of Jimmy McPartland's cuts on this two-disc reissue collection. Six of his sessions, from 1936 to 1956, are included and although much of the repertory is standard Dixieland material—warhorses from *Original Dixieland One Step* and *Clarinet Marmalade to Panama* and *Eccentric*, as well as two versions of *Jazz Me Blues*—the performances are fresh and personal enough to bring even these well-flogged pieces to life. Two of the sides are part of a tribute to Bix Beiderbecke, and such Bix-associated tunes as *Davenport Blues*, *Since My Best Gal Turned Me Down*, *In a Mist*, and *Sorry* add variety to the program.

But it is the musical personalities that bring the essential enlivening qualities to the set: the lusty, Teagardenish trombone of Lou McGarity, Ernie Caceres' ruggedly swaggering baritone saxophone (emulating Adrian Rollini's bass sax style), and McPartland's self assurance as a cornetist who developed in the presence and aura of Bix. The rhythm section of Dick Carey on piano, Carl Kress on guitar, Jack Lesberg on bass, and George Wettling on drums gives some 1953 pieces a swinging foundation that smooths out some of the customary Dixieland bounce. The earliest session, 1936, is rather routine, but four 1939 selections show off the swirling alto sax of Boyce Brown—who shot brilliantly but briefly through the Chicago jazz world in the '30s—and that wonderfully propulsive pianist Floyd Bean. Most notable of the four is a version of *The World Is Waiting for the Sunrise*, which is charged with excitement.

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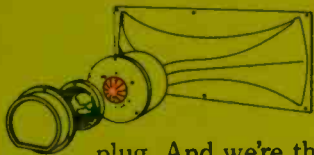
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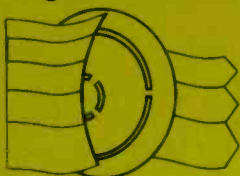


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The set includes one side by Bobby Hackett playing in the '40s with studio groups that are dotted with such jazz names as Johnny Guarnieri, Carl Kress, Joe Bushkin, and Eddie Condon. They serve largely as a background for Hackett's lush ballad style, which at that point had not achieved the finesse he was to develop in the '50s and '60s. J.S.W.

**Jay McShann, Buddy Tate: Crazy Legs and Friday Strut.** John Norris & Bill Smith, producers. *Sackville 3011*, \$7.98.

For both Jay McShann and Buddy Tate, this represents something of a departure. Here is McShann on unaccompanied solo piano but rarely playing the blues, his prime forte. And Tate, whose saxophone is almost invariably heard with the driving push of a swinging rhythm section behind it, is placed in the bare-boned setting of McShann's spare accompaniment. Tate manages to retain all the hallmarks of his customary style—the broad, swooping entrances, the urgent, melodic wail when he gets into high gear, and the feathery warmth on the

gentle ballads. But McShann reveals only hints of his usual rolling, blues-based playing.

The two musicians work together most effectively on Tate's ballads. But when they try to move up to a medium jump tempo, the lack of rhythmic support shows, although Tate's squirming, lifting lines are as provocative as ever. On *Shakey George* there is a brief passage when McShann deserts his rather static comping role and joins Tate as an equal, stirring up a kind of excitement that might have been developed to a greater degree. But for the most part he seems content to take a placid role while his partner is playing.

On his own, McShann is sometimes light and ethereal, sometimes lushly romantic in the Garner fashion, and only occasionally comfortably bluesy. There is a rhythmic heaviness in much of his playing that is most noticeable on Basie's *Rock a Bye Basie*: the duo's performance completely misses the airy lilt that gave the original Basie version its charm. The title tune is an odd McShann original that invokes an American Indian feeling while at the same time sounding like Carmichael's *Hong Kong Blues*. J.S.W.



