

New Wave in Speaker Design

HIGH FIDELITY

Special Speaker Issue

ICD © 08398

Super \$20,000 Speaker Trendsetter?

Six Lab Tests - Speakers from \$150 to \$1,400

Inside the Speaker/Amp Power



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The \$20,000 Infinity Reference Standard





Pioneer's new
speaker has
polymer
graphite cone.



IPM Polymer Graphite.™

Introducing the first low distortion speaker. The Pioneer HPM Polymer Graphite.TM With up to three times less distortion than conventional paper speakers.

Most high fidelity speakers today offer you little more than kazoo technology. And the paper cone you find in most conventional speakers is proof of it. Just as the paper cone in a conventional kazoo creates a buzzing noise, the paper cone in most conventional speakers creates distortion.

At Pioneer we've developed our new HPM speakers with Polymer Graphite cones instead of paper. This new material sets new lows in speaker distortion and new highs in speaker technology.

What good are low distortion components when you have high distortion speakers.

Most people believe that to get the most out of a recording all they need is components that give them the least amount of distortion.

But expensive components mean little when attached to conventional speakers. Even components with an amazingly low level of distortion can't be appreciated when you're listening to them on speakers that most likely have ten times the amount.

So Pioneer engineers created Polymer Graphite, a new speaker cone material that gives you up to three times less distortion than paper.

Polymer Graphite reproduces sound. Paper and metal create it.

The perfect cone material should be rigid enough to significantly reduce distortion. It should be lightweight. And high in internal loss. So it sustains no vibrations and allows no artificial coloring to your music.

Unfortunately, these three attributes are not commonly found in any one speaker.

Paper cones are not rigid enough to keep from flexing. They tend to break up at high listening levels. As they alter their shape, they alter your music. What's more, over the years, their performance can deteriorate.

Metal cones, on the other hand are rigid enough to lower distortion. And can be light enough for quick response. Unfortunately they tend to ring and add their sound to your music.

Pioneer's new HPM speakers have woofer, tweeter and midrange made of Polymer Graphite.

Because Polymer Graphite is rigid, the wave that comes out of your speaker cone is virtually identical to the signal that went into it.

Because it's so lightweight, it's responsive enough to accurately reproduce transients for an added sense of realism.

And because it's acoustically dead you'll hear nothing more and nothing less than music the way it was intended to be heard.

But that's not all. Pioneer's new HPM Polymer Graphite speakers have a horn loaded, High Polymer supertweeter that expands frequency response an additional octave to 50,000 hertz. A computer designed bass reflex cabinet. And much more.

So if you're in the market for high fidelity speakers, you can buy a paper speaker and get kazoo technology. Or you can buy a Polymer Graphite speaker and get Pioneer technology.

 **PIONEER[®]**

We bring it back alive.

Circle 37 on Reader-Service Card

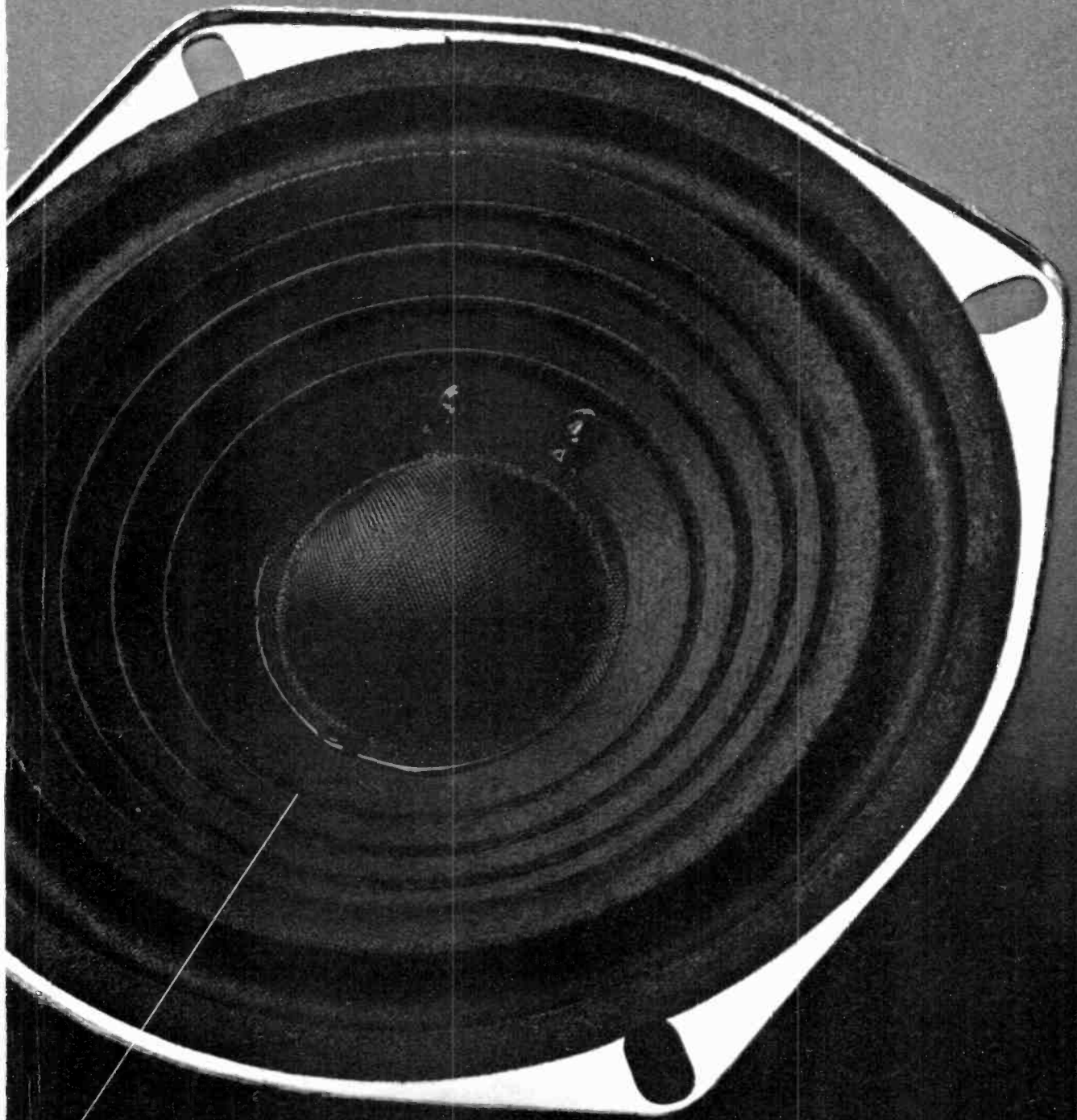


Pioneer F



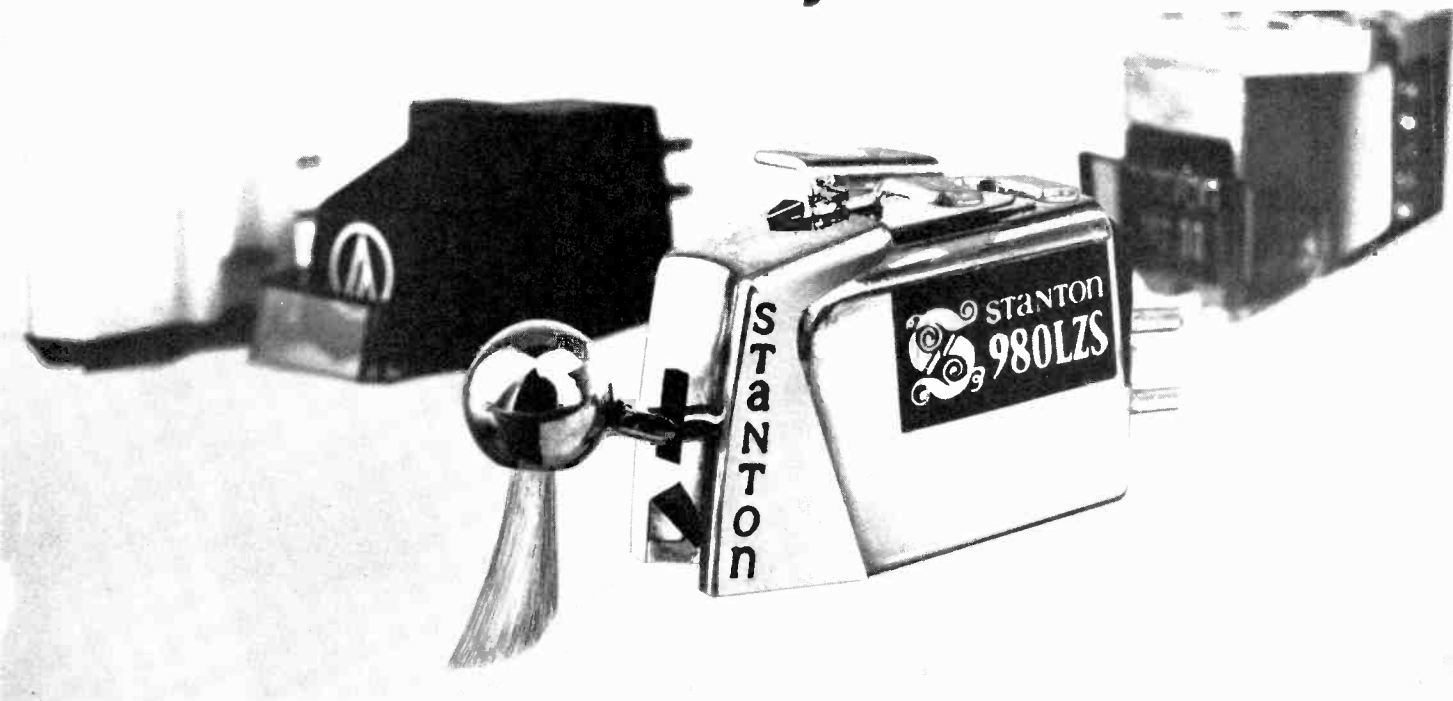
Conventional
kazoo has
paper
cone.

**WHAT'S GOOD
FOR A KAZOO
IS BAD FOR
A SPEAKER.**



Conventional
speaker has paper cone.

The moving coil replacement from Stanton Magnetics... the revolutionary 980LZS!



Now from the company to whom the professionals look for setting standards in audio equipment comes a spectacular new cartridge concept. A low impedance pickup that offers all the advantages of a moving magnet cartridge without the disadvantages of the moving coil pickup. At the same time it offers exceedingly fast rise time—less than 10 micro seconds—resulting in dramatic new crispness in sound reproduction—a new “openness” surpassing that of even the best of moving coil designs. The 980LZS incorporates very low dynamic tip mass (0.2 mg.) with extremely high compliance for superb tracking. It tracks the most demanding of the new so called “test” digitally mastered and direct cut recordings with ease and smoothness at 1 gram.

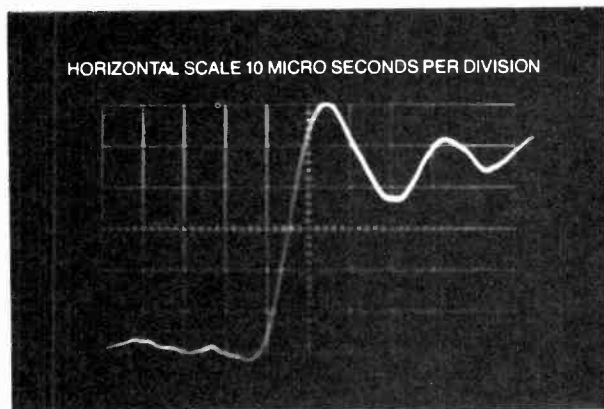
The 980LZS features the famous Stereohedron™ stylus and a lightweight samarium cobalt super magnet. The output can be connected either into the moving coil input of a modern receiver's preamps or can be used with a preamp, whose output is fed into the conventional phono input.

For “moving coil” audiophiles the 980LZS offers a *new standard* of consistency and reliability while maintaining all the sound characteristics even the most critical moving coil advocates demand. For moving magnet advocates the 980LZS provides one more level of sound experience while maintaining all

the great sound characteristics of cleanliness and frequency response long associated with fine moving magnet assemblies.

From Stanton... The Choice of The Professionals.

For further information write to: Stanton Magnetics, Terminal Drive, Plainview, N.Y. 11803.



Actual unretouched oscilloscope photograph showing rise time of 980LZS using CBS STR112 record.



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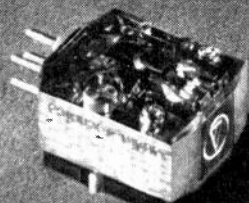
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Tracks digital cannons,
synthesizers, big bass drums
and hot piccolos
with perfect aplomb.



New AT32 Dual Moving MicroCoil™ Stereo Cartridge

Moving coil cartridges have been known for phenomenal transient response for years. Now there's a moving coil cartridge which combines this acoustic transparency with equally sophisticated tracking ability at as little as one gram. The new AT32 from Audio-Technica.

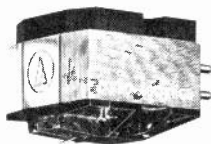
Inside the jewel-like case of the AT32 is a most sophisticated moving assembly. Effective moving mass is extremely low to permit high compliance without unwanted resonances. And every AT32 moving system is individually hand-tuned to insure optimum tracking at all frequencies, while eliminating unit-to-unit variations.

The nude-mounted, square-shank miniature elliptical diamond in its beryllium cantilever is exactly aligned to the groove for lowest distortion. And the tiny moving

coils are mounted in an inverted "V" which precisely aligns each coil with the groove face it senses.

The care in design, construction, and testing lavished on each AT32 is clearly evident in its superb reproduction of even the most-difficult-to-track selections. Indeed, adding an AT32 to your system eliminates one more barrier between you and your music. Audition the AT32 at your nearby Audio-Technica showroom today. AUDIO-TECHNICA U.S., Inc., 1221 Commerce Drive, Dept. 100H, Stow, Ohio 44224.

audio-technica®



Model AT32
Stereo Phono
Cartridge with
Dual Moving
MicroCoils™
\$300

AUDIO-TECHNICA PROFESSIONAL AND HOME PRODUCTS FOR BETTER SOUND



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Zero tracking error, 0.025% wow and flutter, -78 dB rumble and it even plays upside down.

It's Technics SL-10 and it represents the most radical departure in turntable design since Technics first introduced the modern direct-drive turntable in 1969.

Not much bigger than a record jacket, the SL-10 combines a quartz-locked direct-drive motor, a servo-controlled linear-tracking tonearm and a moving-coil cartridge, complete with a built-in pre-preamp.

To play a record, simply place it on the platter, close the cover and push the start button. The SL-10's micro-computer automatically senses the record size and speed.

In addition to providing zero tracking error, the gimbal-suspended linear tonearm is dynamically balanced allowing you to play the SL-10 on its side or even upside down with no loss in accuracy or tracking ability.

Another reason for the SL-10's outstanding accuracy is its moving-coil cartridge. With its built-in pre-preamp, coreless twin-ring coils and pure boron pipe cant lever, the cartridge provides an extremely linear and flat frequency response as well as superb dynamic range.

Technics SL-10. The world's most unique turntable.

Technics
The science of sound

AIWA AD-M800U STEREO CASSETTE DECK

Three heads...and a brain.

Only the very best decks have three heads. But Aiwa's metal compatible deck adds wireless remote control. And a brain ... DATA. Aiwa's exclusive, microcomputer Digital Automatic Tape Adaptation.

THE DATA SYSTEM

In less time than it takes to read what DATA does ... DATA does it. Set DATA's computer and press START. LEDs begin to flicker. One each for LH, FeCr, CrO₂, and METAL.

DATA's electronic senses analyze the tape and an LED lights up as the others go out. Now you—and DATA—know the kind of tape being used.

Another LED flickers and lights. BIAS is set for best frequency response using a built-in 6 kHz reference signal. The next LED flickers and lights. Dolby* levels are calibrated and set using a 400 Hz reference signal.

Two LEDs remain. One flickers and lights. EQ-M is set ... equalization for the mid-range 5-10 kHz. Then the next, EQ-H ... equalization for the high, 10-18 kHz range is set.

Further down the panel an LED lights. It's green. OK! You're ready to record. But ... if the red LED lights instead, the machine's not wrong. The tape is. Get another tape or switch to manual over-ride.

Once DATA is set, you record with maximum sonic quality, regardless of whose tapes or what type you're using. And DATA stores the tape analyses—at your command—in its memory bank. Four different tapes of your choice.

Cassette recording was never so precise. So simple. And so fast.

IT ALL ADDS UP

Precise sophistication like DATA deserves features and performance to match. You've got them, starting with built-in wireless remote control for full-function performance from across

the room, using dependable, invisible infrared projection.

You have 3-head performance using linear, ultra-hard sendust heads with Aiwa's exclusive V-cut geometry for contour effect elimination doing away with roughness at low frequencies. And each

head is designed for best performance at its specific function.

Add Double-Dolby*; IC logic controls; dual motor drive; backlit VU meters with 5-step peak reading LEDs; auto-repeat; memory replay; oil-damped eject and more.

The sum of the parts is frequency response of 30-17,000 Hz using metal tape. S/N ratio of 68dB with FeCr, Dolby on. Wow & Flutter 0.04% WRMS.

This is one of the finest decks you can get at any price. If you prefer, it's available in black with rack handles as the AD-M800BU.

Aiwa's AD-M800U is like having your own recording engineer tucked away in a small but powerful chip. The power's there for you. Listen to an Aiwa. Or write Bob Fisher, national sales manager for more information.



*Dolby is a registered trademark of Dolby Laboratories.



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EDITORIAL

IRCA Nominations

The July 26 issue of *Billboard*, the record business trade paper, announced that "the complete list of nominated albums [for the International Record Critics Awards] is about to be issued by HIGH FIDELITY." As faithful readers will be aware, each December we announce the winners of the awards and, of course, list the runnersup. But the *Billboard* item caused us to think: Why not let our readers see the list in advance? After all, everybody knows the Academy Award nominations before the Oscar show.

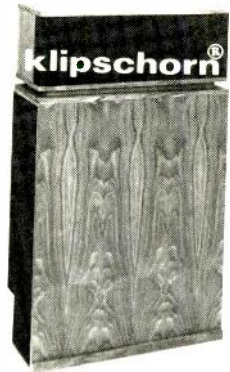
So here are the IRCA nominees. (Since this list is determined by about fifty record critics and editors from around the world, some of the recordings are not available in the U.S.)

- C.P.E. Bach: Symphonies (8); Academy of Ancient Music; OISEAU-LYRE.
 J. S. Bach: *Brandenburg* Concertos; Aston Magna; SMITHSONIAN.
 Bartók: Piano Concertos Nos. 1 and 2; Pollini/Abbado/Chicago; DG.
 Beethoven: Piano Concertos Nos. 1 and 2; Lupu/Mehta/Israel; LONDON.
 Beethoven: Quartet, Op. 131 (arr. for orch); Bernstein/Vienna Phil.; DG.
 Beethoven: Symphonies (9); Bernstein; DG.
 Berg: *Lulu*; Stratas/Boulez; DG.
 Berg/Stravinsky: Violin Concertos; Perlman/Ozawa/Boston; DG.
 Brahms: Symphonies; Solti/Chicago; LONDON.
 Bruckner: Symphony No. 8; Wand/Radio Cologne; HARMONIA MUNDI.
 Cabezón: Complete Works; Antonio Baciero; HISPAVOX.
 Debussy: *Images* (orchestra); Previn/London Symphony; ANGEL.
 Debussy: *Images*; *Estampes* (piano); Jacobs; NONESUCH.
 Debussy: *Pelléas et Mélisande*; Von Stade/Stilwell/Karajan; ANGEL.
 Haydn: *Armida*; Dorati/Lausanne; PHILIPS.
 Haydn: Piano Trios (complete); Beaux Arts; PHILIPS.
 Haydn: Quartets, Op. 20; Juilliard; CBS.
 Hindemith: *Mathis der Maler*; Kubelik/Bavarian Radio; ANGEL.
 Janáček: *Makropoulos Affair*; Söderström/Mackerras; LONDON.
 Lasso: *Moduli quinis vocibus*; Herreweghe; ASTRÉE.
 Mahler: Symphony No. 4; Karajan/Berlin; DG.
 Mahler: Symphony No. 5; Tennstedt/London Philharmonic; EMI.
 Mahler: Symphony No. 9; Levine/Philadelphia; RCA.
 Massenet: *Cendrillon*; Von Stade/Rudel; CBS.
 Massenet: *Werther*; Kraus/Troyanos/Plasson; ANGEL.
 Prokofiev: *Alexander Nevsky*; Abbado/London Symphony; DG.
 Reimann: *Lear*; Fischer-Dieskau/Albrecht; DG.
 Rossini: *Otello*; Von Stade/Carreras/López-Cobos; PHILIPS.
 Schoenberg: *Gurre-Lieder*; Ozawa/Boston; PHILIPS.
 Schubert: Symphonies Nos. 3 and 8; Carlos Kleiber/Vienna Phil.; DG.
 Shostakovich: *Lady Macbeth of Mtzensk*; Rostropovich; ANGEL.
 Shostakovich: Symphonies Nos. 6 and 11; Berglund/Bournemouth; HMV.
 J. Strauss (arr. Schoenberg, Berg, Webern); Waltzes; BSO Ch. Players; DG.
 Stravinsky: *Sacre du printemps*; Muti/Philadelphia; ANGEL.
 Tchaikovsky: Symphony No. 4; Maazel/Cleveland; TELARC.
 Vladimir Horowitz: Concerts 1978-79; RCA.

Which do you think will win? Results in December.

Leonard Marcus

YOU CAN PAY A LOT FOR GOOD SPEAKER DESIGN,



\$1275
each

SPECS
Horn loaded,
folded-horn
woofer design

Frequency
response: 35-
17,000 Hz + 5
dB

Height: 52"
Width: 31 1/4"
Depth: 28 1/2"

Maximum
power input:
105 watts
RMS/channel

BUT YOU DON'T HAVE TO!



\$690
each

SPECS
Horn loaded,
folded-horn
woofer design

Frequency
response: 35-
18,000 Hz + 5
dB

Height: 51 1/8"
Width: 31 1/2"
Depth: 28"

Maximum
power input
250 watts
RMS/channel

If they both have the same design, how come you pay so much less for ours? Because they come direct from the Factory—no retail mark-up. You also get our unconditional Money Back Guarantee.

Our new color catalog tells you all about Speaker Factory's 10 money-saving speakers—plus a lot more.

Send for your copy today by mailing in the coupon. Do it now!

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YES! I WANT TO SAVE MONEY ON SPEAKERS.

- I can hardly wait! I'm enclosing \$1.00 for 1st class postage and special handling.
 I'm anxious to find out more, but regular mail is O.K.

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1101 N. Northlake Way, Seattle, WA 98103

CrossTalk

Q. I own a Dual 1218 turntable. I recently traded in a Shure M-95ED cartridge and "upgraded" to an Acutex M-315 Type III. Unfortunately, with the Acutex pickup, I now have a severe acoustic feedback problem, manifested in gross mistracking. Was my choice of the Acutex a bad mismatch for the arm on the Dual? When I turn off the speakers and listen through headphones, it tracks beautifully. What's to be done?—Aaron F. Kopman, Roslyn, N.Y.

A. Our first suspicion is that the Acutex pickup is too compliant for the Dual, responding in an overly sensitive manner to air- and surface-borne vibrations—which sometimes are intensified by playing records with the dust cover closed. Before you invest in a less compliant pickup, however, try re-orienting your speakers or moving the turntable. If this fails, adding a rigid, heavy plate (a piece of slate, for instance) under the turntable might inhibit the motion of the supporting surface, thereby reducing the amplitude of the induced vibrations. Isolation feet under the turntable or speakers might also do the trick.

Q. I have found an integrated amp that is everything I want, except that the damping factor is 30. I have read that a factor of 40 is the minimum acceptable value. Should I compromise a bit and go for this amp anyway? How large a damping factor is necessary, and does the correct amount vary with speakers?—T. Teatu, Boise, Idaho.

A. Damping factor compares the output impedance of an amplifier to an assumed load impedance of 8 ohms in a loudspeaker, and the lower the amp's impedance, the higher the ratio—i.e., the damping factor—will be. The amp's impedance does vary with frequency, and some manufacturers measure it at 1 kHz and some at 50 Hz. The IHF states that manufacturers should either present a curve of damping factors vs. frequency or specify only the value at 50 Hz. We show the latter because the greatest back EMF (electromotive force) is generated by low-frequency drivers, and poor damping factor here compromises clean bass. There is little difference between a damping fac-

tor of 40 and one of 30, which generally is considered adequate, though the specific minimum value depends on the design of the loudspeaker.

Q. It is my custom to transfer to cassette any disc that I especially like. This enables me to preserve the original record and (most important) allows me to listen to the entire work without having to turn over a disc. Unfortunately, a number of my records have total playing times greater than the 45 minutes afforded by a single side of a C-90 cassette. While I recognize that the potential for problems increases with the use of a C-120, are there any acceptable brands in that length?—James S. Reid, Vienna, Va.

A. Our experiences with brands such as TDK and Maxell has shown that some manufacturers do, in fact, take more care with their housings, so there is less chance of mechanical foulups when using their C-120 cassettes. However, since tape must be thinner in that length, the problems of print-through and lowered headroom in the bass preclude their use for fastidious recording. The situation becomes worse with off-brand tape, where the overall thinness of the magnetic coating, combined with below-par manufacturing and quality-control procedures, leads to inconsistent coating. If you want to use C-120s, well-known brands should cause no mechanical problems, but the quality of the copy may not be up to your standards.

Q. I have an old Rek-O-Kut turntable and wonder if it can be converted to stereo. Can I simply mount a stereo pickup on the original arm, or do I need to buy a new tonearm?—Bernard Kleban, Wilmington, Del.

A. Either may prove satisfactory, as long as your arm is wired (or re-wired) for stereo, though a new turntable and arm may be more so and cost less in the long run. Even if it were possible to mount a modern stereo-wired arm on the baseplate, close enough to the platter to maintain accurate tracking geometry, you might be in for a disturbing surprise. Some turntables that were fine for mono produce a good deal of vertical rumble, which would not have

shown up in original rumble measurements since mono pickups are essentially insensitive to it. Stereo pickups, however, are not.

Q. In your test reports on speaker systems, I frequently read that some models can accept thousands of watts without burning up. Yet those same speakers often carry manufacturers' recommended power inputs of only about 80–100 watts. Are the manufacturers being overly conservative in the ratings? Would you recommend that speakers be driven to power levels far exceeding their published limits, assuming a clean unclipped waveform is applied?—Alfred Wirtenberg, Norwalk, Conn.

A. The specific tests that you are alluding to examine how much pulsed power a speaker can withstand. In such tests, many speakers do show an ability to withstand many hundreds (sometimes thousands) of watts, but only for a millisecond or so. That same power applied on a continuous basis would surely destroy the voice coils. Some manufacturers rate their speakers as to the continuous low-frequency power they will withstand, and in that respect their ratings are not conservative at all.

CBS Technology Center, which conducts these tests for us, applies a continuous tone of 300 Hz and slowly raises the power level to a maximum of 20 dBW (100 watts), stopping the test and recording the power level should the speaker exceed 10% distortion before the maximum input is reached. Remember that with a system rated by a manufacturer as capable of accepting 80 watts (19 dBW) on a continuous basis, our 100-watt test represents only 1 dBW more input—hardly a major increase over the original spec. As a rule of thumb, it is probably best to go with amps capable of higher output power. At most listening levels, continuous power demands will probably never exceed (or even come close to) maximum recommended levels. And an amp with enough reserve to reproduce high-level transients will also be kinder to tweeters, which fail if forced to reproduce the odd-order harmonics generated when a low-power amp is driven into clipping.

HF

IMMORTAL MUSIC SHOULDN'T BE KEPT ON MORTAL TAPE.



Good music never dies. Unfortunately, a lot of cassette tapes do. At Maxell, we've designed our cassettes to be as enduring as your music. Unlike ordinary cassettes, they're made with special anti-jamming ribs that help prevent tape from sticking, stretching and tearing.

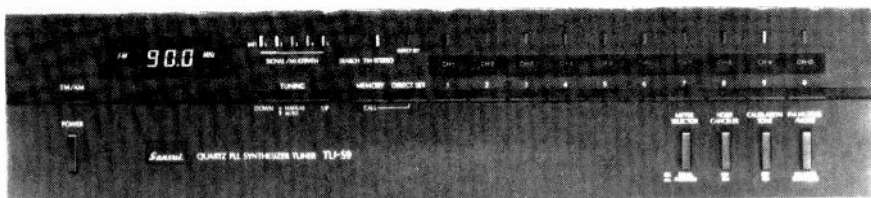
And Maxell cassettes come with something else you won't find on most others. An unconditional lifetime warranty.

So if you'd like to preserve your old favorites for the years to come, keep them in a safe place. On one of our cassettes.



IT'S WORTH IT.

High Fidelity News



Direct-set in Sansui tuner

Sansui's TU-S9 is a fully synthesized digital AM/FM tuner with ten-station memory and a direct-set mode that allows the user to enter the frequency of any station without having to scan the broadcast band. The tuner also features a built-in switchable signal-strength/multipath meter, calibration tone, and provision for attaching a decoder for stereo AM broadcasts. Price of the TU-S9 is \$380.

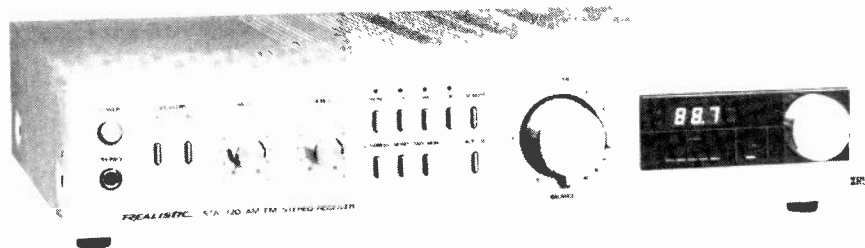
Circle 139 on Reader-Service Card



Fisher's hybrid receiver

The Model RS-250, Fisher's latest receiver, incorporates a Class A-II (sliding bias) power-amp stage claimed to combine the high efficiency of Class B operation with the low distortion characteristics of Class A. The unit is rated at 50 watts (17 dBW) output per channel. The front end employs a dual-gate MOS FET RF stage, linear-phase IF filters, and phase-lock-loop multiplex decoder. A digital display shows tuned frequencies. Other features include a built-in moving-coil head amp, an LED signal-strength indicator, and switchable infrasonic and high-frequency filters. The RS-250 costs \$450.

Circle 140 on Reader-Service Card



Realistic slims down

A low profile and digital frequency readout are highlights of the Realistic STA-720 receiver. Rated at 25 watts (14 dBW) per channel into 8 ohms, the receiver features Auto-Magic circuitry for fine tuning FM stations, a newly developed IC, intended to provide lower distortion, in the phono preamp section, and a 40-position detented volume control. The STA-720 is available from Radio Shack stores for \$300.

Circle 142 on Reader-Service Card



Gain in a can

Housed in a steel cylinder to reduce magnetically induced hum and noise, Sota Industries' Head Amplifier is a battery-powered device intended to raise the very low outputs of moving-coil pickups to a level that can be handled by preamps. It features Class A push-pull circuitry, a three-way impedance selector for precise cartridge loading, and high and low gain switch settings to accommodate varying pickup outputs. Price of the Sota Head Amplifier is \$250.

Circle 145 on Reader-Service Card



Creative distortion from Roland

Roland Corporation's SG-1 allows the electric guitarist to produce violinlike bowing attacks on each note. A control on the device provides from 50 to 300 milliseconds of attack, and another sets the sensitivity. When used with a bass guitar, the SG-1 is said to produce lush string-bass sounds, adaptable to solo or accompaniment performances. It features FET switching, LED indicators, and a battery-eliminator jack and costs \$100.

Circle 150 on Reader-Service Card

(more on page 13)

Circle 49 on Reader-Service Card ▶

The continuing story of TDK sound achievement. Part Four.



In previous chapters we've told you about the technological breakthroughs that make TDK tape so outstanding. We've shown you how TDK tape is wound on a perfectly circular hub/clamp assembly for the smoothest possible flow of sound. But the perfection of the first two phases would be wasted effort if tape travel were inconsistent or slowed down by excess friction. *Part Four*, the TDK bubble slip sheet, is one of our unique answers to reducing friction. On it rests TDK's reputation for smooth-running sound.

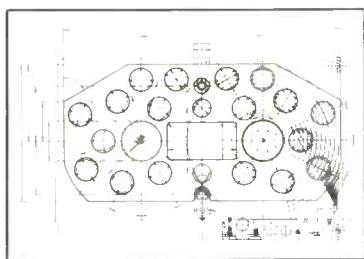
TDK engineers painstakingly studied tape travel. They found the edge of the tape comes into direct contact with the cassette at several points. At any of those critical spots, the tape can be slowed down, tilted away from the parallel, side-tracked or damaged. The need to reduce friction was evident. And it had to begin where the tape edge makes contact with the shell.

The TDK slip sheet first came into existence as a flat piece of paper. Our engineers knew it had to do more than reduce friction. It also had to maintain constant tape speed and perfect tape winding. Two formulations met the exacting TDK standards. Ultra-thin paper coated with silicone. And teflon

coated with a fine layer of graphite. To further diminish the area of contact between tape and slip sheet, our engineers created the bubble concept.

Each TDK bubble slip sheet is computer-designed with twenty bubbles of varying diameters. Each bubble slip sheet is manufactured to micron tolerances to guarantee uniformity in height. In operation, the TDK bubble slip sheet maintains a constant running angle for the tape, minimizing friction. Tape winding is even and consistent. Your music is recorded and played back in a safe, reliable environment. Music is what it all


comes back to. That's why TDK considers all parts in a cassette equally important. And why every effort is made to achieve a perfect interplay between them. It's an achievement you'll hear every time you play your favorite music on TDK. Music is the sum of its parts.



Running analysis of TDK bubble slip sheet.



 **TDK**
The Amazing Music Machine.



Extraordinary.

Infinity makes the ultimate statement in speaker technology.

The Infinity Reference Standard.

The IRS: Seven feet six inches tall. Servo'd woofers driven by one kilowatt per side. 16 Hz to 40 kHz \pm 2 dB.

About \$20,000.

 Infinity

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

CIRCLE NO. 23 ON READER SERVICE CARD

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7930 Deering Avenue.

High Fidelity News

Digital audio discs seek standards

The future of the Philips-developed Digital Compact Disc looks much brighter with the recent announcement that the Netherlands-based company and Sony are working together to refine the laser-based digital audio reproduction system and have developed improvements in modulation and error correction. The two companies have submitted details of their work to the Digital Audio Disc Standardization Conference in Japan in an effort to gain worldwide acceptance of a common set of specifications.

Software suppliers are joining the Compact Disc bandwagon. Polygram has announced that it will release its music programs in this format, and CBS has let it be known that it will be working closely with Sony and Philips on development. Similar in concept to the optical video disc system, the Compact Disc measures just 4.72 inches in diameter and is capable of storing 60 minutes of music on a side.

Du Pont & Philips plan tape venture

It has been nearly ten years since American audiophiles saw the last blank cassettes bearing the Philips and No-reco brands. Philips, which developed the cassette recorder in 1963, still sells a lot of tape around the world but none in the U.S. All of that could change early next year, however, when the company's tape plant in Oosterhout, Holland, is scheduled to become part of a joint venture with E. I. du Pont of Wilmington, Delaware.

The deal—submitted recently to Philips employees and the Dutch government for comment—calls for a united program of research and development, manufacture, distribution, and worldwide sales of audio and video recording tape. Du Pont's contribution is to be technological and financial; Philips' includes the Oosterhout plant, know-how, and its present tape marketing organization.

(more on page 14)

THE HIGH WAY.

It's simply a matter of how you like to go.

First class is Status:Pro. By Gusdorf. All the way to the top is Model 1990, the tower.

Our luxurious hi-rise setting for the most sophisticated components made today and the most sophisticated interfacing between audio and video functions—even VCR and video disc.

See this Status:Pro model in our color brochure and get our dealer listing too.

Send 50¢ to me, Mike Sheperis, now.

GUSDORF CORPORATION
6907 Manchester, St. Louis, MO 63143
Gusdorf Canada Ltd.
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Circle 14 on Reader-Service Card

Are your records really clean? VAC O REC[®], the sure way.

There are plenty of record cleaning products around, but none of them can match the Vac-O-Rec system. Vac-O-Rec rotates the record past a metalized mylar brush which discharges static electricity. This in turn loosens the dust. Then, separate super soft mohair brushes gently reach into the grooves to loosen and effectively remove micro dust. Finally, all dust and dirt is vacuum cleaned away.

The result—a really clean record free of dirt and surface noise. Vac-O-Rec is UL and CSA listed.

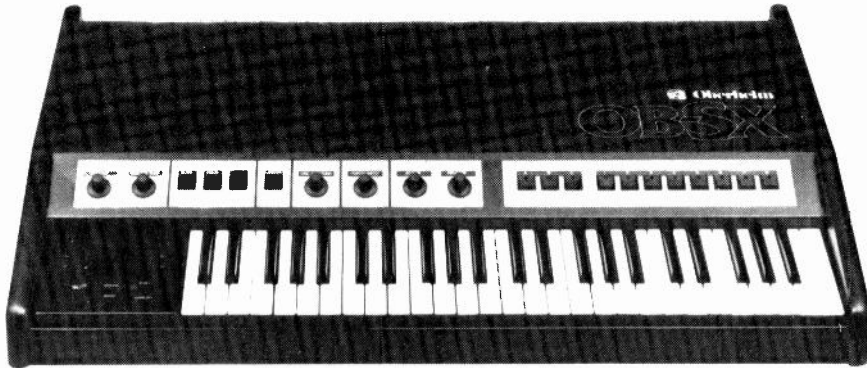
Don't put up with noise, or risk damage to your priceless records. See Robins Vac-O-Rec at your dealer. Manufactured in U.S.A. by Robins Industries Corp., Commerce, N.Y. 11725.



Pat #3654660

Circle 39 on Reader-Service Card

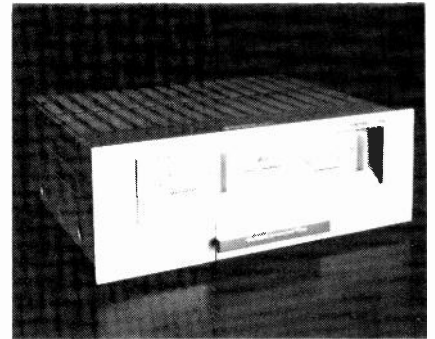
High Fidelity News



Speaking of synthesizers. . . .

A new generation of polyphonic synthesizers from Oberheim Electronics, dubbed the SX Series, is said to be much smaller and easier to use than earlier models. The OB-SX6 (pictured here) is a six-voice synthesizer; the four-voice OB-SX4 can be upgraded to six voices with the addition of two user-installable voice cards. Both models have a four-octave keyboard, pitch-blend and modulation levers, automatic tuning, edit mode, and controls for attack, decay, and release. The SX6 is priced at \$3,500, the SX4 at \$3,000.

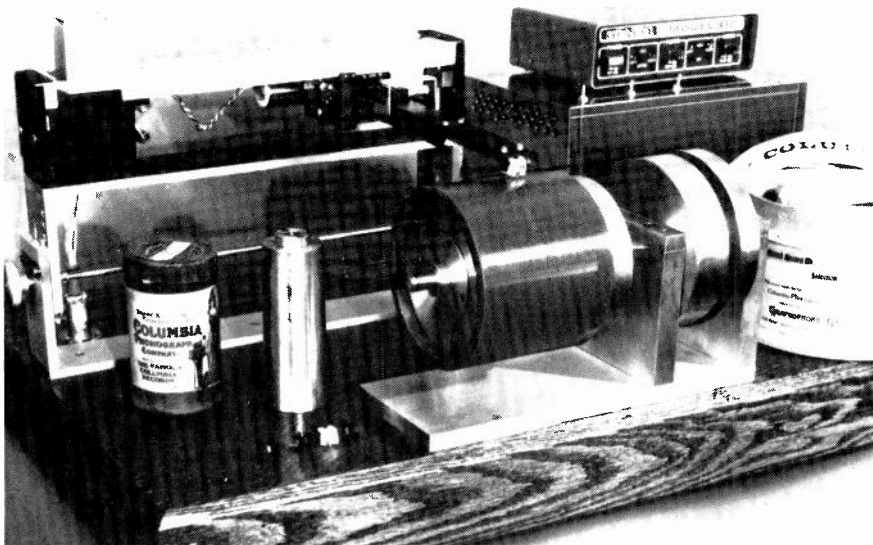
Circle 141 on Reader-Service Card



Marantz' classy new amp

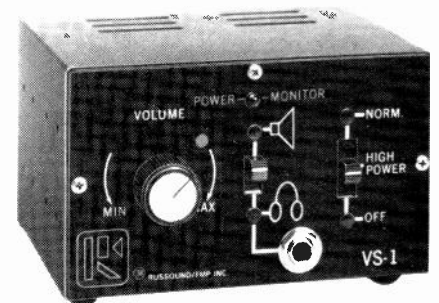
Marantz packs lots of high technology into the SM-6 power amp, part of its new Esotec line of audio componentry. Switchable to either Class A or AB operation, it employs Freon-filled heat pipes to cool the output transistors, built-in speaker switching, and low negative feedback. In its Class A mode, the amp is said to provide output of 30 watts per channel (14¾ dBW), with 120 watts (20¾ dBW) in Class AB. Price of SM-6 is \$850.