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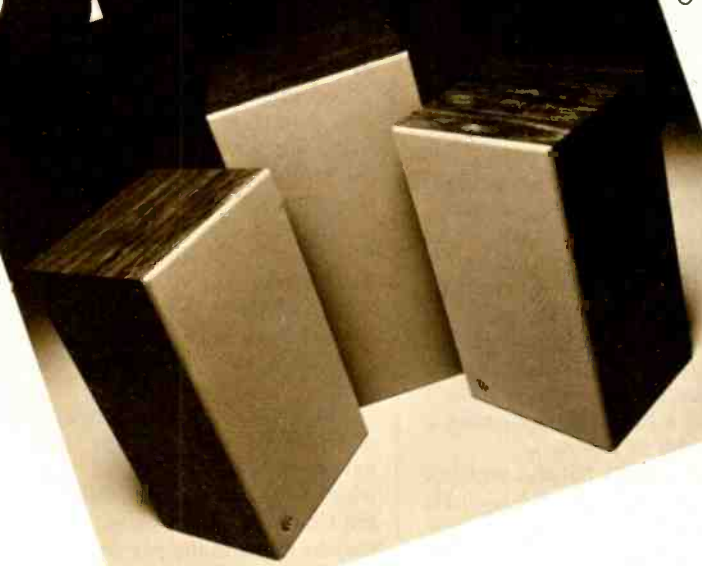
**Roger Miller: Off the Wall.** Milton Okun, producer. *Windsong BHL 1-2237*, \$6.98. *Tape: ●● BHK 1-2237, ●● BHS 1-2237*, \$7.98.

Roger Miller was hot in the Sixties. Some of his hits, like *Dang Me*, broke country and crossed to the pop charts; others, like *King of the Road*, broke pop and crossed to the country charts.

All of his big songs had one thing in common: They were whimsical. No matter whether they dealt with getting drunk or being a bum or even—as in *Kansas City Star*—if they damned the country disc jockeys who played his records, Miller's songs were funny. He was called a novelty act, but he was really operating in the classic style of amoral whimsy that singers like Jimmie Rodgers had practiced in those long-ago years before country music went soft. And the pigeonholing hurt. Miller hasn't had a Top 10 hit in nine years.

After some recent bad work with Columbia, he has signed with RCA affiliate Windsong. His debut on the label is perhaps his best work to date and, for sure, one of the best country albums of this year. There's so much here: *Stephen Foster*, a sublime statement about songwriting that in a mere minute and forty-eight seconds explains such things as why ole Waylon'll never be as good as ole Stephen: *There's Nobody Like You* ("and I just don't love you at all"), a love song that'll make your skin crawl; *Some People Make It*, a party song about dead-

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Nilsson—egg whites, grenadine, gin, and apple brandy

heads and suckers, fat cats and saps; *Roll Away*, a sort of Holiness spiritual; *Ain't Gonna Work No More*, a great desultory hymn of sloth; and *Oklahoma Woman*, on which the boy even yodels.

Roger Miller is one of the few modern country singers who can really write. Yet thankfully there is no forced preciousness to his music, for he sings from the body, not from the brain. N.T.

**Nilsson: Knnillssonn.** Nilsson & Robin Geoffrey Cable, producers. *RCA AFL 1-2276*, \$7.98. *Tape: ●● AFK 1-2276, ●● AFS 1-2276*, \$7.98.

Harry Nilsson has been making albums for the amusement of his drinking buddies for so long now that "Knnillssonn" comes as a pleasant surprise. It may not be quite the comeback RCA would have wished for, but the singer has definitely picked himself up off the barroom floor—and ordered a pink lady. The egg whites here are Mike McNaught's billowing

string arrangements, the grenadine is the plinking rhythm tracks, and Nilsson's versatile voice supplies the gin and apple brandy.

On its surface this is a sweet, slight record, equal parts whimsy and sentimentality. As such it harks back to hit singles of Nilsson's heyday such as *Me and My Arrow* and *Coconut*. The singing, too, sounds revived: After years of woozy mugging, he has regained his vocal agility and control. Once again he can slide with calculated casualness from a wispy croon to a husky burr, turn on a dime from tender to teasing.

But the happy tunes Nilsson whistles (*literally whistles on I Never Thought I'd Get This Lonely*) aren't so happy after all. The lyrics spell out a dark loneliness, and on the hilarious *Who Done It?* the humor is of the gallows sort: The singer ends up hanged by the neck until dead. Another song, *Old Bones*, is more than half in love with easeful death, and even the ostensibly romantic ditties describe

love as "sweet surrender," a feared but welcome dissolution of the self. *Goin' Down* epitomizes the album's ambiguously morbid mirth as Nilsson cheerfully yodels about drowning in despair—or is he only making a dirty joke?

Either way, "Knnillssonn" is an odd, disturbing mix of dolor and delight, a little too pretty for its own good but an encouraging sign from a singer whose talents had long seemed dissipated beyond recall. K.E.

**The Alan Parsons Project: I, Robot.**

Alan Parsons, producer. *Arista AL 7002*, \$7.98. *Tape: ●● 5301 7002, ●● 8301 7002*, \$7.98.