Circle 148 on Reader-Service Card



Collectors take note

The serious (and well-heeled) collector of antique record cylinders might be interested in Art Shifrin's \$5,000 "state-of-the-art" electronic cylinder phonograph. It is composed of four basic parts: a base, a modified Rabco SL8-E tangential tracking tonearm, a heavy-duty hysteresis-synchronous motor, and the cylinder-drive/mandrel assembly. The system is equipped with a Stanton 310B preamp and 500-Series pickup. Two equalization curves are provided: linear and modified RIAA. All types of cylinder records can be accommodated by the phonograph; speeds of 120, 144, and 160 rpm are selected via a stepped pulley with three diameters, and half speeds can be switched electrically. For more information, write directly to Art Shifrin (P.O. Box 128, Little Neck, N.Y. 11363), who in "real life" is a sales engineer with Ampex as well as a cylinder maven.



Turn it down!

The Russound VS-1 is designed to control the volume of remote speakers and headphones at the listening location, rather than at the amplifier or receiver. The device uses a constant-impedance L-pad control that can handle power inputs up to 21¾ dBW (150 watts) per channel. A red LED lights when the power rating of the control is approached; the device can then be switched to its high-power attenuator mode. The VS-1, housed in a black metal case, costs \$80.

Circle 146 on Reader-Service Card

L150. The low and the mighty.

Here is bass reproduced with depth and power that few speakers can equal.

And with distortion so low... a recent test of the L150 in *Stereo Review* magazine* failed to detect any audible distortion!

The L150's new technology, Symmetrical Field Geometry woofer and passive radiator deliver true,

tight bass. Without boom. At volume levels which approach live performances!

Once you're impressed with the L150's lows, you'll be equally impressed with its highs and mids.

Its powerful 1" high-frequency dome radiator provides wide dispersion throughout its range. And a 5" midrange transducer

handles high volume levels without distorting.

From the lowest organ pedal to the highest piccolo passage — the accuracy is consistent. The stereo imaging is superb.

Beyond its sonic quality, the L150 features fine quality construction. Each speaker is crafted in the USA at our Northridge, California

facility, inspected and tested at over 50 test stations, and beautifully hand-finished with oiled and rubbed American walnut veneer.

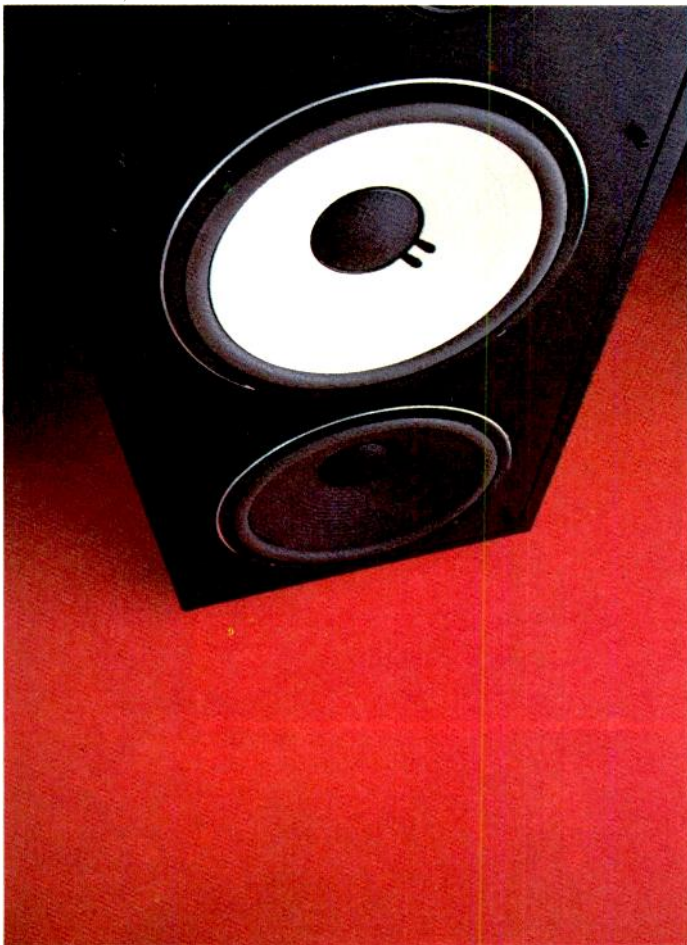
Audition the low and the mighty at your nearby JBL dealer.

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*Feb. 1980 *Stereo Review*

JBL First with the pros.

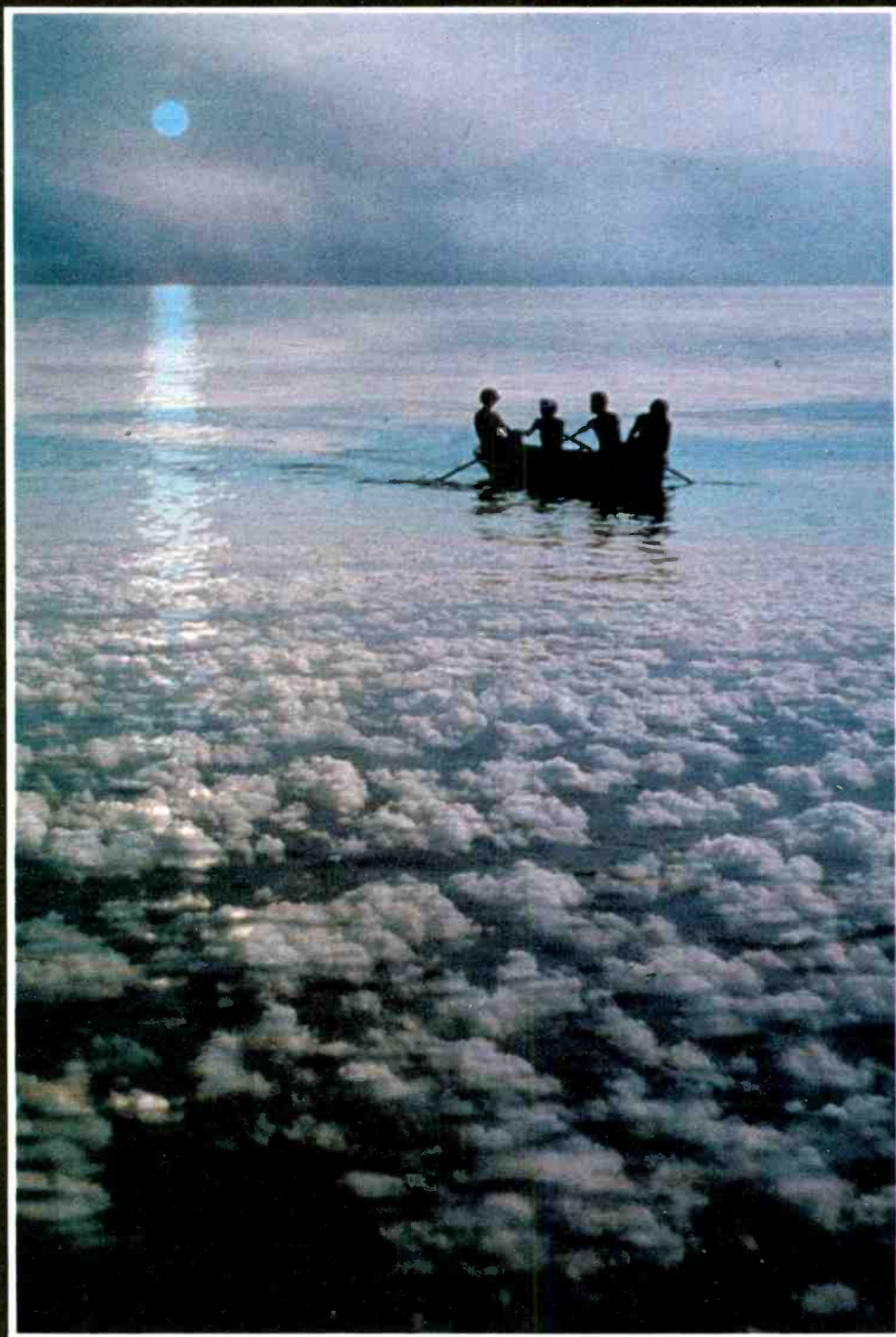
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Circle 19 on Reader-Service Card

The secret of Onkyo.

You'll find it in all four of our new stereo tape decks.



Let Onkyo transport you to a world beyond electronics . . . to a world of more perfect sound. Where you'll hear music of such stunning purity and richness, that you'll forget you're listening to an audio system.

That's the secret of Onkyo . . . and Onkyo's dramatic success. The unique ability to take you several steps beyond pure technology . . . to experience more exciting sound. And you'll find it in all four of our new stereo tape decks.

■ The Onkyo TA-630DM is an outstanding example. It achieves performance heights only hinted at in the acclaimed Onkyo TA-630D.

In 1979, independent testing



The Onkyo TA-630DM

confirmed that the TA-630D outperformed all 19 cassette tape decks in its price range . . . placing first in both sound quality and value. Now even more innovations have been added in the TA-630DM, to widen Onkyo's lead still further.

Not only have we designed-in metal tape capability . . . using a newly developed high-performance hyperbolic S&S sendust record/playback head . . . but we've also fully redesigned the record system electronics to take fullest advantage of metal tape's much improved dynamic range.

The feature-laden TA-630DM also employs Onkyo's exclusive "Accu-Bias" control system . . . which assures that every recording you make is superior . . . regardless of tape-type or brand.

Built-in tone generators in the TA-630DM let you sense each tape's unique bias requirements . . . guiding you to the precise setting for optimum sound. Brighter high notes are the reward.

The TA-630DM's Dolby* noise reduction system, with switchable MPX filter, even lets you decode Dolby* FM broadcast signals for more brilliant off-air recordings.

Other important features include

. . . memory rewind, full auto stop, a timer start/pause function, and two large peak level VU meters.

Throughout, the system has been engineered for extreme reliability and long service life . . . from its precise and rugged phase-locked loop (PLL) servo DC motor drive system, to its richly designed electronic control systems.

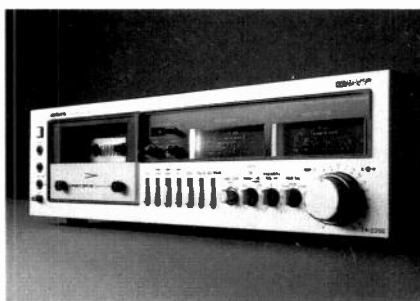
■ Equally impressive is the elegant new Onkyo TA-2050 . . . an advanced two-motor stereo cassette tape deck featuring "Accu-Bias", a Dolby* noise reduction system with switchable MPX filter, full metal tape capability, and soft touch controls. It too delivers more perfect sound.

The TA-2050 utilizes a full logic direct drive motor transport for extremely high reliability with minimum wow and flutter. A separate motor handles fast forward and rewind functions. A special Hard-Permalloy record/playback head . . . and a ferrite erase head . . . provide optimum performance with all types of tape, including metal.

Two valuable features of the TA-2050 are its instant muting and automatic fade in/fade out control systems . . . which permit far more professional recording effects. Musical passages can be "cut-in" or "cut-out" instantly. Sound passages can be "faded-out" or "faded-in" smoothly. And cassettes can be recorded right to the end . . . then rewound a short bit to overlay a professional "fade-out" effect.

The Onkyo TA-2050 also features a memory-stop/memory-play system, a timer mode selector, special "peak-hold" meters for added precision and convenience, and full remote control capability with the optional RC-5 remote control unit.

■ Many of the same innovations are found in the Onkyo TA-2020 . . . a surprisingly affordable stereo cassette tape deck with "Accu-Bias" and metal tape capability.



The Onkyo TA-2050

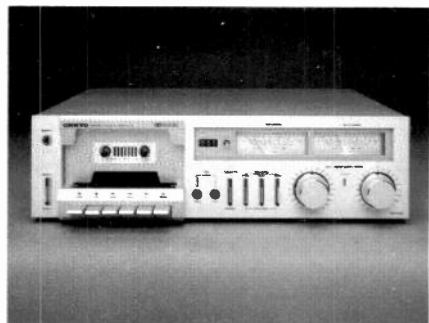


The Onkyo TA-2020

The TA-2020 features a servo-controlled DC motor, large VU meters, a Dolby* noise reduction system with built-in MPX filter, and a convenient timer/pause button for unattended operation.

Richly engineered to Onkyo's uncompromising standards, no other stereo cassette deck in its price range provides such sound quality.

■ The Onkyo TA-1900 represents an incredible achievement . . . in both performance and economy. It



The Onkyo TA-1900

puts full high fidelity metal tape stereo within easy reach of even the entry level audiophile.

The TA-1900 features simplified soft-touch controls, three position Bias/EQ switches to maximize tape performance, Dolby* noise reduction circuitry, a Hard-Permalloy record/playback head, a ferrite erase head, and a DC servo motor.

Without exception, the Onkyo TA-1900 is the most affordable quality tape deck in audio today!

■ Styling of all four new stereo cassette tape decks is superb. Brushed silver metal with elegant appointments. The TA-630DM resembles Onkyo's top-of-the-line TA-2080 . . . while the other three models debut Onkyo's dramatic new slim-line design.

Onkyo USA Corporation
42-07 20th Ave., Long Island City
N.Y. 11105. (212) 728-4639

*TM of Dolby Laboratories

HIGH PERFORMANCE HIGH BIAS.



AMPEX GM II HIGH BIAS TAPE.

When you're recording music that's rich in high frequencies, you need a high performance tape. Ampex GM II high bias cassettes. They retain and release every note and nuance. Especially those found in highly amplified electronic music.

GM II's high performance begins with the magnetic particle. The ones we use are smaller, permit higher volumetric loading and greater uniformity of dispersion on the tape surface. This produces a more consistent energy, increased output sensitivity, and a substantial reduction in the third harmonic distortion level. Our unique oxide formulation and new processing techniques extend the high end while they lower the noise floor (-62.8dB @ 333Hz). And to make certain that tape-to-

head contact is precise, we use our exclusive Ferrosheen™ calendaring process to give the tape an ultrasmooth, glossy surface.

GM II's True-Track™ cassette mechanism is an audio achievement in and of itself. Every aspect, from the fore and aft guide system to the computer-torqued cassette housing screws, says high performance. Then every Ampex cassette must pass our stringent quality control standards.

GM II high bias, high performance tape. Use it next time you're recording a passage that's rich in high frequencies. You'll hear what a difference it can make when your high bias tape delivers high performance.

For complete information and specifications on all Ampex premium tapes, write us for a copy of our Full Line Brochure.

AMPEX
The Tape of the Stars

THE AUTOPHILE

Something for Everyone in '81

by Robert Angus

This year may have been disastrous for Detroit automakers, but for the people who design, make, sell, buy, and use car stereo equipment, it has been the best on record. The continuing growth of the auto sound industry is manifested in the scores of new products available this fall—products that reflect the maturity of car stereo design and manufacture.

Last year, emphasis was on amplifier power and driver count, virtually to the exclusion of all other considerations. When you go shopping this year, you'll find a moderation in that emphasis and more discussion of distortion, ease of use, digital tuning, and compactness. Compactness, pushbutton tuning, and digital frequency readout are hardly new to car stereo design, but their ascendancy over such macho considerations as acoustic power and number and size of drivers bespeaks a realization on the part of manufacturers and users alike of the realities of the energy shortage on the one hand (evinced in the shrinking size of cars) and the need for making FM tuning simpler and more accurate on the other.

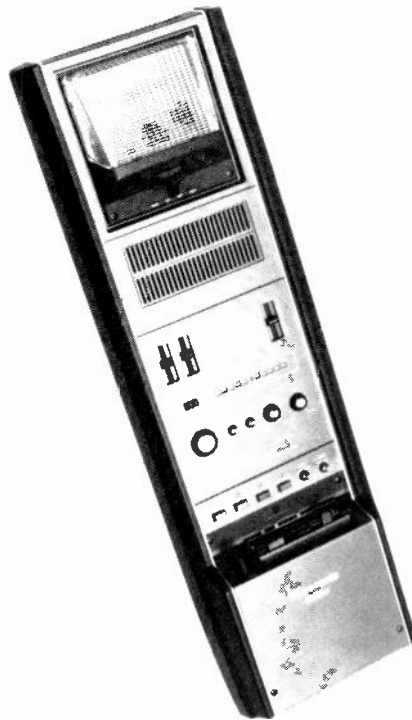
Two months before the nation's car stereo retailers got their first look at the 1981 models, a press wire service flashed the "news" across the country: The Federal Communications Commission had approved a system for stereo AM broadcasting. [That bit of news, as we noted on page 20 of our July issue, was incorrect and presumptive.] The story went on to suggest that AM stereocasts could become a reality within weeks. It was too late for most manufacturers to do anything about it—but not Marantz, which produced a prototype adapter for its CAR-427 deluxe receiver, introduced last year. It was the only piece of stereo AM auto sound equipment on display at the Summer Consumer Electronics Show (Sansui and Magnavox both showed stereo AM equipment for the home), but nobody seemed to care—if they noticed at all. Marantz management, which thought it had scored a coup, was surprised and disappointed.

In the meantime, stereo AM got bogged down in bureaucratic red tape, threats of lawsuits by proponents of rival systems, hostility from some broad-

casters, and second thoughts from the FCC. The result is that it will be at least next year before you'll have stereo AM in your car. The Marantz experience proves that a manufacturer can adapt an existing piece of car stereo equipment to the new format. Unfortunately, many of those who heard the demonstration walked away without knowing that they had been listening to stereo—AM or otherwise.

Perhaps the biggest contribution made by new products is in the art of

Top to bottom: Alpine Model 7128, Panasonic Model RM-310, Sparkomatic Model GE-1000



loudspeaker design. There are dozens of systems, including acoustic suspension models that could serve equally well with home microcomponents, two-way and three-way wedge systems, and sound-dispensing cylinders. Electronics manufacturers like Alpine and Clarion are introducing technology and features heretofore seen mainly on better-quality home components, while Pioneer has made several improvements in its Super-tuners.

The Electronics. By all odds, this season's most newsworthy product is the Clarion PE-959A, a \$900 cassette/radio combination with full microprocessor programmer, auto reverse, pushbutton operation, Clarion's Magic Tune FM circuit, and other goodies. It can switch itself on and off, as well as change stations up to ten times with preprogrammed commands.

There are three versions of Pioneer's Supertuner II: KP-6500 for \$220, KP-7500 for \$260, and the KMX-20, an in-dash model for \$300. Alpine, which has staked out the high-technology segment of the market as its own, has the Model 7128, an AM/FM/cassette combination designed for use with an external preamp/equalizer and power amp. Priced at \$300, it includes a digital PLL frequency synthesizer, ten-station preset (five AM, five FM), digital clock, the company's Cassette Glide eject, metal-tape capability, and auto reverse. There's also a \$150 40-watt amplifier, the 3008; an 18-watter, Model 3006 (\$60); and a five-band equalizer/preamp priced at \$150. A couple of ultracompact cassette/receiver units designed for X-body compact cars round out the Alpine line: the 7124, a \$200 2.2-watter that can also be used with external preamp and power amp; and the 7327, a \$300 system with Dolby noise reduction.

Mitsubishi's best is the CE-747, a \$480 in-dash receiver/cassette model with auto reverse, Dolby, metal-tape capability, and low-level connectors for separate power amplifiers; a choice of amps at 8, 20, or 40 watts per channel is available. The company also offers an X-body chassis with horizontal or vertical tuning scale, the RX-723 (\$150), and two power amps, the CV-24 with 8 watts per channel and a \$50 price tag and the \$120 Model CV-25, a four-

channel unit with 20 watts each.

From Panasonic comes a lower-priced version of its roof-mounted Cockpit system. The RM-310 contains an AM/FM radio with cassette deck, built-in 10-watt amplifier, preamp with three-band equalizer, and LED level meters for \$600. In addition, the Supreme series of in-dash all-in-ones incorporate cassette decks with pushbutton AM/FM radios. Prices range from \$180 to \$280.

What's new at Jensen is presets—five of them on the T-415 tuner and R-406 combo. The latter, at \$290, fits most foreign and domestic cars and has auto reverse. Sanyo's entries include the \$150 FT-7 AM/FM/cassette unit with music search and the low-cost under-dash FT-150 cassette deck with Dolby.

Music search, this time called ESP, is also the hallmark of Craig's T-619 receiver/recorder, priced at \$230. Its amplifier section produces 8 watts per channel, and the tape deck reverses automatically. Three more receiver/recorders, also with automatic reverse but without ESP, are the T-617, which costs \$130, and the T-618 and T-640, each \$160. The T-640 comes with five preset pushbuttons. A trimode equalizer/signal-processor, either with five bands (R-550, \$100) or with seven (R-551, \$150), and four new power amplifiers priced from \$40 to \$180 complete the line. Not to be outdone is Grundig with a \$325 radio/cassette model with automatic reverse, the GCF-9300.

Still relatively new to car stereo, Kenwood comes on strong with an in-dash tuner/cassette combination, the KRC-721, \$400; a seven-band graphic equalizer, the \$220 KGC-737; an in-dash tape transport-receiver with 4-watt output, the KRC-511, \$380; and two power amplifiers, the 15-watt KAC-727 at \$95 and the 50-watt KAC-801 at \$220. The Marume name is brand-new, and it is represented by six AM/FM/cassette units ranging from \$70 for a 5-watt manual tuner to \$170 for an 8-watter with five presets. There's also an 8-track unit, the M-P880, for \$110. Sparkomatic's additions include a seven-band graphic equalizer with 50-watt power booster (GE-1000, \$190) and a \$160 receiver/deck, the SR-303.

JIL has two similar products, the Model 672, designed for X-body cars, and the CD-82, an auto-reverse radio/cassette ensemble with metal-tape capability. Among Kraco's new electronics models are the KXI-81 X-body AM/FM/cassette unit, which can be mounted horizontally or vertically, and the in-dash KGE-801, a receiver/tape transport



Pioneer TS-1600 (top) and Jensen J-2000 rear-deck speakers

with five-band graphic equalizer, auto reverse, weather band, and 20-watt amplifier.

Yet another newcomer is Tancredi, a company that offers no fewer than seven in-dash radio/cassette models ranging in price from \$106 for the basic Model TC-1050 to \$330 for the TC-7000, with auto reverse, electronic tuning, and LED readout. The company's three equalizer/boosters, priced at \$100, \$110, and \$150, each offer seven bands of equalization. And Arthur Fulmer has added two in-dash head-end units: the 16-5200, priced at \$150 and offering AM, FM, and cassette in a compact chassis, and a \$160 model, the 16-6100, with five preselector pushbuttons.

Speakers. Among the more innovative of the new crop of car stereo loudspeakers are two models from Jensen. Its first quadaxial system, the Series X, sells for \$150 a pair and features a 6-by-9-inch woofer with 20-ounce magnet, 2-inch piezoelectric tweeter, and two separate midrange drivers, all on the same chassis. Then there's the J-2000 for \$200 a pair. Cylinders 10½ inches long and 5½ inches in diameter, they contain a 4½-inch woofer at one end and a lightweight passive radiator made of compressed glass spheres on the other. In the middle is a high-frequency dome tweeter.

A cross-axial design is the hallmark of Pioneer's five new models. The TS-1600, at \$170 a pair, has a tweeter that fits on top of the conventional 6½-

inch woofer and directs high frequencies at the listener by means of diffuser plates. The line also includes the 6-by-9 TS-697 and TS-698 speakers, at \$140 and \$170 per pair, respectively. Toyota owners have a different choice in the 5-by-8 rear-deck TS-585 (\$100 per pair), while the TS-87 is a 3½-inch dash-mount speaker designed to fit in the dashboards of GM and Ford cars.

A midrange/tweeter plate is available from Visonik of America. The DMT-1 features a door mounting plate, measuring 5½ by 3 inches, to hold the tweeter and midrange side by side. Designed for use in triphase speaker systems, it costs \$80 per pair. AFS Kriket introduces a dome tweeter and dome coaxial 6-by-9 speaker. The latter, the Domaxial II, costs \$130 per pair and incorporates a phenolic dome tweeter.

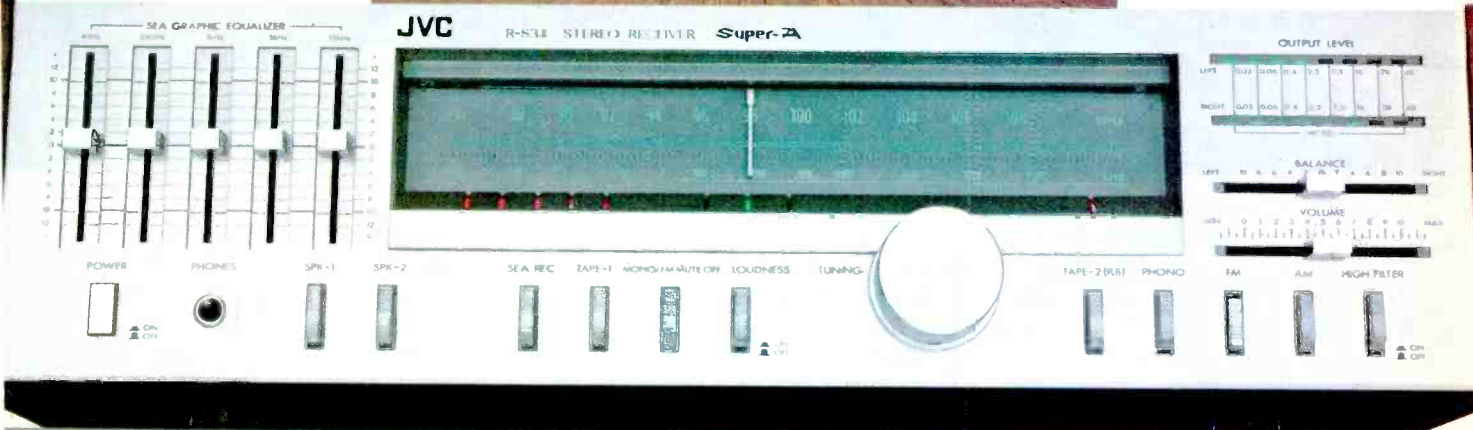
Alpine's fall sally into loudspeaker systems includes the three-way 6302 costing \$120 per pair, a 6-by-9 two-way speaker with capacity for 65 watts per channel and a price of \$200 per pair (Model 6204), a 4-inch two-way speaker system priced at \$50 (the 6202), and the 6104, a 4-by-6 dual-cone system selling for \$40 per pair.

Sparkomatic has three models: the SK-600 compact coaxial, only 1½ inches deep; the 6-by-9 SK-6950; and the 6-inch SK-650. The latter two feature a strontium-cobalt woofer magnet.

Audiovox' Hi-Comp line has six new members, ranging from the 4-inch round HCS-10 (\$36 per pair) to the \$190 HCS-90, a two-way system incorporating a 4-inch woofer and 2¼-inch cone tweeter. At \$52, the HCS-15 is a 5-inch coaxial speaker; the \$100 HCS-59 is a 5¾-inch three-way system with independent woofer, tweeter, and midrange; the HCS-342, a 4-by-10 three-way system, costs \$116; and the HCS-362, at the same price, is a 6-by-9 three-way system.

A wedge and a double-woofer system are Mesa's latest. The former, Mini-Mesa 20-ZX (\$110 per pair), contains a passive radiator, a 2-inch tweeter, and a 3½-inch woofer. The Mini-Mesa 25-E costs \$175 per pair and holds two 3-inch woofers and a horn tweeter in an enclosure measuring less than 4 by 8 inches. And, if you're having trouble cramming your favorite 6-by-9 speaker into a cutout that measures only 6 by 8 or 5 by 7 inches, the Adapta-Sound 202 is the very thing for you. At \$16 a pair, it fits a big peg into a small hole and, at the same time, is intended to provide Venturi loading to the driver. **HF**

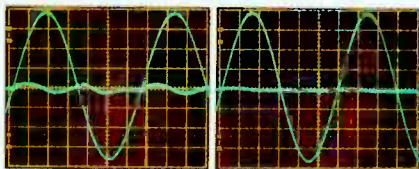
Only JVC combines Super-A purity and graphic equalization in a receiver.



Super-A **R-S33** FM/AM Stereo Receiver

Naturally, you want a receiver that gives you the most for your money. And only JVC gives you both Super-A amplification and graphic equalization.

You'll hear Super-A as pure, natural sound. Violins, cymbals, voices and other complex, delicate sounds are smooth and airy. That's because Super-A does away with most of the measurable switching and crossover distortion, a source of harshness in some conventional Class-AB receivers.



Class-AB Jagged center line indicates switching distortion.

JVC Super-A Minimal distortion in output waveform.

At the same time, you'll get plenty of power. The R-S33 shown here gives you *40 watts per channel minimum RMS into 8 ohms, from 20-20,000 Hz, with no more than 0.007% total harmonic distortion*. A regular Class-A amplifier with this kind of power would be heavy and expensive. But because it doesn't require high idling currents, the R-S33 costs and weighs about the same as a conventional receiver.

Even the most sophisticated amplifier can't correct cartridge peaks, speaker roll-off or room acoustics. Neither can it accommodate your changing tastes in sound as you take off Beethoven and put on disco. That's where JVC's 5-band SEA graphic equalizer comes in. With independent controls at 40 Hz, 250 Hz, 1 kHz, 5 kHz

and 15 kHz, it lets you extend the deep bass without creating boominess. Mellow out a voice without cutting the highs. Add brightness to the extreme highs and more.

With all this, the R-S33 has plenty of other features to recommend it: direct-coupling, a sensitive tuner section with linear-phase IF filters, two tape monitors with equalizer and dubbing facilities, LED power meters, and JVC's triple power protection system.

So if you're interested in getting more without paying more, call 800-221-7502 toll free for the location of your nearest JVC dealer (in N.Y. State 212-476-8300). Once you've heard the R-S33, you'll have no doubts about which receiver gives you the most for your money.

JVC®

US JVC CORP.

58-75 Queens Midtown Expressway, Maspeth, New York, 11378.

THE ONLY OTHER WAY TO GET THIS KIND OF DYNAMIC RANGE IS TO HIRE YOUR OWN ORCHESTRA.



At a live performance, you normally experience about 90 decibels of dynamic range. In other words, the difference in volume between the loudest and quietest passages is about 90dB.



But that's not what you get from your stereo.

Conventional records and tapes compress dynamic range. dbx components help restore it to the level of a live performance.

Because of conventional recording processes, your records are limited to just 50dB of dynamic range, or 60dB at the very best. Tapes and broadcast can be as limited as 40dB.

Now dbx technology solves that problem. Dramatically. In two different ways.

1. The 3BX. For conventional program sources.

The 3BX Dynamic Range Expander can restore the dynamic range of every conventional record and tape you own. FM broadcasts, too.

For example, the 3BX can deliver up to 75dB from conventional records—better than the so-called audiophile discs, including direct-to-disc and digitally mastered recordings. And the 3BX also reduces the ticks, pops and record surface noise that interfere with quiet musical passages.

2. The dbx Model 21. For dbx encoded discs.

For the ultimate in dynamic range, you can add the dbx Model 21 Disc Decoder to your present system, and play the revolutionary new dbx Discs and Digital dbx Discs.

These specially encoded discs are the world's first records to deliver the full dynamic range of live music. Up to 90dB or more. Plus they virtually eliminate record surface noise. So for the first time you can experience the dynamic range of a live performance, heard against a background of virtual silence.

And you can choose from a growing library of dbx Discs, including everything from the London Symphony and the Boston Pops, to Neil Diamond and The Who.

Hear it today.

To really appreciate what dbx technology can do for the dynamic range of your music, you have to hear it for yourself.

Visit an authorized dbx retailer near you for a demonstration, and take home the ultimate in dynamic range.

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dbx, Incorporated, 71 Chapel Street, Newton, MA 02195. 617-964-3210.

Free dbx 21 offer.

During the dbx "Best of Both Worlds" promotion, from Sept. 2 until Nov. 30, 1980, you can get a free dbx Model 21 with the purchase of a 3BX Dynamic Range Expander through participating U.S. dbx authorized retailers in continental U.S., Hawaii and Alaska. Also check out the latest releases from the growing DBX DISC CATALOGUE.

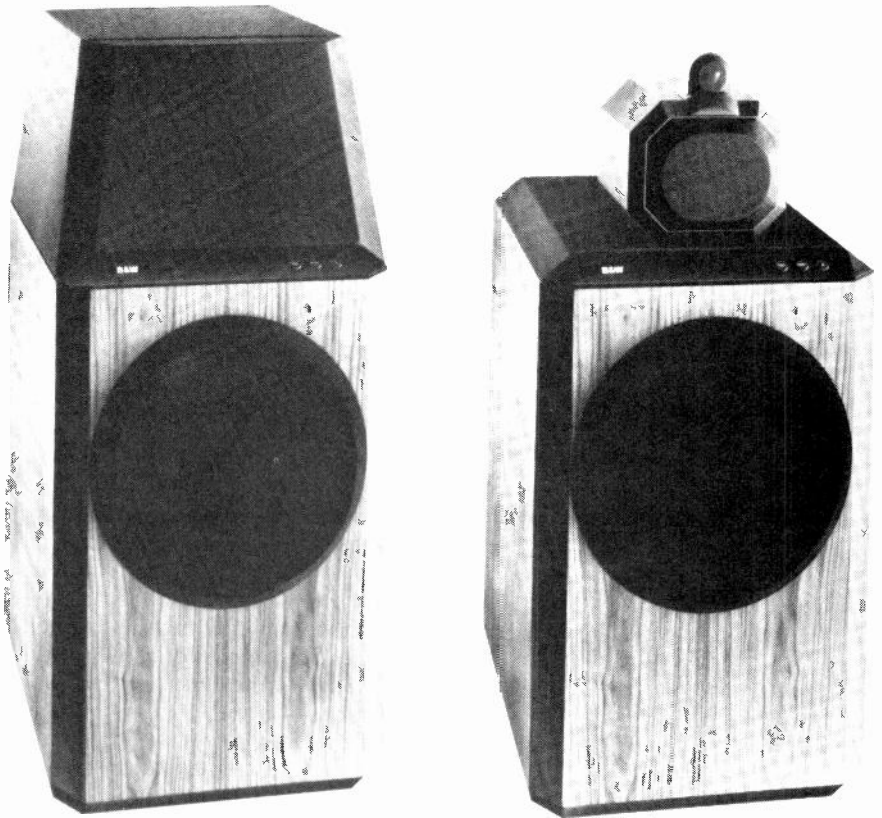
Offer void where prohibited by law.

dbx[®]

MAKING GOOD SOUND BETTER

New Equipment Reports

Preparation supervised by Robert Long, Peter Dobbin, and Edward J. Foster. Laboratory data (unless otherwise noted) supplied by CBS Technology Center or Diversified Science Laboratories.



B&W Pulls Out All the Stops

B&W Model 801 loudspeaker, in walnut or teak veneer enclosure; black ash available on special order. Dimensions: 17¼ by 22¼ inches (floor coverage), 37½ inches high. Price: \$1,465; optional "bonnet" (midrange/tweeter grille), \$130; rosewood or lacquer finishes available on special order at additional cost. Warranty: "limited," five years parts, labor normally included. Manufacturer: B&W Loudspeakers, England; U.S. distributor: Anglo-American Audio Co., Inc., P.O. Box 653, Buffalo, N.Y. 14240.

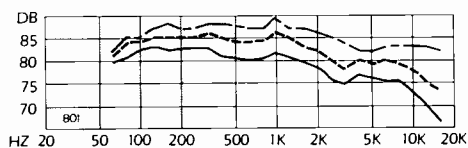
B&W is one of those speaker companies that has adopted the computer as a major design tool; in the Series 80 (of which the 801 is the premier model in both the chronological and the prestige sense), the company was determined to leave no digit unturned in its search for the very best product that could be devised with the analytical and data-acquisitive faculties at its disposal. Among the major computer applications involved are aid in crossover-network design, component testing and matching, and subassembly testing and matching. The matching includes both the choice of parts and subassemblies that will best complement each other and the pairing of stereo systems for near-identical performance. A by-product of the performance records that are generated is the possibility of hand-selecting replacement parts to maintain the tight inter-pair tolerance if a repair ever becomes necessary. None of this is unique, though the aggregate approach—as well as the final design—does reflect the fact that B&W is willing and able to do its own original thinking.

The tweeter and midrange driver have their own enclosures within what might be called the "head" of the system, which has a coiled cord that plugs into a socket in the woofer/"body" section and can be covered by an optional superstructure/grille "bonnet" if its angular features offend your sensibilities. (We prefer its looks without the bonnet.) The beveled edges of the head are intended to

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, a division of Columbia Broadcasting System, Inc., and Diversified Science Laboratories. The choice of equipment to be tested rests with the editors of HIGH FIDELITY. Samples normally are supplied on loan from the manufacturer. 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; HIGH FIDELITY, CBS Technology Center, and Diversified Science Laboratories assume no responsibility for product performance or quality.

B&W Model 801 loudspeaker

ANECHOIC RESPONSE CHARACTERISTICS (0 dBW input)



..... boundary-dependent region
 — average omnidirectional response
 - - - average front hemispheric response
 - · - on-axis response

AVERAGE OMNIDIRECTIONAL OUTPUT

(250 Hz to 6 kHz)

79% dB SPL for 0 dBW (1 watt) input

CONTINUOUS ON-AXIS OUTPUT (at 300 Hz)

108 dB SPL for 20 dBW (100 watts) input

PULSED OUTPUT (at 300 Hz)

116% dB SPL for 28% dBW (750 watts) peak

"NOMINAL" IMPEDANCE

5.7 ohms

APPROX. TWEETER CONTROL RANGE (re "flat")

± 2 dB above 3.5 kHz

APPROX. MIDRANGE CONTROL RANGE (re "flat")

-1, -2 dB, 900 Hz to 3.5 kHz

minimize diffraction; a cloth-covered foam pad on top of the body section minimizes reflections. Nestled into this pad is a battery that powers the overload-protection circuitry. Battery life is listed as approximately two years; a test button next to the protection pilot in front of the battery triggers the protection system and thus demonstrates whether the battery has sufficient charge to operate it.

At the back of the body section is a connection panel (sockets for individual banana plugs) plus a system fuse. Casters are virtually obligatory in a floor-standing studio monitor speaker and a nice touch in the home. (The design criteria of the 801 include both applications, in fact: It is intended as a true monitor—that is, a superaccurate reproducer—that will also fit gracefully into a home.) The acoustic suspension woofer (plus, of course, the crossover) occupies the body of the speaker; the head is attached to it by a rod running through the midrange housing and screwing into a threaded socket near that for the midrange/tweeter cord. The head and body thus are rigidly connected, though the head can be swiveled on the body.

The data from CBS Technology Center must be approached with a bit of caution, since the same caveats apply to their interpretation here as with any other speaker whose tweeter is placed far above the central horizontal axis. Some standards call for the measuring microphone to be on the tweeter axis, which certainly represents the speaker's output better when only an on-axis measurement will be made; some systems (particularly among those popular during the period when this test technique was under consideration) have no clearly defined tweeter axis because of multiple drivers and/or reflectors. The lab thus chose to use the "geographic" axis, half-way up the overall height, and to place a sufficient number of microphones around an imaginary sphere enclosing the loudspeaker to catch a sampling of the entire spatial output. Thus the "on-axis" curve for a loudspeaker such as this does not represent what you hear when you listen "on axis"—that is, with the tweeter/midrange head pointing at yours. The lab did run a sweep curve on this axis. Within as close a tolerance as we could expect in such a test, it confirms the B&W claim of essentially flat response from 45 Hz up.

The usual anechoic curves confirm the ultrasmoothness—the freedom from quirks in both frequency and spatial propagation—that we hear from the 801. The distortion curves are equally comforting: Nothing above 1% shows up in the 0-dBW (1-watt) test, and even at 100 dB SPL the second harmonics remain below 1%, while the third harmonics exceed that figure only below 40 Hz and rise above 2% only below 25 Hz—essentially, below the speaker's bandpass. Most of the distortion data within its working range are well below ½%. Efficiency is relatively low for so large a system (some evidently has been traded for deep-bass response), and the dynamic-range ceiling is below the threshold of pain (at a hair under 117 dB SPL). Some competing models thus will play louder with the same electrical input or can be driven to higher output levels. The first consideration need concern only those whose budgets preclude purchase of 801s in the first place; the second will be of interest only if visceral impact is more important than hearing preservation. Neither is within B&W's design criteria.

Pulse waveforms are well reproduced. At 3 kHz, there is some slight hangover plus evidence of low-level reflections. While both effects are minor, it is somewhat surprising to find them at all, considering the care that has been taken with such things in the design. Though the "nominal" impedance is below the 8-ohm rating, it obtains only over a fairly narrow band below 100 Hz, and most of the impedance curve lies above 8 ohms—actually rising to a maximum of about 45 ohms near 2 kHz. The 801 therefore constitutes a relatively "safe" load if speakers are to be paralleled from a transistorized amplifier.

But the whole adds up to considerably more than the sum of its parts: In simplest possible terms, the 801 is among the handful of great loudspeakers available. Detail, whether of timbre or of stereo imaging, is reproduced with a delicate accuracy that imposes no obtruding quality of its own. That very unobtrusiveness is a mark of the design's success, though it puts it at a disadvantage in hasty A/B comparisons, where less accurate speakers may seem more dramatic. Indeed, with extended listening, the little exaggerations on which their appeal is based become progressively apparent, while the 801's superb poise and balance make it seem, more and more, the objective reference against which the others' foibles can be measured. That is not to say that the B&W speaker is for everyone (even were price no object), but those who admire well-controlled, accurate response should audition it carefully.

AKAI QUICK-REVERSE. FOR PEOPLE WHO HATE TO INTERRUPT A GREAT PERFORMANCE.



Just pop in the cassette and spend the rest of the night making beautiful music together.

AKAI proudly announces the GX-F60R. Another superb example of quality in reverse.

It begins with the finest record/playback head in the industry. AKAI's glass and crystal ferrite Twin Field Super GX Head. Guaranteed for over 17 years of virtually wear-free performance on any tape formulation — low-noise through metal.

You'll also find a tape transport design that's sheer engineering wizardry.

And a two-motor system to lend even more stability.

All this, combined with specially engineered channeled tape guides, maximize tape-to-head contact in both directions for both record and playback.

Wow and flutter is



Four-position tape selector.

reduced to less than 0.04% WRMS. Distortion is less than 0.7% (1000 Hz "0" VU).

Now, add AKAI's second stroke of genius, our Quick-Reversing mechanism. Integrated into one of the two tape guides, is an infrared device that detects the tape leader and triggers the reverse.

The result — virtually no interruption in place of the usual 12 to 14 seconds of silence between sides on conventional decks.

And just in case you thought we neglected the rest of the GX-F60R's features in search of the perfect transport system, read on.

You'll also find full-logic solenoid controls, two-color fluorescent VU/peak bar meters, Dolby,* timer record/playback and remote control capabilities.

Plus a handsomely designed hydraulically-dampened panel that artfully conceals a full host of controls.

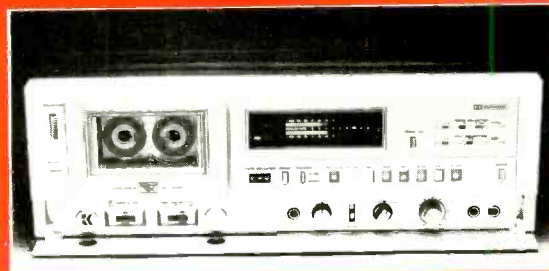
All in all, the finest reversing cassette deck AKAI has ever built.

And guaranteed to leave you with a lot more than time on your hands.

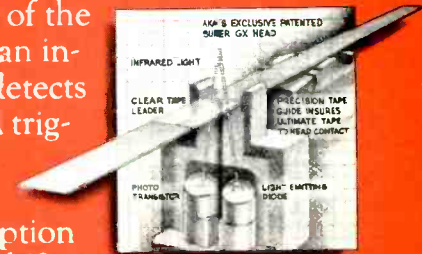
For much more information on the

GX-F60R — or our more economically-minded CS-M40R, also metal-capable with Quick Reverse — write AKAI, P.O. Box 6010, Compton, California 90224.

*™Dolby Labs, Inc.



The GX-F60R, our new Auto-Reverse, Quick-Reverse expert.



The magic of quick-reverse.

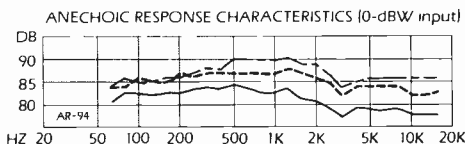
A K A I

YOU NEVER HEARD IT SO GOOD

Blue-Gened Baby from AR



Acoustic Research AR-94 loudspeaker



..... boundary-dependent region
 — average omnidirectional response
 - - - average front hemispheric response
 - · - on-axis response

AVERAGE OMNIDIRECTIONAL OUTPUT
 (250 Hz to 6 kHz)
 82 dB SPL for 0 dBW (1 watt) input

CONTINUOUS ON-AXIS OUTPUT (at 300 Hz)
 108 dB SPL for 20 dBW (100 watts) input

PULSED OUTPUT (at 300 Hz)
 122½ dB SPL for 34½ dBW (2,800 watts) peak

"NOMINAL" IMPEDANCE 4.8 ohms

AR-94 loudspeaker system, in wood cabinet with wraparound cloth covering. Dimensions: 14 by 30½ inches (front), 10¾ inches deep. Price: \$200. Warranty: "full," five years parts and labor. Manufacturer: Teledyne Acoustic Research, 10 American Dr., Norwood, Mass. 02062.

AR's line of vertical "high tech" speakers started at the top, with the AR-9 (HF, October 1978). Since then, as much of the 9's blue blood as possible has been transfused into the nether price regions. The process began with the AR-90, followed by the 91, 92, and, most recently, the 93 and 94, each representing a yet lower price. In testing the AR-94 we are, therefore, documenting the other extreme of the series. And we find that, despite the wide price spread between the 94 (at \$200) and the 9 (at \$800), an astonishing proportion of big daddy's genes remain operative in the new baby.

All the models in the series employ vertically aligned drivers (except in the bass) for maximum stereo-image clarity, which also is enhanced by the acoustic blanket surrounding the high-frequency drivers to absorb their radiation along the baffle board and forestall diffraction and reflection effects at the enclosure's front edges. But while the bigger models use paired side-firing woofers at the bottom of the enclosure (which therefore couple to the floor and the back wall), the 94 takes a markedly different approach in this region. Though it is termed a three-way system, it has no midrange driver per se; rather, two 8-inch drivers cover both bass and midrange via an unusual crossover scheme. Both drivers receive a share of input below 350 Hz; as that crossover point is approached, the signal to the lower driver rolls off and the full midrange input is fed to the upper one. One reason for this relationship, according to AR, is that it effectively prevents cancellations—the so-called wall dip—from occurring, as they would were both 8-inch cones driven to the higher frequencies. A conventional crossover of 6 dB per octave is applied to the tweeter.

Exclusion of driver level controls from the 94 represents one of the cost savings in the design, and we don't miss them. (Many designers have told us ruefully that they include such controls only because "the market demands them." If a speaker is well designed in the first place, driver controls are an inadequate substitute for good placement and room acoustics.) The speaker connects to the amplifier via color-coded screw-down posts on the underside of the enclosure, and a recess on one side of the integral base allows the wires to pass freely without tilting the cabinet. According to AR, some 20% of the manufacturing cost of a typical loudspeaker system goes into wood veneers and the like for the enclosure. The 94 therefore eschews such materials, employing instead unfinished particleboard covered by a nonremovable black cloth "stocking" and finished top and bottom with black plastic caps. The result is not only another cost saving, but a distinctive and very attractive appearance.

Despite the complexity of the crossover network—or, perhaps, because of it—we were pleased to note the unusually smooth, consistent impedance curve in the data from CBS Technology Center. From a high of 10 ohms at 55 Hz, impedance dips smoothly to the "nominal" 4.8 ohms at 150 Hz, rises gradually to about 10 ohms again at 3 kHz, then settles down to a little under 6 ohms at 10 kHz. Some amps may balk at paralleled pairs of 94s, but on a one-per-channel basis they present a very "comfortable" load to typical output stages. Thanks to its relatively large cabinet volume, the speaker is fairly efficient for a moderate-priced acoustic suspension design, but use of a skimpy amp seems pointless considering the 94's excellent dynamic range. In fact, the thunderous (122½-dB) output in the pulsed test drained the lab's amp dry without inducing untoward behavior in the speaker.

Frequency response plots show elevated output down to about 40 Hz. Distortion products—both second and third harmonics—are remarkably well controlled; at moderate listening levels, they stay well below ½% over most of the band. At loud levels (100 dB SPL), harsher-sounding third harmonics remain below 1% on the average, while second harmonics hover around 1%. Scope photos demonstrate the 94's ability to reproduce 300-Hz transient waveforms with excellent precision; the tweeter does show some evidence of blurring 3-kHz pulses, but we could hear none in listening tests.

Frankly, we were surprised at just how impressive the AR-94's tonal reach and balance proved to be. Bass reproduction was our first eye-opener. With program material stretching from drum rolls to the deepest organ fundamentals, we were mightily impressed with the unit's ability to put out clean, articulate bass. Complex orchestral passages—frequently the bane of less well designed systems—

"...an outstanding product on any absolute scale of measurement without regard to price." -STEREO REVIEW



Read more of what Stereo Review magazine had to say about the Yamaha CR-840 receiver:

"The harmonic distortion of the CR-840 was so low that without the most advanced test instruments it would have been impossible to measure it."

When speaking of the OTS (Optimum Tuning System), an easy-to-use Yamaha feature that automatically locks in the exact center of the tuned channel—for the lowest possible distortion, Stereo Review said, "The muting and OTS systems operated flawlessly."

Among Yamaha's most significant features is the continuously variable loudness control. By using this control, the frequency balance and volume are adjusted simultaneously to compensate for the ear's insensitivity to high and low frequency sound at low volume settings. Thus, you can retain a natural-sounding balance regardless of listening level. As Stereo Review states, "...another uncommon Yamaha feature."

And there's more. Like the REC OUT/INPUT SELECT feature. These separate controls allow you to record from one program source while listening to another program source. All without disturbing the recording process. Stereo Review's comment was, "...the tape-recording functions of the CR-840 are virtually independent of its receiving functions." One could not ask for greater flexibility.

In summing up their reaction to the CR-840, Stereo Review said, "Suffice it to say that they [Yamaha] make it possible for a

moderate-price receiver to provide performance that would have been unimaginable only a short time ago."

And the CR-840 is only one example in Yamaha's fine line of receivers. For instance, High Fidelity magazine's comment about the Yamaha CR-640 receiver: "From what we've seen, the Yamaha CR-640 is unique in its price range."

And Audio magazine has remarks on the Yamaha CR-2040 receiver: "Without a doubt, the Yamaha CR-2040 is the most intelligently engineered receiver that the company has yet produced, and that's no small feat, since Yamaha products have, over the last few years, shown a degree of sophistication, human engineering, and audio engineering expertise which has set them apart from run-of-the-mill receivers."

Now that you've listened to what the three leading audio magazines had to say about Yamaha receivers, why not listen for yourself? Your Yamaha Audio Specialty Dealer is listed in the Yellow Pages.

To obtain the complete test report on each of these receivers, write: Yamaha International Corp., Audio Division, P.O. Box 6600, Buena Park, CA 90622.

Quotes excerpted from June 1979 issues of Stereo Review, High Fidelity and Audio magazines. All rights reserved.



 **YAMAHA**

THE BEST SOUND IS THE PUREST.

LUX Audio...

*Pure
and
Simple*

To make a sound system pure and simple has been the dream of audio engineers. Lux accomplished this through the unique Duo-Beta system for all amplifiers. For total harmonic distortion (THD) you can't hear. And transient intermodulation (TIM) you can't even measure.

With tuners, Lux took an equally effective approach. The Closed Locked Loop System for infinitely precise tuning accuracy. And the Acculock System, an electromechanical locking device to reach and hold that tuning precision.

Duo-Beta

Negative feedback is a corrective measure to maintain sound purity by lowering THD. While doing that, however, it can increase TIM. A "no-win" solution. So Lux designed amplifiers that needed no correction.

Too much feedback can destabilize amplifiers and cause damage. Too little reduces damping and increases low frequency noise and rumble.

Duo-Beta delivers the precise amount of feedback needed through two circuit paths, eliminating the last vestiges of audio impurity. That's the Lux touch.

CLL Tuning

Most good tuning systems use quartz lock synthesizers. And they work. But they only work on the local oscillator or front end. Lux's CLL circuitry, on the other hand, controls all the stages of a tuner, from front end to IF and detector circuits.

CLL circuitry, based on the crystal controlled frequency transmission of the broadcasting station provides total tuning...stable and accurate.

Acculock

This is the typical Lux touch. A simple way to assure tuning precision. So simple, you can't mistune even if you want to. Because at the exact center tuning point, the Acculock system puts a mechanical lock on the tuning knob. For about one second, you can't even move that knob. The CLL system says when. The Acculock system does it.

Pure and simple systems

T-400 AM/FM Stereo Tuner

T-450 CLL Acculock AM/FM Stereo Tuner:

IHF usable sensitivity: 10.3dB (1.8µV)

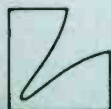
L-450 Integrated Amplifier: A Duo-Beta unit; 50 watts per channel RMS, both channels driven into 8 ohms, from 20-20,000 Hz with no more than 0.03% THD.

L-480 Integrated Amplifier: A Duo-Beta unit; 70 watts per channel RMS, both channels driven into 8 ohms, from 20-20,000Hz with no more than 0.05% THD.

L-580 Integrated Amplifier: A Duo-Beta unit; 100 watts per channel RMS, both channels driven into 8 ohms, from 20-20,000Hz with no more than 0.03% THD.

Sophisticated technology

The technology described above has been proven on Lux's high end models. You get the benefits, but not the cost of more sophisticated systems. That's another Lux touch. Pure and simple.



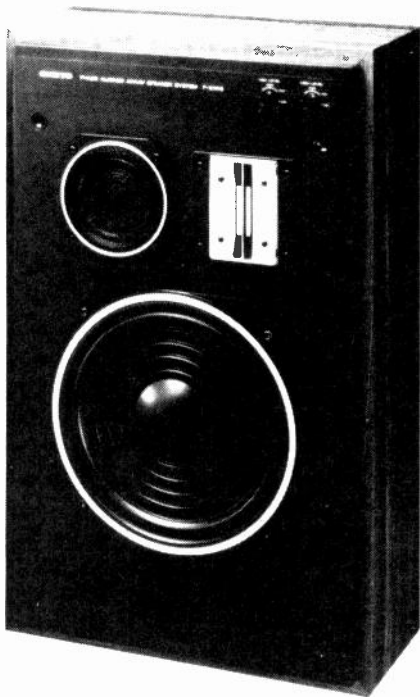
Ultimate Fidelity Stereo Components

LUX Audio of America, Ltd.

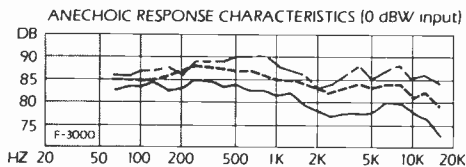
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Onkyo in Phase



Onkyo F-3000 loudspeaker



■■■■■ boundary-dependent region
 ——— average omnidirectional response
 - - - - average front hemispheric response
 - · - · on-axis response

AVERAGE OMNIDIRECTIONAL OUTPUT
 (250 Hz to 6 kHz)
 81½ dB SPL for 0 dBW (1 watt) input

CONTINUOUS ON-AXIS OUTPUT (at 300 Hz)
 109 dB SPL for 20 dBW (100 watts) input

PULSED OUTPUT (at 300 Hz)
 122½ dB SPL for 33½ dBW (2,400 watts) peak

"NOMINAL" IMPEDANCE 5.5 ohms

APPROX. TWEETER CONTROL RANGE (re "flat")
 +2 dB above 3 kHz; see text

APPROX. MIDRANGE CONTROL RANGE (re "flat")
 +2 dB, 600 Hz to 6 kHz; see text

are reproduced with clarity and honesty of timbre. Imaging, too, proves remarkably accurate and is notable for its front-to-back depth. High frequencies, especially the demanding percussives of piano and triangle, are handled with clarity and verve. Obviously, we are enthusiastic about the 94, as we have been about each of the AR vertical models we have heard. While they certainly are not equal in absolute performance—the 94's deep bass is not as magisterial as that of the 9, for example—the littlest of the genus offers exceptional sonic value, in our estimation.

Circle 131 on Reader-Service Card

Onkyo F-3000 loudspeaker, in wood enclosure with vinyl finish. Dimensions: 16½ by 26¼ inches, 11 inches deep. Price: \$350. Warranty: "limited," five years parts and labor. Manufacturer: Onkyo Corp., Japan; U.S. distributor: Onkyo U.S.A. Corp., 42-07 20th Ave., Long Island City, N.Y. 11105.

Attempts to maintain phase accuracy in loudspeakers—insuring that the sound emanating from the separate drivers reaches the listener at the same time—have usually led designers to mount traditional drivers in "stepped" or canted cabinets to keep the voice coils of all drivers in the same vertical plane. Onkyo, however, takes another tack altogether in its F-3000 Phase Aligned loudspeaker. The flush-mounted 11-inch woofer and 4-inch midrange have annularly ribbed flat diaphragms formed of a blend of polyurethane and felted paper. The high-frequency driver, too, comes in for some revamping with what Onkyo calls a Direct Drive Membrane tweeter, whose lightweight voice coil is laminated directly onto a thin plastic film and then suspended in a magnetic field—essentially the sort of driver being called a "ribbon tweeter" by some companies.

The F-3000 is intended for floor placement, and each unit comes with a pair of black wooden stands that screw into the bottom of the enclosure. So mounted, they raise the speaker and tilt it back slightly to aim it toward the seated listener. Two controls, MID and HIGH, are located on the front baffle behind the grille; screw-down posts for hookup to the amplifier are provided on the back of the cabinet. Careful craftsmanship characterizes the construction of the F-3000, and close examination is required to distinguish its vinyl finish from the rosewood it imitates.

The data from CBS Technology Center define the speaker as moderately efficient for an acoustic suspension design and capable of accepting prodigious power. In the pulsed power tests, CBS's own amp ran out of steam before unacceptable distortion could be produced. Paralleling two pairs may cause some amps to balk. Impedance averages about 8 ohms across the frequency band above bass resonance. The minimum measured impedance is actually below 4 ohms between 1 and 2 kHz, admittedly an area with less musical energy than in the 100-Hz range of the "nominal" (5.5-ohm) impedance.

The controls produce little effect when they are turned to their MAX settings from the indicated NORMAL at which the lab made its measurements and we did most of our listening. At the minimum setting, however, the HIGH control effectively shuts down the tweeter above 5 kHz, while the MID cuts response by about 17 dB at 2 kHz. Such extremes always are a travesty of high fidelity, to our way of thinking.

Distortion figures, especially for the harsh-sounding third harmonic, are extremely low. At both moderate and loud listening levels, traces depicting third harmonic products show an average of about ½% across the entire test spectrum. Second harmonics remain below 1% at loud levels and below ½% at moderate levels in the midband but rise to about 2% between 2 and 5 kHz at both levels. Transient waveform reproduction is exemplary; both the 300-Hz and 3-kHz waveform traces are virtual duplications of the input signal.

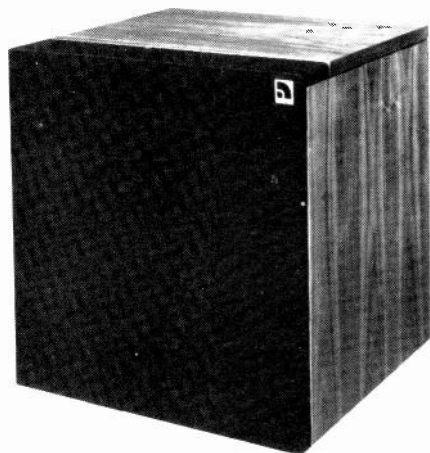
In listening tests we are delighted with the overall performance of the F-3000. While some of the other "exotic" tweeters we've heard suffer from sonic flaws, the Direct Drive Membrane presented a vivid re-creation of just about any high-frequency signal we fed to it; delicate brushed cymbals that had been all but lost on another speaker here emerged with clarity and proper balance. Likewise, midrange and upper bass are handled with an up-front, uncolored immediacy. We sometimes detected a slight heaviness in the bass—which, on some program material, can be restrained by a bit of bass cut at the preamp. Stereo imaging is spacious side to side, with a dramatic frontal projection if somewhat less depth than

we often find in speakers of comparable overall accuracy.

The F-3000 presents a reshaping and rethinking of traditional materials and techniques in the development of a more accurate dynamic loudspeaker. To what extent these technical specifics—as opposed to care in the general design and construction—are responsible for the success of the project is, perhaps, a moot point. But it is, unequivocally, a fine loudspeaker.

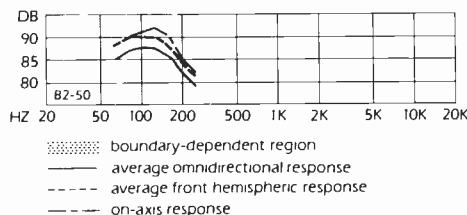
Circle 134 on Reader-Service Card

An Excellent Subwoofer From Sweden



Audio Pro Ace Bass B2-50 subwoofer

ANECHOIC RESPONSE CHARACTERISTICS (0.85V input to L ch; sensitivity at "1"; crossover at max)



Audio Pro B2-50 Ace Bass Subwoofer, in walnut or black ash wood enclosure with built-in power amp and crossover options. Dimensions: 18 by 17½ inches (top), 21 inches high. Price: \$995. Warranty: "limited," five years parts and labor, transferable. Manufacturer: 3Dgruppen ab, Sweden; U.S. distributor: Intersearch, Inc., 4720-Q Boston Way, Lanham, Md. 20801.

The Audio Pro design seeks—successfully, in our opinion—to solve all the problems inherent in trying to integrate a separate subwoofer into an existing system. It offers independently variable low-pass (subwoofer) and high-pass (main system) crossover-frequency adjustments, plus a wide-range level (sensitivity) control for the subwoofer band, to optimize the sonic mating between it and the speakers with which it will be working. It includes a power amp for the subwoofer band so that the main system's amp can put all of its resources into the band that will be handled by the original speakers. An automatic AC-switching device eliminates a separate trip to the subwoofer amp each time you turn on the system. Casters make it easy to experiment with placement for optimum blend with the main speaker pair or to trundle the subwoofer out of the way when it's not in use. All told, this represents greater adaptability than in any subwoofer we've tested to date.

The amplifier section actually does more than amplify; its relatively complex circuit (the Ace Bass after which the model is named) resembles some speaker "servo" circuits in sensing current through the drivers and transmitting the information via a negative feedback loop to the amplifier proper and includes a "soft-clipping" waveform shaper that cuts in when signal values come within about 2 volts of the hard-clipping ceiling. The input to the amplifier section combines the two channels via a 138-Hz low-pass filter and therefore is mono (L+R) from that point on. Further low-pass filtering, for the variable turnover, comes later on. The output feeds two identical drivers, wired in parallel, with one connected out of phase and mounted back to front for a "push-pull" configuration said to cancel second-order distortion products. The port of the bass-reflex enclosure is on the bottom, held the correct distance above the floor by the casters.

Because of the intimate relationship between the electronics and the drivers, the subwoofer is driven by its own amp whether you feed it from a line-level output (either from the main output of a preamp or from the pre-out connection, if it has one, on a receiver or integrated amp) or from power-output (speaker) terminals. The B2-50 employs DIN connectors (coded two-prong jacks for power connections, a five-pin input/output jack for line signals), and appropriate adapters are packed with it. The recommended setup, which we favored in our testing, uses only the five-pin jack and the adapter for the familiar RCA-style ("phono") pin jacks for the preamp output and power-amp input. The preamp signal feeds into the crossover, where the low-pass portion goes directly to the built-in amp, while the high-pass portion goes back to the main system for amplification. In this configuration, the satellite speakers are driven directly from that main amp.

If you have a receiver with no pre-out/main-in connections, you can feed its power output to one pair of power connections on the B2-50 and use the other pair for the connections to the satellites. The signal for the subwoofer is taken off the internal jumpers between these pairs; thus it feeds the built-in amp and drivers via the low-pass filter (and a level-reducing pad), but the full frequency range goes to the satellites, disabling the high-pass crossover control. The satellites can be paralleled with the subwoofer at the receiver output, instead of the subwoofer jack panel, with essentially identical results—as the excellent owner's manual spells out.

But best results require use of the variable high-pass filtering and, therefore, of the line-level connections. (They cannot be used effectively with a receiver's tape in/out connections because any change in the volume-control setting would alter the output from the satellites only; the subwoofer's sensitivity control

Circle 42 on Reader-Service Card ▶

SONY



Heavy.

Introducing another Sony only. The MDR series open-air headphones. The smallest, lightest stereo headphones available today. Or tomorrow.

With our lightest at 40 grams, you will barely know you're wearing them. Yet the sound is dynamite.

Through a remarkable new audio breakthrough, our engineers have succeeded in reducing big-headphone technology down to the size of your listening channels.

The MDR series headphones' airy spaciousness delivers absolute clarity through an ultra-small driver

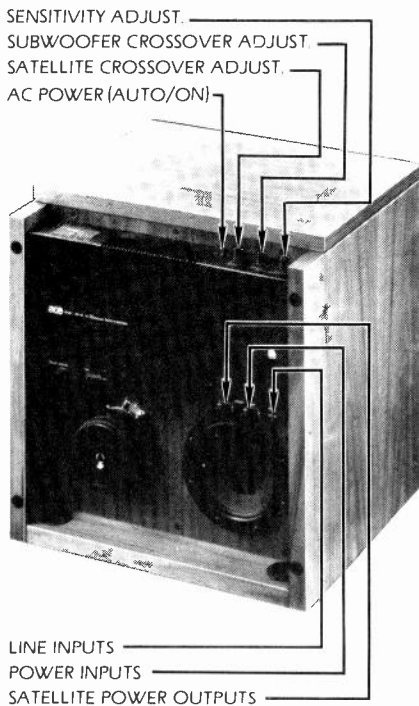
unit that produces more than three times the energy of conventional circuits. And a new high-compliance diaphragm accurately reproduces the 20 to 20,000Hz bandwidth and improves low-range response.

That means you can listen to the heaviest of music for hours. Lightly. And know that you're hearing every nuance of the original recording from deep bass to the highest treble.

Listen to our new MDR series headphones. They're light. And heavy.



STEREO HEADPHONES
MDR



would have to be readjusted.)

The primary adjustment is at the sensitivity control, to balance the subwoofer's level to that of the speakers it supplements. Generally, we began with a rough adjustment here, with both crossover controls set at 100 Hz, then experimented with the latter to see if we could improve the mating between the deep bass and the remaining sound, adding a sensitivity touchup if it seemed necessary. With well-designed satellites, both crossover controls probably are best kept at about the same frequency. Some speakers whose bass range does not extend very deep are intentionally underdamped to create a peak just above the bass rolloff and give the impression of more bass; however, they typically have a boomy one-note quality in this region. For them, the manual recommends setting the high-pass filter to a higher frequency than the low-pass filter. The idea is to play off the satellite's peak against the high-pass control's attenuation for a flat net output. Classic wisdom has it that relative level, frequency, and Q (sharpness) of the crossover filters should all be independently variable for precise mating of a subwoofer with the main speakers; the Audio Pro adjustment scheme comes close to offering this ideal flexibility with fewer controls and, therefore, less chance for user confusion.

Much of the measurement technique at CBS Technology Center is calculated for full-range speakers and uses 300 Hz as a touchstone. This frequency is above the subwoofer's bandpass, much of which lies below the 60-Hz rating limit of the lab's anechoic chamber. As a result, the quantity of data in our subwoofer reports is relatively restricted. The response measurements do confirm good output (that is, substantially flat, insofar as it can be judged) to below 30 Hz, with a sharp rolloff at about 25 Hz. The upper frequencies at which response is 3 dB below 40-Hz output are remarkably close to those shown on the calibrations of the low-pass crossover control. With a continuous 100-Hz tone, signs of distress did not appear until output was raised to 106 dB SPL (with a 2.7-volt input and the sensitivity control set at "1"). Impedance is moot, of course, in a self-powered speaker. Distortion, in all tests, reached its maximum in the neighborhood of 30–40 Hz. The second harmonics are extremely well controlled: no more than about 1% at an output level of 90 dB SPL and about 2% at 100 dB, and remaining well below ½% from 100 Hz up in all the tests. The third harmonics are not as low but still qualify as good by comparison to other speakers in this frequency range. Maxima at the two tests levels ran about 3% and 10%, respectively, with all third harmonics below 1% from 70 Hz up.

All of this suggests clean and ultradeep bass, and enough of it to match just about any speaker you want to use the subwoofer with. Our listening tests concur. If the main speakers are fine reproducers in all respects except bass response, the B2-50 can do wonders. And it makes very little difference how efficient the main speakers are, since the 16-dB sensitivity adjustment range is more than enough to match any model we could come up with. Positioning is as important as adjustment if best results are to be obtained. Though theory dictates that the ear loses its ability to detect source direction below 100 Hz, some higher frequencies (however attenuated) do get through the crossover, and we found it easiest to get a good blend with the main speakers' stereo image when the subwoofer was between them. If the listener's distance from it differs substantially from his distance from the main speakers, phase anomalies can result at the crossover. And its placement against a wall or furniture or under a table can significantly color the sound, as it can with any speaker. But when appropriate care has been paid to all these details, its performance can't be bettered by any subwoofer we know of. Add to this its relatively compact size, and it is an exceedingly attractive design.

On top of these sterling virtues are the styling and the AC system. All of the controls and connections (as well as the drivers) are on the front panel behind the easily removable grille cloth. The wiring passes from the electronics panel down to openings in the bottom, where it can be dressed back beneath the enclosure, out of view. Very neat. And the automatic AC switching obviates your ever having to remove the grille once you have the adjustments just as you want them for the final subwoofer placement. The slightest signal in the audio automatically turns on the built-in amp instantly if the AC switch is in its AUTO position; several minutes after all audio input has ceased, the amp reverts to its STANDBY mode, in which current drain from the wall socket is negligible. If you will be away from home for some time and

Synthesized Art.

Sony's new receiver creates higher-fi with a computerized tuner, a DC power amp and Pulse Power Supply.

Dream up a stereo test and compare our new STR-V55 receiver work of art with any other receiver you care to hear. Or view.

The measure of the receiver you invite into your home should feature unusually intelligent versatility. Ample power. Inaudible distortion. And an attractive design that speaks with a quality "finish."

Of course, we'd like to recommend our STR-V55 because we synthesized our newest technology to give you the incredible accuracy of frequency synthesized tuning, a versatile microcomputer and silent, uninterrupted power. The tuner section is so sophisticated that a highly stable quartz-crystal oscillator locks in AM and FM signals for brilliantly faithful reproduction of broadcast programming.

And the microcomputer gives you tuning options that simply don't exist anywhere else.

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

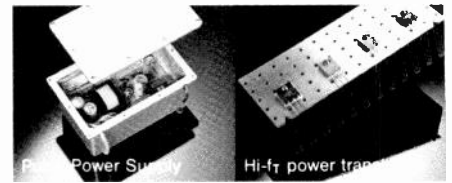
Choose auto tuning to capture stations with frequencies that you don't know for certain. A touch of a button precisely finds the next station encountered up and down the frequency band.

Manual tuning lets you approach known frequencies at high speed

and then obtains the exact frequency in precise, discrete steps.

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

Our beauty is not only designed for easy viewing, it's coordinated to be proudly displayed. Bright electro-fluorescent digits



It's also important to know that an efficient, compact Pulse Power Supply provides stable DC power even at peak levels. And highly responsive Hi-fi power transistors artfully reproduce complex wave forms even at high frequencies and full output power.



STR-V55

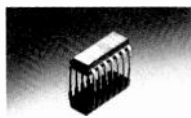
display frequencies.

Bright green LEDs in a five-step array show signal strength. And red LEDs pinpoint your favorite stations at a glance.

Consider the power of 55 watts per channel that propels the intimacy of the original performance through Sony's advanced DC amp technology. And a high-gain low-noise phono amp in the preamp section enables you to even use an MC cartridge with your turntable to capture the subtleness of the softest, most delicate music.

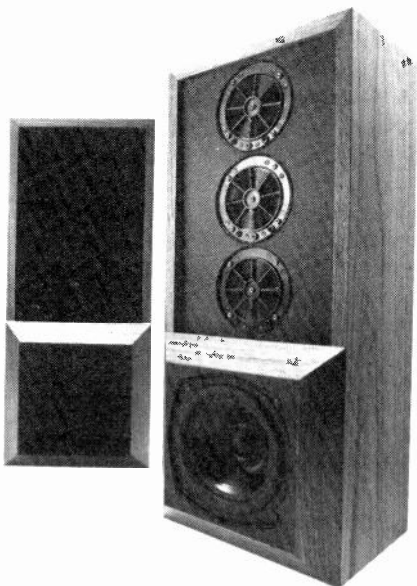
Sound is so clear that quiet intervals are *quiet* even at the highest listening levels.

Sony's STR-V55 is more of a receiver because you demand to hear more of your music. Own our masterpiece.

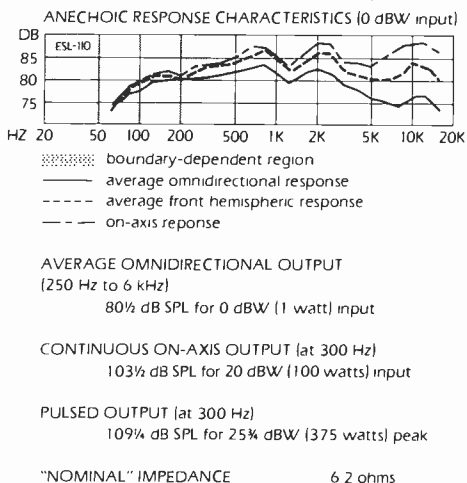


SONY

Dennesen's Hybrid Mini



Dennesen ESL-110 loudspeaker



want no current drain at all, you can switch the AC to OFF. In details like these, as well as in its overall design, the B2-50 testifies to exemplary care in considering its user and his needs. We recommend it without reservation.

Circle 133 on Reader-Service Card

Dennesen ESL-110 loudspeaker system, in wood cabinet with walnut-veneer finish. Dimensions: 7½ by 18 inches (front), 8 inches deep; 8-foot AC power cord attached. Price: \$500 per pair. Warranty: "limited," three years parts and labor. Manufacturer: Dennesen Electrostatics, Inc., P.O. Box 51, Beverly, Mass. 01915.

To our knowledge, the ESL-110 is unique—a combination electrostatic/dynamic speaker system only slightly larger than the common, strictly dynamic, mini variety. A featherweight at 14 pounds, the 110 contains three separate 3-inch electrostatic elements with 12 square inches of total radiating area plus one 5-inch Bextrene woofer mounted in its own acoustic suspension enclosure. The bevels on the stepped cabinet are designed to minimize edge diffractions; the "step" itself allows phase alignment of the woofer's voice coil with the electrostatic elements. Like other tiny speakers, Dennesen's does not attempt ultra-deep bass response, which could be achieved in so small an enclosure only at the price of preposterously large bass-driver excursion and input power. If you can do without that last octave or two, you can use the 110 as is; if not, Dennesen (and others) can supply a subwoofer to extend the range.

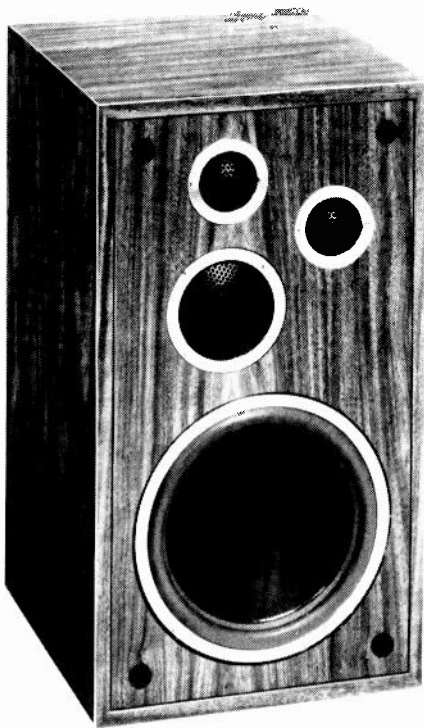
Like its (much larger) full-range electrostatic progenitors, the 110 needs a source of external voltage to operate, and each unit must be plugged into an AC power outlet. That accomplished, connection to the amplifier is via standard screw-down posts. Physical construction of the wood-veneer enclosure seems quite neat and sturdy. Data from CBS Technology Center disclose that the 110 does not take well to high power inputs. Though it passed the 300-Hz continuous-tone test at the 20-dBW (100-watt) level—for 103½ dB of output—the harmonic distortion tests indicate that in real-world conditions the speaker cannot be driven to that level without excessive distortion, particularly at lower frequencies. So CBS chose 94 dB SPL for the high-level distortion test in order to keep distortion at 100-Hz (the range in which you would cross over to a subwoofer if you use one) from exceeding the test's 10% maximum. Obviously, the 5-inch woofer, which is asked to reproduce frequencies up to 3 kHz, simply cannot handle the bottom two octaves of the audible band at this level. We can be more sanguine about the distortion picture at moderate listening levels, however: Third harmonics average well below 1% across the band, and second harmonics average a good deal lower, though they rise above 1% in the region between 400 Hz and 1 kHz.

Impedance values are remarkably consistent throughout the midrange and lower treble, ranging from the nominal value of 6.2 ohms (at 360 Hz) to slightly less than 5 ohms (at 5 kHz). At both extremes of the band, impedance rises fairly sharply—to 38 ohms at the 65-Hz woofer resonance and to just over 10 ohms at 12 kHz. Waveform reproduction, as depicted in scope photos, is excellent in both the 300-Hz and 3-kHz tests, with only a hint of what may be reflections in the latter.

We set up our listening evaluations both with and without an auxiliary subwoofer. Without the subwoofer, auditioners found the 110s adequate in bass response; when asked to give their evaluations after hearing it in combination with the separate low-frequency driver, they were less prepared to comment positively about its stand-alone low-frequency performance. (Our experience has been similar in our past auditions of minisystems.) Predictably, midbass and midrange frequencies fared better than the bass. Vocals, especially, won our plaudits. And the electrostatic elements lend high frequencies the airy quality that has won a continuing audience for this genre of driver. We were bothered, however, by some steeliness in strings, whether bowed or plucked, and woodwinds' upper registers sometimes seemed harshly overetched. Since the speaker has no tweeter attenuator controls, we used our preamp's treble control to mitigate some of these effects.

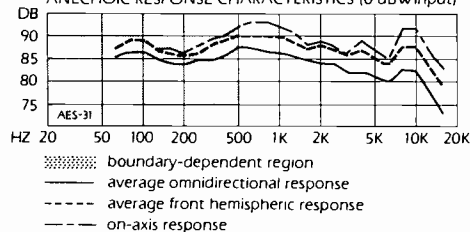
Your attitudes about minispeakers—either by themselves or in tandem with a subwoofer—will dictate your response to the ESL-110, as we see it. If the format's physical dimensions suit your listening room or if the deep-bass underpinnings that can be reproduced by few moderate-size systems are a necessity in your listening (therefore requiring a subwoofer in any event), the availability of a mini with electrostatic high-frequency reproduction will be welcome news. It does, indeed, bring an airiness to the upper end that is missing in most of the minis we

AES Speakers Make Debut



AES-31 loudspeaker

ANECHOIC RESPONSE CHARACTERISTICS (0 dBW input)



AVERAGE OMNIDIRECTIONAL OUTPUT
(250 Hz to 6 kHz)

84% dB SPL for 0 dBW (1 watt) input

CONTINUOUS ON-AXIS OUTPUT (at 300 Hz)

109 dB SPL for 20 dBW (100 watts) input

PULSED OUTPUT (at 300 Hz)

120% dB SPL for 31¼ dBW (1,330 watts) peak

"NOMINAL" IMPEDANCE

4.6 watts

have worked with, and (with some judicious use of the treble control) we find the 110 among the more successful designs of the type. On balance, however, we still prefer through-designed full-range systems to the mini/subwoofer alternatives, both for their inherent sonic values and for their cost-effectiveness. Considering how popular the mini is at present, we're aware that we may be at odds with the sentiments of many readers in making this statement. And when all is said and done, each listener must remain the final arbiter for his own system.

Circle 132 on Reader-Service Card

AES-31 loudspeaker system, in wood enclosure with vinyl finish. Dimensions: 13 by 23 inches (front), 11 inches deep. Price: \$150. Warranty: "limited," five years parts and labor. Manufacturer: Audio Electronics Systems, Inc., 101 N. Park St., E. Orange, N.J. 07017.

Despite the fact that Audio Electronics Systems is a new name in the speaker market, it is hardly a new company. For some twenty-five years, its parent company—United Speaker Systems—has been supplying others with raw drivers and complete systems for sale under their brand names. From 1959 to 1971, for instance, USS manufactured seventeen speaker models for Fisher Radio. In its first proprietary line, AES offers five models, ranging from a two-way ported bookshelf system to a three-way, four-speaker acoustic suspension design.

The Model 31 is a three-way system housed in a ported enclosure of the traditional "bookshelf" size. Its driver complement consists of a 10-inch woofer, 1½-inch soft dome midrange, and 2-inch cone tweeter. AES evidently expects that either the dealer or the purchaser may want to use it without the grille in place; much care has been taken with finish of the baffle board and in fitting wire-mesh screens over the midrange, tweeter, and port opening. Since the woofer is unprotected, use of the grille still is desirable. The usual screw-down posts on the rear of the cabinet connect to the amplifier; no driver balance controls are provided.

In tests at CBS Technology Center the AES-31 easily withstood the 20 dBW (100 watts) of the continuous-tone input test and accepted pulsed inputs up to peaks of 31¼ dBW before distorting excessively. Impedance figures average about 8 ohms across the audible band, though their risings and fallings suggest a less than ideal load for a typical power amp. The lowest value among them actually is about 2.5 ohms at 12 kHz. Since relatively little signal is to be found this high, the most important minimum is certainly that of the "nominal" impedance: 4.6 ohms at 110 Hz. The impedance also is below 5 ohms in about 2¼ octaves of the treble range, from about 1 to 5 kHz, so it would be safer to ignore AES's 8-ohm rating and treat the 31 as a 4-ohm model.