Producer/engineer Parsons' first "project," based on Edgar Allan Poe's *Tales of Mystery and Imagination*, was a venture into what has come to be known as rock opera. That category seems to include anything that is sung, has a beat, and reflects some literary aspirations on the part of the author. Rather than simply adapt Poe's work to this relatively new medium, Parsons chose to improve upon it (and increase his royalties) by writing new tunes and new lyrics with collaborator Eric Woolfson. The result was pretty uninspired as literature—at least compared to the original—but sold very well indeed.

This time around, Parsons and Woolfson have appropriated the title of Isaac Asimov's popular work of science fiction and turned it to their own ends. And again, they'll probably clean up in the record stores.

"I, Robot" shares with its predecessor the immaculate sound production that one might expect of the man responsible for the sheen of Pink Floyd's "Dark Side of the Moon" and the sense of musicality common to the work of Parsons' production clients Al Stewart and Pilot. That band, in fact, appears here, along with the Hollies' Allan Clarke and a host of lesser names.

Where "I, Robot" differs from "Tales of Mystery and Imagination" is that it has less—far less—to do with the original source material. The truth be known, it doesn't even have much to do with robots, once you move inside the stylish cover.

There are a couple of catchy tunes on this album, with perhaps even a hit among them. I'd bid for *The Voice*, which sounds a bit like a 1990 version of the Coasters' *The Shadow Knows*, but I may be living in the past as much as Parsons is in the future. T.E.

**Bobby Paunetto: Commit to Memory.** Robert Vincent Paunetto, Jim Czak, & Todd Anderson, producers. *Pathfinder 1776*, \$6.99.



Every now and then, something comes along to revive my fading hope that individual vision may survive the increasingly monolithic structures of the music biz. Rather than trim his sails to some a&r department's hot air, composer/vibraharpist Bobby Paunetto, a former student of Gary Burton at Berklee, decided to record his own music on his own label. He has come up with one of the season's half-dozen best instrumental albums—musically both accessible and challenging, well produced, well recorded, and well packaged.

Though it is full of fine individual contributions, the strengths of "Commit to Memory" are collective strengths. It is a blend of jazz and contemporary salsa, enriched with funk and rock touches and a smidgen of contemporary conservatory music. It is played by a group of young musicians whose experience covers virtually every major name in jazz and salsa, from Charlie Mingus to Tito Puente. But whereas much the same could be said about many a dull studio-musician jam, Paunetto's work combines ease and flow with enough musical richness to keep anybody blinking.

The album is essentially Latin jazz, but it goes far beyond the usual Latin-percussion-with-solos-on-top. The opening cut, *Spanish Maiden*, is based on flamenco harmonies and modes with a midtempo blend of Cuban rhythms. On *Taz*, the piano constantly shifts between Latin and contemporary jazz comping under sax solos that balance the lessons of free jazz with a sense of more formal styles. The jazz waltz *El Catalan*, a warm, straight-ahead piece with just enough acid to keep it from going sugary, leads directly to the springing funk rhythm and cool tonalities of *Dragon Breath*. The complex *Delta* combines conservatory and jazz composing techniques, its lead instruments entering in canon form before an improvised ensemble solo section of interweaving lead parts. Keith Jarrett's *Coral* is an excuse for pretty woodwind sounds of flute, clarinet, and bass clarinet and a warm trombone solo by Ed Byrne in a style rarely heard since the days of J. J. Johnson. The closing *Good Bucks*, a twelve-bar blues of unorthodox chord structure, is braced between the sacred African-derived *batá* drums and some remarkable Latin blues piano playing.

Despite all these references, *Commit to Memory* is in no sense fragmented. Rather it is almost too cohesive, and—its one drawback—to an inattentive ear sounds almost too laidback. The album has general distribution, but if you have a problem finding it, order it direct from Bobby Paunetto at 410 E. 182nd St., Bronx, N.Y. 10457.

J.S.R.

Continued on page 161

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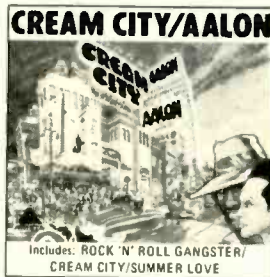
159

# New Acts

BY JIM MELANSON

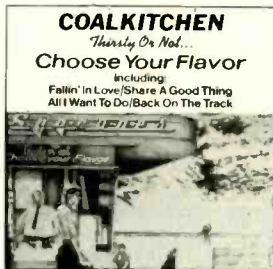
**Aalon: Cream City.** Jerry Goldstein, producer. *Arista AL 4127*, \$6.98. *Tape: ●● 5301 4127, ●● 8301 4127*, \$7.98.