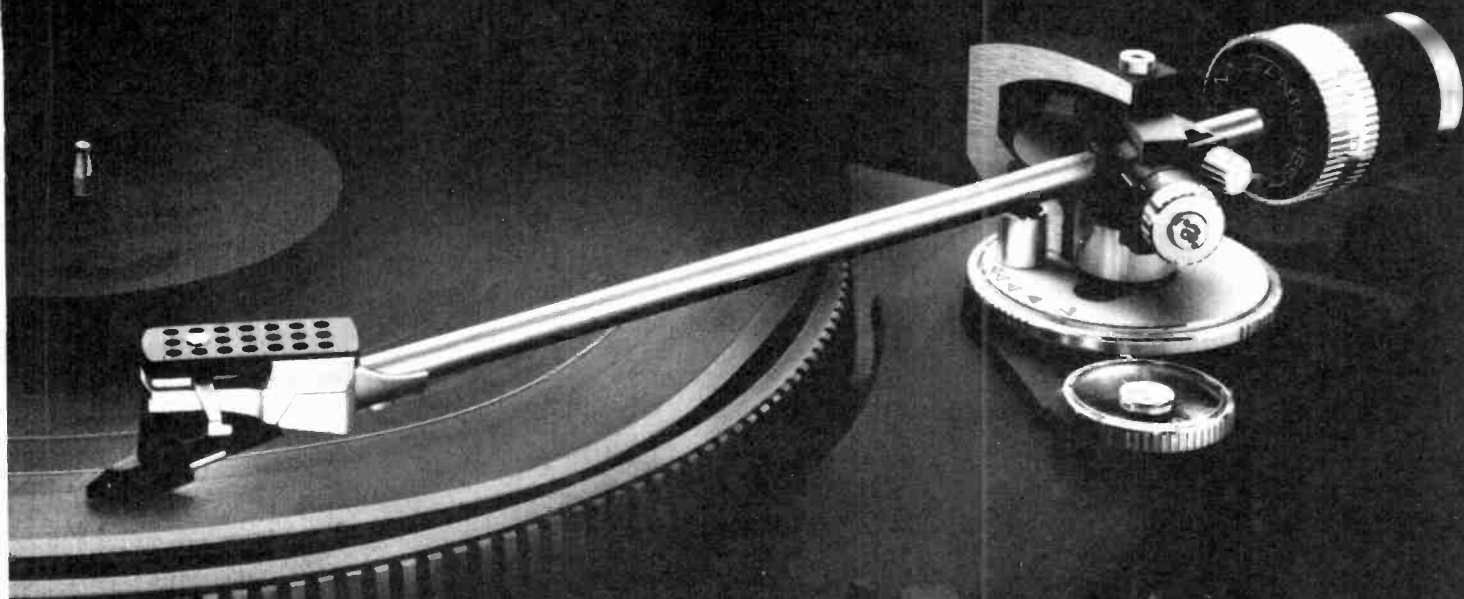
At moderate listening levels, distortion products average very low indeed, with second harmonics well under 1% and third harmonics at about ½%. At louder levels (100 dB SPL), the picture remains similar for third harmonics, but second harmonic distortion rises to about 2% between 200 Hz and 1 kHz and actually reaches about 10% at 5 kHz. Waveform reproduction, as evidenced in oscilloscope photos, shows excellent fidelity in 300-Hz pulses, with just a bit of overhang and ringing with 3-kHz pulses.

At normal (moderate) listening levels, bass is convincing and well articulated, without the johnny-one-note quality of some ported designs. Imaging is quite spacious side to side but relatively shallow back to front. This broad image, combined with a gutsy frontal projection, is likely to please jazz aficionados more than classicists. At moderate levels we found the 31 capable of reproducing a wide variety of program material with verve. At high levels, however, strings tend to get a bit edgy with a metallic bite to the higher notes that may stem from the relatively high distortion in the 5-kHz range. A nasal color also creeps into woodwinds and brass at these levels, though the effect is not as noticeable with less demanding rock.

Perhaps the key word for the AES-31's sound is "bright." That word can be taken as either commendation or complaint. If you like the ultravivid immediacy of a bright speaker, you'd do well to audition the 31; if neutral, uncolored reproduction is your criterion, this is not a high-priority model for you. If you like its sound and format, you may be particularly pleased to find that its efficiency—which is higher than that of comparably sized acoustic suspension models—and relatively low impedance make the most of many modest-power transistorized amps for installations (a typical urban apartment, for example) where reproduction levels range only from background to moderately loud.

Circle 135 on Reader-Service Card

Test labs now use
an extraordinary new instrument to
evaluate record playback performance.
A warped record.



Magazine test reports are usually based on measurements made with professional equipment and under ideal laboratory conditions. None of which matches the real-life situation you face at home.

Virtually all records manufactured today are warped. And even records that are slightly warped can make conventional tonearm and cartridge combinations (typically 18 grams effective mass) distort badly and even leave the record groove.

The test labs know this, of course which is why they tried something different with Dual's 8-gram Ultra Low Mass tonearm and cartridge system. They added an innovative test instrument to their scopes and meters.

A badly warped record

The results of this new test are not reported as percentages, decibels or other technical jargon, but in clear and unmistakable language:

"Navigating the worst warps we could find, the Dual/Ortofon combination proved very agile indeed, with nary a mistrack."

High Fidelity

"... tracked the most severely warped records in our collection, usually so well that we heard nothing wrong." *Stereo Review*

"Even a severe warp that would normally throw the pickup into the

air will usually give no more than a slight 'thump' ... and most warps are undetectable by ear."

Popular Electronics

"The Dual takes dead aim at the fiend of disc reproduction—the warped record—and response to record warps practically is eliminated at the source." *Stereo*

One test lab, after making the usual measurements, chose to just listen to music as reproduced by ULM.

"There is no way measurements, or mere words, can describe the acoustic presence of this record player... highs are crystalline, with a purity we haven't heard before. The bass is so clean that one can hear new sounds from records, such as the harmonic vibration of unplayed strings on the double bass... overall definition and transient response were outstanding."

HiFi/Stereo Buyers Guide

You too can hear the difference ULM makes. Visit your local Dual dealer and be sure to bring your own "test instrument." Especially one that seem unplayably warped.

ULM.

A major breakthrough in record playback technology.

Write for our brochure describing all nine Dual ULM turntables. Prices start at less than \$150. United Audio, 120 So. Columbus Ave., Mt. Vernon, NY 10553.

Dual

ALL YOU HAVE TO DO IS LISTEN.

THE SANSUI 900 SUPER SYSTEM.

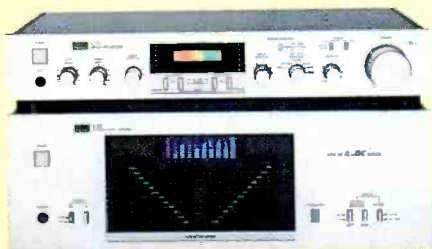
Just listen.

Your ears will tell you immediately. Here is sound that's just about as good as it gets. And your eyes will tell you here's styling that's a cut above the rest.

But best of all, here is a sensibly priced complete system of high performance separates that is as easy to use as it is to buy.

All you have to do is plug it in — and enjoy.

C-77 Control Center/ Preamplifier with Automatic Fader and Moving Coil Pre-Preamp Unique in offering full stereo mixing with the convenience of an automatic and manual fader for smooth, professional sounding transitions from any connected source to any other, plus a built in pre-preamp for moving-coil cartridges. Variable loudness control.



B-77 LINEAR-A DC Servo Power Amplifier with Spectrum Analyzer and Peak Power Meter. Sensibly rated at 60 watts/channel, min. RMS, both channels into 8 ohms from 20-20,000Hz, with no more than 0.03% THD. Direct-coupled throughout, it features Sansui's exclusive new "Linear A" circuitry for low distortion with high efficiency, along with separate 10-band spectrum analyzer and peak power displays that show just what your system is doing.

T-77 Quartz-PLL Digital Synthesizer FM/AM Tuner with 8 Preset FM/AM Stations and Auto Search Digital Quartz-PLL Synthesizer design, which guarantees the most accurate tuning possible, is the highlight of this extraordinary tuner. Stores up to 8 stations in memory circuits for instant recall.

This system also has a direct/



drive automatic-return FR-D3 turntable with its low 0.028% wow/flutter and 72dB S/N ratio.

The attractive audio rack that contains the 900's components has additional space for an optional Sansui metal-tape compatible cassette deck.

Also included are two S-50 12", 3-way loudspeakers specially designed to perfectly match the system's components and fill your listening room with an uncanny amount and quality of music.

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Letters



Simplified Miking

Herman Carter's comments about simplified miking ["Letters," July] are well-taken. Recently, listening to a tape I had made of a broadcast concert by the Chicago Symphony Orchestra, I realized the sound was more pleasant and natural than any disc, and the obvious explanation was that the number of mikes was held to a minimum—which one can confirm by attending a CSO concert. Whether this is dictated by concert hall etiquette or is a conscious choice by Chicago's sonically advanced WFMT, it approximates Mr. Carter's recommendations, except the mikes are still a good deal closer to the orchestra than is "the best seat in the house." The sound undoubtedly also benefited from first-generation dubbing and a minimum of control-room tinkering. I suggest that readers make their own tapes of live broadcasts. And, if my impression holds true, maybe we could expect expensive studio productions to deliver the same quality that WFMT presents every week.

Christopher Brewster
St. Paul, Minn.

One could easily argue that, in a symphonic concert, where the conductor is balancing the orchestral sounds according to what he hears, "the best seat in the house" is over the podium. Incidentally, WFMT is the subject of an article in this issue.—Ed.

Missing Music

Congratulations to Harris Goldsmith [July] for noticing the missing bars in Bernstein's old Columbia version of the *Eroica*. I have had other recordings with awkward chunks missing: a London *Till Eulenspiegel*, an Angel *La Mer*, and RCA versions of *Don Juan*, Tchaikovsky's Third, and Beethoven's Ninth. I have had a *Sacre du printemps* with Part I transferred at the wrong speed and a Verdi Requiem with the side break between the last two notes of the *Dies Irae*. I even have an *Eroica* that is credited to a French conductor but is directed by a German one. I discovered these errors for myself. I hope future reviewers will notice such things first.

Richard Sebolt
Springfield, Mass.

Scheherazade Soloist

In his June review of the reissue of

Erich Leinsdorf's recording of Rimsky-Korsakov's *Scheherazade*, R. D. Darrell wondered whether the violin soloist and concertmaster might have been the late Felix Slatkin. It was not Slatkin, but Israel Baker, also the exemplary soloist in Columbia's recording of the Schoenberg violin concerto (M2S 679).

The recording was made in Hollywood, in two sessions (c. 1960–61) on Stage 5 of the Goldwyn Studios. (Stage 5 was responsible for some felicitous musical sounds—Stan Kenton's "West Side Story" album among them.) Si Zentner had been engaged as principal trombone for the recording and asked me, his personal manager, to accompany him.

Bill Wagner
Sherman Oaks, Calif.

Another "Predictable Crisis"

I have another crisis to add to those Allan Kozinn discussed in his article on the classical record business [April].

What sadness in the classical recording field: HNH/Unicorn apparently has closed its doors for being excellent. I have bought more recordings on these labels in the past few years than any other—music by Moeran, Berkeley, Nielsen, Grieg, Cooke, all with fine orchestras, excellent notes, and surfaces the envy of the industry.

They offered offbeat repertory that most other labels shunned. I don't need another *Rite of Spring*, Brahms's First, or Sibelius' Second. But where else could I get a complete *Peer Gynt*, a *Maskarade*, or the successors to the modern British symphonic tradition that emerged from Vaughan Williams?

David Caldwell
Pittsburgh, Pa.

While HNH is now defunct, Unicorn recordings still are available in European pressings. As we noted in "Behind the Scenes" in August, they are imported by Euroclass Record Distributors, Ltd., 155 Avenue of the Americas, New York, N.Y. 10013.—Ed.

Whence Korjus?

The mystery over the origin and early years of Miliza Korjus, to which David Hamilton alludes in his review [July] of the Arabesque reissue of some of her HMV recordings, is apparently the way she wants it. There are numerous earlier LP transfers of her 78 discs, among them Preiser, OASI,

and Australian HMV. But the one that may have the inside story is "Prominent Estonian Singers" (Melodiya D 27182), containing material from HMV and RCA and prepared at the Tallinn studio in Soviet Estonia. The accompanying booklet states that she was born in Warsaw and moved to her family's Estonian homeland in 1920; a promising career there ended in some sort of artistic skulduggery, and she left.

According to an Estonian correspondent in New Jersey, Korjus was unsuccessful in getting into the opera house in Tallinn and went away mad. She apparently hates the country that turned her away and does not seem to acknowledge any roots there.

James Annala
McMinnville, Ore.

More on Schuller

Hurrah and congratulations on Gunther Schuller's "The Trouble with Orchestras" [June]. High time it was all said—high time for mediocrity and cynicism in music to be combated, and nowhere can the battle be better mounted than in the music press.

Friede F. Rothe
New York, N.Y.

Record Reissues

You never review reissues, even of historical records. The number of readers interested in such records is not that small; among them are members of the Furtwängler Society, Beecham Society, Mengelberg Society, Toscanini Society, et al.

Dr. Hans A. Illing, President
The Wilhelm Furtwängler Society
Los Angeles, Calif.

Among the records we recently reviewed have been: in May, Vol. II of "The Record of Singing," recorded 1914–25, and a *Trial by Jury* from 1927 and *H.M.S. Pinafore* from 1930; in June, a 1943 *Archduke Trio* and a Haydn sonata from 1946, plus reissues of *Scheherazade* LPs from 1961 and 1969 and a 1964 *Façade*; in July, we devoted two pages to Segovia recordings from 1927–39 and reviewed Tiana Lemnitz and Miliza Korjus reissues from 1934–48, as well as a disc from 1894–99 originals and a reissue of a 1965 *La Stravaganza* LP; and in August, besides reviews of records made by Gieseking (1953) and Fleisher (1956), we ran an article on Beecham recordings. (We also, by the way, review new records.)—Ed.

HIFI-CROSTIC No. 57

by William Petersen

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-Croscopic No. 57 will appear in next month's issue of HIGH FIDELITY.

Y	1	E	2	X	3	V	4	M	5	A	6	W	7	D	8	P	9	N	10	S	11	L	12	C	13	Y	14	V	15																																																																																																																																																																																																																																		
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INPUT

- A. Sullivan's only grand opera
- B. Obligation
- C. German-American pianist/composer (1833-94) "The Landing of the Pilgrim Fathers" (full name)
- D. c-d-e flat-f sharp-g-a flat-b-c (2 wds)
- E. With Word H, Samuel Barber compositions (2 wds)
- F. In the Homeric epoch, melody for reciting epics
- G. Knowledgeable about jazz (slang)
- H. See Word E
- I. Soprano Marshall
- J. Ostentatious; splendid
- K. High-pitched drum (comp)
- L. Mozart opera (3 wds)
- M. Learning
- N. "Casse- . . ."
- O. Folksinger Collins
- P. Lengthens the value of a note
- Q. "Bet bist du . . ."
- R. Debussy suite
- S. Paganini
- T. Gentile's predecessor
- U. A rapid scale passage
- V. Ravel, for one
- W. With Word Z, Schoenberg sextet
- X. Griffes composition for piano or orchestra (3 wds)
- Y. Walter Legge's widow
- Z. See Word W

OUTPUT

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

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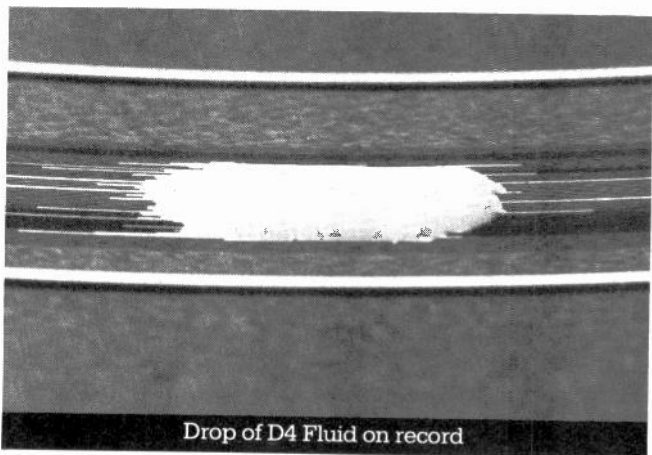
Aqueous Cleaning vs. Organic Solvents

Electron microscopy (Figure 1) shows the principal cause of record wear: small particles of microdust, deposited from the air by gravity, are ground along the record groove by the stylus. Surface noise goes up. Sound quality goes down.



Record etched by dust held to surface by "slick" treatment

Figure 1

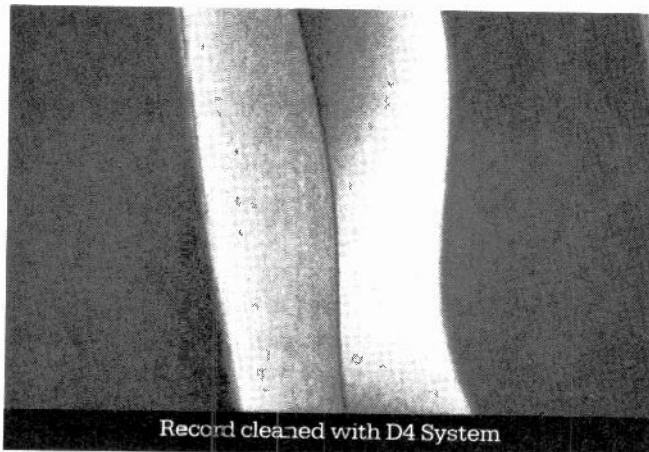


Drop of D4 Fluid on record

Figure 2

Figure 2 shows a drop of the aqueous Discwasher D4 Fluid, literally lifting dust and contamination out of record grooves. The extraordinarily complex D4 Fluid uses water pure enough for kidney dialysis, along with eleven chemically engineered additives that still results in lower dry-weight residue than most tap water. This formula is amazingly high in cleaning activity, uniquely safe for vinyl and vinyl additives, and preferentially "carries" contamination into the new Discwasher D4 pad.

In some record care products, organic solvents are used rather than water. Organic solvents such as ozone-gobbling chlorofluorocarbons, petroleum distillates (hexane, heptane) and alcohol concentrates are indeed speedy extractors and delivery solvents. They evaporate fast. Some organic solvents can dissolve vinyl stabilizers. Organic solvents may leave a "slick" looking record by treating the disc with other compounds carried in the solvent mix. In doing so, record contamination may also be dried back onto the disc in a nice even layer. Dust is often "held" to the record surface by "treatment."



Record cleaned with D4 System

Figure 3

Electron micrograph (Figure 3) shows a record cleaned with the Discwasher D4 System. High technology record care leaves only a clean surface.



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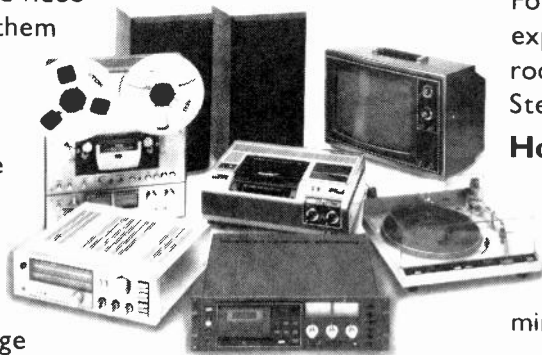


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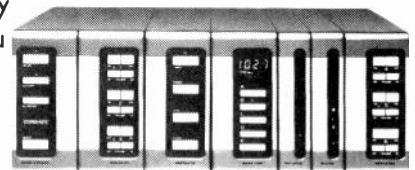
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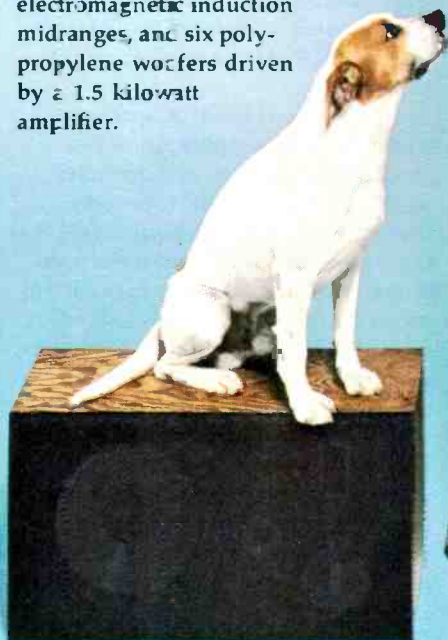
by Michael Riggs

Always evolving, yet often curiously familiar, loudspeaker technology is more than the collection of buzzwords that it may seem to the casual observer.

Despite the winds—nay, the hurricanes—of change over the last twenty-five years, it is remarkable how little loudspeakers have changed with regard to the ways they do their job. Direct-radiating cones and horn-loaded and electrostatic drivers have all been around for a very long time. The Heil tweeter, for instance, can be described as a horn-loaded device of sorts; Magneplanars and drivers such as Infinity's Emit are electromagnetic mimics of electrostatics; and Ohm's peculiar-looking Walsh driver has an "old-fashioned" voice coil at its heart. Even ionic (or plasma) speakers are not new.

The quality of sound reproduction

Sitting atop Infinity's bookshelf-sized R5e loudspeaker, our Nipper stand-in peers intently at the \$20,000 Infinity Reference Standard system. Composed of four 7½-foot-high sections, each side (two towers) contains 36 electromagnetic induction tweeters, 12 electromagnetic induction midranges, and six polypropylene woofers driven by a 1.5 kilowatt amplifier.



we take almost for granted today has come not so much from radical innovation as from clever twists on existing air-moving techniques and the application of new materials. This in itself is hardly surprising, since most of the time, nature yields only by inches, not by miles. We'll be taking a quick look at some of the most interesting new approaches, with an eye to what all the ruckus is about.

The Phase Race

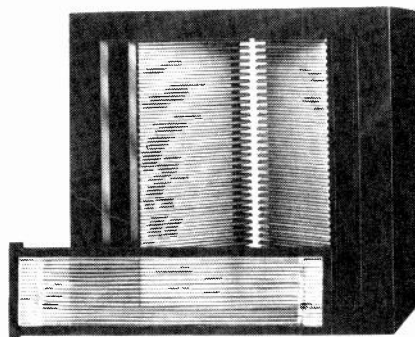
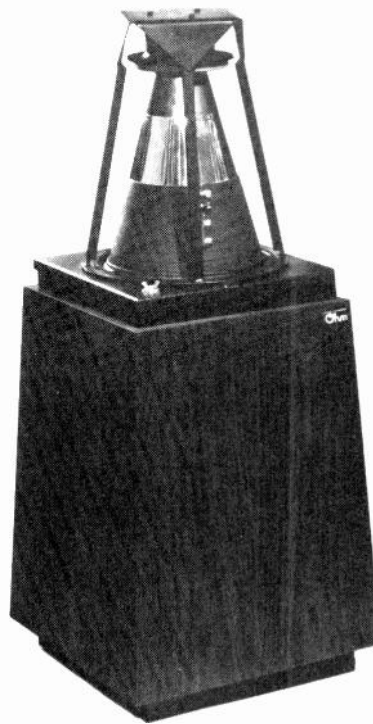
When you hear a kettledrum beat, say, at a concert, all of its components—fundamentals and harmonics—reach your ear at the same instant, regardless of their frequency. That is, they are perfectly in phase. But when the same sound is played through an audio system with conventional speakers, the higher frequencies arrive slightly (perhaps a quarter-millisecond) ahead of the lower ones because the woofer's voice coil lies farther behind the baffle board than the tweeter's and because of phase shift in the crossover filters.

It has long been known that very large phase perturbations impair audible fidelity, but until recently few engineers considered the small errors created by typical loudspeakers important. In this country especially, most still don't. However, a substantial minority has concluded that they are indeed audible, usually as an alteration or distortion of the recorded ambience, a blurring of the stereo image, or a general muddying of the sound.

The first company to make a big splash with phase compensation was Dahlquist, with its DQ-10. This rather unconventional-looking loudspeaker incorporates five drivers, each on its own baffle, mounted in a staggered array that aligns their voice coils in the same vertical plane. Many other manufacturers, including KEF, B&W, Technics, DCM, Ultralinear, B&O, Epicure, Fried, Wharfedale, Onkyo, Heath, and Pyramid, have also introduced phase-compensated models, usually with either stepped or sloping baffles to position the drivers.

Honing Rough Edges

Sloping baffles came into vogue largely because of the undesirable cabinet reflections and diffraction effects often created by stepped cabinets. Diffraction



The "new" seldom is totally so; for example, two major innovations of the '70s—the Walsh driver (top) and Heil air-motion transformer—can be analyzed in terms of predecessors.

tion occurs when a sound wave travels along the surface of a speaker panel and reaches an edge, where it sprays out into the room. The edges, in effect, become secondary radiators, repeating—with a very short delay—what the speaker has just projected. This very common phenomenon is known to cause interference effects that alter, or "color," a speaker's frequency response and is said by some to impair stereo imaging.

Any sharp irregularity on the surface of the baffle tends to become a source of diffracted radiation as well. For that reason, some manufacturers, such as Snell and KEF (and including many who are not concerned about phase response), use either curved baffles for

their drivers or narrow baffles with rounded edges. AR, among others, places a sound-absorbing "acoustic blanket" on the baffle around its high-range drivers to prevent sound from traveling along the front panel, thereby eliminating the opportunity for diffraction. Boston Acoustics combats diffraction with an unusually wide, shallow enclosure (which also promotes a uniform radiation pattern), and many designers have taken to mounting drivers flush on the front of the speaker, thereby reducing the number of surface features that might create diffraction effects.

Sound in Space

Diffraction might be considered part of the more general topic of radiation patterns, or dispersion, which has been receiving increasing attention of late. In this regard, there are three basic types of loudspeakers: front-firing (the vast majority), dipole (including most electrostatics and the Magneplanars), and "omnidirectional" (such as the Ohm F—which, typically, is omnidirectional only in the horizontal plane). At present, there is little consensus on which, if any, of these is best, though there does seem to be a growing feeling that the radiation pattern should be, as nearly as possible, uniform with frequency. That is, the frequency balance should be the same anywhere within the speaker's "listening area." Assuming for the moment that this is indeed the "correct" goal, it must be admitted that it is a very difficult one to achieve.

The reason is that all speakers tend to become omnidirectional below about 200 Hz and that, with drivers of practical sizes, most tend to become fairly directional at high frequencies. For front-firing designs, the strategies used to control diffraction also help to control sound distribution. Some omnidirectional designs use a reflector—often an inverted cone above an upward-firing tweeter—for wide (even 360-degree) distribution. A rather novel approach is embodied in the Beveridge electrostatic, which has a special enclosure that suppresses the back wave from the diaphragm and a lens arrangement that very nearly produces perfect hemicylindrical radiation.

Cerwin-Vega takes a different route to the same destination with its Metron Spiral Uniform-Force Thin-Film Transducer (dubbed SUFT-FET as a

quasi-acronym). It has a spiral voice grid on a 1.5-inch thin-film diaphragm suspended in a magnetic field. Current from the amplifier passes through the voice grid, causing it to move in the magnetic field. This driver is said to achieve horizontal distribution of 120 degrees at all frequencies.

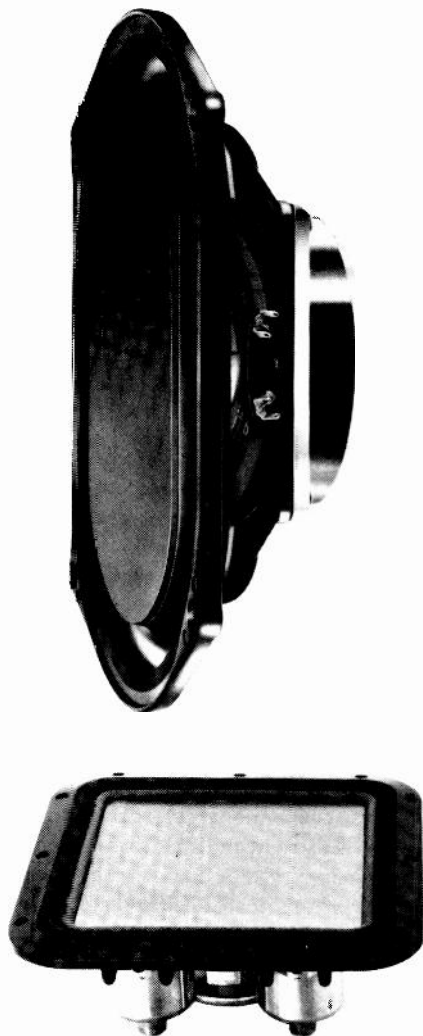
Weight Watching

Another advantage of a device such as the SUFT-FET is its relatively low mass. A loudspeaker is supposed to start moving as soon as a signal is applied, follow the signal perfectly, and stop moving the instant the signal stops. But all physical objects have mass—which is to say that they have inertia—and tend to resist changes in motion. The more massive a driver is, the more force will be required to control it and the poorer its transient response is likely to be, especially at high frequencies. The most straightforward way of attacking the problem is to make the mass of the driver as low as possible. This accounts for the proliferation of devices such as the "ribbon" tweeters of Decca, Pyramid, and JVC, which operate in much the same way as the SUFT-FET.

Electrostatic loudspeakers, such as the Dayton Wright XG-10 and the Quad, have long been renowned for their excellent transient response. They use a thin conductive plastic membrane as a diaphragm. It is charged to a very high voltage and stretched taut between two grids connected to the amplifier outputs. When a signal is applied to the grids, the diaphragm moves toward the grid with a charge opposite its own.

Magnepan and Magneplanar speakers are flat-panel, electromagnetic analogs to electrostatics. They use a thin diaphragm with wires running through it and suspended in a permanent magnetic field. The interaction between the permanent field and the alternating field created by the signal currents in the diaphragm cause the diaphragm to vibrate. Like electrostatics, these are very low-mass dipole radiators with inherently good phase response.

The Emit and Emim (electromagnetic induction tweeter and electromagnetic induction midrange) drivers of many Infinity systems and Onkyo's DDM (direct-drive membrane) operate on the same principle as the Magneplanars, but they are designed to be used in "conventional" speaker systems in place



Flat drivers, from long-popular KEF oval woofer (top) to the four-coil square model used by Sony in its all-flat-driver APM-8 system, seem to be coming into their own.

of ordinary cones and domes. One of their primary advantages is their relatively low mass, a property they share with the Heil drivers in ESS speakers, though the latter's accordion-folded diaphragms "squeeze" the air out, rather than pushing it in classic "piston" fashion.

Probably the last word in low-mass drivers is the ionic loudspeaker. The only member of this rare species now in production is the Plasmatronics Hill Type-1, which uses a plasma driver from about 700 Hz up to frequencies that are of interest only to bats. In this system, the temperature of a hot ionized gas is modulated by the output of the power amplifier, causing it to expand and con-

tract in response to the audio signal. The plasma acts as a virtually massless gas "diaphragm" and reportedly produces a hemispherical, phase-coherent output.

Using the Room

A common by-product of low-mass design is very smooth, extended treble response—a very important contributor to the overall sound of a system. In fact, a loudspeaker's frequency response is probably the most significant determinant of its quality. There are a good many loudspeakers in almost all price ranges with very flat response—in an anechoic chamber. Unfortunately, that is not a speaker's natural environment; in a real room, it must contend with reflections from the floor and walls that can cause peaks and dips in its response, particularly at low frequencies. This long-known fact accounts for the stock advice that you experiment liberally with speaker placement to reduce these effects as much as possible.

A distinction must be made between the way a listening room "loads" a speaker close to one of its boundaries—including the floor—and the way the reflective properties of those boundaries can be used in distributing the sound through the room. Some so-called omnidirectional designs make positive use of reflections in the latter way. The Bose Direct/Reflecting principle (first embodied in the Model 901) might be numbered, loosely, in that company, though it uses the boundaries for time delay as well. Alteration of frequency response is not the objective of such designs; indeed, Bose tells you to keep the speakers away from the walls, while its standard pedestal base keeps them off the floor. But when you move a speaker close to one or more boundaries, the resulting interaction does alter effective response.

In recent years, manufacturers have been more and more inclined to go for the jugular of this problem by designing their speakers to be placed in a particular position relative to room boundaries or, at least, to offer some response-tailoring options for specific placements. Such loudspeakers tend to have predictable response and can be chosen by the user to suit his decor: No longer will you buy a pair of speakers to hang on the wall and then find that they sound good only on the floor in the middle of the room. The first company to make the room-matching problem a

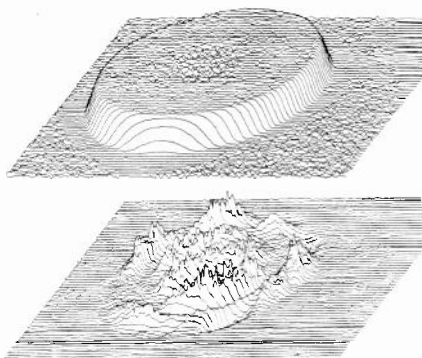
top design priority was Allison Acoustics. In recent years, other companies—including Acoustic Research, Snell, and Boston Acoustics—have followed suit.

By the Numbers

Advances have also been made in enclosure design techniques for woofers. The design formulas for acoustic-suspension speakers have been known for a long time. If the engineer does his math right, he can achieve exactly the response curve he wants without "fine tuning." Until recently, however, figuring out a vented system was a matter of making an educated guess and then pursuing a tedious routine of cut and try. And there was no guarantee that the final result would be the best possible one.

The pioneering work of mathematicians Thiele and Small changed the picture entirely. By applying electrical filter theory to woofers' acoustic-filter behavior pattern, they developed a general set of design formulas, of which the acoustic-suspension equations are a small subset. It is now possible for designers to juggle efficiency, enclosure size, and bass response in ways undreamed of a few years ago. With the aid of a computer, a designer can examine many alternatives in a short time and select the one that best serves his goals, serene in the knowledge that the product will do exactly what he wants and expects.

Computing Thiele alignments (as they have come to be called) is only part of the growing role of computer-aided speaker design and research. KEF, B&W, and Acoustic Research have led the way, using their magic abacuses to make anechoic frequency response measurements in ordinary rooms, to make detailed impulse response analyses showing exactly how a speaker or driver responds to input signals over time (handy for finding resonances and the like), to investigate cabinet resonance and flexing modes, to design optimal crossover networks, and to keep a running inventory of driver performance for creating closely matched pairs and picking a replacement driver should one blow in use. At first, all work of this kind was done on minicomputers, such as the DEC PDP-11, but AR recently began performing some of these tasks on an Apple II personal microcomputer costing only about \$4,000. At that price, it's



Computer, a major design tool of the '80s, was used to generate these graphic printouts for Celestion study of driver motion in pistonic (top) and breakup modes.

only a matter of time before small companies start playing some of the same games as the big boys.

Other manufacturers in Britain and Japan have been using laser interferometry and other sophisticated optical techniques to observe the breakup modes and resonances in drivers. Because conventional cone drivers are not perfectly rigid and are driven only from their apexes, they do not behave as perfect pistons. Instead, they flex ever so slightly, bending different ways at different frequencies and drive levels. The result is distortion. These new test methods enable researchers to actually see the effects of new materials and cone constructions. Rank Hi-Fi in England, manufacturer of Wharfedale loudspeakers, and Onkyo in Japan have been prominent exponents of this approach.

New Materials

The computers and lasers have borne fruit of several varieties. Sony, Technics, and Mitsubishi have turned to honeycomb sandwich drivers for high rigidity combined with low mass. Aluminum is used for the combs themselves, which are covered over with aluminum foil, carbon fiber, or plastic reinforced with glass fiber. The Mitsubishi drivers are fashioned as cones, but Technics, Sony, and Onkyo use flat diaphragms, which their manufacturers say behave more like pistons than cones do. Another advantage afforded by flat drivers is that, because the diaphragms mount flush to the baffle board, there is no need for staggered cabinets to achieve phase correction. The Sony drivers are further distinguished by the fact that

they are square and are driven at four points on the diaphragm. This is said to make the diaphragm move more as a single unit—hence the name APM, for accurate pistonic motion. Onkyo employs a polyurethane and paper laminate stiffened by four metal ribs.

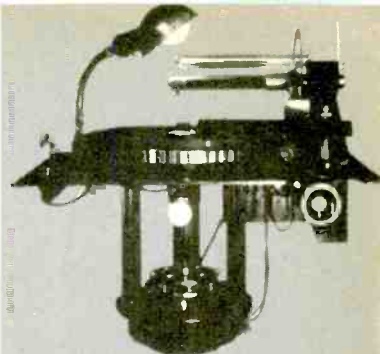
There are other reasons for switching from paper (the traditional cone material) to synthetics. Proponents claim that the new materials are inherently better damped, more consistent in manufacture, and—being less affected by changes in heat and humidity—more stable in operation. English manufacturers (KEF particularly) have been using Bextrene plastic for years. More recently, B&W has developed a polyamide fiber material, Pioneer has one using graphite and polymer, and Infinity and KLH in the U.S. have adopted polypropylene.

The new KLH speakers are interesting for another reason, as well: Their woofers are, as KLH puts it, "computer controlled." For years, Bose, Electro-Voice, and other manufacturers have been using electronic equalization to complement the bass response of some of their speaker systems. But a designer can go only so far with equalization before seriously compromising a speaker's dynamic range; he cannot boost the bass so much that the woofer is routinely overdriven at typical home listening levels. The problem becomes especially acute with very small systems, which usually have both poorer deep bass response than larger designs and smaller woofers with less power-handling capability.

KLH's solution is its Analog Bass Computer, which dynamically varies bass equalization to the speaker in accordance with the level of the bass signal from the amplifier. At low levels, the computer increases the equalization to provide flattest response. As the bass input goes up, the computer cuts back on the equalization to prevent excessive distortion or driver blowout.

Will knowing more about how speakers are designed and built make you a better shopper? Maybe. But beware: You can't make a good decision just from the spec sheets. Good speakers have been made with ordinary materials and test equipment, and bad ones have been made in the name of high technology. What's important is not how it sounds on paper, but how it sounds in your home. **HF**

**1939...FIRST DIRECT-DRIVE TURNTABLE SYSTEM.
1951...FIRST MOVING-COIL CARTRIDGE.
1972...FIRST DIGITAL (PCM) RECORDING.**



In 1939 while many turntable manufacturers were trying to make the transition from horn phonographs to electrical record players, Denon developed its first direct-drive turntable, (shown above). Denon engineers discovered that only a direct connection between motor and platter—free of the pulleys or belts found in more primitive drive mechanisms—could completely eliminate speed fluctuations that obscure musical detail.

Today, many turntable makers have discovered the virtues of direct-drive. It is now the accepted means of approaching state-of-the-art performance. But only one company has had 40 years to refine the direct-drive principle. It is the same company that 29 years ago developed another technology now in widespread use: the Moving-Coil Cartridge. It is the same company that changed the entire process of recording music by inventing digital (PCM) recording.

The company is Denon.



DENON

1980...DENON'S DP 60-L DIRECT-DRIVE TURNTABLE.

The latest stage in Denon's refinement of direct-drive is the DP-60L Semi-Automatic Turntable. It uses a unique AC Servomotor with a quartz "clock" speed-reference to achieve exceptional torque and speed accuracy, while eliminating the corrective speed surges that degrade the performance of other direct-drive turntables. The DP-60L is supplied with two plug-in tonearm wands—one straight and one S-shaped—to assure a precise match-up with the characteristics of any phono cartridge.

The result? Musically cleaner sound, free of sonic smearing.

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more convenient. And you can reprogram the memory in seconds.

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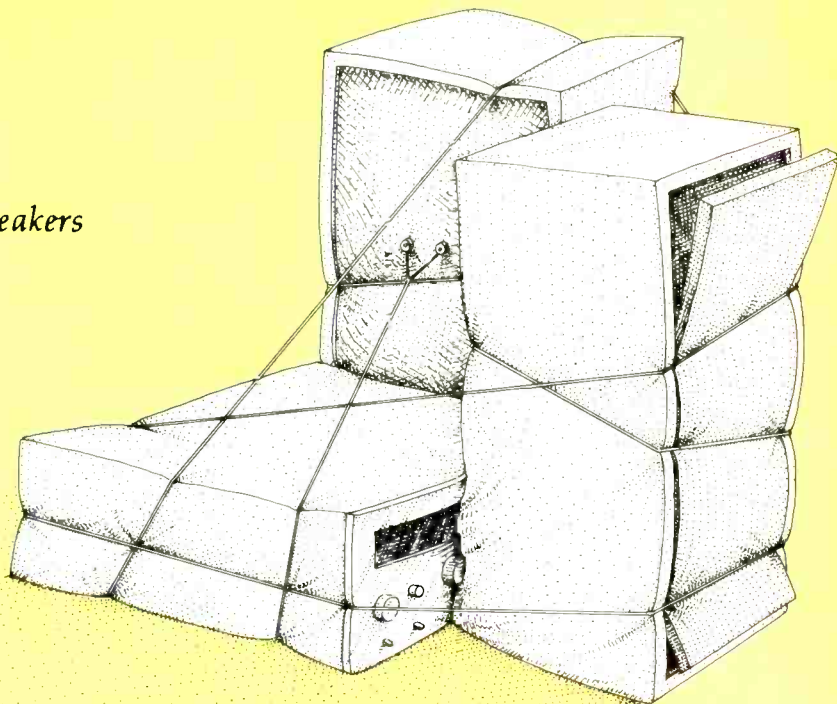
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The Uneasy Symbiosis

Getting the most out of your loudspeakers means more than feeding them with a "big enough" amp.

by Peter W. Mitchell



It is comforting to suppose that, when you buy an assortment of audio components and connect them to make a stereo system, all of the parts will work together synergistically to achieve maximum performance. But it ain't necessarily so.

All too often, the performance of the stereo system is determined more by the compatibility of components—their favorable or detrimental interactions—than by the individual quality of each. So it is important to examine what happens at the "interfaces" between components. In this article we will focus on one: that between the amplifier and the loudspeaker. There may be a war of sorts going on between your amplifier and your loudspeakers, which can result in either more distortion or less useful power output than the amp was designed for.

To see how such problems can arise, let's look at how the amplifier delivers power to the speakers. Electrical power is simply the product of voltage and current. A typical "power amp" functions mainly as a voltage amplifier, stepping up the audio signal from a fraction of a volt (at the line input jacks) to several volts at the speaker terminals. In old textbooks you rarely find the word "voltage"; in its place is the quaint but revealing term "electromotive force"

(EMF). The amplifier's output voltage, varying with the musical signal, acts as the driving force that pushes current through the loudspeaker, past any resistance—or impedance—along the way. And, finally, in all conventional dynamic loudspeakers, current flowing through the voice coil causes it to move in the magnetic gap and produce sound.

Where does the current come from? The amplifier's power-supply circuit draws electrical power from the AC wall socket, rectifies and filters it, and stores it in a reservoir (large capacitors). The output transistors are basically current valves, opening and closing according to the signal voltage; the valves open as the voltage goes up, and current flows from the power-supply capacitors through the output transistors to the loudspeaker.

Since the power (in watts) delivered equals the voltage multiplied by the current (in amperes), the effective power-output capacity of an amplifier depends on several factors: how much the voltage can be amplified before it is "clipped" (distorted) in the amplifier; how much current can be made to flow through the output transistors before they overheat or the power-supply reservoir runs dry; and what the real impedance of the loudspeaker is. If the imped-

ance is high, little current flows; if the impedance is low, a lot of current flows—up to the amplifier's own limit.

What, then, is the true impedance of a loudspeaker? Many amplifier designers assume a typical impedance of 8 ohms. After all, a label on the back of many loudspeakers plainly states that the impedance is 8 ohms. And both Federal Trade Commission requirements and the IHF standard for amplifier/receiver specifications mandate that the advertised power and distortion of audio amplifiers for home use be measured with an 8-ohm test resistor connected to the output terminals in place of a speaker.

But resistors don't make sound; loudspeakers do. And while some speakers bear a plausible electrical resemblance to an 8-ohm resistor, most do not. A conventional loudspeaker system has a complex impedance that varies dramatically with frequency: Because of its complement of voice coils, crossover inductors and capacitors, suspension compliances, driver/enclosure resonances, and tonal-balance controls, a typical so-called 8-ohm loudspeaker can vary from 5 or 6 ohms up to 20 or 30 ohms. (Fig. 1 shows a couple of typical impedance curves.) Given this variation, how does a speaker manufacturer pick a

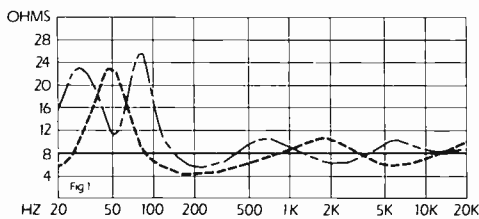


Fig. 1: The impedance of an 8-ohm test resistor (solid line) does not vary with frequency because it has no reactive components. That of a typical "8-ohm" two-way acoustic suspension loudspeaker system (dotted line) has maxima at woofer resonance and near the crossover; its minimum in the "music power range" is closer to 4 ohms than to 8. A typical three-way vented system of the same advertised impedance (dash-dot line) shows characteristic double peak in bass and secondary maxima near the two crossovers.

single number as the "rated" impedance? The answer depends on which manufacturer you talk to.

For some manufacturers, the rated value is the lowest impedance spanning any significant part of the frequency range; thus, if the rated value is 8 ohms, the actual impedance will be 10–12 ohms or higher at most frequencies. For many companies, the rated impedance is an average, with the actual impedance varying both below and above the stated value; thus some "8-ohm" loudspeakers actually have a true impedance as low as 4 ohms at some frequencies.

If loudspeakers went below their rated impedance in only a narrow band of frequencies, perhaps it wouldn't matter much. But the same physical factors that vary the impedance also dictate the pattern of that variation. The impedances of inductors and coils, including voice coils, rise with increasing frequency; capacitor impedance falls as frequency increases. Consequently, in most conventional speakers, the impedance is high at the woofer/cabinet resonance frequency (usually 40–70 Hz) and at crossover frequencies (perhaps around 1,500 Hz in a two-way system). The lowest impedance ordinarily is found in the upper bass or lower midrange—often around 100–300 Hz—and in some designs, particularly electrostatics, the impedance will also drop to a low value at high treble frequencies.

When music gets loud, its highest

energy levels often occur in precisely the same frequency range (the upper bass and lower midrange) where conventional loudspeakers have their *lowest* impedance. (See Fig. 2.) For instance, many drums generate sonic peaks in the octave between 125 and 250 Hz. Again, the lower the speaker impedance, the greater the amplifier's output current and the greater the potential strain on its power supply and output transistors. For this reason HIGH FIDELITY's test reports on speakers always include a measurement of their "nominal" impedance: the minimum impedance exhibited in this upper-bass "power" range.

This impedance usually is less than 8 ohms. Now, when you connect a speaker to an amplifier designed to interface with an 8-ohm impedance (as many are) and play music loud, the amp may be called on to pump out more output current—sometimes much more—than it was designed to. For example, when an amplifier delivers 20 dBW (100 watts) into an 8-ohm load, its output current is 3.5 amperes rms, or 5.0 amperes peak. Fig. 3 shows the output-current waveform produced when a drum roll in a cassette recording of the Overture to Verdi's *La Forza del destino* was played through one of America's best-selling "8-ohm" speakers, with the volume control set to produce an output voltage corresponding to 20 dBW into 8 ohms. The faint horizontal calibration lines are at 2-ampere intervals, so the amplifier was delivering peak currents of +8 and -8 amperes. If two of these loudspeakers were wired in parallel, this current would double to 16-amp peaks! Not many of today's amplifiers are designed to deliver this much current. (The drum roll falls in the spectrum analyzer's 160-Hz band, where this "8-ohm" speaker has an impedance of 5 ohms, and two of them wired in parallel present a 2.5-ohm load to the amplifier. This is not unusual.)

Therefore, when you are selecting an amplifier to mate with your loudspeakers, it is wise not to rely on advertised or rated impedances: Find out the speaker's minimum impedance in the frequency range where music has its peak power levels; if it is less than 6 ohms, pick an amplifier with sufficient current reserves to perform well in tests at 4 ohms. If you need two speakers wired in parallel in each channel or are using speakers whose advertised impedance is only 4 ohms, an amplifier with

ample current output becomes especially desirable. HIGH FIDELITY's amplifier test reports provide a clue by listing the output at clipping for 4, 8, and 16 ohms. When an amplifier has substantial current reserves, its 4-ohm clipping output will be substantially higher (3 dB more, or double the wattage, if there were no current restrictions whatever) than its 8-ohm output. If the 4-ohm output is less than or nearly the same as the 8-ohm output, the amplifier's current output is being restricted at low speaker impedances—usually by protection circuits.

Incidentally, this rule does not apply to the special cases of models employing switched power transformer windings (Apt) or autotransformers (McIntosh) to equalize power outputs at various impedances. The Apt 1, for instance, has about the same measured output at 4 and 8 ohms but has enormous current reserves and will drive even 2-ohm impedances with ease.

Of course every amplifier has at least some form of output current limiting, even if it's just fuses or relays to protect the transistors from damage in case you accidentally short-circuit the speaker wires. (See "The Arithmetic of Impedance.") So the common amplifier/speaker mismatch we've been describing is a question not of conflicting principles, but of degree: Given that most speakers have an impedance lower than 8 ohms at the frequencies where peak power demands occur in music, amplifiers must put out more current than an 8-ohm load requires for the same output-voltage level. But how much more? At what level should current limiting set in?

Amplifiers differ widely in this respect, and a mismatch (a low-impedance speaker used with an amplifier of modest current capabilities) need not have catastrophic consequences; the current restriction may simply limit the usable power output. If, in the case illustrated earlier, the amplifier can deliver only 5-ampere peaks instead of 8 amperes, the output power is $(5/8)^2$, or 39% of what it might have been, meaning that the maximum undistorted sound level is reduced by 4 dB. This would reduce the capability of our "100-watt" (20-dBW) amplifier to 40 watts (16 dBW) with this speaker—which still may be plenty, depending on the system and how it is used.

Speaker/amplifier mating be-

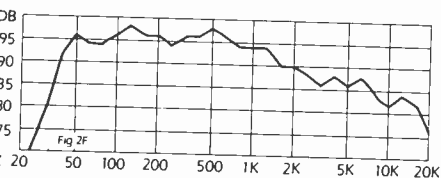
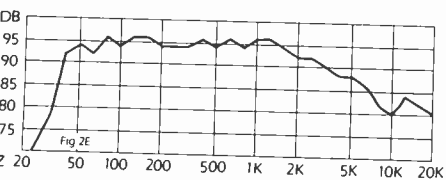
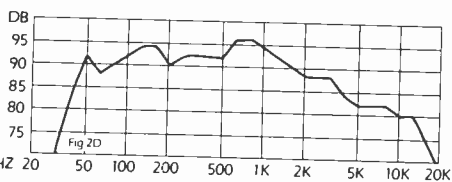
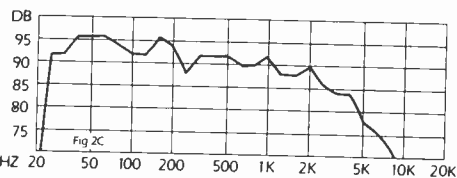
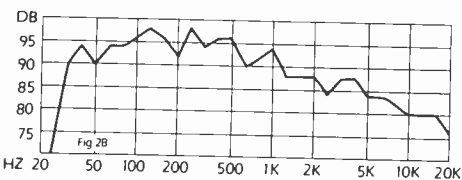
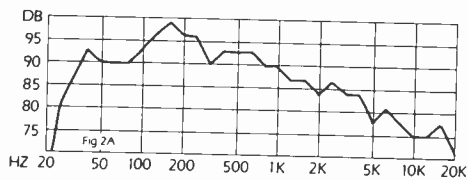


Fig. 2: Frequency distribution of peak energy levels in music, as measured with a one-third-octave spectrum analyzer. The first graph (A) shows measurements for a live orchestra in Symphony Hall, Boston; the remainder are taken from recordings—including digitally mastered and direct-to-disc examples—of symphonic music (B), pipe organ (C), opera (D), jazz band (E), and rock (F). Each combines maxima from several different works.

comes more of a problem when the "reactive" character of loudspeakers is considered. A resistor, such as the 8-ohm test resistor used for laboratory measurements, simply absorbs power from the amplifier and dissipates it as heat. But a loudspeaker is only partly resistive; since it contains inductive and capacitive elements, it does not dissipate all of the power fed to it. When the speaker's cones are suddenly kicked into motion in a transient, some of the input energy is momentarily stored in the magnetic field around the voice coils, in the compliant suspensions, and in the electrostatic fields within the crossover capacitors. At the end of the transient, these fields collapse and energy flows back through the wires into the amplifier.

(See Fig. 4.) The force driving this current is called the speaker's "back EMF," and the amplifier's ability to absorb the return current is called its "damping factor." If the flow of this return current into the amplifier's output circuit were impeded, the energy would be used up in the speaker by continued resonant vibration of the cones (particularly the woofer), muddying the sound. Modern amplifiers absorb this return current efficiently, passing it through the output transistors into the power supply or to ground; but current-sensing protection circuits cannot distinguish reactive current from normal output current, so reactive loudspeakers can cause current limiters to trigger at power levels substantially lower than the amplifier's rated output.

The interaction between amplifier protection circuits and the energy-storing reactive elements in loudspeakers can produce bizarre consequences. In many amplifiers, the protection circuit monitors the current flowing through the output transistors; whenever the current exceeds the rated value, a corrective signal is sent back to an earlier stage in the amplifier, altering (distorting) the incoming audio signal so that it won't create unsafe levels of output current. But in others, the circuit cuts off the input signal when excess output current is detected. The speaker's inductances (notably the woofer voice-coil and crossover choke) react to the sudden loss of drive current by generating a sharp back-EMF spike. A few thousandths of a second later, if the output transistors survive this spike, the protection circuit

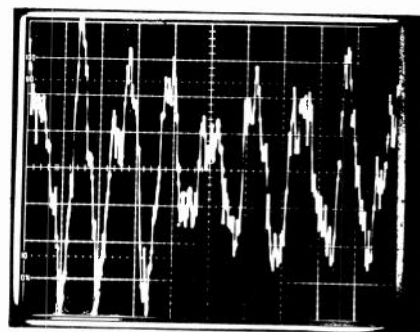


Fig. 3: Oscilloscope waveform shows current flowing into a popular "8-ohm" speaker reproducing a drum roll in a Verdi overture. The horizontal calibration lines are 2 amperes apart, so peak currents of +8 and -8 amperes are present.

observes that the current is now within safe limits and switches the signal back on—in the middle of the waveform, creating a sharp switching transient. The output current immediately resumes its previous (excessive) level, and the protection circuit tries again, producing another spike. These transients actually may burden the output transistors more than the excessive current would have if left uninterrupted; they also create a harsh, irritating sound, dumping a lot of nonmusical energy into the tweeter, which may decide that it has had enough and expire. So, in addition to confusing protection circuitry, reactive loudspeakers can also directly threaten their own safety and that of the amp's output transistors.

Thus far we have discussed transistor failure only in terms of excessive current due to a short circuit or very low impedance. But destructive overheating of a transistor results from the dissipation of too much power within the device: The culprit is not current alone, but the combined effects of voltage and current. The designer must also consider other potential failure modes such as "secondary breakdown." He works with a graph that outlines the "safe operating area" (SOA) of the transistor—a map of all of the combinations of voltage and current that the device can handle without self-destruction. With a resistive load impedance, the current is directly proportional to the voltage: Double the signal voltage, and you simultaneously double the output current. It's child's play for the circuit designer to select

transistors whose SOA encompasses this relationship, since he needs to know only what value of load resistance to plan for, and that determines the maximum current that a given voltage will produce.

With a reactive loudspeaker, however, the voltage/current relationship becomes complex. The two tend to go

out of phase; that is, their maxima tend to lead or lag one another in time. Classically, the worst-case reactive load is an electrostatic speaker, which is basically a huge capacitor; here the voltage and current can be very far out of phase, with the current virtually nonexistent when the voltage is at a positive or negative maximum, and vice versa. Furthermore,

the capacitive load dissipates virtually none of the power fed to it. Instead, most of the current is dumped back into the amplifier during the next half-cycle of the waveform. Not surprisingly, this reactive impedance subjects the output transistors to the most stressful combinations of voltage and current, and any attempt to drive electrostatic speakers at high power levels commonly yields voltage/current values outside the SOA of the transistors.

The Arithmetic of Impedance

Amplifiers differ in performance from one brand or model to the next, in part because of the assumptions their designers make about the impedances they will be called upon to drive.

Power in watts (P) is the product of output voltage (V) times current in amperes (I): $P = V \times I$. Impedance in ohms (Z) is the ratio of voltage to current: $Z = V/I$. If we want an amplifier to deliver, say, 72 watts to a true 8-ohm load, a little arithmetic shows that the 72 watts will be composed of 24 volts driving 3 amperes of current. If we want to deliver 72 watts to a higher impedance, a higher voltage will be needed and less current will flow; if we want to deliver 72 watts to a lower impedance, more current must flow and not as much voltage will be needed to push it. So when an engineer is assigned to develop a 72-watt amplifier for 8-ohm speakers, the obvious procedure is to create a circuit that can amplify signals up to 24 volts without distortion, select output transistors that can handle 24 volts without breakdown and pass 3 amperes of current without overheating, and provide a suitable power supply.

Of course it's not quite that simple. Let's suppose that you buy this amplifier and connect it to two pairs of "8-ohm" speakers that have an actual impedance of 5 ohms at the "power" frequencies in music, meaning that the net impedance is 2.5 ohms. You play some music and crank up the volume control until the amplifier is just below clipping. It is putting 24 volts into a 2.5-ohm impedance, the resulting current flow is 9.6 amperes, and 230 watts are delivered to the speakers—until the output transistors burn out. Soon everybody learns from similar failures that this amplifier blows up easily, and the company goes bankrupt.

There is nothing a manufacturer fears more than a failure-prone product,

and engineers who design only for excellent performance soon find themselves unemployed. In audio components—which are not self-contained, but must be interconnected with other system components—"reliable design" means making products immune from connection problems and user mistakes, even accidentally short-circuited speaker wires. Obviously, the output current must be limited to a value that is safe for the output transistors, so it's up to the designer to choose transistors large enough to supply current to realistic speaker impedances. But that's not a free choice: Larger output transistors not only cost more, but also tend to have higher junction capacitance, slower response, and increased high-frequency slewing distortion. Designing for high currents (low impedances) also tends to raise the cost and weight of the power-supply transformer, heat sinks, etc.

Thus, in a highly competitive market, many manufacturers find that the most practical and cost-effective approach is to optimize the design for a 6-ohm impedance, which is the minimum impedance of a large number of "8-ohm" speakers. This seems to work well enough for a lot of stereo-system owners. It's up to you to decide whether your requirements are more demanding than average—whether you are using speakers of low impedance or using two pairs or straining your system's capabilities by playing recordings (such as digitally mastered or DBX-encoded discs) with powerful dynamics. If so, it may behoove you to select an amplifier designed for high output currents: that is, for unfettered operation at low impedances. You will find that amplifiers differ substantially in their ability to drive low impedances cleanly at high volume levels—and that this ability does not correlate very closely with their rated 8-ohm power.

The capacitive and inductive impedances in ordinary dynamic loudspeakers present amplifiers with the same generic problem, only smaller in magnitude. Current peaks often lead or lag voltage peaks slightly in time, but they are not completely out of phase. Some of the output current is kicked back into the amp by the speaker, but most of it is absorbed and dissipated as either heat or sound. Since, on the average, only about 1% of the amplifier's output power is converted to sound by a loudspeaker, some 99% must either be dissipated as heat (as it is by resistive loads) or dumped back into the output transistors (by reactive load components).

A speaker's impedance curve (from a test report or manufacturer's literature) provides a clue to how resistive or reactive it is. A resistor has the same impedance at all frequencies, while reactive impedances vary with frequency. So at those frequencies where the curve is level, the impedance is basically resistive. At those frequencies where the impedance varies rapidly, it is at least partly reactive. Of the impedance curves in Fig. 1, the sharpest variations (steepest slopes) are seen in the octaves above and below the woofer/cabinet resonance; many conventional loudspeakers are indeed most reactive in the bass ranges. The fact that many kinds of music make high power demands at those lower frequencies where speakers are most reactive helps to explain the observation that, when amplifiers are compared, the most obvious differences often are in the reproduction of bass transients.

Even when only moderately reactive, a speaker still can easily cause enough phase shift between voltage and current to carry an amplifier's output transistors outside of their safe operating area. Consequently, nearly all amplifiers in the past decade have incorporated a form of protection called "V-I (voltage-current) limiting," using a

rough approximation of the SOA, to prevent burnout from driving typically reactive speakers. Unfortunately, the standard approximation is not very close to real SOAs. If a designer chooses a relatively "loose" level of V-I protection, the amplifier may still burn out when connected to a difficult load; if V-I limiting is "tight," as it often is, the amplifier will deliver its full rated power into a test resistor but can deliver only a fraction of that into a loudspeaker before the protection circuit gets in the way.

The 1978 IHF standard for measuring amplifiers includes a "reactive load" specification using a test load with reactive characteristics similar to the majority of conventional dynamic speakers; it was intended to provide a consistent test of an amplifier's ability to deliver its rated power into typically reactive speakers. So far most manufacturers have failed to publish this measurement. As a general rule, however, amplifiers designed to handle low impedances contain high-current transistors with large SOAs and thus can be expected to handle reactive impedances well, too.

During the last year or two, some important advances in amplifier design have improved compatibility with the real impedances of loudspeakers. One is the adoption of more sophisticated protection circuits, permitting more effective use of the entire SOA of the transistors. Another is the development by semiconductor manufacturers (in both the U.S. and Japan) of new output transistors having both high speed and a large SOA, so that excellent performance with low-impedance or reactive speakers can be obtained without compromise in the form of high-frequency distortion.

Another case in point: the power MOSFET, with its negative thermal coefficient. Ordinary bipolar transistors must be protected from "thermal runaway." When large amounts of current heat the transistor, its gain rises, which increases the current, which heats the transistor some more, further increasing its gain . . . until it goes up in smoke. Being immune to this failure mode, MOS-FET amplifiers can have very "loose" V-I limiting, leaving them free to feed their full power to reactive loads. This doubtless accounts, in part, for their reputation for fine sound.

It may be worth mentioning a few more potential oddities in amplifier/speaker symbiosis, even though there

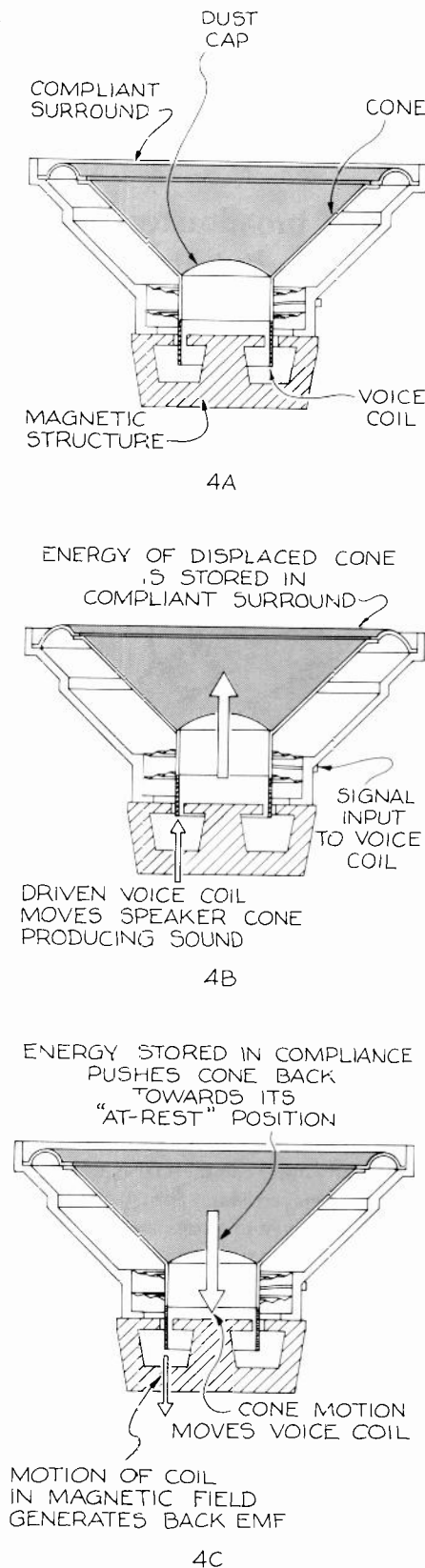


Fig. 4: Elasticity of compliant surround at edge of cone is one mechanism by which driver stores energy from amp and then returns it as back EMF.

isn't much you can do about them. One is that the impedance curve in many loudspeakers is not a fixed commodity. As the music gets loud and lots of current flows through the voice coils, for example, they get hot and their resistance rises. As a result, they draw a little less current from the amplifier. And because of a changing division of the signal between the crossover and the voice-coil impedances, the tonal balance can change. This is becoming less common as more manufacturers pack voice-coil gaps with heat-conducting silicone grease or magnetic ferrofluids to minimize temperature changes.

Another common problem is that, when the woofer's voice coil makes large in-and-out excursions in reproducing strong bass notes, its inductive (reactive) impedance varies during the waveform cycle. This nonlinear impedance can be a significant source of distortion, which is minimized by low resistance between the amplifier and the woofer. This is one reason why it always is wise to employ heavy-gauge stranded wire for speaker cables, connected securely at each end and checked annually to be sure that no loose connections or oxidation impose resistance in the signal path.

Installation of a fuse in the amplifier/speaker line can also be a source of nonlinear impedance and consequent intermodulation distortion as fluctuating low-frequency signals cause the fuse element to heat and cool. A relatively minor problem at worst, it can be eliminated either by the amplifier designer (who can place fuses in feedback or power-supply circuits, rather than at the output) or by the speaker designer (who can fuse the tweeter and woofer independently, rather than using one fuse for the whole system). If you already have bought an amplifier and speakers that violate these rules, you can minimize fuse heating by using an infrasonic filter to prevent amplification of rumble, disc warp, and tonearm-resonance energy. (If your system has no infrasonic filter, an outboard model can be added.) The filter also will minimize woofer-cone excursion and associated muddying of bass.

Awareness is the key to solution of the symbiosis problems we have been considering. Designers certainly are paying increasing attention to their prevention. But only through awareness of potential problems and their symptoms can you spot a poor combination and seek a better one. HF

WFMT: Our First National Radio Station

by Phillip Huscher

Chicago's prestigious classical FM broadcaster is not just the only radio station to be transmitted throughout the U.S., but also our first European station.



Above, Lazar Berman, whose Chicago debut was sponsored by WFMT; right, program director Norman Pellegrini watches president Raymond Nordstrand at the controls.



Despite Chicago's Second City complex, its classical radio station WFMT can claim, with much justification, to be No. 1. Other stations around the country resort to garbage to bring in listeners: Houston's KRLY-FM recently paid \$6,000 to a young woman who shaved her head, replaced her hair with cow dung, and sang "I Feel Pretty"; station KEZY in Orange County, California, gave free tickets to a Linda Ronstadt concert for the largest sign proclaiming an obscenity. In contrast, over the last three decades, WFMT has achieved unparalleled success through quality: airing fine broadcasts, commissioning music, sponsoring concerts, organizing the country's most financially successful "marathons" for its city's orchestra, turning its program guide into one of

Mr. Huscher, who has written frequently about music for the Chicago Daily News and Chicago Magazine, is chairman of the music history department of Chicago Conservatory College.

America's biggest magazines, and last year becoming our first national radio station, relayed throughout the U.S. by satellite. It has won more than forty national and international awards—more than any other commercial station—including eleven Major Armstrong Awards, given to recognize initiative, particularly in programming, and three Peabody Awards, considered the Oscars of the broadcasting industry.

WFMT president Raymond Nordstrand maintains that all the extraneous activities and acclaim "would be very uninteresting if we weren't successful as a radio station—if no one listened and we made no money." In fact, it is one of the most profitable classical stations, with an estimated 400,000 Chicago listeners, and thanks to the satellite, it hopes to double that number soon.

The station's programming stresses material not available on commercial records. It broadcasts the complete seasons of eight American orchestras (including the Big Five) and three

opera companies, concerts from several international festivals, and all PBS simulcasts. It has even acquired unique rights to several program sources from abroad, including the British Broadcasting Corporation's archives.

Some BBC programs had long been broadcast on American stations. In 1973, Nordstrand wanted access to the archival Transcription Service, rich in operas, plays, and historic concerts, but the Britons' policy was to grant rights to national radio systems only, not to individual stations. Nordstrand countered with "How much do you charge New Zealand? I'll match it," and the BBC gave in. Last year WFMT also acquired the rights to syndicate selected BBC programs to other stations in the U.S., and this spring it became not only our first national station, but our first European one as well by joining the European Broadcasting Union.

U.S. membership in EBU had already been granted to National Public Radio, a programming service for non-



Left, announcer Mike Nichols (that's right) and Rita Jacobs, cofounder with Bernard Jacobs, shown above, in the studio in the '50s. Right: "free spirit" Studs Terkel.



commercial stations, but NPR was offering only eight hours of classical music each week and making limited use of the EBU's musical repertory. In April, Nordstrand submitted an application, and a month later the Chicago station was voted in. It was interested in Berlin Philharmonic concerts; several EBU broadcasters wanted to pick up Studs Terkel's interviews from WFMT.

Every weekday morning for one hour, WFMT belongs to Terkel, author (*Hard Times, Working*), oral historian, and "free spirit." Since he joined the station in 1952, Terkel has lured a remarkable crowd into the studio—Carl Sandburg, Janis Joplin, Buckminster Fuller, Birgit Nilsson, Marc Chagall, Elisabeth Schwarzkopf, Norman Mailer, Pete Seeger, Aaron Copland, and Woody Allen among them. His show remains one of WFMT's most popular, along with another in-house product, *The Midnight Special*, a three-hour potpourri of folk music, satire, show tunes, and farce. Long a Chicago institution, it has in-

spired similar efforts around the country; *Saturday Night* on Cleveland's WCLV is a direct descendant. (Host and WCLV program manager Robert Conrad once worked for WFMT.)

The Chicago station not only has broadcast music, but has sponsored it. And last year it commissioned song cycles from nine American composers, including Lukas Foss, Barbara Kolb, and Philip Glass. Each composer was paid \$1,000 plus all expenses to hire performers, rehearse, and tape the music for premieres over WFMT. In the mid-'50s, it started broadcasting live concerts by Chicago's Fine Arts Quartet, performing in recital halls or playing in the studio exclusively for WFMT listeners—as, in New York, WQXR had been doing with its WQXR Quartet and, later, WABC-FM was to do with its ABC Quartet. But it was with the Fine Arts beginning in February 1962 that WFMT broadcast the first live concert series anywhere in stereo. Seven years later the same series brought the station its first Armstrong

award for its pioneering work in incorporating Dolby noise reduction in its signal.

In 1976, WFMT began sponsoring concerts off the air as well. When no one else in Chicago seemed interested in bringing Russian pianist Lazar Berman to town during his first American tour, it took the plunge (as did WGBH in Boston), booked Berman, and by playing his records on the air eventually sold out Orchestra Hall. That success encouraged it to sponsor other artists neglected by local concert series: pianist Ivan Moravec, cellist Daniel Shafran, and pianist Bella Davidovich.

WFMT was a latecomer to those weekend marathons that dozens of commercial classical stations have been holding for up to thirteen years to benefit their local symphony orchestras (and to demonstrate to advertisers their listeners' expendable wealth). Chicago's first marathon did not take place until 1976, but since that time it has amassed more than \$2 million for the Chicago

Symphony Orchestra, far more than any other station has accumulated for its orchestra.

WFMT has always banned prerecorded ads and commercial jingles. Spots, limited to four minutes per hour, are read live by staff announcers. Yet, for all the lost ad revenues—Eastern Airlines alone might have brought in a quarter of a million advertising dollars during the past decade but refused to give up its jingles—Nordstrand is convinced these are the most persuasive commercials in the business, and many advertisers agree. Last year one local bank signed a five-year contract for more than a million dollars, probably the largest in radio history between an advertiser and a single station.

If WFMT leads a charmed life today, it didn't always. In the late 1940s, Bernard and Rita Jacobs operated WOAK, a nearly defunct pop FM station headquartered in the converted ballroom of the aging Hotel Guyon on Chicago's west side—a world away from its present posh Michigan Avenue location. The Jacobses harbored serious ideas about fine arts programming, and in 1950 WOAK went all-classical. Five months later, with hardly any advertisers or staff left, it retreated to its old format. Undaunted, the Jacobses bought out the station, changed the call-letters to WFMT, and on December 13, 1951, they tried again. This time it was literally a labor of love; there *was* no money. They were soon joined by Norman Pellegrini, a frustrated actor with an abiding love of music, who brought along his record collection to play on the air. Today WFMT's program director, he suspects he was hired because he could pronounce Brünnhilde. It didn't hurt that he was willing to work for next to nothing.

Nordstrand entered the scene by accident. One summer afternoon in 1953, he accompanied a friend to an audition for Mike Nichols, then WFMT's head announcer. When his friend wasn't offered the job, he decided to try out and was hired on a part-time basis. For a while, Nordstrand juggled announcing with academia—he was then an economics student, and later professor, at Northwestern University—but he eventually left teaching for full-time broadcasting. In 1971 he became general manager and president. Nichols, meanwhile, stayed at the station long enough to launch the first version of *The Midnight Special*. Then one night, waiting for the train home af-

Nordstrand countered with "How much do you charge New Zealand? I'll match it."

ter work, he met Elaine May, and a few months later they started packing for New York. Nordstrand remembers trying to convince Nichols of FM's bright future and the uncertainty of New York life. Nichols and May, of course, became the hottest comedy team of the '50s and '60s—until Nichols decided to become Broadway's hottest director.

Bernard Jacobs had long suffered from multiple sclerosis and, in 1968, took an irreversible turn for the worse. In a precipitous move, which some recognized as panic, he sold WFMT to local TV station WGN, a business affiliate of the *Chicago Tribune*. Fearing a change in format, concerned listeners formed the Citizens' Committee to Save WFMT, donated funds, and took the case to court, protesting "concentration of control in media." As it turned out, the crisis passed quickly; in 1970 the *Tribune* backed down and "donated" the radio station (along with its long-term financial obligations to Jacobs) to WTTW, Chicago's public television station. It is an unusual arrangement: the profits of a commercial radio station going to a non-commercial TV station.

WFMT's program guide first appeared in 1952 as a sixteen-page bi-weekly listing. In 1970, it merged with the WTTW program magazine and became a full-size city monthly, complete with a calendar of events, a critical guide to dining, articles, fiction, and lots of advertising. It is now *Chicago* magazine, the best-selling city monthly in the U.S., with a paid circulation of 200,000 and revenues twice that of the station itself. (In 1979, WFMT/*Chicago* revenues topped \$10 million, with before-tax profits bordering on \$1 million. Every year, several hundred thousand dollars are turned over in dividends to WTTW.)

In November 1978, United Video, a common carrier in Tulsa, Oklahoma, that provides signals to cable systems nationwide via satellite, began carrying Chicago's WGN-TV as one of three U.S. television stations it relayed. At the time, UV was also looking for a classical station in the Midwest to add to its stable of

services. With a Chicago station, the supplier could piggyback the signal onto that of WGN-TV. The combination of quality and convenience made an agreement between WFMT and UV a natural. It was announced at the National Cable Television Association convention in May 1979, and the Federal Communications Commission gave its approval in October. Thus WFMT became the first, and so far only, nationally broadcast radio station in the country.

To reach its new audience, WFMT's signal is picked up in downtown Chicago, transmitted by microwave along with WGN-TV to the RCA satellite uplink station in Lake Geneva, Wisconsin, and from there to RCA's Satcom I 22,300 miles above the equator. Transponder 3, one of Satcom's twenty mini receiving stations, sends WFMT back to earth stations, or downlinks. Any cable system in the continental U.S. with the proper equipment can pick up WFMT in stereo. If it carries WGN-TV, it already operates a receiver tuned to Transponder 3 and now only needs an inexpensive stereo upconverter. United Video charges cable companies a penny per subscriber each month to add WFMT; cable subscribers then pay the company a small monthly fee for the new programming. The Chicago station receives no payment, only the satisfaction of reaching an anticipated half million more listeners in Aspen, Colorado, Gainesville, Georgia, or Portland, Oregon—and of course a great sales pitch for potential national advertisers, since cable systems must distribute WFMT with all commercials intact.

In the first months, WFMT was added to cable systems in thirty states, mostly in towns where there was no existing classical station. In some cases where the cable management was reluctant to make the investment in new equipment, or dubious of the audience for classical music, determined citizens formed committees to stir up interest.

The Chicago station seldom hears directly from its new listeners, but during the April CSO marathon cable subscribers in twenty-four states phoned in pledges. WFMT prefers playing a passive role in the United Video arrangement and seems determined not to let national exposure ruffle the even tenor of local operations. Despite all the changes that are certain to come, Nordstrand predicts only that "WFMT will continue to survive and succeed." **HF**

Preview of the Forthcoming Year's Recordings

Part II

As promised last month, here is the conclusion of our annual preview of industry releases. Domestic reissues are indicated with a ■, audiophile (digital unless otherwise noted) releases with an ▲. (To end the suspense for reader Morton Franklin ["Letters," February]: no D'Indy Second Symphony again this year.)

NOTE ON ABBREVIATIONS

Performing groups are indicated with appropriate combinations of P (Philharmonic), R (Radio), S (Symphony), C (Chamber), O (Orchestra), and Ch (Chorus).

Where the number of discs is known, it is included in parentheses at the end. The number may indicate either a multidisc set or separate discs.

EUROCLASS RECORD DISTRIBUTORS

See Rubini, Unicorn. Euroclass Record Distributors, Ltd., 155 Avenue of the Americas, New York, N.Y. 10013.

PHILIPS

BOCCHERINI: *Guitar Quintets Nos. 4-6*. P. Romero; St. Martin's Academy C Ensemble.

BRAHMS: *Clarinet Sonatas (2)*. Pieterman, H. Menuhin.

- CHERUBINI: *Requiem*. Austrian RSO&Ch, Gardelli.
- CHOPIN: *Piano Concerto No. 1; Andante spianato and Grande Polonaise*. Davidovich; London SO, Marriner.
- DEBUSSY: *Nocturnes (3); Jeux*. Concertgebouw O, Haitink.
- DEBUSSY: *Preludes, Book I*. Arrau.
- FAURÉ, SCHOENBERG, SIBELIUS: *Pelléas et Mélisande*. Rotterdam PO, Zinman.
- HANDEL: *Double Concertos (3)*. St. Martin's Academy, Marriner.
- HANDEL: *Royal Fireworks Music; Concerto grosso*. St. Martin's Academy, Marriner.
- HAYDN: *L'Incontro improvviso*. Zoghby, M. Marshall, D. Jones, Ahnsjö, Trimarchi, Luxon; Lausanne CO, Dorati (3).
- HAYDN: *Symphonies Nos. 101, 102*. Concertgebouw O, C. Davis.
- SCHUMANN: *Liederalbum für die Jugend; Liederkreis*. Ameling, Demus (2).
- SCHUMANN: *Piano Concerto*. WEBER: *Konzertstück*. Brendel; London SO, Abbado.
- VERDI: *Stiffelio*. Sass, Carreras, Manuguerra, Ganzarolli, Di Cesare; Austrian RSO&Ch, Gardelli (2).
- VIVALDI: *Sacred Works, Vols. 5-7*. John Alldis Choir, English CO, Negri (3).
- ▲ WILLIAMS, J.: *Lost in Space (film-score excerpts)*. Boston Pops O, J. Williams. *Italian Love Duets*. Ricciarelli, Carreras. *The Spirit of Christmas*. London SO, C. Davis.

LIVING BAROQUE

- HANDEL: *Concerti grossi (12), Op. 6*. English CO, Leppard (3).
- MONTEVERDI: *Madrigals, Book VIII*. Leppard (3).
- PERGOLESI: *Concerti armonici*. I Musici (2).

Released by Polygram Classics, Inc., 137 W. 55th St., New York, N.Y. 10019.

RCA RED SEAL

- BACH: *Cantatas Nos. 51, 199*. Gruberová; German Bach Soloists.
- BACH: *Trio Sonatas*. Galway, flute; Kyung-Wha Chung, violin; Moll, harpsichord; Welsh, cello.
- BEETHOVEN: *Late Quartets*. Cleveland Qt. (4).
- CHOPIN: *Piano Works, Vol. 2*. P. Serkin.
- LISZT: *Paraphrases and Fantasies*. Lowenthal.
- ▲ MAHLER: *Symphony No. 10*. Philadelphia O, Levine (■ analog first movement) (2).
- MOZART: *Piano Concertos Nos. 20, 22*. Ax; Dallas SO, Mata.
- ▲ MOZART: *Die Zauberflöte*. Cotrubas, Donat, Kales, Tappy, Boesch, Talvela, Van Dam; Vienna State Opera Ch, Vienna PO, Levine (3).
- ROCHBERG: *Concord Quartets*. Concord Qt.
- SCHUMANN: *Symphonies (4)*. Philadelphia O, Levine (3).

- The Complete Caruso* (continuation of series using Soundstream process).
- The Horowitz Collection* (Clementi sonatas, et al.) (2).
- The Horowitz Concerts 1979-80*. Works by Mendelssohn, Rachmaninoff, Schumann.
- Jesus of Nazareth (television film soundtrack)* (3).
- Tintypes (original Broadway cast recording)* (2).

Also planned are a major project featuring James Levine and the Chicago SO; newly released material of Arthur Rubinstein; recordings by the Canadian Brass and the Guarneri and Cleveland Qts.; releases by violinist Dylana Jenson and clarinetist Richard Stoltzman; major repertory from Eugene Ormandy and the Philadelphia O, some to include pianist Emanuel Ax; albums by Leontyne Price, Robert White, Julian Bream, Andrés Segovia, James Galway, Jean-Pierre Rampal, Tedd Jonselson, and Eduardo Mata and the Dallas SO.

RCA GOLD SEAL

- BEETHOVEN: *Symphony No. 9*. Price, Forrester, Poleri, Tozzi; New England Conservatory Ch, Boston SO, Munch.
- BERLIOZ: *Symphonie fantastique*. Boston SO, Munch (first stereo release).
- DVOŘÁK: *Symphony No. 9*. Boston SO, Fiedler.
- SAINT-SAËNS: *Symphony No. 3*. Fox; Philadelphia O, Ormandy.
- STRAUSS, R.: *Don Quixote*. Janigro; Chicago SO, Reiner.
- WAGNER: *Götterdämmerung (orchestral highlights)*. London SO, Stokowski.
- Maurice André: *Il Trompetto assoluto*.
- Baroque Favorites (*Pachelbel's Canon, et al.*). Paillard CO, Paillard.
- Classic Film Scores: *Korngold's Sea Hawk; Scores for Bette Davis*. National PO, Gerhardt (2).
- Greatest Hits of Christmas. Philadelphia O, Ormandy.
- Joan Morris and William Bolcom: *These Charming People; The Girl on the Magazine Cover* (2).
- Leontyne Price: *My Favorite Hymns*.
- Jean-Pierre Rampal: *Carnaval de Rampal*.

RCA Records, 1133 Avenue of the Americas, New York, N.Y. 10036.

RUBINI (U.K.)

(distributed by Euroclass Record Distributors, Ltd.)

- American Singers, Vol. 1*. Craft, De Cisneros, Fay, Hamlin, Lankow, et al. (3).
- Isidoro Fagoaga*. Arias by Giordano, Wagner (also includes Wagner arias sung by De Angelis, Molinari, Parmeggiani).
- Paul Franz*. Arias by Bizet, Gounod, Massenet, Reyer, Saint-Saëns, Wagner.
- Italian Tenors of the 1920s*. Alabiso, Bendeninelli, Bergameschi, Chiaia, Garuti, Men-

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Maria Kuznetsova. Arias by Glinka, Gounod, Massenet, Puccini, Verdi, et al.
Riccardo Stracciari, Vol. 3. Arias by Gounod, Puccini, Rossini, Verdi, Wagner, et al.
Giuseppe Taccani. Arias by Bizet, Donizetti, Giordano, Mascagni, Ponchielli, Puccini, Verdi.
Miguel Villabella. Arias by Bazin, Boieldieu, Gounod, Massenet, Offenbach, Rossini.

SAGA

ALBINONI: *Adagio.* VIVALDI: *Four Seasons.* Sinfonia di Siena.
 BOYCE *Anthems and Voluntaries.* Ely Cathedral Choir, Wills.
 FAURÉ: *Piano Music, Vol. 2.* Ferber.
 TORROBA: *Guitar Works.* Hill.
 ■ *Janet Baker: An Anthology of English Song.*
Jill Gomez: Spanish Song Recital. Works by Falla, Granados, Turina.
Philip Pickett: The Virtuoso Recorder. Works by Vivaldi, et al.
Popular Music from the Time of Elizabeth I. London Camerata.
Popular Music from the Time of Henry VIII. Hilliard Ensemble.
Segovia Plays Bach. Includes D minor Chaconne. *Songs for a Tudor King.* Hilliard Ensemble.
 Distributed by Centaur Records, Inc., P.O. Box 23764, Baton Rouge, La. 70893.