A fusion of progressive jazz, r&b, and rock greets the ear here. The group has its pleasant moments, but it's also a long way from headline status. The material is only fair, and the playing comes off sounding coolly predictable.



**Blue: Another Night Time Flight.** Elton John & Clive Franks, producers. *Rocket PIG 2290*, \$6.98. *Tape: ●● PIGC 2290, ●● PIGT 2290*, \$7.98.

The John tie-in might help Blue's notoriety, but their mediocre rock sound won't. Guitarist/keyboardist Hugh Nicholson pens eight of the ten numbers and only a few even come close to hitting the mark—the title cut being one of them. The playing skill is there, and maybe next time the material will match it. Until then, hold your money.



**Coal Kitchen: Thirsty or Not ... Choose Your Flavor.** Michael Day, producer. *Full Moon/Epic PE 34827*, \$6.98. *Tape: ●● PET 34827, ●● PEA 34827*, \$7.98.

This is a diversified four-man, one-woman group that nicely blends pop, light r&b, and camp. Carla Peyton's singing

highlights the strong hooks on several of the numbers, with above-par vocal support coming from three of the other four members. Arrangements throughout are good. Both AM and FM radio should be able to find something here to please listeners.

**Driver: No Accident.** David Anderle, producer. *A&M SP 4645*, \$6.98. *Tape: ●● CS 4645, ●● 8T 4645*, \$7.98.

A West Coast trio of hard rockers going nowhere very fast and sounding like spliced-together outtakes from Kiss, Boston, and Aerosmith. The material is trite; the sound ponderous.



**Fringe Benefit.** Clive Crawley, producer. *Capricorn CP 0183*, \$6.98. *Tape: ●● M5 0183, ●● M8 0183*, \$7.98.

Already signed to Capricorn/Polydor in Europe, this four-man group makes its U.S. debut with fairly good results. Lead singer/songwriter/guitarist John Jones is the focal point, and he handles it well. The light raspiness in his voice grabs you from the outset and, more often than not, so does the material. The band is fairly tight right now, but time and experience can make them a notch better. The pop/rock sound they put out is worth a spin.

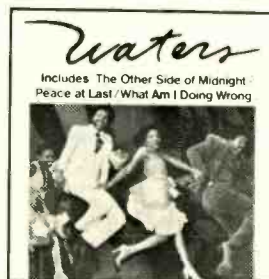
**The New York Community Choir.** Warren Schatz, producer. *RCA APL 1-2293*, \$6.98. *Tape: ●● APK 1-2293, ●● APS 1-2293*, \$7.98.



Disco/r&b with a congregational flavor is this fifteen-member gospel choir's forte. The dance beat is definitely there, but the arrangements never overpower the expressive vocals. Schatz, who already has a name for himself in the disco field, exploits the numerous musical hooks to their fullest. This group could very well nudge gospel a little closer to the national spotlight, where it well deserves to be.

**The Section: Fork It Over.** The Section, producers. *Capitol ST 11656*, \$6.98. *Tape: ●● 4XT 11656, ●● 8XT 11656*, \$7.98.

The Section's approach is progressive jazz with a sprinkling of rock, all instrumental. The players tend to meander quite a bit, and the music has lots of holes—the "we're doing it for ourselves" sound. They've done some great work as James Taylor's backup band, so perhaps the lack of a focal point is the problem. Don't expect much airplay or sales.



**Waters.** Steve Barri & Michael Omartian, producers. *Warner Bros. BS 3062*, \$6.98. *Tape: ●● M5 3062, ●● M8 3062*, \$7.97.

Here is another singing family (two brothers, two sisters) and a pretty good one at that. The stylized r&b sound is reminiscent of the Fifth Dimension, although the material is a notch or two below theirs. Already experienced West Coast session singers, these folks should do well on their own.

**Waves.** Bill Halverson, producer. *Polydor PD 1-6107*, \$6.98. *Tape: ●● CT 1-6107, ●● 8T1-6107*, \$7.98.

Waves has a shot at it. The five-piece group fits nicely into the mainstream pop/rock bag with tight playing, varied material, and excellent vocals. The album is a winner from start to finish—listen up to *Moonlight Sympathy* and *Back of Your Mind*.

Continued from page 159

**Andy Pratt: Shiver in the Night.** Arif Mardin, producer. *Nemperor NE 443*, \$6.98. *Tape: CS 443, TP 443*, \$7.97.

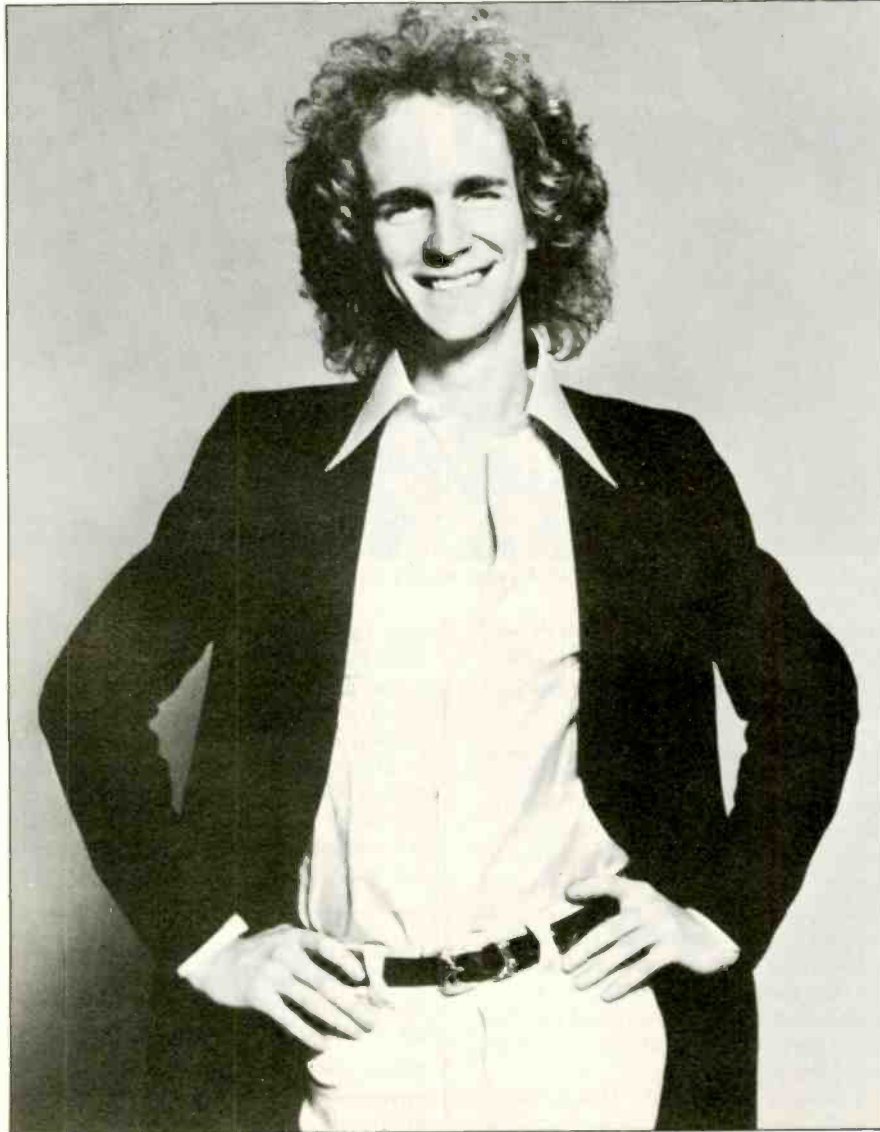
Andy Pratt's work has always been exalted by its emotional intensity and musical eccentricity. It's never caught on commercially, however, so the lackluster conventionality which creeps into "Shiver in the Night" may be calculated. Perhaps rock-guitar clichés and banal sloganeering ("Let what's important be important to you") will succeed where luminous melodies and a personal vision have failed. This is by no means a bad album, but after the brilliance of "Andy Pratt" (1973) and "Resolution" (1976) it does disappoint.

The same musicians who enlivened "Resolution" sound spirited here, and producer Arif Mardin, whose ingenuity is usually inspired, seems to have nodded

out over the board. How else can one explain the flaccid disco of *I Want to See You Dance*, which is too close for comfort to Leo Sayer? Pratt's songs, as written, should soar, but chorus after chorus on this album simply plods. None of the rockers, for instance, boasts the bite of last year's *Karen's Song*, much less the exciting rush of *Avenging Annie*.