SERAPHIM

■ *BRAHMS: Violin Sonata No. 3.* FRANCK: *Sonata.* Y. & H. Menuhin.
 ■ *PURCELL: Dido and Aeneas.* Flagstad, Schwarzkopf, Hemsley; Mermaid O and Singers, Jones.
 ■ *ROSSINI: L'Italiana in Algeri.* Sciutti, Simionato, Valletti, Cortis, Petri; La Scala Ch&O, Giulini.
 SCARLATTI, D.: *Keyboard Sonatas.* Ciccolini, piano.
 ■ *STRAUSS, R.: Tod und Verklärung.* WAGNER: *Prelude and Liebestod from Tristan und Isolde.* Los Angeles PO, Leinsdorf.
Hans-Martin Linde and Konrad Ragossnig: Flute-Guitar Recital. Works by Fürstenau, Mozart, Praeger, Schubert.
 Released by Angel Records, 1750 N. Vine St., Los Angeles, Calif. 90028.

SERENUS

HAIFF: *Music of, Vol. 2.*
 KUPFERMAN: *Music of, Vol. 7.*
 MARTINŮ: *Music of.*
 NIEMAN: *Music of.*
 ORNSTEIN: *Music of, Vols. 1, 2.*
 SÜSSMAYR: *Das Namensfest (cantata for children's chorus).* PAISIELLO: *Cantata comica.*
 TARTINI: *Concertos, et al.* New York Philhar-

monia Virtuosi, Kapp.
 WALKER: *Music of, Vol. 3.*
 WEIGL: *Music of.*
Contemporary Piano Project (works by Brehm, Haieff, Lessard, Luening, MartinŮ, Ornstein, Thorne). Peltzer (3).
 Serenus Corp., 145 Palisade St., Dobbs Ferry, N.Y. 10522.

1750 ARCH

ADAMS, J.: *Shaker Loops.* Ridge Qt. *Phrygian Gates.* McCray, piano.
 BRANT: *Solar Moth.* KOBIALKA: *Autumn Beyond.* Kobialka, violin.
 BYRD: *Gradualia.* Brett, dir.
 DODGE: *Cascando.* Musical setting of the Beckett radio play.
 JENCKS: *Piano Works.* Mikulak.
 LOPEZ, P.: *Ship of Death (text by D. H. Lawrence).* Buckner (t); Arch Ensemble for Experimental Music, Hughes.
 NANCARROW: *Studies for Player Piano, Vols. 3-5.*
 SEEGER, C.: *Violin Sonata.* Erickson, Shenk. *Songs.* Dudley (s), Shenk.
 1750 Arch Records, 1750 Arch St., Berkeley, Calif. 94709.

SINE QUA NON

BEETHOVEN: *Piano Concerto No. 5; Sonata No. 27.* Gulda (with Vienna State Opera O, Swarowsky).
 MOZART: *Piano Concertos Nos. 20, 23.* Entremont; Frankfurt SO, J. Entremont.
 MOZART: *Piano Concertos Nos. 21, 27.* Gulda; Vienna State Opera O, Swarowsky.
 Sine Qua Non Productions, 25 Mill St., Providence, R.I. 02904.

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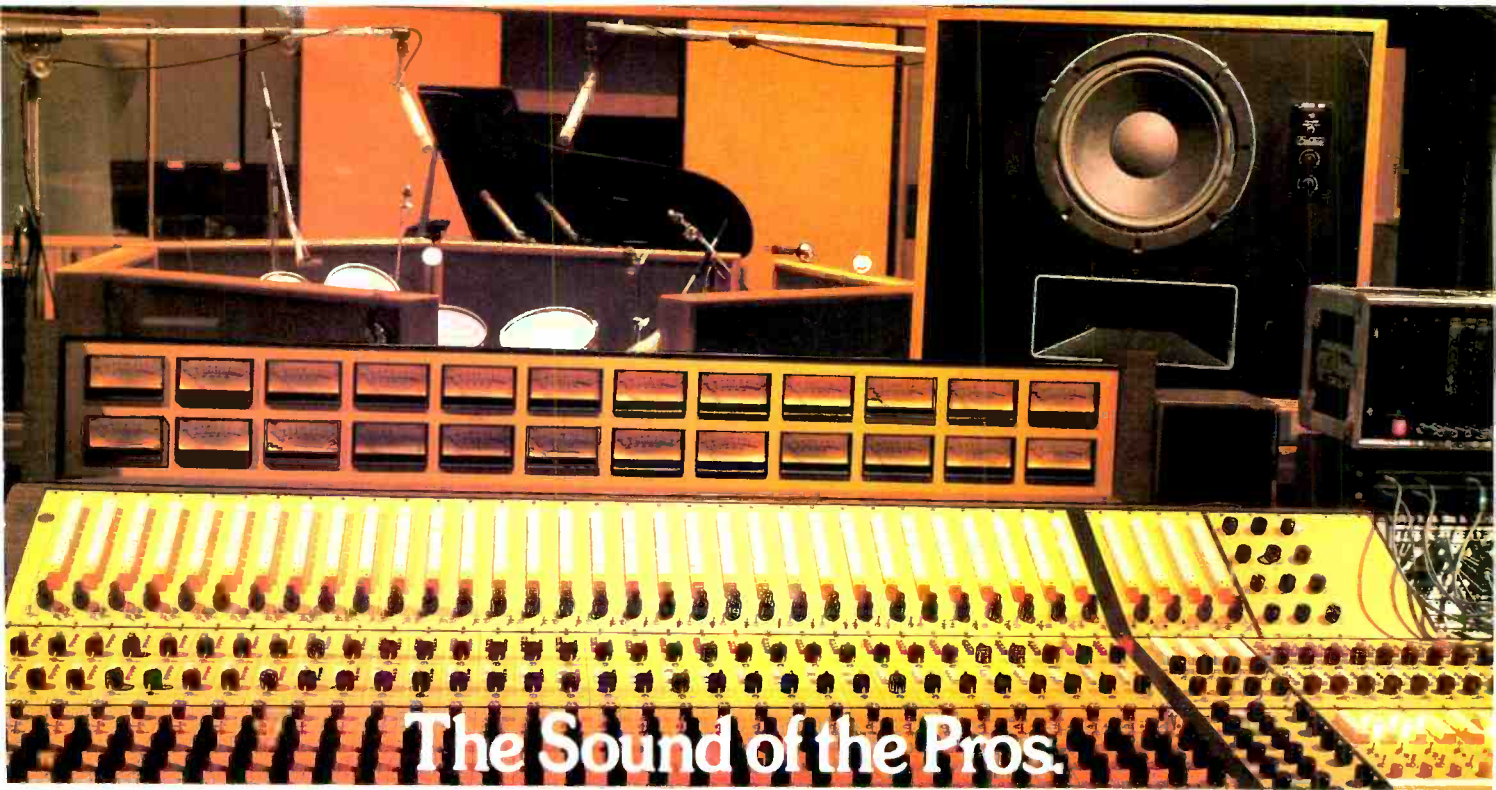
HANDEL: *Concerti Grossi (7).* M. MacDonald, Caldwell, Slowik; Smithsonian C Ensemble, Weaver (2).
Smithsonian 20th-Century Consort: Chamber Music (2). Works by Chenoweth, Penn, Rochberg, Schwantner, Wright.
 Smithsonian Recordings, P.O. Box 10230, Des Moines, Iowa 50336.

STARLOG/VARÈSE SARABANDE

(a new joint venture of Starlog magazine and Varèse Sarabande)

▲ *HERRMANN: North by Northwest (original film score).* London Studio SO, L. Johnson.
 JOHNSON, L.: *The Avengers (suite from TV series); The Professionals.* London Studio SO, L. Johnson.
 ▲ *JOHNSON, L.: Film Music (suites and excerpts from First Men on the Moon, Captain Kronos, Hedda, Dr. Strangelove).* London

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- HINDEMITH, POULENC, PROKOFIEV: *Flute Sonatas*. Válek, Hála.
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- JANÁČEK: *Choral Works*. Czech PCh, Veselka (2).
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- LASSO: *Penitential Psalms*. Czech PCh, Veselka (2).
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- Chamber Works* (by Kubík, Kurz, Riedlbauch, Rybář, Slavický). Various.
- Music at the Court of Charles IV*. Prague Madrigal Singers, Symposium Musicum (2).
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- Telarc Records, 23307 Commerce Park Rd., Cleveland, Ohio 44122. (Distributed by Audio-Technica U.S., Inc., 1221 Commerce Dr., Stow, Ohio 44224.)

TELEFUNKEN

- BACH: *Cantatas*. Harnoncourt, Leonhardt (continuation of series).
- ▲BACH: *Motets*. Harnoncourt.
- BEETHOVEN: *Piano Sonatas, Vol. 1*. Buchbinder.
- ▲BOCCHERINI, HAYDN, TELEMANN: *Works for Cello and Double Bass*. Bauman, Stoll.
- BRAHMS: *Ballades (4); Piano Pieces, Op. 70*. Frantz.
- TELEMANN: *Concertos*. Quadro Hotteterre
- TELEMANN: *Darmstadt Overtures*. Vienna Concentus Musicus, Harnoncourt.

Cellists of the Berlin PO, Vol. 2.

Violin Chamber Works. Zehetmair, et al.

Released by Polygram Classics, Inc., 137 W. 55th St., New York, N.Y. 10019.

TITANIC

- BACH, C.P.E. & J.C.: *Violin-Harpsichord Sonatas*. Lieberman, Kroll.
- BACH: *Flute Chamber Works (complete)*. Miller, Richman, et al. (2).
- BACH: *Harpsichord Works (includes Chromatic Fantasy and Fugue)*. Abreu.
- BACH, GAULTIER, MOUTON: *Lute Works*. C. Strizich.
- BACH: *Organ Works (includes Toccata and Fugue in D minor)*. B. Lagacé.
- BACH: *Violin-Continuo Works (complete)*. Boston Museum Trio.
- BALBASTRE, FORQUERAY: *Harpsichord Works*. Rephann.
- BEETHOVEN: *Piano Trios, Op. 1 (complete)*. Amadé Trio (2).
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- GIUSTINI, et al.: *Fortepiano Works, Vols. 1, 2*. Horszowski (2).
- HAYDN: *Piano Sonatas, Vols. 1, 2*. Bilson, fortepiano (2).
- HAYDN: *Piano Trios, Vol. 2*. Amadé Trio.
- HOTTETERRE, PHILIDOR: *Recorder Chamber Works*. Kosofsky, Kroll, Sennari.
- LECLAIR: *Sonatas for Two Violins*. Monosoff, Lieberman.
- MARAIS: *La Gamme*. Boston Museum Trio.
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- SCHUBERT: *Piano Sonata, D. 959; Variations on an Original Theme*. S. Carlin, fortepiano (with M. Carlin).
- VIVALDI: *Concertos Arranged for Two Harpsichords*. Pixton, Parmentier.
- American Brass Quintet: Music of the 1850s performed on period instruments.*
- Mireille and Genevieve Lagacé: Organs of Venice and Vicenza*. Works by Frescobaldi, Merula, et al. (2).
- Music from the Court of Frederick the Great*. Huene, Quantz flute; Kosofsky, Lieberman, Kroll.
- Titanic Records, 43 Rice St., Cambridge, Mass. 02140.

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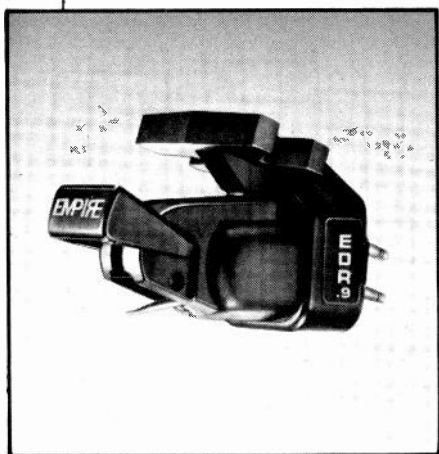
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- ▲BLISS: *Piano Concerto* (with Fowke); *Welcome the Queen; Homage March*. Royal Liverpool PO, Atherton.
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- BULLER: *Proenca*. Sarah Walker (ms); Walker, electric guitar; BBC SO, Elder.
- DAVIES, P.M.: *Ave Maris stella; Tenebrae super Gesualdo* (with Thomas, s). Fires of London, P. M. Davies.
- DUNSTABLE: *Veni Sancte; Veni Creator*. KINLOCHE: *Instrumental Works*. PURCELL: *Fantasies and Pavans*. Fires of London, P. M. Davies.
- FAURÉ: *Barcarolles Nos. 1-9*. Parkin.
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- HOWELLS; C. W. ORR: *Vocal Works*. Langridge (t), Ogston (b); Parkin.
- ▲MESSIAEN: *Organ Works (complete), Vols. 1, 2*. Bate (Beauvais Cathedral).
- TIPPETT: *Shires Suite*. D. YOUNG: *Virages* (with De Saram, cello). Leicestershire Schools SO, Fletcher, Young.
- VAUGHAN WILLIAMS: *On Wenlock Edge* (with English, t). IRELAND: *Overlanders Suite; Epic March*. West Australian SO, Measham.
- ▲WIENIAWSKI: *Violin-Piano Works*. Ricci, Gruenberg.
- ▲Jennifer Bate: *Recital on the Royal Albert Hall Organ*. Works by Bach, Bate, Langlais, Vierne, Widor, et al.
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VANGUARD

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- BACH: *Well-Tempered Clavier, Book 1*. Horszowski, piano (3).
- BACH, P.D.Q.: *Liebesslieder Polkas*. Swarthmore College Ch. *Twelve Quite Heavenly Songs*. Schickele, Ferrante; Oei.
- BEETHOVEN: *Piano Sonatas Nos. 31, 32*. Oppens.
- ▲DEBUSSY: *Trio for Flute, Viola, and Harp; Syrinx*. DEVIENNE: *Duo for Flute and Viola*. RAVEL: *Sonatine en trio (arr. Salzedo)*. Orpheus Trio (analog).
- ▲RESPIGHI: *Pines of Rome; Feste romane*. Baltimore SO, Comissiona.
- ▲RZEWSKI: *Four Pieces; Which Side Are You On?* Rzewski, piano.
- ▲TCHAIKOVSKY: *Symphony No. 4*. Baltimore SO, Comissiona.
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This fall Vanguard will also introduce an AUDIOPHILE CHROME CASSETTE series, selected from among its most popular record albums. The first twelve releases will include, among others, Somary's *Brandenburgs* and *Messiah*, Mackerras' *Petrushka* and *Pictures*, Janigro's *Four Seasons*, Deller's Purcell and Abravanel's *Satie*, and "P.D.Q. Bach on the Air."

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BEETHOVEN: *Symphonies (9).* Leipzig Gewandhaus O, Masur.

▲ **BERLIOZ: Symphonie fantastique.** London SO, Paita.

BRUCKNER: *Symphony No. 0.* Osaka PO, Asahina.

▲ **GRAINGER: Works for Symphonic Band.** U.C.L.A. Wind Ensemble, Westbrook (45 rpm only).

■ **HERRMANN: Seventh Voyage of Sinbad** (original soundtrack). British Studio O, Herrmann (first stereo release).

■ **HINDEMITH: Kammermusik, Op. 24, No. 1.** *Concertos for Harp, Woodwinds, and Orchestra; for Trumpet, Bassoon, and Orchestra.* San Francisco Little SO, Millar (first stereo release).

▲ **HOLDRIDGE: Violin Concerto No. 2** (with Dicterow); *Symphonic Suite from Lazarus and His Beloved.* London SO, Holdridge.

■ **NEWMAN: Anastasia** (original soundtrack). 20th Century-Fox SO, Newman (first stereo release).

■ **SKALKOTTAS: Greek Dances (12).** San Francisco Little SO, Millar (first stereo release).

■ **STEINER: John Paul Jones** (original soundtrack). London Sinfonia O, Mathieson.

▲ **TCHAIKOVSKY: Symphony No. 6.** National PO, Paita.

▲ **Vaclav Hudecek: Violin Recital** (Tartini's *Devil's Trill Sonata*, arr. Kreisler; et al.). Hala, piano; Susumu Miyashita, koto.

CONCERT HALL SERIES (mono reissue):

DELLO JOIO: *Tre Ricercordi.* Smadjai, piano; Vienna SO, Swoboda. RÓZSA: *Hungarian Serenade.* La Jolla O, Sokoloff.

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BEETHOVEN: *Symphony No. 3.* Vienna Tonkünstler O, Busch.

SIBELIUS: *Symphony No. 5.* Berlin RSO, J alas. TCHAIKOVSKY: *The Tempest.* Vienna Tonkünstler O, Fekete.

VILLA-LOBOS: *Bachianas brasileiras No. 7; Chôros No. 4.* Berlin RSO, Villa-Lobos.

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HARRIS: *Symphony for Voices, et al.* North Texas State U. A Cappella Ch, McKinley. *Songs (complete); Lamentation* (with Goldsmith, viola). Berkowitz (s), J. Harris.

HARRIS: *Violin Sonata* (with Temianka); *Cello Sonata* (with Rejto); *Soliloquy and Dance* (with Goldsmith, viola). J. Harris.

URANIA SERIES: Release choices to be determined as tape conditions are assessed.

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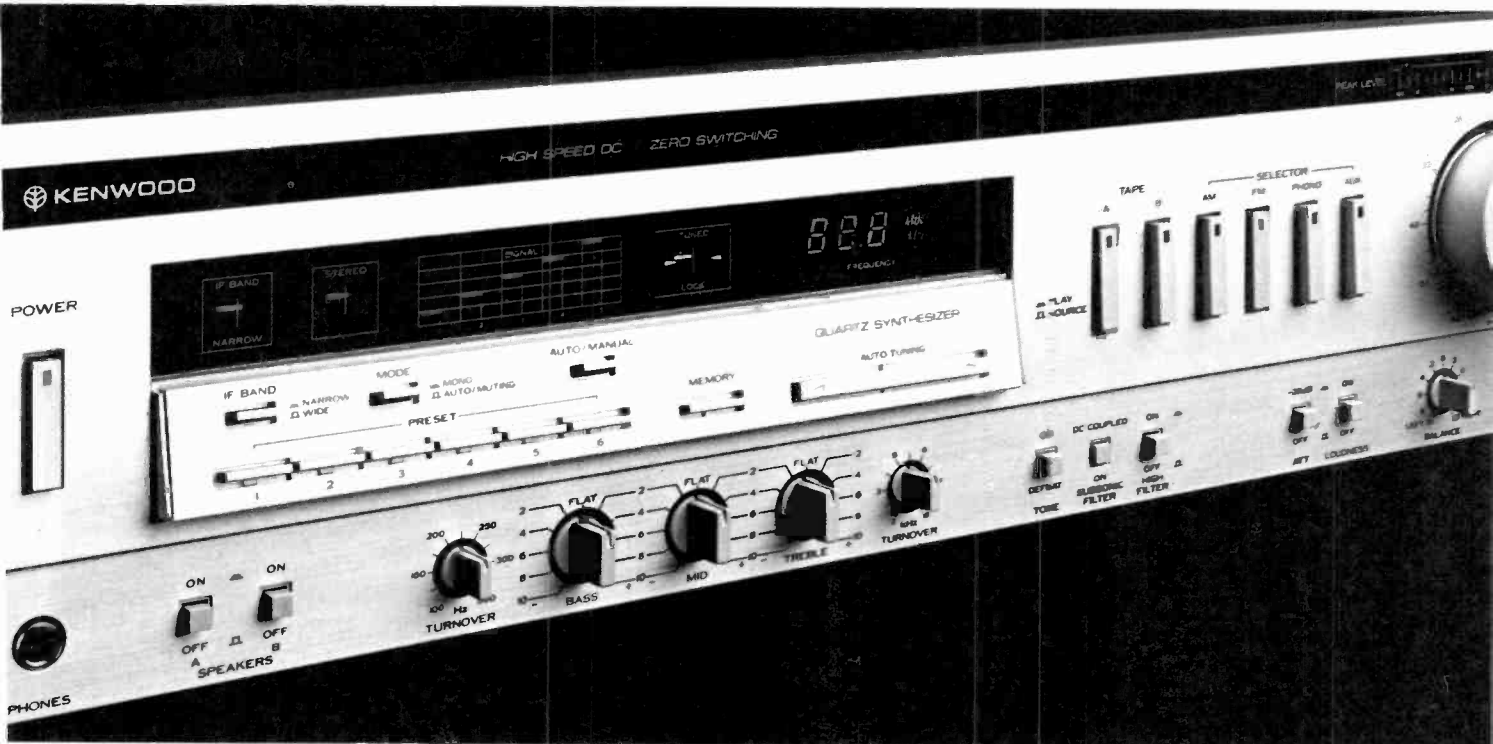
BACH: *French Suites (6).* Graham, piano.

SCHUBERT: *Piano Trios.*

SCHUMANN: *Symphonic Etudes; Fantasiestücke.* Graham.

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Behind the Scenes

Ira Moss, whose Moss Music Group took over the Vox/Turnabout line a couple of years ago, has stirred considerable interest in the formation of a new organization to foment wider acceptance and recognition of classical music. His working title, Association for Classical Music, boils down to ACM—not to be confused with CMA, the twenty-two-year-old Country Music Association, which inspired his idea.

Specific activities and policies will be determined by the group's governing board when that takes final shape, but Moss suggests such enterprises as surveys, sponsorship of free concerts, award presentations, and programs to promote fundamental music appreciation and education in the schools and in more informal settings and to further the understanding of contemporary music. The greater exposure that results should benefit not only the recording industry, but all segments of the music business. Working with Moss in formulating the idea and pulling together potential board members has been Marvin Saines, former vice president of CBS Masterworks, a likely candidate for directorship of the board. To judge from initial promises of support, all areas of the music community will be represented, and membership will be open to the public.

This promises to be a month of new departures for Deutsche Grammophon. As we noted in June, DG will enter the digital fray with **Herbert von Karajan's** *Die Zauberflöte*—in a package, incidentally, that will offer a bonus 45-rpm disc containing the new digital *Zauberflöte* Overture on one side, backed by Karajan's first recording, a 1938 reading of the overture with the Berlin State Opera Orchestra. DG will also launch its new Concours series with the three releases announced in last month's preview, recordings by competition-winning pianists **Boris Bloch**, **Steven de Groot**, and **David Lively**. What's more, the German label will finally make a foray into the budget market. This month will see the first in a projected annual series of releases of "big boxes," planned to list at around \$5.00 per disc. Two of the initial four sets will feature the Berlin Philharmonic, with **Karl Böhm** conducting Schubert's symphonies (five discs) and **Rafael Kubelik** Dvořák's (nine discs). There will also be nine-disc sets of the Schubert piano sonatas played by Wil-

helm **Kempff** and the Bach orchestral works with **Karl Richter** leading his Munich Bach Orchestra. These sets will offer DG's usual imported pressings; the cost-cutting will be done in the annotations and elsewhere.

With Karajan's latest *Brandenburgs* reviewed in this issue, we should note that another significant remake is in the works. **Neville Marriner** recently recorded the concertos for Philips with the Academy of St. Martin-in-the-Fields and an all-star roster of soloists: **Henryk Szeryng**, violin; **Jean-Pierre Rampal**, flute; **Heinz Holliger**, oboe; **André Bernard**, trumpet; and **George Malcolm**, harpsichord. As anyone who has heard it will readily recall, Marriner's 1971 recording was adventuresome, to say the least. In conjunction with musicologist and harpsichordist **Thurston Dart**, who died before the project was completed, Marriner reverted to the presumed "original" versions of some of the works—thus such oddities as a French horn replacing the trumpet in No. 2, soprano recorders in No. 4, the abbreviated harpsichord cadenza in No. 5, etc. Almost perforce, his new reading will be more conventional.

Buyers who frequent cutout bins have probably noticed an unusually heavy representation of London titles lately—a side effect of the Polygram takeover. Decca/London discs are now being pressed by the Philips plant and sporting a "made in Holland" notation on the label. Ultimately, owing to the difference in technique, everything the British label decides to keep in circulation will have to be reprocessed by Philips. The recent rash of cutouts represents some preliminary trimming around the edges of the sizable catalog, and further deletions are expected.

As we mourn the recent passing of one classical musician/Hollywood star, **José Iturbi**, we hail the advent of another: **Luciano Pavarotti** is about to take the lead role in a movie, set in London but filmed in Hollywood, about (what else?) an Italian opera singer. For what it's worth, the proposed title is *Yes, Giorgio*.

RCA's big operatic project of one summer became Decca/London's of the next. When RCA scrapped its ballyhooed

La Gioconda plans in 1979, **James Levine** and the National Philharmonic went on to record *La Bohème* for EMI/Angel (reviewed next month). This past summer the National Philharmonic returned to *Gioconda*, this time for Decca and under a new conductor, **Bruno Bartoletti** (since Levine was not free). Soloists are **Montserrat Caballé**, **Agnes Baltsa**, **Alfreda Hodgson**, **Pavarotti**, **Sherrill Milnes**, and **Nicolai Ghiaurov**.

On the whole, it has been a slow year for operatic recording. London, which usually hosts a half-dozen or more such projects in a summer, this year had only three others—**Colin Davis'** Covent Garden *Il Trovatore* (which we noted in August) for Philips and two EMI recordings featuring the Philharmonia Orchestra and Ambrosian Opera Chorus: Levine's *Tosca*, with **Renata Scotto**, **Plácido Domingo**, and **Renato Bruson**, and **Riccardo Muti's** *La Traviata*, with **Scotto**, **Alfredo Kraus**, and **Bruson**. As a by-product of *Traviata*, **Muti** also did some Verdi ballet music with the Philharmonia.

National Public Radio, which last June became the first national radio network in the world to broadcast full time via satellite, is launching a campaign this month to catch the ear of the classical listener. Special programs include live broadcasts of an all-Mozart concert by the St. Paul Chamber Orchestra, with **Pinchas Zukerman** at his new helm, on the 4th and the opening concert of the Los Angeles Philharmonic's season on the 23rd. In addition, there will be a series of five broadcasts traversing Brahms's complete piano works in performances by **Detlef Kraus** taped earlier this year. A portrait of **Eugene O'Neill** (*O'Neill and the Sea*) will offer a 1978 Yale University presentation of **Beatrice Lauffer's** one-act opera *Ile*, based on an early work of the playwright, and there will also be a first broadcast of *Simple Simon*, a "theater opera" by **Michael Sahl** and **Eric Salzman**. Among the series starting this month will be the entire season of the San Francisco Opera, with ten of the twelve works broadcast live; thirteen taped concerts by the Cincinnati Symphony Orchestra, including **Michael Gielen's** debut as its conductor; and *Backstage* with **Richard Mohr**, thirteen half-hour conversations with **Rudolf Bing**, **Vladimir Horowitz**, **Leontyne Price**, **Boris Goldovsky**, **James Levine**, and others—some with impromptu performances. **HF**

Record Reviews

A Worthy Fate

by Peter G. Davis

Supraphon offers an important first recording of a little-known Janáček opera.



Fate is the least known of Leoš Janáček's seven mature operas. Written between 1903 and 1907, just after *Jenufa*, it was never performed during his lifetime. Thirty years after his death, it finally reached the stage in a double premiere, on October 25, 1958, in Brno and the following evening in Stuttgart, but both productions drastically altered the opera's text and structure in order to lend a coherent dramatic shape to what had long been considered an impossible libretto. This "rescue operation" did not succeed in launching *Fate* into the world, however, and it has never been seen anywhere since, although the BBC gave a broadcast performance of the original score in 1971. Now we have Supraphon's recording, which also presents the opera as Janáček left it.

The factors that kept *Fate* off the stage when Janáček was alive are rather complex. Various performances were planned from time to time, always thwarted by circumstance or the composer's truculence with opera-house management. World War I intervened, and then he became deeply involved with other projects during the incredibly productive five years before his death in 1928; *Fate* remained on the shelf. Most students of his work have dismissed the opera as an experiment by an original creative genius who had not yet mastered his highly unconventional ap-

proach to music-drama, and the Brno/Stuttgart premieres seemed to uphold this contention.

One suspects they are correct, although it is just possible that the right production could reveal *Fate* as a more viable, potentially theatrical work than casual acquaintance suggests. Its descriptive subtitle—"three romantic pictures"—gives a clue to what Janáček was after: an operatic "novel" in three self-contained scenes, each focusing on a single crucial event in a love relationship that actually spans many years. This sort of freely selective dramatic presentation in novelistic terms was very much in the air at the turn of the century, with such precedents as Tchaikovsky's *Yevgeny Onegin*, Puccini's *La Bohème*, Massenet's *Sapho*, and most particularly, Charpentier's *Louise*, an opera Janáček greatly admired.

The plot is based on a real-life incident that came to his attention while he summered at the Moravian spa of Luhačovice in 1903. There he met a woman named Kamila Urválková, who told him of her unhappy love affair with a struggling young composer, Ludvík Celanský. Kamila was forced by her parents to leave him and marry a rich farmer. Ludvík never forgave her supposed desertion, and he took revenge by writing a one-act opera that presented her as a deceitful and calculating jade. The subject struck a responsive chord,

and Janáček resolved to write his own opera showing her in a more favorable light.

The libretto he eventually devised, however, concentrates far more on the composer (now called Zivný) than on the heroine (Míla). The two meet again at Luhačovice after a year's separation; Míla's marriage to a rich man, arranged by her mother, has not yet taken place. During that year, she has had Zivný's child. That fact and the potent memories of past love reawaken their passion, and they decide to marry, much to the horror of Míla's unbalanced mother. In Act II, Zivný and Míla have been together four years, but he has still not completed his opera based on their shared life—the scene of her earlier betrayal still fills him with doubts and jealousies, and he cannot bring himself to compose the ending. Their quarrels are interrupted by Míla's mother, who, now completely insane, struggles with Míla until they topple to their deaths over a balustrade. Six more years pass before Act III. Music students in a conservatory are playing over parts of Zivný's opera, commenting ironically on its strange autobiographical plot and unfinished state. Zivný enters, still tormented by the loss of Míla, and in a long monologue he reassesses the tragic nature of their fated love. After a final vision of Míla in tears, he breaks down and is led away.

This bare-bones outline sounds pretty unpromising, but the interior motivations of the two protagonists rather than exterior incidents are what fascinated Janáček. He attempted to explore a very delicate but familiar problem: how two people in love react when each regards the other as an idealized fantasy figure—the reality of human nature and the outside world continually shatter their illusions, since a love based on such immature attitudes is bound

to fail. (Interestingly enough, Janáček's own marriage was dissolving when he wrote *Fate*.) Then, too, there is the added irony of Zivný's futile efforts to explain his life through his art, in this case through an opera; a man who cannot understand his own life, Janáček appears to be saying, can never create a finished work of art. In its essentials, *Fate* shows its composer treating a basic theme that lies at the heart of all his stage works: Living is often an intensely painful process, but life itself is a precious gift to be treasured and to be met head-on, without sentimentality or compromise. Indeed, the scenes between Zivný and Míla reveal two fallible yet searching characters, as warmly human and immediately real as any in Janáček's other operas.

Clearly, the form of *Fate* gave the composer a great deal of trouble, and he did not yet command the techniques that later allowed him to handle so brilliantly the even more unconventional material of *The Cunning Little Vixen*, *The Makropoulos Affair*, and *From the House of the Dead*. The intention of each act is plain enough—the superficial concerns of the vacationers in Act I as contrasted with the intense reunion of Zivný and Míla, the inevitable domestic tragedy of Act II, and Zivný's Tristan-like delirium in Act III, through which he reaches full self-realization. Yet we never really have enough information about these people, the action is often insufficiently motivated, and the many subsidiary characters hardly seem to exist at all. Míla's mother, in fact, is little more than an arbitrary symbol of fate, or worse, a convenient plot device. Perhaps a stylized, expressionistic staging would strengthen and focus the action, in which a cast of shadowy, slightly unreal people fleetingly illuminate the real-life fantasy world of Zivný and Míla. It might just work, but it would take an imaginative producer with a keen understanding of Janáček's essentially humanistic message.

The 1958 German production, which I was fortunate enough to see several times while a music student in Stuttgart, offered some fairly ingenious practical solutions, although Kurt Honolka's adaptation distorted the opera beyond recognition in the process. His major piece of surgery was to split Act III in two and place the first half at the beginning of the opera as a prologue. The conservatory students become actual opera singers rehearsing Zivný's unfinished score, making the opening scene an opera within an opera that suddenly breaks off as the unhappy composer enters the rehearsal. His subsequent monologue leads into Act I proper, and the rest of the action takes place in a flashback—an effective theatrical device (no doubt cribbed from *The*

Tales of Hoffmann) but one that ruins Janáček's gradual development of his two main characters.

Honolka also transferred many vocal parts from one person to another—a disastrous procedure with a composer as word-conscious as Janáček, and one that renders many of the orchestra's thematic references to specific characters and events totally meaningless. Míla's mother is the principal beneficiary of this rewriting in an obvious effort to give her greater dramatic import. She no longer goes insane, but simply degenerates into a nagging mother-in-law. And instead of being dragged to her death, Míla falls during a heated argument with Zivný and dies after striking her head on the composer's piano—hardly an improvement on the original.

What remains vivid, even after twenty-two years, is the music. This is surely the most lyrical of Janáček's operas, for the composer was never more prodigal in spinning out long-breathed vocal lines of bewitching beauty to express the lovers' every emotional nuance. The idiom is, naturally enough, closer to the expansive style of *Jenůfa* than to the terse concentration of the later operas, and in terms of sheer invention, *Fate* is in no way inferior to its predecessor. Once heard, the music is impossible to forget. To this day, a glance at the Honolka score instantly brings back the plangent sound of Josef Traxel's Zivný, the fragile vulnerability of Lore Wismann's Míla, and, in the haunting cantilena of Lenšký, the hero of Zivný's incomplete opera, the golden tenor of young Fritz Wunderlich.

Some enterprising company should one day give *Fate* its true world premiere in the form Janáček intended—who knows, the results may confound all critical reservations. At the very least, one must agree with Michael Evans in his study of the composer's operas: If *Fate* is a failure, "it is a failure on the grandest scale, in an act of complex, rich, and stimulating vision."

Little need be said of the Supraphon recording, which offers a solid, serviceable performance. Like the previous installments in the Czech label's Janáček opera series, this one features singers to whom the language, style, and spirit of the music are second nature even if the voices per se are of a rather provincial quality. František Jílek, who conducted the 1958 Brno stage performance, secures crisp playing from the Brno Janáček Orchestra, and the sound is conservative but very listenable. The main point is that *Fate* can now be heard on discs at last, and with luck this recording will inspire a faithful production enabling us to assess this intriguing opera's true worth.

JANÁČEK: *Fate*.

CAST:

Miss Míla	Magdaléna Hajóssyová (s)
Doubek (as a boy)	Milena Jílková (s)
Kosinská	Anna Barová (s)
Součková	Jaroslava Jánská (s)
Míla's Mother	Jarmila Palivcová (ms)
Zivný	Vilém Přibyl (t)
Dr. Suda	Vladimír Krejčík (t)
Hrázda	Jiří Olejníček (t)
Doubek (as a student)	Josef Skrobánek (t)
Lhotský	Richard Novák (b)
Konečný	František Caban (b)
Verva	Jaroslav Souček (b)

Brno Janáček Opera Chorus and Orchestra, František Jílek, cond. [Zdeněk Zahradník, prod.] SUPRAPHON 1112 2011/2, \$17.96 (two discs, manual sequence).

The (Almost) Complete Ruggles

by Allan Kozinn

CBS's valuable survey of the American eccentric's meager output is among the final legacies of the Lieberson era.



Charles Sprague Ruggles—who began using the name Carl during his student years—has been called everything from a primitive to a visionary, a transcendentalist, and even a mystic; while there is some truth in each of those descriptions, what he was, really, was an eccentric, strongly opinionated New England iconoclast who wrote a concise body of mildly dissonant neo-Romantic music.

With good reason, he is often paired

with Charles Ives: Both were rugged Yankee individualists who studiously avoided being trapped by the conventions of Western music, whether the old rules of tonality or the newer strictures of the serialists, although both used those conventions when it suited them. They were, in fact, close friends, and each considered the other the world's greatest composer. Yet there were significant differences, too. Ives, the worldly insurance magnate, had progres-

sive if somewhat naive political views; Ruggles, more the salty old rustic, was said to be a political reactionary. Of course, the more important distinction musically is that, while Ives turned out numerous works in a kind of loose notation that imposes a heavy interpretive burden upon performers and scholars, Ruggles spent much of his life seeing to the minute details of only ten pieces, polishing and reworking them until each score said precisely what he meant it to say. When he died in 1971 at age ninety-five, he left perhaps a dozen known projects unfinished, having destroyed or repudiated many others that did not meet his exacting standards.

Although about half the items in this new CBS set are first recordings, Ruggles has fared reasonably well in the studio, given the size of his output. His three major orchestral pieces, *Sun-Treader*, *Organum*, and *Men and Mountains*, have remained steadily in the catalog, the last in several performances. Of his smaller works, there have been two recordings of the piano version of *Evocations* and one each of *Portals* for string orchestra and the trumpet/trombone version of *Angels*.

Collecting the rarities and the better-known works into a unified survey was a marvelous idea, and it should come as no surprise that "The Complete Music of Carl Ruggles" was a brainchild of the late Goddard Lieberson, one of the last champions of new American music at a major label and the last classics executive with power to implement projects of such high prestige and limited commercial appeal. And a fine set this is. Under the joint direction of Michael Tilson Thomas, a Ruggles devotee since high-school days, and John Kirkpatrick, best known for his Ives work but a Ruggles expert as well, the performances are conscientiously prepared and enthusiastically executed. Whether or not the collection can honestly be called "complete" is another question, to which I will return.

For the most part, the music is arranged chronologically, beginning with *Toys* (1919), a brief song for unspecified voice and piano on the composer's own text, the earliest piece Ruggles acknowledged. Forty-three when he wrote it, he dedicated it "to my little son Micah" on the boy's fourth birthday. Micah must have had precocious ears, for *Toys* is metrically varied and freely chromatic, with abundant seconds and ninths in the piano part. Yet amid this modernism nestles simple, old-fashioned tone painting. The singer tells of a painted ship in a gentle three-note "wave"; a train set's "choo choo" is sung just as the piano part sends that toy clattering on its way; and a balloon floats audibly

skyward. Not a deep work, perhaps, but a charming one that Ruggles felt represented the beginning of a style. With Thomas providing spirited accompaniment, Judith Blegen sings the piece with a clarity and smoothness—particularly on the sustained high B at the end—that I have missed in many of her standard-repertory performances.

Toys was composed toward the end of a thirteen-year struggle with an opera, *The Sunken Bell*; in 1923, Ruggles finally scuttled the project and left his sketches to molder in an unheated New England shed. This was a bad time to have attempted an opera, for during these years he was moving decisively away from his immature, late-Straussian idiom toward the atonal style of his later life's work. And if *Toys* hinted at this change, his only other acknowledged vocal work, *Vox clamans in deserto*, drove the point home with a vengeance. Shaped between 1919 and 1923, this set of three poems (Browning's *Parting at Morning*, Meltzer's *Son of Mine*, and Whitman's *A Clear Midnight*; four others were sketched but not completed) for voice and an expanded chamber group is a tense, dramatic, and pessimistic work with a craggy, declamatory vocal line, well sung here by mezzo-soprano Beverly Morgan, over a chilling instrumental accompaniment. *Speculum Musicae* plays this most aggressively dissonant of Ruggles' scores with expected expertise, and the stereo imaging tends to draw the listener into the center of the group—a position CBS's dreadfully noisy surfaces render less than ideal.

From 1920 to 1924, Ruggles worked on the three-movement symphony *Men and Angels*, one of the many works he eventually scrapped. But he salvaged the second movement, "Angels," publishing it in 1925 in a version for six muted trumpets. Writ-

ten in ternary form and marked "serene," it has a hymnlike quality, its dissonances so evenly regulated that it sounds almost tonal. In 1940, he expanded the contrapuntal middle section, transposed the piece up a half-step, and rescored it in a brighter, more satisfying version for four trumpets and two trombones, all muted. Both editions are performed here by Gerard Schwarz and an otherwise unidentified brass ensemble; given players who can count, there's little that can go wrong.

Ruggles discarded "Men," the short (2:17) first movement, which is nevertheless included here; there is nothing inferior about it. Its contrasts—the opening and closing bars are brash and brassy, the central climax is a scintillating string crescendo, and the major thematic material takes the form of a quiet, beautiful, and uncharacteristically lyrical oboe solo over muted strings—are all skillfully woven together.

The last movement of *Men and Angels* (originally called "Sun-Treader"; no relation to the later work of that title) he revised and used as the opening movement of another symphony, *Men and Mountains* (1924). In this three-movement work, he returned to the angularity—but not the severity—of *Vox clamans*. He also expanded his tonal and dynamic palette: Where the old "Men" is almost a chamber piece except for a few climactic bars, *Men and Mountains* boasts first and last movements ("Men" and "Marching Mountains") of full symphonic scope and character, separated by a comparatively frail central movement ("Lilacs") for strings only. Of the available recordings, Thomas' new one is clearly the best. Lukas Foss also led the Buffalo Philharmonic in a recording some years earlier (Turnabout TV 34398), but there the players sound insecure—a tragic flaw in this music—and the reading lacks vitality. William Strickland coaxes a lively, self-assured performance from the Polish National Radio Orchestra in a recording (CRI SD 254) that finishes a close second, marred only by audible edits.