Part of the problem is Pratt's deference to the less imaginative members of his band, but he too seems to have slacked off a bit. His melodies aren't as carefully wrought as in the past, nor do his lyrics sound as deeply or cathartically personal. Exhortations outnumber epiphanies. He still sings like a cross between a chicken and a cherub, though, and especially on *Landscape* he gives one's heartstrings a tremulous tug. It's only because Pratt has set such high standards that this record seems below par, so cross your fingers and wait for the next one.

K. E.



Pratt—below the self-imposed standard



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Elvis Presley—always the King

**Elvis Presley: Moody Blue.** Elvis Presley & Felton Jarvis, producers. RCA AFL 1-2428, \$7.98. Tape: ●● AFK 1-2428, ●● AFS 1-2428, \$7.98.

Shortly after I had finished the review of this album, Elvis Presley died. Originally, I had said that the album was awful, and that Elvis had even managed to transform *Pledging My Love*, one of the perfect rock & roll songs, into stale candy. The only good performance in the lot, I said, was a version of *He'll Have to Go*. Now that cut sounds bad too. The best thing about the album, I concluded, was that it was pressed on clear blue vinyl; that is still the best thing about this album.

It was easy to dismiss "Moody Blue" casually. Elvis will do it again, I thought; he'll rise anew and splendid as he did

with that TV special in 1968, as he did with *Burning Love*.

But now it's over, and he won't do it again, and what he has done should be praised as frankly as this album should be dismissed. He by no means invented rock & roll, but he was its king, and no matter how many albums like this one are released posthumously, that simple fact will not change. N.T.

**Candi Staton: Music Speakers Louder than Words.** Bob Monaco, producer. Warner Brothers BS 3040, \$6.98. Tape: ●● M5 3040, ●● M8 3040, \$7.97.

There are times when you wonder how anyone can make himself felt through the thousand skilled voices on the thousand skilled albums produced every

year. Then the one-in-a-thousand voice leaps out, and you know. It happens here in a clear voice with just an edge of huskiness and a blend of strength and restraint that cuts through the competition and leaves them silenced in its path.

Like most pop-oriented albums, "Music Speaks Louder than Words" covers material from the Bee Gees to contemporary country. But it's no ragbag. *Nights on Broadway* sets the tone: Almost every phrase is intense, almost aching, but unforced and flowing. *You Are* is a message song with truth and guts instead of the usual "we all got to love each other" clichés, and Allen Toussaint's *A Dreamer of a Dream* is about love and sex for real adults.

But though the material is good, Staton is triumphant. The title song is remarkable, with its cappella ending out of the gospel-choir tradition, but hardly better than the potentially blah *When You Want Love* whose conviction comes entirely from the bleakness and stoicism of her interpretation.

Nor does she let the more uncomplicated joys pass. *Main Thing* is a delicious bow to archetypal r&b, with spiky, skipping guitar work, down-low brass, gutbucket sax work, and a vocal of magnificent, tough but not hard-boiled, laid-back sexiness. And *Before the Next Tear-drop Falls*, a country number sung in the ornate and stately spiritual style made



Staton—the sound triumphant

most famous by Mahalia Jackson, gives the album a closing note of tranquility and resolve.

"State of the art" means many things. For Candi Staton it has meant an emotional classicism that both transcends and renews the at-the-heart stuff of pop-music. J.S.R.

**The Strawbs: Burning for You.** Jeffrey Lesser, producer. *Oyster OY 1-1604*, \$6.98. *Tape: CT 1-1604, 8T 1-1604*, \$7.98.

The Strawbs grapple with a familiar late '70s paradox in this, their eleventh studio album. Beginning a decade ago as a resolutely progressive experiment in modernized English folk music, the band has gradually formalized their compositional and performing style to a point where each new release seems less an extension than a cautious preservation of their original approach. That stasis is amplified further by '70s pop chic, which has absorbed and legitimized hard rock and the gothic excess so central to English rock in general and the Strawbs in particular.

"Burning for You" consequently emerges as a tame and predictable work despite a lineup shift that showcases two keyboard players and arrangers, John Mealing and Robert Kirby. Their elaborate orchestrations underscore an apparent attempt to shake the band loose from its moorings. The ploy has minimal effect simply because the Strawbs have been simulating this symphonic scale since their earliest recordings, using synthesizers and organ (first added by Rick Wakeman and displayed to best effect on the little-known but compelling "From the Witchwood" album in 1971).

At the same time, founding member and principal writer David Cousins and alternate soloist and writer David Lambert are increasingly trapped between the overblown but dramatic narratives of the earliest Strawbs and a presumably more commercial emphasis on love songs. Whereas the group's first U.S. successes, like the conceptual "Grave New World," were florid allegorical melodramas fusing Anglican hymnology with rock technology, their subsequent records have backed off. Cousins' stormy, minor-key domination has been leavened by Lambert's chirpy love songs and glottal rockers. As a result, throughout "Burning for You" I find myself missing the early bombast and Cousins' ringing dulcimer and acoustic guitar. These new songs, while less overbearing, are also less distinctive, pitting the band against scores of pop and rock outfits who likewise mix portent and sentiment. At this stage, that competition places the

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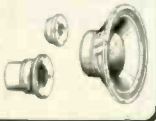
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Streisand—plastic pop that works

Strawbs at something of a disadvantage, and until they can either master romantic rock outright or reclaim their admittedly overstated grand designs, their burn is but a simmer. s.s.

**Barbra Streisand: Superman.** Gary Klein, producer. *Columbia JC 34830, \$7.98. Tape: ●● JCT 34830, ●● JCA 34830, \$7.98.*

Star trappings and all, Barbra Streisand is essentially a perennial pop mainstream singer. Musically she's a credit to her ilk, floating with ease and grace over careful backings that supply their standard ingredients, and on "Superman" she has mostly chosen songs with intelligent lyrics. Nothing deep, but nothing ridiculous either.

Mark you, a rocker she ain't. The two tracks with pop/rock settings come off far too slick: The legitimate poor-little-famous-girl beef of *Don't Believe What You Read* is undercut by a Nancy Sinatra kind of treatment, and *Cabin Fever*—a lousy-husband contemporary country theme—just doesn't convince.

But these are the only letdowns. Most of the cuts—and almost all the really

good ones—are love songs. *Love Comes from Unexpected Places*, a delicious melody handled just right from the acoustic guitar on through, is a near-classic. *Answer Me* and *My Heart Belongs to Me* are equally chiseled vocals, built with a control and craftsmanship just short of calculation. Just how much of this album's quality comes from vocal style, rather than material, is made clear by the relatively undistinguished *I Found You Love*, which she fills with little pleasures of phrasing—plastic pop, yes, but it works.

Two songs above all sum up the best of "Superman." One is a light and sophisticated 1930s Cole Porterish piece by Billy Joel called *New York State of Mind*, the other is a wise and ironic number about the paradoxes of human need, *Lullaby for Myself*. Marvelous songs, sung marvelously.

Mainstream pop music takes more than its share of critical lumps. It is nice to be reminded that the vast and sprawling bazaar called Tin Pan Alley has had its goldsmiths as well as its dross merchants and that lightness, simplicity, humor, and even irony have been part of its stock in trade. J.S.R.

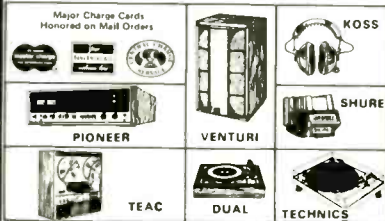
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**THE TEX RITTER STORY.** By Johnny Bond. Chappell & Co., Inc., 397 pages, \$11.95.

Tex Ritter was not a great performer, but he was one of the first singers to exploit the romantic image of The Cowboy—celibate Quixote of an America that never was. In many ways, his career was parallel to and overshadowed by Gene Autry's. But Autry was a real country singer in the Jimmie Rodgers vein before he became a sound-stage cowboy, and Ritter got his start in Broadway musicals such as *Green Grow the Lilacs* (1930). From the beginning his music was essen-



Tex Ritter—not just a singing cowboy

tially theatrical. His recording debut, *Goodbye Old Paint* (1933), and his most famous performance, *High Noon* (1952), were equally schmaltzy; he always sounded the same.

By the time of *High Noon*, Ritter's country audience had dwindled. The record was a Top 20 hit but didn't even appear on the country charts. Woodward Maurice Ritter was the original rhinestone cowboy.