Without doubt, Ruggles reached his peak in *Sun-Treader* (1927–28), a single majestic movement in sonata form, full of brilliant orchestral touches and magnificently varied textures. At times it is brawny, as in the recurrent opening bars, underpinned by steady timpani—a "treader" motif; elsewhere it builds from quiet gentility to dissonant, striving urgency. The Buffalo Philharmonic meets most of the work's formidable challenges more than adequately; but Thomas' other recording of a decade ago with the Boston Symphony (DG 2530 048) is in every respect su-

perior to the newer version. That disc, in fact, is an excellent introduction to Ruggles' work and indispensable to any collection of American music.

Between *Men and Mountains* and *Sun-Treader*, Ruggles sketched two other symphonic pieces; all that remains is a single movement for string orchestra, *Portals* (1925). Though hardly a fan of the twelve-tone school—he called serialism "a dog chasing its tail"—he evidently saw some merit in phrases that avoid repeated notes: In *Portals*, his opening melody covers nine of the twelve tones without repetition. This is one of his more somber and introspective works, and Thomas approaches it with sobriety while managing to wring a full-bodied, shimmeringly silver tone from the Buffalo strings.

Evocations, like *Angels*, appears in two versions: one for solo piano (its four movements dating from 1937–43 were all revised in 1954), another for orchestra (scored in the mid-'40s). John Kirkpatrick interprets the 1954 piano revision with unquestionable authority, but the dry recorded sound hampers the intended effect. As in *Portals*, Ruggles constructs long lines without repeated notes; but here he calls on the pianist to sustain them far beyond their written value so that a misty resonance hangs over the end of each phrase. This comes across better in a collection of American piano music recorded by Roger Shields (*Vox SVBX 5303*), whose playing is also considerably more exciting than Kirkpatrick's; and for those who insist upon Kirkpatrick's authority, there is his own earlier, somewhat livelier recording (Columbia Special Products AML 4986), which includes both the original and the 1954 revision of the piano score.

Ultimately, however, *Evocations* is most effective as an orchestral work—not so much a literal transcription as a new look at the same basic material. In Thomas' spacious performance (the only orchestral *Evocations* on disc) the work takes on an entirely new meaning, more mystical, more atmospheric, and much more evocative.

With *Organum* (1944–47), Ruggles again entered new ground, adding lines in fourths and fifths (hence the title) and saving the seconds and ninths, which had long been a trademark, for climactic points with more lyrical material in between. As extroverted as *Sun-Treader* but more compact and lyrical, *Organum* was for all practical purposes his last work.

There is one more piece here, though: a sixteen-bar chorale called *Exaltation*, written in 1958 in memory of his wife, who had died the previous year. The score is stark and simple, the only direction read-

RUGGLES: Complete Works.

Judith Blegen, soprano; Michael Tilson Thomas, piano.* Beverly Morgan, mezzo-soprano; *Speculum Musicae*, Michael Tilson Thomas, cond.** Buffalo Philharmonic Orchestra, Michael Tilson Thomas, cond.* Gerard Schwarz, Brass Ensemble, Michael Tilson Thomas, cond.** John Kirkpatrick, piano.† Gregg Smith Singers; Leonard Raver, organ.†† [Steven Epstein, prod.] CBS MASTERWORKS M2 34591, \$17.98 (two discs).

Toys.* *Vox clamans in deserto*.** *Men*.† *Angels* (first and second versions).** *Men and Mountains*.† *Sun-Treader*.† *Portals*.† *Evocations* (first† and second† versions). *Organum*.† *Exaltation*.†† ††

ing "congregation in unison," and not composed on a specific text. Thomas and Kirkpatrick have devised a reasonable solution, presenting it first on solo organ (Leonard Raver), then by a brass ensemble, followed by organ, brass, and chorus (the Gregg Smith Singers) singing "Oh God, Our Help in Ages Past," a solo organ interlude, and finally the chorus a cappella on the syllable "ooh." Except for a few strong-beat dissonances, there is nothing here unfit for a church. *Exaltation* stands as a touching coda to a career steeped in innovation. Ruggles devoted his last few decades to painting, a longtime avocation.

Now, as to the question of completeness: There is in fact more Ruggles around, some in the Library of Congress, some at Yale University. Two of his earliest songs, "Ich fühle deinem Odem" and "Oh, How Can I Be Blithe and Glad?" were published in Boston in the 1890s, and some of his friends claim to have seen or even to have copies of other finished songs from the same period. There is also, according to Kirkpatrick's notes, a piece for violin and piano called *Mood*, said to date from Ruggles' *Sunken Bell* years. This is quite a controversial little item. No one, including the composer's son,

seems to have heard anything about it until Kirkpatrick performed it a few years ago, and some Ruggles experts believe it to be either entirely spurious or, at best, constructed of fragments from sketches. In his notes, Kirkpatrick claims to have found *Mood* (supposedly subtitled "Prelude to an Imaginary Tragedy") in the '60s, while helping Ruggles arrange his papers, and hid it to prevent the composer from destroying it. This raises some questions: Why only this piece, of all the material Kirkpatrick must have come across? And why did he fail to include it among the many other unfinished or discarded works he discussed in his lengthy article in the spring/summer 1968 issue of *Perspectives of New Music* (from which these liner notes are drawn almost verbatim)? Finally, if the piece is genuine, why has it not been included in this set? CBS may have intended to present only the music Ruggles acknowledged, but then why include "Men"?

Even leaving aside the rejected works, we know from the inclusion of the two *Angels* and *Evocations* that Ruggles' own arrangements of his works are fair game. So where is his 1946 two-piano version of *Organum*? Or the solo piano version of that

work published in *New Music* that same year? The 1925 edition of *Angels* included a solo organ arrangement by Lynnwood Farnam approved by Ruggles, and the first page of that score lists no fewer than six alternate instrumentations Ruggles considered suitable. The two versions of *Evocations* on the old Columbia Special Products disc, which provide some interesting clues into the revisionist workings of Ruggles' creative mind, put CBS in the embarrassing position of having a recording of a work in its own catalog that is not in the "complete" set. And for the sake of completeness, wouldn't Ruggles' symphonic band arrangements of works by other composers be worth hearing?

Still, however they may affect the claim to completeness, these gaps do not add up to any great loss, and the importance of this excellent collection is obvious. What is really disappointing is that, having taken three years (1975-78) to record it and having kept it in the icebox for two more, CBS has apparently given absolutely no care to its manufacture. This is a horrible pressing, with numerous serious flaws superimposed on a surface that grinds disgracefully throughout.

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BACH: Brandenburg Concertos (6), S. 1046-51.

A Los Angeles Chamber Orchestra, Gerard Schwarz, cond. [Patti Laursen, prod.] ANGEL DSB 3901, \$21.96 (two discs; digital recording). Tape: 4Z2S 3901, \$17.96 (two cassettes). 45 rpm: DSSC 4504, \$28.98 (three discs) (distributed by Ambassador Foundation, 300 W. Green St., Pasadena, Calif. 91129; add \$2.50 for shipping).

Berlin Philharmonic Orchestra, Herbert von Karajan, cond. [Hans Hirsch, prod.] DEUTSCHE GRAMMOPHON 2707 112, \$19.96 (two discs). Tape: 3370 030, \$19.96 (two cassettes).

Concertos: No. 1, in F; No. 2, in F; No. 3, in G; No. 4, in G; No. 5, in D; No. 6, in B flat.

With thirty recordings of the *Brandenburg* Concertos already in SCHWANN, any newcomer must face careful scrutiny—both for quality of interpretation and for sonic excellence. In a bid for the latter, Gerard Schwarz's performances with the Los Angeles Chamber Orchestra were recorded digitally (using the Soundstream process); the conventional 33 $\frac{1}{3}$ -rpm version is available through retailers, while the 45-rpm pressing (purported to offer a better transfer of the digital master) must be ordered directly from Ambassador International Cultural Foundation, the orchestra's sponsoring organization. In both formats the record sleeves promise "a remarkable new audio experience: brilliant display of sharply etched detail, spectacular dynamic



Gerard Schwarz, conductor and trumpet virtuoso in digital *Brandenburgs*

range, impressive clarity, and freedom from distortion."

What reaches the ear, alas, is anything but "sharply etched detail" and "impressive clarity," and I'm not at all convinced that the 45-rpm edition is significantly superior to its conventional counterpart. In both the harpsichord projects adequately (with a bit more bite at the higher speed), but the string sound is decidedly blunt and murky, and the oboes are perceptibly distorted. Presumably because of inferior disc mastering, both versions suggest the slightly cloudy sound of a third-generation tape copy, albeit minus the hiss, and even by conventional disc standards neither rates better than a B plus. Furthermore the acoustic of the recording venue (Ambassador Auditorium in Pasadena)—at least as captured here—is rather too dry.

Sonic considerations aside, the performances have many attractive features. These are intelligent and thoroughly musical interpretations, revealing an awareness of recent discoveries relative to eighteenth-century performance practice and a keen sense for applying them to use of modern instruments. Schwarz's vertiginous tempo in the Second Concerto (in which he also plays trumpet) could hardly have been pos-

sible with the old valveless clarinos, but only the dourest purist will resist his dazzling virtuosity and finesse. I am less enamored of solo violinist Paul Shure's nervous vibrato and Malcolm Hamilton's sometimes fussy continuo realizations. And others may dislike some of the busier elaborations of repeats, as in the trios of the First Concerto. Yet, apart from these shortcomings (and occasional patches of sour string intonation), there is much to admire, not least the overall precision and fluency of the playing.

This last compliment applies similarly to Herbert von Karajan's new Berlin Philharmonic performances, with special praise for the oboes and horns in the First Concerto and the trumpet in the Second. No information is given as to the number of performers, but the sound is of a wisely reduced ensemble, which Karajan leads with surprising stylistic savvy. Still, there are problems aplenty—notably, plodding tempos in the second movement of No. 1, the first of No. 5, and the second of No. 6. Occasionally he misses the point altogether, most egregiously in his preposterously heavy-handed, *legatissimo* rendering of the Menuet in No. 1. (Even the first trio is lifeless.) Kept well in the background—from which perspective it becomes as madden-

B Budget
H Historical
R Reissue
A Audiophile
 (digital, direct-to-disc, etc.)

Critics' Choice

The most noteworthy releases reviewed recently

AVISON: Concerti Grossi after Scarlatti (12). St. Martin's Academy, Marriner. PHILIPS 6769 018 (3), July.

BACH, BRAHMS: Chorale Preludes (arr. Busoni). Jacobs. NONESUCH H 71375, Aug.

BARTÓK: Bluebeard's Castle. Varady, Fischer-Dieskau, Sawallisch. DG 2531 172, Aug.

BARTÓK: Violin Concerto No. 2. Zukerman, Mehta. COLUMBIA M 35156, July.

BEETHOVEN: Symphonies (9). Vienna Philharmonic, Bernstein. DG 2740 216 SKL (8), July.

BEETHOVEN: Triple Concerto, Op. 56. Mutter, Ma, Zeltser, Karajan. DG 2531 262, Sept.

BERNSTEIN: Serenade; Fancy Free. Kremer, Israel Philharmonic, Bernstein. DG 2531 196, June.

DUKE: Songs. Bogard, Duke. CAMBRIDGE CRS 2776, Aug.

EATON: Danton and Robespierre. Indiana University, Baldner. COMPOSERS RECORDINGS IUS 421 (3), July.

ELGAR, WALTON: Cello Concertos. Kirshbaum, Gibson. CHANDOS ABR 1007, Sept.

GRIEG: Olav Trygvason; Landkjenning. London Symphony, Dreier. UNICORN RHS 364, June.

HANDEL: Ariodante. Mathis, Baker, Lepard. PHILIPS 6769 025 (4), Aug.

MOZART: Symphonies (11). Academy of Ancient Music, Schröder, Hogwood. OISEAU-LYRE D 169D3 (3), May.

PALESTRINA: Song of Songs. Czech Philharmonic Chorus, Veselka. SUPRAPHON 4 12 2141/2 (2), Sept.

PROKOFIEV: Alexander Nevsky, Op. 78. Obratzova, Abbado. DG 2531 202, July.

SCHUBERT: Symphony No. 7, in E (arr. Weingartner). Berlin Radio, Rögner. SPECTRUM SR 116, Aug.

SCHUBERT: Works for Violin and Piano. Luca, Kalichstein. NONESUCH H 71370, Sept.

SHOSTAKOVICH: Song Cycles. Bogacheva, Nesterenko. COLUMBIA/MELODIYA M 2 34594 (2), April.

SIBELIUS: Symphony No. 2, Op. 43. BBC Symphony, Beecham. ARABESQUE 8023, Sept.

ARTHUR FIEDLER: Forever Fiedler. RCA CRL 3-3599 (3), Sept.

THOMAS MURRAY: Organ Recital. Town Hall S 23, June.

THE RECORD OF SINGING, VOL. 2. EMI ODEON RLS 743 (13), May.

ANDRÉS SEGOVIA: The EMI Recordings 1927-39. ANGEL ZB 3896 (2), July.

KING'S ROW. Film score by Korngold. CHALFONT SDG 305, Aug.

ing as low-level Muzak—the harpsichord is generally audible, but sometimes (in No. 6, conspicuously) it completely disappears beneath washes of lush string tone. (The harpsichordist, too, gets a black mark for adding the four-foot stop in the middle of the first-movement cadenza of No. 5.) I could go on, though it hardly seems necessary, especially in view of the dull and lifeless recorded sound; if Angel rates a B plus, DG gets a solid C.

My favorite *Brandenburgs*—in no particular order—remain those of the Leonhardt Consort (MCA/Seon 67030), the Collegium Aureum (Quintessence 2 PMC 2705), and the Aston Magna ensemble (Smithsonian 3016). Those loath to listen to original instruments should consider the Schwarz digital (in the less expensive 33½ version) or Raymond Leppard's performances with the English Chamber Orchestra (Philips 6747 166). S.C.

BERG: Chamber Concerto: Adagio (arr. Berg)—See Debussy: *Prélude à l'après-midi d'un faune*.

CHATMAN: *On the Contrary**; *Hesitation*†. **MORGAN:** *Trio for Flute, Cello, and Harpsichord*** **HUDSON:** *Fantasy/Refrain***

Robert Onofrey, clarinet; Eastman Musica Nova, Sydney Hodkinson, cond.* John Loban, violin; Maura Chatman, celeste.* Carole Morgan, flute; Barbara Haffner, cello; Lambert Orkis, harpsichord.** Linda Quan, violin; John Graham, viola; André Emelianoff, cello.** [Carter Harman, prod.] COMPOSERS RECORDINGS SD 414, \$7.95.

The most interesting music here is that of Stephen Chatman, a thirty-year-old composer who studied at the University of Michigan and now teaches at the University of British Columbia in Vancouver. Particularly impressive is *On the Contrary* (1974) for solo clarinet and eight instruments, a study in contrasts with a beautifully realized, shimmeringly static coda that rounds things off very neatly. *Hesitation* for muted violin and celeste is, as the title implies, somewhat disjointed and tentative.

Robert P. Morgan, who studied composition with Roger Sessions and Andrew Imbrie, teaches at Chicago University. His trio for flute, cello, and harpsichord (1974) sounds more like paper music than the work of Chatman and suffers from a curious lack of balance among the instruments. The harpsichord, in particular, is distantly recorded and sounds as if it were miles away from the flute and cello.

Joe Hudson describes his *Fantasy/Refrain* as "a very straightforward attempt to write a rondo in the classical way." It isn't

particularly successful. For reasons best known to the composer, he makes each return of the subject "difficult, at first, to recognize. Repeated listenings, it is hoped, will reveal to the listener the sense of return implicit in these sections." Good luck.

I do wish CRI would help the composers whose music it records by paying more attention to the jacket notes. There really is no excuse for the typographical errors and the inadequate information provided here. If you go to the trouble of bringing obscure composers before curious listeners, why not tell more about them and their music? I.L.

CHAUSSON: Concert for Violin, Piano, and String Quartet, in D, Op. 21.

A Lorin Maazel, violin; Israella Margalit, piano; Cleveland Orchestra String Quartet. [Robert Woods, prod.] TELARC DG 10046, \$17.98 (digital recording).

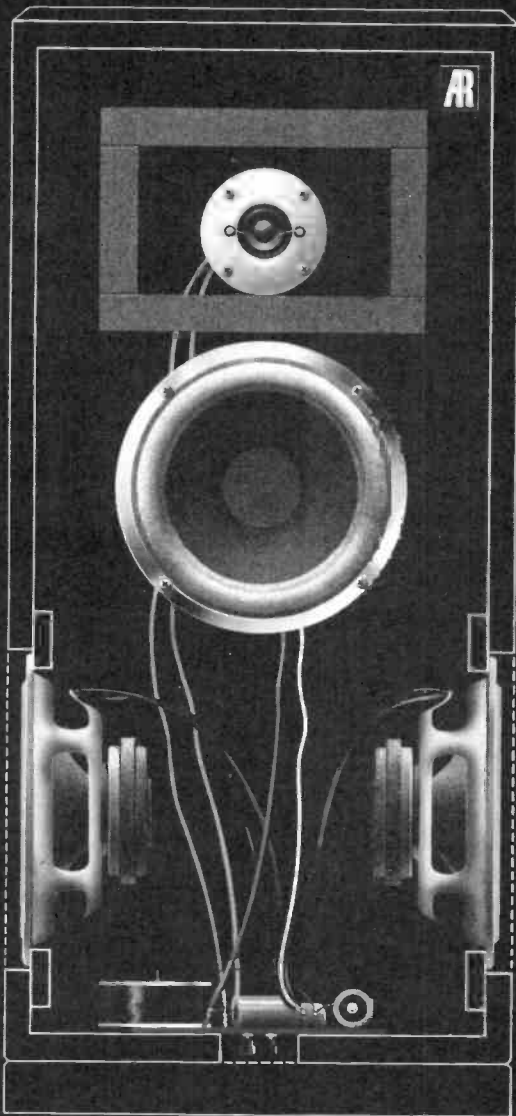
COMPARISON: Heifetz, Sanromá, Musical Art Qt. RCA ARM 4-0945

Chausson is tough to love but easy to like—not particularly exciting, perhaps, but honest and unpretentious. This thoughtful, skillfully constructed work, though it often goes by the standard English translation to "concerto," is far from concertolike in any conventional sense. There is no real competition between soloists and quartet, nor are the solo parts showy or virtuosic. At times it resembles an enriched violin sonata, at others a concerto grosso; the piano plays almost continuously, in effect supplying a basso continuo. There seems to have been no model for Chausson's creation, nor does it seem to have inspired any imitators.

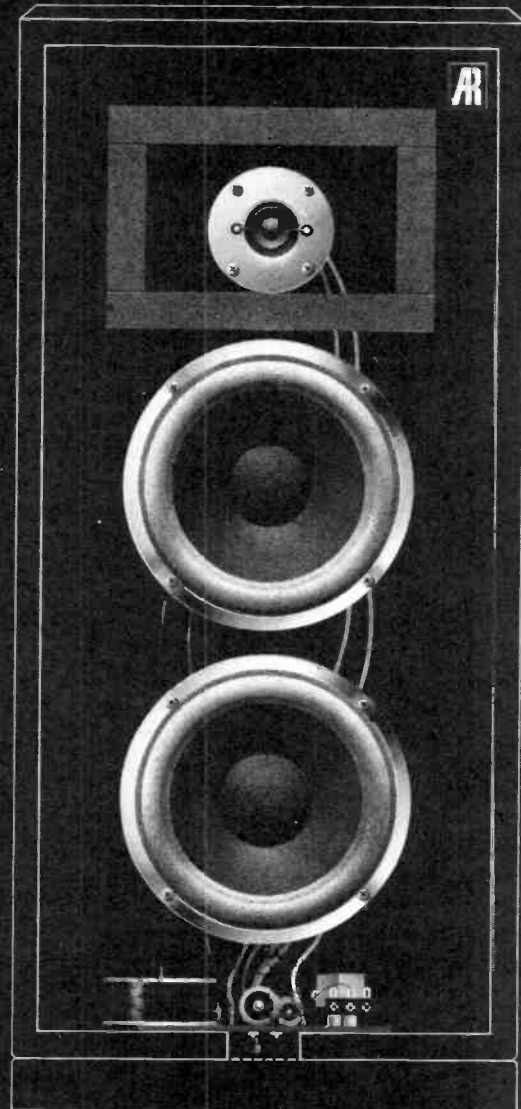
Not a popular work, it nonetheless wends its way to disc about once every decade. One of the oldest versions remains the most satisfying: Jascha Heifetz' recording (c. 1940) with Jesús María Sanromá and the Musical Art Quartet, which preserves one of the violinist's greatest chamber performances. His associates are superior musicians who, far from being mere accompanists, fully share in the success of this collaboration. Within its narrow dynamic framework, RCA's recording reproduces the instrumental timbres with remarkable vividness.

Telarc's disc could hardly be more different. Lorin Maazel began studying violin at age five, played with the Pittsburgh Symphony while still a student, and has appeared as soloist with some of the world's finest orchestras. He certainly has sufficient technique to cope with Chausson's relatively modest demands, though he betrays some intonational insecurity in his upper register and obvious stress in the more difficult passagework. His old-fashioned style

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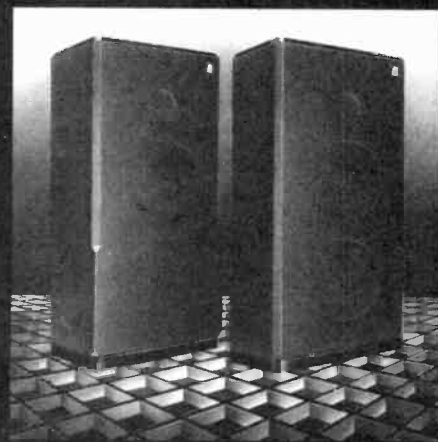
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seems paradoxical coming from such a modern, emotionally restrained, business-like conductor. His vibrato is heavy, his tone syrupy; he applies portamento lavishly, phrases with great freedom, and colors the sound more than is customary today. Whereas Heifetz dominates but never overpowers his ensemble, Maazel simply sticks out, so great is the discrepancy between his tone and style and those of his first-rate supporting cast, the impressive Cleveland Orchestra String Quartet and his pianist wife, Israella Margalit.

One senses that Maazel loves this piece deeply, perhaps too much. His conception—assuming that he is primarily responsible for the interpretation—constantly calls attention to itself. Except for the finale, tempos are very slow. This is especially disastrous in the charming *Sicilienne*, where a lethargic tempo and heavy accents transform what should be a delicate, gracefully propelled movement into a lumbering peasant dance. Sometimes the tempos cannot be sustained, as in the *Grave*, which ends considerably quicker than it began. (Chausson's dynamic scheme is also disregarded at the end of this movement.)

Yet interpretive faults aside, Telarc deserves commendation for undertaking such a risky venture. This is not the sort of piece to attract audiophiles, nor has there been any attempt to record it sensationally. The stereo spread is modest, the perspective rather distant with no "you are there" presence. Balances are natural and utterly free of exaggeration. One can simply sit back and enjoy the unconstricted dynamic range, the realistic string tone, and the remarkable solidity of the piano. Telarc should make more chamber recordings. R.D.H.

DEBUSSY: *Prélude à l'après-midi d'un faune* (arr. Sachs). **SCHOENBERG:** Chamber Symphony No. 1, Op. 9 (arr. Webern). **BERG:** Chamber Concerto: Adagio (arr. Berg).

Boston Symphony Chamber Players [Rainer Brock, prod.] **DEUTSCHE GRAMMOPHON** 2531 213, \$9.98. Tape: 3301 213, \$9.98 (cassette).

Having scored a palpable surprise hit with four arrangements for salon orchestra of popular Johann Strauss waltzes by (of all people) Schoenberg, Berg, and Webern (DG 2530 977, December 1979), the Boston Symphony Chamber Players continue their archaeological excavations in the same general territory and come up with somewhat more exotic artifacts. This expedition proves not quite so rewarding.

The most curious item is a transcription for eleven instruments of Claude Debussy's *Prélude à l'après-midi d'un faune*

(1894). Perhaps some useful purpose was served by the performance of this rather pedestrian arrangement at an October 27, 1920, concert sponsored by Arnold Schoenberg's Society for Private Musical Performances, but it hardly seems necessary to revive it today, when the Debussy original is so readily available to every music lover in live or recorded versions. With the magical orchestration reduced to near zero, the work sounds oddly disjointed and ineffective. Annotator Volker Scherliess attributes the transcription to Hanns Eisler for reasons he does not explain. Actually, the perpetrator of this hack job was Benno Sachs, as is clear from the original manuscript score and parts, now in the Arnold Schoenberg Institute in Los Angeles.

Marginally more interesting is Anton Webern's transcription for violin, flute, clarinet, cello, and piano of Arnold Schoenberg's Chamber Symphony, Op. 9 (1906). On January 27, 1923, Webern informed Schoenberg that "a week ago, I finished the arrangement of the Chamber Symphony and now am revising this draft thoroughly. I hope to succeed in achieving what you expect from me in this regard. At any rate, I am aiming for it with all my strength." Schoenberg's idea that the comprehensibility of a work is enhanced by presenting the motivic material clearly in order to highlight the instrumental lines—not realized in his original instrumentation—doubtless suggests what he expected from the transcription. Webern succeeded, if that was his intention, but at a heavy price. The impassioned and Romantic Chamber Symphony is rendered bloodless and intellectual. Not intended for performance at the Society's concerts, which ended on December 18, 1923, the arrangement was designed to go along with a transcription for the same instruments of Schoenberg's *Pierrot lunaire*. It was published by Universal Edition in 1968.

Alban Berg's arrangement for violin, clarinet, and piano of the Adagio from his Chamber Concerto (1925) dates from 1935, the last year of his life. Why he undertook this labor while struggling to complete *Lulu* is not clear. The original, scored for violin, piano, and thirteen wind instruments, owes much to Schoenberg's Chamber Symphony but is serial rather than tonal in orientation. Although Boulez has called it "probably the strictest work . . . Berg ever wrote," it is deeply affecting and intensely personal. Much of its pathos comes through even in this bare-bones version.

The Boston Symphony Chamber Players' performances are, as expected, first-rate. I.L.

DELIBES: *Coppélia*.

Rotterdam Philharmonic Orchestra,

David Zinman, cond. **PHILIPS** 6769 035, \$19.96 (two discs, manual sequence). Tape: 7699 126, \$19.96 (two cassettes).

COMPARISON:

Ansermet/Suisse Romande

Lon. STS 15371

Delibes's perennially charming score, one of the masterpieces of nineteenth-century theater music, has by and large fared well on records. Currently available versions by Ernest Ansermet, Yuri Fayer and the Bolshoi Theater Orchestra (Melodiya/Angel SRB 4111), Richard Bonynge and the Suisse Romande (London CSA 2229), and Antal Dorati and the Minneapolis Symphony (Mercury SRI 2-77004) all have much to recommend them. The latest version, too, is highly commendable—engagingly lively, handsomely played by the Rotterdam Philharmonic, and recorded by Philips with exceptional warmth and presence.

In some ways, however, the splendid sound of these discs is their most notable feature. For in the final analysis David Zinman's reading, despite its vigor and dramatic responsiveness, lacks the qualities that distinguish the merely estimable from the truly outstanding: the final ounce of rhythmic élan, graceful phrasing, and affectionate nuance that would do full justice to this score's inexhaustible charm. Also lacking is a detailed synopsis of the ballet's action—surely a requirement for any listener who wants to get the most out of music designed to give theatrical form to a detailed plot. Philips' pressings are typically smooth and silent. Though this is undoubtedly the best sounding *Coppélia* on discs, the Ansermet performance remains the best musical statement. D.S.H.

HANDEL: *Water Music*.

Academy of St. Martin-in-the-Fields, Neville Marriner, cond. **PHILIPS** 9500 691, \$9.98. Tape: 7300 779, \$9.98 (cassette).

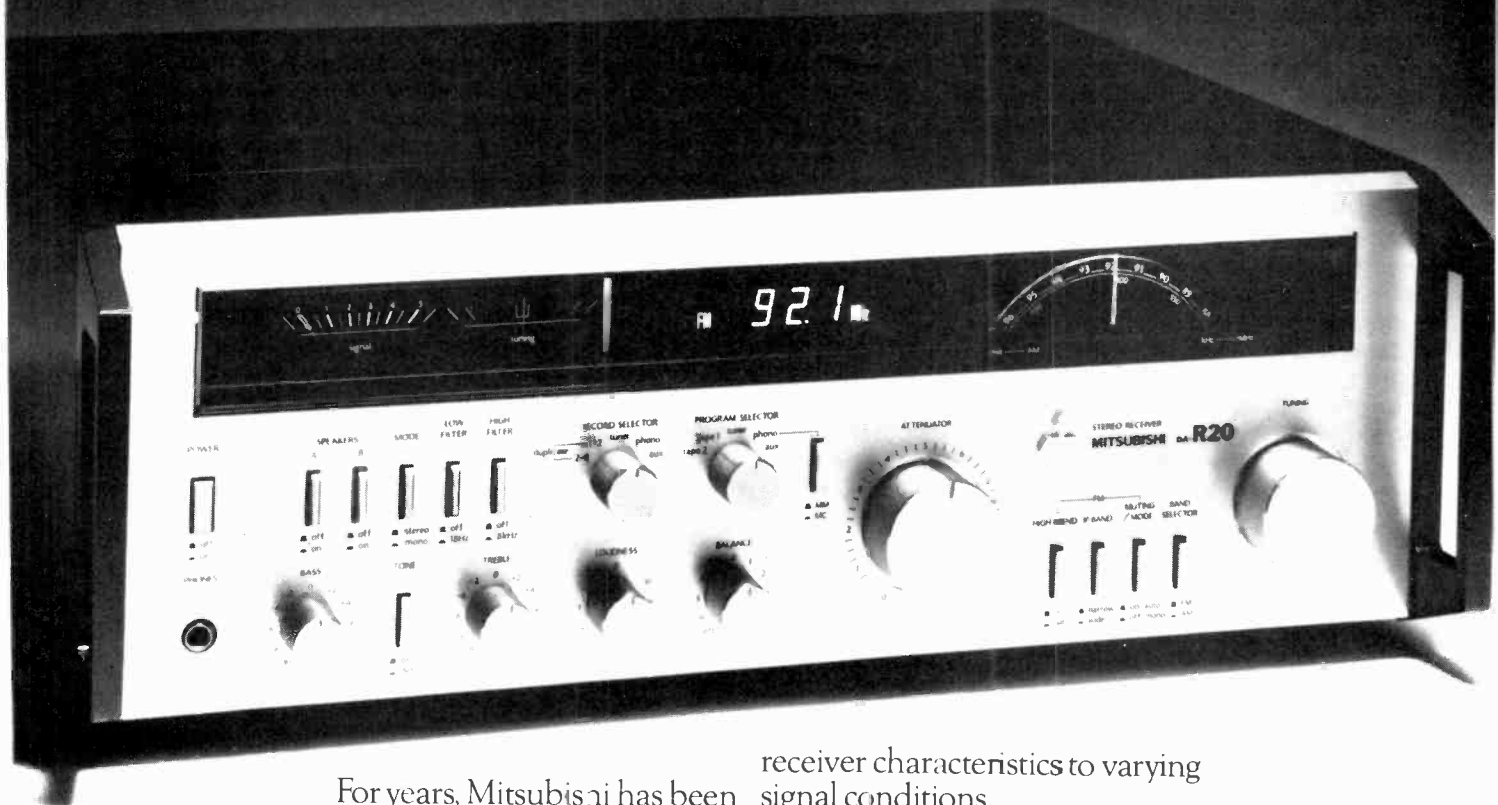
HANDEL: *Concerti Grossi (6), Op. 3*.

Northern Sinfonia, George Malcolm, cond. [John Boyden, prod.] **NONESUCH** H 71376, \$5.96.

Concertos: No. 1, in B flat; No. 2, in B flat; No. 3, in G; No. 4, in F; No. 5, in D minor; No. 6, in D.

These records provide an intriguing contrast, though their styles of performance are not that far apart. Both feature top-notch, small-scale English chamber orchestras; the two directors, George Malcolm and Neville Marriner, have often been associated on record (Marriner accompanies Malcolm's recording of Handel's organ concertos); and the Northern Sinfonia's concertmaster probably plays on the St. Martin's disc. So there is plenty of common

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ground.

Marriner and the Academy have, in the past, given us some outstanding Handel recordings on Argo—especially one of the *Ariodante/Alcina* ballet music (deleted) that is among my favorite discs, and a lively *Water Music* (ZRG 697). But now that they are getting around to re-recording this repertory for Philips, all the sparkle and life seem to have gone out of their performances. As I noted with their recent *Musical Offering* (9500 585, June), and as was also true of their Bach orchestral suites (6769 012), the playing is sophisticated, neatly programmed, and utterly cold. Tempos are right, ornamentation is stylish, rhythms are crisp, but there is very little interest to be derived from the playing: It sounds as if they are on automatic pilot.

The Northern Sinfonia, on the other hand, though scarcely as expert in this repertory, offers vivid, scintillating accounts of the lively Op. 3 Concertos. Occasionally the sound is rougher or the ensemble less precise than on the Academy's disc, but I gladly forgo polish for the springy, purposeful drive of Malcolm's rhythms, which invigorates the allegros and dignifies the andantes. The prominent oboe parts are perkily played, and string articulation is bouncy and crisp.

This is one of the most enjoyable "nonauthentic" Handel discs I have encountered recently, and it sent me back to some old records that are really the source of all modern English Handel playing—Thurston Dart's superbly musical performances with the old Philomusica of London. He did a *Water Music* that fairly bubbled with high spirits, and I think he would be depressed to hear to what heights of bloodless purity his style has been taken by the Academy of St. Martin. For a lively original *Water Music*, try either of two "original instrument" versions: Hogwood (Oiseau-Lyre DSLO 543), cool and neat, or Harnoncourt (Telefunken 6.42497), wild and exuberant. N.K.

HAYDN: Symphonies: No. 97, in C; No. 98, in B flat.

New York Philharmonic Orchestra, Leonard Bernstein, cond. [John McClure, prod.] CBS MASTERWORKS M 35844, \$8.98. MT 35844, \$8.98 (cassette).

HAYDN: Symphonies: No. 94, in G (Surprise); No. 104, in D (London).

Pittsburgh Symphony Orchestra, André Previn, cond. [Suvi Raj Grubb, prod.] ANGEL SZ 37575, \$8.98.

HAYDN: Paris Symphonies (6).

R Orchestra of Naples, Denis Vaughan, cond. [Miles Morgan, prod.] ARABESQUE 8047-3, \$20.94 (three discs, manual sequence). Tape: 9047-3, \$20.94

(three cassettes). [From RCA RED SEAL LSC 6805, 1967.]

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.

HAYDN: Symphonies: No. 57, in D; No. 86, in D.

B R Cincinnati Symphony Orchestra, Max Rudolf, cond. [Israel Horowitz and John Sievers, prod.] MCA WESTMINSTER MCA 1405, \$4.98 [from DECCA DL 10107, 1965].

HAYDN: Symphonies: No. 88, in G; No. 100, in G (Military).

R Columbia Symphony Orchestra, Bruno Walter, cond. [Thomas Frost, prod.] ODYSSEY Y 35932, \$5.98 [from COLUMBIA MS 6486, 1964].

Some years ago in these pages H. C. Robbins Landon wrote, "Leonard Bernstein is one of the greatest, if not *the* greatest, interpreters of Haydn's music we have today." The present release (recorded five years ago) gives no reason to dispute that statement. Here two of Haydn's finest symphonies, and inexplicably two of the least frequently played of the final twelve, receive performances of great virility and commitment, as well as refinement and elegance.

No. 97 is one of Haydn's most festive and extroverted C major works. Bernstein and the New York Philharmonic give it an irresistibly exuberant reading, yet one of suavity and polish. The martial first movement is wonderfully vital and ebullient, the Adagio non troppo flowing and militant where required. The buoyant minuet contrasts terrifically punched sforzando chords with a delicately inflected trio. Solo timpani beats are forceful but musical, not always the case with timpani. The finale is simply brilliant, and Bernstein provides an amusing touch. Haydn has written passages (measures 17-23 and 212-218) where the strings and oboes are asked to play softly while the horns honk away loudly and insistently with repeated G naturals. Bernstein is the first conductor I've heard who does not tone down the horns.

An extended section of the slow movement is marked ponticello in the violins. This would normally produce a raspy sound, and the Philharmonic's violins don't seem to be complying. Admittedly, it's a peculiar effect for Haydn to have requested at that point in the score. Bernstein also gives one passage to a solo violin, though no solo is marked in the score (Landon edition).

A trumpet blooper at the beginning of the minuet's da capo could have been corrected; otherwise, this is the finest re-

corded performance by (and the finest recording of) the Philharmonic I've heard in some time, and I don't hesitate to proclaim it one of the great Haydn renditions on records.

In the less extroverted No. 98, Bernstein's performance is of a different character. Here one can perhaps disagree with his tempos. I grew up with the old Toscanini version, which was never transferred to LP. This, too, is one of the great Haydn recordings, and I hope RCA will one day rectify its omission. It was followed by LPs by Beecham and Klemperer. Compared to those performances, Bernstein's tempos for the first and third movements are on the slow side, except for the introduction to the first movement; in fact, he relates the pace of the introduction to that of the Allegro, so that the length of the quarter note in the former becomes the length of the half note in the latter.

There is no single way to perform a great masterpiece, however, and given its slowish tempo (not rigidly maintained), the first movement shows great conviction, as does the minuet; both movements have a well-sprung lift. In the first movement the violins play the turns most gracefully starting them on the beat. The Adagio, Haydn's tribute to the recently deceased Mozart, has a nice cantabile feeling and features excellent playing by the woodwinds. The oboe solo (Harold Gomberg's, I presume) early in the finale is delicious, and the pre-Rossinian second subject is deftly handled. Eliot Chapo, the orchestra's concertmaster at the time, gives a good account of the extended violin solo (as he does in No. 97).

Haydn specified a slower tempo for the finale's coda than for the main body of the movement but wrote some of the music so that it sounds faster. Bernstein handles this change beautifully in contrast to such conductors as Dorati. He includes the few bars of harpsichord solo just before the end; this was a visual joke of the composer's, the harpsichordist (originally Haydn) having sat there throughout the performance doing nothing.

There is breadth and majesty to this account, and a Beethovenian quality that points up the direct link between Haydn and Beethoven in the development of the symphony. Bernstein observes all repeats in both works. My review copy had slightly gritty surfaces.

I have come to respect André Previn greatly, so it disappoints me to be less enthusiastic about his coupling of the *Surprise* and *London* Symphonies. My initial impression was that the first movement of the *Surprise*, marked *Vivace assai*, is much too slow, yet Bernstein in his New York recording (CBS M 32101) takes the same tempo



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and still imparts a lilt and vitality absent here.

The opening of the *London*, rather soft-toned and restrained, does not make one sit up and take notice, but the first-movement Allegro is more animated than its counterpart in the *Surprise*, and the Andante has a nice flow. Previn takes the minuet of the *London* (Allegro) at exactly the same pace as that of the *Surprise* (Allegro molto), making the latter rather heavy-footed. For my taste, both are too slow. His finales are both suitably animated. Previn

also observes all repeats.

In general, his performances lack that "unbuttoned" quality so essential to Haydn as well as to Beethoven; the Pittsburgh Symphony plays well, but everything sounds just a bit too careful. Moreover, each recording has a metrical peculiarity. In the slow movement of No. 94, at measures 143 and 144, Previn adds an extra beat of rest to each bar, in effect providing two 5/8 measures. I don't think Haydn ever wrote anything in 5/8 time. In the minuet of No. 104, where he wrote two

measures of silence totaling six beats, Previn shortens the pause to five beats each of the three times it occurs.

There is also an engineering peculiarity: The microphones seem to have been placed on top of the double basses and at some distance from the violins, so that many important violin passages are not prominent enough and others are barely audible, while the galumphing of the basses is clearly heard at all times—certainly an odd perspective from which to record an orchestra. My review copy had distinctly swishy and gritty surfaces.

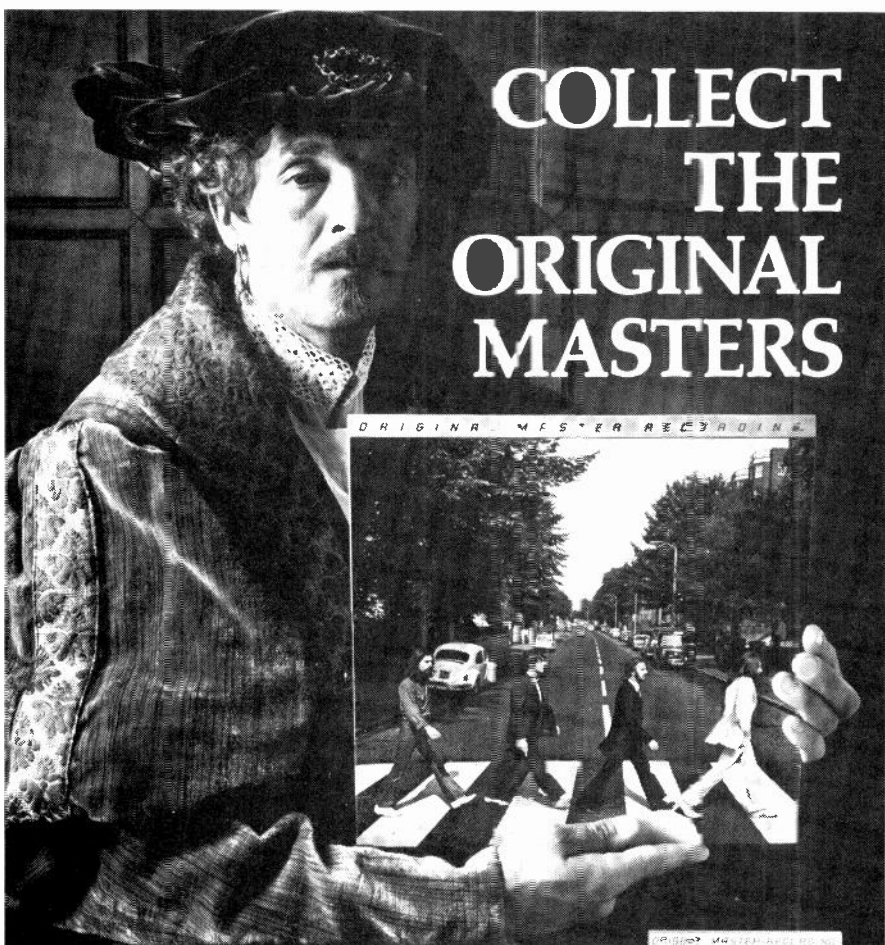
On the subject of the *London* Symphony, I can't resist mentioning the splendid performance and recording by Colin Davis and the Concertgebouw Orchestra (Philips 9500 510), coupled with an equally fine *Military* Symphony.