This is Johnny Bond's second book. The first was an autobiography, *Reflections*, published last year by the John Edwards Memorial Foundation at UCLA. Bond was a much better musician (he made some of the finest honky-tonk records of the 1940s for Columbia) than he is a writer. *The Tex Ritter Story* begins with this sentence: "Frank Ritter stood on the barren land crushing clods of soil beneath his feet as he gazed soulfully out over the vast, unending loneliness of the big country stretched out before him." More like the screenplay for a B Western than the stuff of prose.

But the preposterous writing is only part of the book's problem. Bond's lack of perception about his subject's role in twentieth-century culture is the other part. There is no sense of show-business machinery here, no sense of unnaturalness. Tex Ritter, bless him, was a persona, a character role. Bond says extremely little of how that role was cultivated and maintained. It is almost as if he wants us to believe that Ritter really was a singing cowboy and not a perceptive and lucky showman.

Appended to the narrative are a detailed discography, a catalog of the seventy-six films Ritter made, and the programs of the plays he acted in. And when Bond quits puppy-trooping and loosens up, he tells some delightful drinking stories and anecdotes of backstage weirdness. The appendices, together with these instances of simple, unaffected narrative are the best things about this book.

NICK TOSCHES

**DUKE: A PORTRAIT OF DUKE ELLINGTON.** By Derek Jewell. W. W. Norton and Company, Inc., 264 pages, \$9.95.

Aside from Ellington's own *Music Is My Mistress* and a book for children, all but

one of the seven full-length books on Duke have been written by Englishmen: G. E. Lambert, Peter Gammond, Stanley Dance (a transplanted Englishman), and now Derek Jewell, who is the jazz critic of the London *Sunday Times*.

The author got to know Ellington during the last ten years of his life by interviewing him many times, and they eventually developed a personal friendship. His book is less the usual story of a life than, as Jewell says, "an attempt at understanding" Duke Ellington.

In this, it differs from the other books because it attempts to get behind Duke's facade of glib quips and verbal fencing. He was an intensely, determinedly private person. Even in *Music Is My Mistress*, he rarely lowered his guard. And those who have written about him either had no access to the man beneath the polished surface or respected his desire for privacy.

With his death the conspiracy of silence was bound to evaporate. The initial peeling away of the layers of protective silence has been done by Jewell with obvious affection, taste, and consideration. He deals perceptively with the three principal women in the Duke's life: his wife, Edna (the mother of Mercer Ellington), and the two women who were *in loco uxoris*—Mildred Dixon and, principally, Beatrice Ellis (known as Evie) and her long, lonely existence waiting for her Ulysses.

There are insights into the frequently tense relationship between Duke and his son, Mercer. And there are views of Ellington that, while they may puncture the suave, controlled front that he presented to the world, nonetheless present him as a much more interesting and understandable human being.

All this, however, is simply one aspect of a book that projects a strong sense of time and place as Ellington rose in the world and expanded his horizons. In addition to conversations with his subject, Jewell draws on talks with several people who were very close to him. The result is a portrait that often has an intimate quality, a close-up of a man who has usually been seen from a distance. It is warm and lively, sprinkled with Ellingtonian wit and colored with a sense of humanity that is not customary in books on jazz figures.

JOHN S. WILSON

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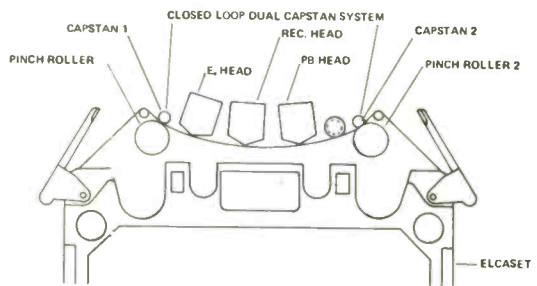
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**2. The 3-motor system starts with a DC servo motor** for utmost reliability. A sophisticated feedback circuit corrects for line voltage fluctuations, and other speed-altering factors. This is the finest tape recorder motor system money can buy. Proof? Wow and flutter of only .04%.

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**4.** Direct coupling of playback head with the FET first-stage reproduction amplifier significantly reduces distortion, improves signal/noise ratio and frequency response linearity.

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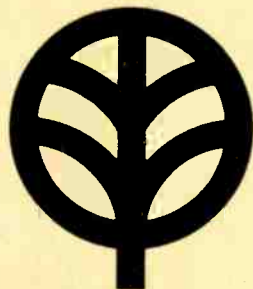
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