Denis Vaughan was Beecham's assistant conductor during the 1950s and is now honorary president of the Sir Thomas Beecham Society. These recordings of the *Paris* Symphonies, done with Vaughan's own Orchestra of Naples, were originally issued by RCA in 1967. I did not hear them the first time around and gladly make their acquaintance now.

I don't know whether Beecham ever performed any of these works; certainly he did not record them. In any case, I doubt that he could have rendered them any more stylishly than Vaughan does. These are really beautiful performances, recorded in an ambience (the Palazzo Reale, Naples) that gives them just the right airiness and emphasizes their grace and buoyancy. Many wonderful details of scoring, often unnoticeable in other versions, receive their due here. Note particularly the handling of the bassoon, oboe, and horn interjections in the second movement of No. 82, and the clear projection of the independent bassoon part in the tutti passages in the first movement of No. 87.

Most of the tempos are perfectly judged, especially the Allegretto movements of Nos. 82 and 85. But the Andante of No. 83 does seem too slow, the more so as Vaughan chooses to repeat the first half. And some of the outer movements, such as those of No. 83 and the finale of No. 87, would benefit from the greater feeling of urgency slightly quicker tempos would provide.

Vaughan employs a harpsichord, and its presence is for the most part unobtrusive. But is it necessary? These symphonies were composed for the Orchestre de la Loge Olympique in Paris, which included about forty violins, ten double basses, and doubled winds. It's doubtful that a harpsichord would have made much of an effect with that large an



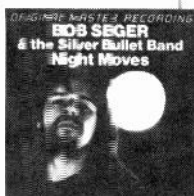
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orchestra. (In this age of historically accurate performances, perhaps some enterprising company will consider recording the *Paris Symphonies* with forces of the size for which they were written.)

Vaughan's use of a chamber orchestra does sacrifice some of the rugged vigor of these works—a quality Bernstein supplies admirably in his versions with the Philharmonic (CBS D35 769), along with a greater feeling of spontaneity in the fast movements. Still, *Arabesque's* is a very worthwhile and enjoyable reissue. Evident

throughout is Vaughan's love for this music, a characteristic not always encountered these days. Robbins Landon's authoritative annotations enhance the set.

Max Rudolf has long been a respected figure on the American musical scene, as both conductor and teacher of conducting. This souvenir of his 1960s tenure in Cincinnati features two favorites of his, and he conducts sturdy, attractive performances. No. 86 is the only duplication in the collection under review. The acoustic is drier here than on *Arabesque* and the read-

ing lacks some of the gracefulness of Vaughan's. But Rudolf adds more dash in the fast movements, particularly the finale, which is very fast (though not quite as fast as in Walter's historic account). He brings similar attributes to No. 57, a work that is not well known but certainly deserves to be, and gives full play to the humor in both works.

Bruno Walter presents a more personal brand of Haydn than the other conductors represented here. Except for the finale of No. 88, the tempos in the fast movements are rather deliberate, and even that finale is not rushed; the emphasis is on geniality. His pacing enables him to shape phrases affectionately, as in the second subject of No. 100's first movement and the trio of its minuet, and it also allows many details to emerge in these well-recorded performances.

A couple of Walter's mannerisms show up in No. 88—the shortening of rests in the introduction and in the slow movement and the imposition of decrescendo-crescendo effects on forte passages. Absent is the energy Walter was able to summon even a few years before these recordings were made. Still, they are very enjoyable, and it is good to have anything conducted by Walter restored to the catalog. The sound is fuller and more forward than on the original issue.

To listen to these thirteen symphonies in close succession is to be overwhelmed anew by the incredible genius of Joseph Haydn. John Canarina

John Canarina conducts and teaches conducting at Drake University's College of Fine Arts.

HELPS: *Symphony No. 1*—See Thomson; *Symphony No. 3*.

HUDSON: *Fantasy/Refrain*—See Chatman; *On the Contrary; Hesitation*.

JANÁČEK: *Fate*. For a review, see page 66.

MAHLER: *Symphony No. 9*, in D. London Philharmonic Orchestra, Klaus Tennstedt, cond. [John Willan, prod.] ANGEL SZB 3899, \$17.96 (two discs, automatic sequence). Tape: 4Z2S 3899, \$17.96 (two cassettes; with *Symphony No. 10: Adagio*).

MAHLER: *Das Lied von der Erde*. Lili Chookasian, alto; Richard Cassilly, tenor; Cincinnati Symphony Orchestra, Walter Susskind, cond. [Marc Aubort and Joanna Nickrenz, prod.] CANDIDE QCE 31117, \$4.98 (SQ-encoded disc). Tape: CT 2258, \$4.98 (cassette).

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R Nan Merriman, alto; Ernst Häfliger, tenor; Concertgebouw Orchestra, Eduard van Beinum, cond. PHILIPS Festivo 6570 193, \$6.98. Tape: 7310 193, \$6.98 (cassette). [From Eric SC 6023, 1957.]

Is there any orchestral music slower than the closing pages of the Mahler Ninth? This thought came to mind as I listened to Klaus Tennstedt give the most extended performance—and one of the finest—I've ever encountered of this problematic symphony.

The sprawling first movement and the almost equally lengthy Adagio finale

are two of the most difficult movements in the entire repertory to perform convincingly, but Tennstedt succeeds in sustaining each as one unbroken arc and elicits passionately committed playing from the London Philharmonic. The first movement has an inexorable sense of fatality, and the various tempo changes of the second are handled beautifully. (In fact, there is flexibility of tempo throughout.) The Rondo-Burleske is appropriately frenzied, particularly in its final moments, and the great Adagio, the crown of the work, could not have greater breadth and nobility or, in its

last moments, more profound resignation and stillness. This is a totally absorbing and gripping account from start to finish. Unfortunately, it is not helped by the rather swishy record surfaces, which, considering the amount of quiet music in this work, are more irritating than they might otherwise be.

Walter Susskind, for many years a highly respected conductor in Europe and North America, was successively music director of the Toronto and St. Louis Symphony Orchestras. At the time of his death earlier this year he was music advisor to the Cincinnati Symphony, which he here directs in a conscientious and musicianly reading of *Das Lied von der Erde*—arguably Mahler's greatest work. The excellent soloists, Lili Chookasian, in her second recording of the work (her first was with Ormandy), and Richard Cassilly, deliver performances of power and sensitivity. Susskind's tempos are on the slow side throughout, and the deliberateness of the opening song suggests three beats to the bar rather than the one beat indicated by Mahler.

What militates against the success of this version is the recording. Mahler was the most scrupulous of composers in providing expression marks and other details in his scores. But in Candide's rather generalized reproduction, many details simply are not heard; the orchestra seems to have been recorded from some distance back in the hall, and the soloists also sound remote. This lessens the impact of the performance and saps its character.

For all the advances in recording technique in recent years, there is still much to be said for a good mono recording such as Philips' reissue of the classic Van Beinum account of *Das Lied*. (Curiously, this version dates from 1957, when stereo recording was already well under way.) Here are all the details missing from the Candide recording, plus a more committed orchestral performance. Good though the Cincinnati playing is, it does not have the bite of the Concertgebouw's, as witness the contrabassoon jabs at the beginning of "*Der Abschied*." The much-admired Nan Merriman gives a most heartfelt and moving performance, and Ernst Häfliger, who was later to record the work with Bruno Walter, conveys wonderfully the manic character of his songs.

The essential difference between these two accounts is that, through a combination of performance and recording, Van Beinum and Philips take us inside the work, while Susskind and Candide keep us on the outside listening in. J.C.

MEDTNER: Fairy Tales (2), Op. 20; Fairy Tales (4), Op. 26; Sonata minacciosa,

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in F minor, Op. 53, No. 2.

Antony Rollé, piano. [Ilhan Mimaroglu, prod.] FINNADAR SR 9026, \$7.98.

Nikolai Medtner (1880–1951) had the misfortune of being a Russian emigré musician in an earlier epoch, before that status elicited automatic sympathy. Very talented, he spent most of his later years as a sort of celebrity *manqué*. As a virtuoso keyboard artist, he had to take a humble third place to Rachmaninoff and Moiseiwitsch. (His performance of Beethoven's *Appassionata* is preserved on an RCA Bluebird disc, long out of print; its slight lethargy may reflect his advanced years, but style and craft are present.) As a composer, he has fared slightly better, with an occasional revival such as the present one—but none so extensive as the project sponsored by the Maharajah of Mysore to record all of his music. (Medtner unfortunately died before he could record more than three 78-rpm albums for the Maharajah's "Medtner Society.")

His music, appealingly lyrical and solidly crafted, somewhat resembles that of another Russian academic, Nikolai Miaskovsky, an almost exact contemporary (1881–1950). His style is eclectic, and the examples on this recording are typical. The two early *Fairy Tales*, Op. 20, are slightly faceless and stolid—on the order of early Scriabin or very early Rachmaninoff. A few years later, Medtner produced four more *Fairy Tales*, Op. 26, and these are more engaging; nonetheless, it takes no great musical detective work to hear Rachmaninoff's E flat Prelude from Op. 23 in the first, Balakirev's *Islamey* in the second, and the most famous Scriabin etude in the third. As for No. 4, it begins as a paraphrase of one of the Schumann *Nachtstücke*, goes into a central section reminiscent of Debussy's early *Danse*, and culminates à la Rachmaninoff's inevitable C sharp minor Prelude, Op. 3, No. 2.

In the much later *Stormy Sonata*, which Medtner reputedly regarded as one of his masterpieces, the harmonic idiom and textures are more densely modernistic, and a personal idiom may now and then be espied in the thicket of notes inhabited by ghosts from the recent (and not so recent) past. There are quasi-quotations from the Spanish school—one passage sounds for all the world like a fugitive from Albéniz' *Iberia*—a fugal episode that falls midway between Liszt and Hindemith, and an ending that is a dead ringer for those octaves in *Funeraillles*. Unlike Alkan and his crew, Medtner used only the best ingredients for his goulash; for all that, Alkan—with his sometimes horrendous taste and purple passages—was a more scintillating musical personality.

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The young Brooklyn-born pianist Antony Rollé is obviously an uncommonly talented performer. With technique to burn, he sails into this knotty music with panache and nuance. He particularly warms to the *Fairy Tales*, all of which emerge with plenty of color and a touching lyricism. The sonata is less communicative, but the basic fault may lie in the music itself; Medtner, like bonbons, is better in small doses. The sound of the piano has been beautifully captured in this proximate but atmospheric facsimile, and Finnadar's processing is first-rate. H.G.

MORGAN: Trio for Flute, Cello, and Harpsichord—See Chatman: *On the Contrary; Hesitation*.

MOZART: *Il Sogno di Scipione*, K. 126.

CAST:

La Costanza	Lucia Popp (s)
La Fortuna	Edita Gruberová (s)
Licenza	Edith Mathis (s)
Scipione	Peter Schreier (t)
Publio	Claes H. Ahnsjö (t)
Emilio	Thomas Moser (t)

Salzburg Chamber Chorus, Salzburg Mozarteum Orchestra, Leopold Hager, harpsichord and cond. [Gottfried Kraus and Rudolf Werner, prod.] DEUTSCHE GRAMMOPHON 2709 098, \$29.94 (three discs, manual sequence).

MOZART: *Idomeneo*, K. 366.

CAST:

Elettra	Edda Moser (s)
Ilia	Anneliese Rothenberger (s)
Idomeneo	Nicolai Gedda (t)
Idamante	Adolf Dallapozza (t)
Arbace	Peter Schreier (t)
High Priest	Eberhard Büchner (t)
Priest	Günther Leib (b)
Voice of the Oracle	Theo Adam (bs-b)

Walter Olbertz, harpsichord; Leipzig Radio Chorus, Dresden State Orchestra, Hans Schmidt-Isserstedt, cond. [Helmut Storzjohann, Christfried Bickenbach, and Eberhard Geiger, prod.] ARABESQUE 8054-4L, \$28.92 (four discs, manual sequence). Tape: 9054-4L, \$28.92 (four cassettes).

COMPARISONS:

Pritchard/Glyndebourne	Sera. SIC 6070
Davis/BBC	Phi. 839 758/60
Böhm/Dresden	DG 2740 195

MOZART: *La Clemenza di Tito*, K. 621.

CAST:

Vitellia	Julia Varady (s)
Servilia	Edith Mathis (s)
Sesto	Teresa Berganza (ms)
Annio	Marga Schiml (ms)
Tito	Peter Schreier (t)
Publio	Theo Adam (bs-b)

Walter Taussig, harpsichord; Leipzig Radio Chorus, Dresden State Orchestra, Karl Böhm, cond. [Reimar Bluth and Werner Mayer, prod.] DEUTSCHE GRAMMOPHON 2709 092, \$29.94 (three discs, manual sequence). Tape: 3371 049, \$29.94 (three cassettes).

COMPARISONS:

Kertész/Vienna St. Op.	Lon. OSA 1387
Davis/Covent Garden	Phi. 6703 079

We could just say, "These three recordings are very boring," and leave it at that, but that, as a great American once said, would be wrong. It would seem to imply that: 1) *Il Sogno di Scipione*, the novelty in the group, is unworthy of serious attention, and 2) *Idomeneo* and *Clemenza di Tito*, the ostensibly known commodities, are merely poorly served here. Both of these propositions include assumptions I don't think should be so easily assumed.

Proposition 1 may well be true; what bothers me is the assumption that DG's recording—a highly professional job featuring performers of high repute—provides sufficient evidence. Proposition 2 is clearly true as regards these recordings; what bothers me here is the assumption that the problem is confined to them.

Scipione is a "dramatic serenade" in one act, though not as long an act as DG's three-disc format might suggest. The piece itself occupies five sides totaling just over 101 minutes. On the ten-minute Side 6 we get an alternate version of the *Licenza*, or dedicatory epilogue, in which only the aria (flanked by a recitative and final chorus) is different. The justification is that this form of the *Licenza* may actually have been performed in Mozart's lifetime; the rest of the work certainly wasn't—the Salzburg archbishop in whose honor it was apparently written died before the honor could be done.

Scipione was written early in 1771, during a stretch that also produced *La Betulia liberata*—shortly after the composition of *Mitridate* and before *Ascanio in Alba* and *Lucio Silla*. In the Metastasio text, the sleeping Scipio's soul is contested by the goddesses Constancy and Fortune. Would he rather be a good person or have fun? Coached by his adoptive grandfather, Publio, and his father, Emilio, he chooses—well, you know which one he chooses.

The music is worked out with all the craftsmanship you would expect from the fourteen-year-old Mozart, but there isn't much more than craftsmanship to be heard here. Still, is this all Mozart's fault? Might the music sound more alluring, or at least more involving, if it were performed by a conductor and singers concerned with more than just getting the notes out? One clue for me is the sense of relief produced

by the appearance of Publio; Claes H. Ahnsjö's tenor—though a tiny instrument with no range extremes—is the only voice in this cast with any real lyric quality, and his singing suddenly made me listen with curiosity rather than mere duty.

When you think about it, you realize that those prominent Mozartians in the *Scipione* cast are part of the corps that has done so much to make current performances of Mozart's vocal music such a trial. And you realize that this same Mozart corps has furnished the bulk of the casting for the stereo recordings of *Idomeneo* and *Clemenza di Tito*. With this realization, I began wondering whether these operas are necessarily as tedious as they have usually seemed to me.

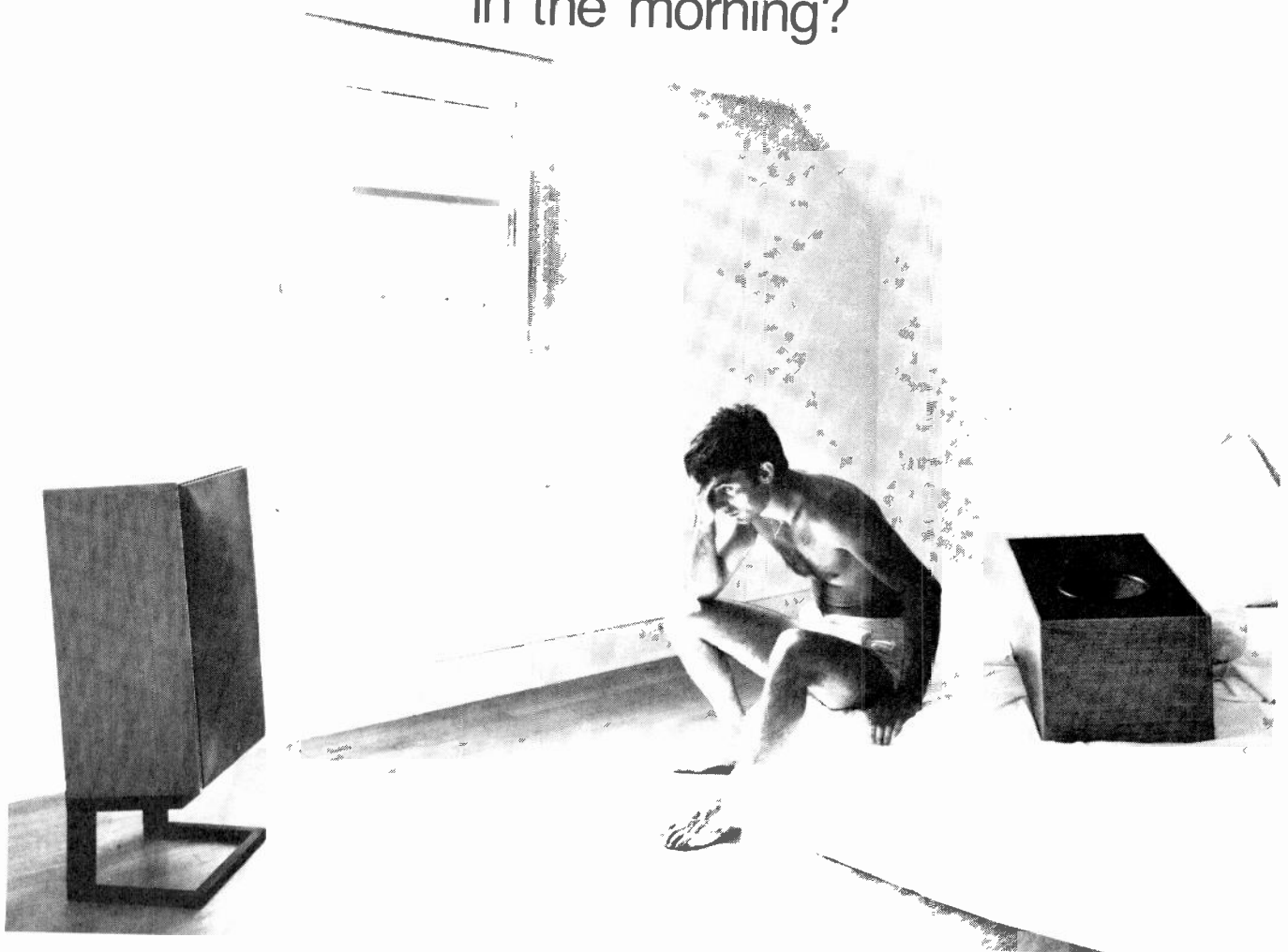
Mozart's more recent chroniclers have satisfied me that the composer didn't turn grudgingly to opera seria, that he really did want to see what he could do with the genre. Fine, but this doesn't mean that he succeeded. The basic approach of opera seria is to break down complex situations and emotions into their component parts and then dramatize those components individually and sequentially. This seems to me all but certain to have stymied Mozart, who—critical cliché to the contrary—really hadn't much gift for simplicity. Given two or three or four intersecting emotions, his creative juices flowed like nobody else's; given a single scraggly emotional strand, he had nothing to work with.

Except, of course, his immense technical skill, which is abundantly evident in both *Idomeneo* and the more stripped-down *Clemenza*. But is there anything here to connect with the emotional concerns of real-life people, anything that goes beyond stock representation of such attitudes as grief, apprehension, loneliness, jubilation, envy, rage, etc.? Is it possible to imagine any circumstances under which one might wish to spend a second more in the presence of those shrieking harpies, Elettra and Vitellia?

Well, maybe, but it would take a soprano of remarkable technical accomplishment, vocal size, tonal beauty, and above all dramatic imagination. Who cares whether Vitellia's assassination plot is on or off at any particular moment? Partly because who cares whether that jerk Tito gets his? I know that it's fashionable to worry about such questions as whether *Idomeneo* sings the simpler or more elaborate version of "Fuor del mar," yet I am more likely to wonder, especially during the performance, whether there's any reason for tenor X to be singing *any* version.

One exception comes to mind: George Shirley, the *Idomeneo* of the Davis recording, who does frequently persuade me that the music means something. Other-

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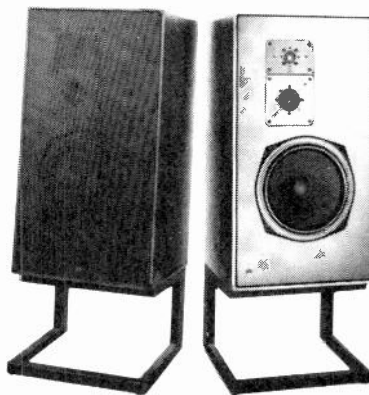
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wise, there's Sena Jurinac's *Illia* in the Glyndebourne *Idomeneo*, plus a few other honorable efforts, and that's it.

Naturally there is value in having all this music on records, but I have no simple recommendations to make. In his May 1978 review, Andrew Porter found much to admire in the Davis *Clemenza*, so you might want to check it out. I don't share his enthusiasm, but then, I don't have much enthusiasm for the alternatives. How on earth would one go about choosing among the Titos of Werner Krenn (Kertész), Stuart Burrows (Davis), and Peter Schreier

(Böhm)? It's all too depressing.

Perhaps the Kertész set comes closest to sounding as if something were actually going on, with Teresa Berganza in prime shape as Sesto and Maria Casula making a gusty stab at Vitellia. It's true that the recitative is drastically abridged, but do the larger quantities included in the Davis and Böhm recordings serve much purpose? (The Davis and Böhm selections are quite different, incidentally. I see no grounds for preference on this count.) If you're really pressed for a choice, I would note that Davis has the only bearable Publio (Robert

Lloyd); Böhm's Theo Adam makes this admittedly officious character positively loathsome.

Idomeneo is of course a textual nightmare. Fortunately, David Hamilton ran this through pretty thoroughly in his September 1979 review of the Böhm set, so we needn't go into it again. The Arabesque set—the first domestic release of an EMI recording originally issued in 1972 and reviewed by Paul Henry Lang as an import in August 1973—contains more music than any of the others. This may be significant if your interest is archival, if you want to know that it's all there on the shelf should some need ever arise. As for the performance, it unfolds steadily, steadily . . . steadily.

There are moments in the Böhm *Idomeneo* (and in his *Clemenza* too) where a phrase takes hold in such a way as to make you wonder what he might have done with these operas fifteen or twenty years ago, when he was still in control of his performances. And although I enjoy the warmth and directness of Julia Varady, Böhm's Elettra and Vitellia, she is overextended by these roles; she seems more properly an *Illia/Servilia*.

With the Glyndebourne *Idomeneo* too drastically chopped up even for my permissive taste (and not all that distinguished apart from Jurinac and perhaps Léopold Simoneau as Idamante), I guess that leaves the Davis set by default. And it's not such a terrible choice at that; in addition to Shirley, there are honorable efforts by Pauline Tinsley (Elettra) and Margherita Rinaldi (*Illia*). Unfortunately, Philips includes no English translation of the libretto.

I told you this wasn't going to be easy. K.F.

RUGGLES: Complete Works. For a review, see page 68.

SCHOENBERG: Chamber Symphony No. 1, Op. 9 (arr. Webern)—See Debussy: *Prélude à l'après-midi d'un faune*.

SIBELIUS: Concerto for Violin and Orchestra, in D minor, Op. 47; Humoresques (6): Op. 87b, Nos. 1-2; Op. 89, Nos. 1-4.

Salvatore Accardo, violin; London Symphony Orchestra, Colin Davis, cond. PHILIPS 9500 675, \$9.98. Tape: 7300 770, \$9.98 (cassette).

SIBELIUS: Concerto for Violin and Orchestra, in D minor, Op. 47; Two Serenades, Op. 69; Serious Melodies (2), Op. 77.

Boris Belkin, violin; Philharmonia Orchestra, Vladimir Ashkenazy, cond. [Ray Minshull, prod.] LONDON CS 7181, \$8.98.

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The conductor plays a demanding role in the Sibelius violin concerto, what with the many intricate cross-rhythms in the orchestral writing and the additional problem of clarifying the sometimes murky scoring and balancing it with the frequently unviolinistic solo part. Davis, of course, has recorded the seven Sibelius symphonies with considerable success, and Ashkenazy, a more recent convert to the podium, is embarking on the same voyage, with a digital Second to be released shortly.

Two very different approaches can be heard here, and I much prefer Accardo and Davis. Predictably, the Italian virtuoso takes a very controlled look at the score, reproducing all the bowing, dynamic, and phrase indications with scrupulous exactitude. He favors a very pure—almost white—tone with a fast, lean vibrato and brings out the work's classical aspects with severe purity of emotion. In its patrician technical perfection, his playing resembles Heifetz'. (He even surmounts the treacherous third-movement hazards with comparable effortlessness.) And his interpretation, with less aggressive heat and greater sobriety than Heifetz', is equally defensible. In the slowish first two movements, Davis makes all the ambiguous rhythmic pulsations unusually firm (in the manner of the Neveu/Susskind and Haendel/Berglund recordings). This effective reading begins with a frozen, Nordic quality, which gradually thaws, warmed by the Latin translucency of Accardo's cantabile. The mercurial third movement has a dancing elegance.

Sir Donald Tovey once brilliantly characterized that third movement as "a polonaise for polar bears," and it sounds as if Belkin and Ashkenazy were trying to take off some of the chill. At every turn, the violinist seeks an excuse to linger over the rhythm or draw a pulsating nineteenth-century sound from his instrument. The opening of the Adagio has never sounded more like its counterpart in Wieniawski's D minor Concerto (though other violinists, such as Oistrakh and Zukerman, have tried). On the whole, Belkin's playing lacks both tonal variety and refinement. Compare Accardo's razor-sharp attacks with Belkin's slurry shifts. (But show mercy and spare him the embarrassment of comparison in the third movement, where his beefy, labored performance speaks for itself.) Ashkenazy's considerate collaboration gives hope for his forthcoming cycle.

Accardo's six humoresques afford sheer delight, and Belkin, too, picks up in his shorter works—so much so that both recordings merit investigation. Technically, each is well balanced. H.G.

TCHAIKOVSKY: The Enchantress.

CAST:

Kuma (Nastasia)	Rimma Glushkova (s)
Polya	Galina Molodsova (s)
Princess	Ludmilla Simonova (ms)
Nenila	Nina Derbina (ms)
Prince Yuri	Lev Kuznetsov (t)
Paisi	Andrei Sokolov (t)
Balakin	Vladimir Makhov (t)
Lukash	Lev Bliseyev (t)
Prince Nikita	Oleg Klenov (b)
Kudma	Victor Rybinsky (b)
Foka	Pyotr Gluboky (b)
Potap	Sergei Strukachev (b)
Mamirov	Yevgeny Vladimirov (bs)
Zhurán	Boris Dobrin (bs)
Kichiga	Vladimir Matorin (bs)

Moscow Radio Symphony Orchestra and Chorus, Gennady Provatorov, cond. CBS/MELODIYA M4X 35182, \$19.98 (four discs, automatic sequence).

Tchaikovsky's worth as an operatic composer is by no means fully contained by his two pieces known to Western audiences, *Yevgeny Onegin* and *The Queen of Spades*. Several of his other sung stage works are rewarding of attention (for some supporting argument, see my discography of Russian opera, Part I, HF, December 1974), and *The Enchantress* is among the most interesting of these.

This is not to say that it's a fully successful opera. The libretto (by Hippolyt Shpazhinsky, drawn from his play of the same name) attempts just about everything that could be imagined in one evening of theater, leaving the audience with some long leaps to make and outsize assumptions to gulp down, and the score ranges from stretches of true brilliance and conviction to others that are little more than due fulfillment of a formal task imposed by some barely justifiable turn of event or character.

Nonetheless, the basic dramatic premise is strong enough. The heroine is a frank, free-spirited young innkeeper named Kuma, whose personal qualities and sympathies for dissidents among the common people are exaggerated into a reputation for licentiousness, witchery, and sedition by the political and religious conservatives of the ruling class. As a result, the reigning prince pays her an inspection visit. He becomes infatuated with her, and though she repels his advances, his attentions to her are enough to cause both his wife and his son, the young Prince Yuri, to declare themselves sworn to her death. But Yuri is also disarmed by her directness and sensuous charm, as well as her declaration that it is he, and not his father. Kuma finds attractive (hard to resist, that one). In an extravagant final act, Yuri and Kuma are about to get away from all this. But the princess, with the aid of a misogynistic her-

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mit, poisons Kuma (much graphic description). Kuma dies. The elder prince catches up with it all and stabs the young prince. The young prince dies—choruses of mourning, bodies in river, mother hysterical, elder prince raving mad, hermit gleefully gloating, thunder, lightning, stage manager and percussion players putting in for risk pay. I mean, really—.

In structuring and detailing, the thing's a mess. In content, however, it has its points, and incorporates most of the themes that most intrigued Tchaikovsky, and other Russian composers as well. All three participants in the triangle "fall in love with" distant ideas of one another and pretend that's a relationship. The heroine is pilloried as antisocial purely for lack of hypocrisy. Her contact with "Nature" (she lives in the country on a riverbank, not in the ascendant city of Nizhny Novgorod, and sings of her communion with forests and spaces) shows her purity; the rural commonfolk are simple and good, the urban upper class complex and bad, though naturally the work's creators and their audiences are among the latter group, not the former. Those who accuse others of malicious magic are the ones to practice it. The source of all the evil and insanity is the assumption that female sexuality is both irresistible and of its very nature destructive.

The score boasts a good deal of splendid melodic material and very inventive accompanimental writing, especially for the woodwinds. The best-known scene is that between Yuri and Kuma, largely because a chunk of it was ravishingly recorded, in German, by Tiana Lemnitz and Helge Roswaenge some fifty years ago. The scene's a beauty, all right, though its impact

lies almost entirely in its vocal melodies and the effects they can secure from fine and appropriate voices. It is preceded by a fine, tense monologue for Kuma as she awaits Yuri and his companion, who she knows mean to kill her—the sort of personally involved melodramatic situation Tchaikovsky was especially effective with.

Elsewhere, there are several other arias for the principals that are typical of the composer, with their weaving melodies and subdued endings. They are strong, except for that of the elder prince, a character Tchaikovsky seems to have had trouble getting at. There are charming choruses of greeting and arrival in the first act, a fairly strong scene between the prince and princess, and an even better one between the princess and Yuri. Representative of the sections that work less well is the ensemble worked up over Yuri's oath to do away with Kuma; the situation seems contrived for a grand-opera ensemble and the composer's heart not in it because it stops really following the truth of the characters' actions—curious how often he tried this and how consistently he failed (most of the way through *Maid of Orleans*, for instance). The lurid last act really has some excellent writing in it; it is hard to swallow because it is difficult to leap from the fairly down-to-earth theatrical assumptions of the earlier scenes to this sort of thing. From Dargomizhsky right down to Shostakovich, Russian operawrights have often not troubled to establish a consistent level of reality—the problem plagues a host of interesting works.

I wish I had to hand the older Westminster release of an earlier Soviet performance that once circulated here, for its edition differs in some respects from that

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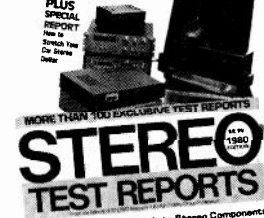
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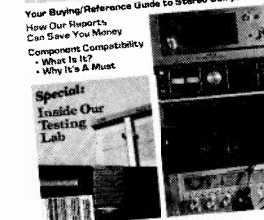
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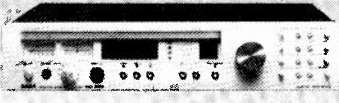
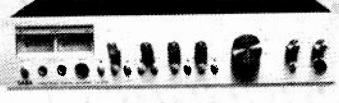

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Atamian (piano, arr. Raphling)
RCA ARC1-3636 (D); ●ARK1-3636
- SZYMANOWSKI, KAROL**
Masques, Op. 34; Etude, Op. 4, No. 3; Valse
romantique (1925)
Feder † Son. 3 Prot. 149
Sonata No. 3 for Piano, Op. 36
Feder † Masques Prot. 149
- TCHAIKOVSKY, PIOTR ILYICH**
Concerto No. 1 in bb for Piano & Orch.,
Op. 23
Drescher, Weinberg, Paris Proms Orch.
CMS/Sum. 5084; ●45084
Concerto in D for Violin & Orch., Op. 35
Andrade, Walther, Hamburg Radio Sym.
CMS/Sum. 1080; ●41080
- THOMSON, VIRGIL**
Piano Music
Tollefson: 10 Etudes; Cantabile; Catalan
Waltz; 9 Etudes; Bugles & Birds; An Old
Song; In a Bird Cage; Alternations
Fin. 9027
- TURINA, JOAQUIN**
Rapsodia sinfónica, Op. 66; Sinfonia sevil-
lana, Op. 23
Weinberg, Hamburg Sym. † Honegger
CMS/Sum. 1061; ●41061
- VAUGHAN WILLIAMS, RALPH**
English Folk Song Suite
Wick, London Wind Orch. (& Toccata
marziale) † Holst None. 78002
- VERDI, GIUSEPPE**
Rigoletto
Soloists, Martin, Hamburg Radio Sym.
(excerpts) [I] CMS/Sum. 1086; ●41086
- La Traviata**
Callas, Kraus, Sereni, Ghione, Lisbon San
Carlos Op. [I] (rec. 3/27/58)
- WALTON, WILLIAM**
Façade
Berberian, Tear, Bedford, Ens. [E] † Fa-
çade 2 Peters PLG-135; ●PCD-135
Façade 2 (1979)
Berberian, Tear, Bedford, Ens. [E] † Fa-
çade Peters PLG-135; ●PCD-135
- ZAIMONT, JUDITH LANG**
A Calendar Set, for Piano (1972-78); Chan-
sons nobles et sentimentales, for Tenor
& Piano (1974); Nocturne for Piano
(1978)
Steigerwalt; Bressler, Zaimont; Zaimont
Leonarda 101

used in the new recording, and I would like to check my recollection that it made a somewhat stronger case for the piece. This is only decently played and sung, and not very satisfactorily recorded—there is rather crude highlighting of brass and woodwind, and a compressed, flat sound whenever more than one solo voice is involved—often, needless to say. There is no effort with anything beyond concert rendition—even the important indicated sound effects in the last act are omitted.

Best of the soloists is the Yuri, Lev Kuznetsov, whose flowing, hefty tenor has a good, gathered ring at the top. He sounds headier and more fluent in this music than in his stentorian role in the *Covetous Knight* recording, and though his phrasing is hardly insinuating enough to put the memory of Roswaenge to rest, he gives a satisfying performance. The Kuma, Rimma Glushkova, has a bright lyric soprano that is pleasurable in the middle range and at middle dynamics; past these limits, she tends to the sort of quavery edge that besets 90% of Eastern European sopranos.

As the elder prince, Oleg Klenov shows a burly, solid baritone with a somewhat dry, covered higher range. The role lies high much of the time. His princess, Ludmilla Simonova, is a mezzo with a sizable, imposing middle range and a frayed, uncertain top. The supporting singers, many of them seasoned familiars of the last quarter-century of Soviet recordings, are very uneven. On the one hand, a splendid bass voice (that of Vladimir Matorin) pops out in the bit part of Kichiga, and the firm tenor of the veteran Vladimir Makhov is welcome in an equally small role. But on the other, the vital role of Kudma, the vicious hermit, is given to Victor Rybinsky, competent enough in some previous assignments, but not up to the considerable vocal and dramatic challenge of this part.

The booklet contains the usual and is adequate I suppose, but a work of this sort could use more help—the translation is of the bare-bones variety, and the author of the notes (Boris Schwarz, and I doubt there is anyone more knowledgeable) seems not to have been given the space or the editorial encouragement to really make the case for this worthwhile specimen. C.L.O.

THOMSON: Symphony No. 3.*
HELPS: Symphony No. 1.†

New Hampshire Symphony Orchestra, James Bolle, cond.*; Columbia Symphony Orchestra, Zoltán Rozsnyai, cond.†. [Carter Harman, prod.] **COMPOSERS RECORDINGS** SD 411, \$7.95 [from **COLUMBIA** MS 6801, 1966].

THOMSON: Piano Works.

Arthur Tollefson, piano. [Ilhan Mimaroglu, prod.] **FINNADAR** SR 9027, \$7.98.

Etudes (19); Portraits: Cantabile; Catalan Waltz; Bugles and Birds; An Old Song; In a Bird Cage; Alternations.

Virgil Thomson's instrumental music can carry one back to the place where old wicker chairs wait on the front porch, the drink is lemonade, trees grow tall and green, and all the talk is of kinfolk. There's a slight minty taste of provincialism—a bit odd coming from a composer who studied

in Boston and Paris and has spent most of his eighty-four years in Manhattan. But Thomson never forgets that Kansas City, Missouri, was home; and proud he should be, for what comes through in his music is a sense of sureness and stability—values born of home, family, church, holiday dinners, and those traditions it has become so fashionable for the rest of us to scorn because we don't have them to hold onto anymore.

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much more comfortable, but hardly less expressive, than their own.

This is, of course, only one side of Thomson's music—the side that makes it sound "peculiarly American," whatever that phrase may finally come to mean. But there's much more to it. In speech, writings, and music, straight talk is Thomson's forte, and clarity is one of the prime characteristics of his Symphony No. 3, a version for mid-sized orchestra of his 1932 String Quartet No. 2. The four classically cast movements manage remarkably to combine unpredictability and inevitability; you never know exactly what will happen next, but when it comes, the ear recognizes that the choice was right.

Dedicated to architect Philip Johnson and built with imagination from the best available materials, the symphony is, as CRI's notes point out, almost Schubertian in language and structure. I'm not entirely convinced that the orchestral version is an improvement on the string quartet original; when the snare drum and field drum begin knocking about, Thomson's clever side seems to be speaking up in a context where witticisms are not needed. However, this could well be a weakness of the performance and not of the score. The semiprofessional New Hampshire Symphony, conducted by James Bolle, plays but adequately.

CRI couples Thomson's Third with a re-release of Robert Helps's Symphony No. 1, with Zoltán Rozsnyai conducting a Viennese assemblage called the Columbia Symphony Orchestra. This work pivots on a central Adagio, which has (or had) a separate life as the Adagio for Orchestra and which is by far the most substantial and thoughtfully conceived part of the symphony. In the more energetic outer movements, Helps uses a language more boisterous than Thomson's and engages in more theatrical outbursts than the older composer would find fitting. Nevertheless, there is little that is compelling here, at least in Rozsnyai's often detached approach.

It's pleasant, then, to return to Thomson's very personal statements and the new recording of nineteen etudes and a smattering of "portraits," performed with great humor and care by Arthur Tollefson. This piano music is considerably more sophisticated and cosmopolitan than the Third Symphony—in effect, the lemonade has given way to champagne. It's easy to imagine Thomson playing these miniatures for his friends at Parisian parties, and even the dourest subject of a musical portrait would have to laugh and be charmed, for each of these piano sketches is worth a hundred thousand words or more.

The ten etudes from the summers of

1943 and 1944 and the nine etudes from April, June, and July of 1951 are genuine exercises (for five fingers, pivoting the thumb, broken arpeggios, etc.), but they, like the portraits, are also witty evocations, quick shots full of action. "Drink to Me Only with Thine Eyes," "Three Blind Mice," and "Oh, Susannah" pop up—or at least melodic outlines suggest these tunes. Thomson would probably get a kick out of using "Three Blind Mice" in a canonic etude entitled "Fingered Fifths." But he'd probably be even more delighted to prove that he never used a smidgen of the old tune, but only made us think he did. K.M.

VERDI: Luisa Miller.

CAST:

- | | |
|--------------|-----------------------------|
| Luisa | Katia Ricciarelli (s) |
| Laura | Audrey Michael (s) |
| Federica | Elena Obratzsova (ms) |
| Rodolfo | Placido Domingo (t) |
| A Villager | Luigi de Corato (t) |
| Miller | Renato Bruson (b) |
| Wurm | Wladimiro Ganzarolli (bs-b) |
| Count Walter | Gwynne Howell (bs) |

Chorus and Orchestra of the Royal Opera House, Covent Garden, Lorin Maazel, cond. [Rainer Brock, Günther Breest, and Michael Horwath, prod.] DEUTSCHE GRAMMOPHON 2709 096, \$29.94 (three discs, manual sequence). Tape: 3370 035, \$19.96 (two cassettes).

COMPARISONS:

- Moffo, Bergonzi, MacNeil, Cleva
 RCA LSC 6168
 Caballé, Pavarotti, Milnes, Maag
 Lon. OSA 13114

While the result may not be terribly satisfying, this is the most stimulating Verdi recording we've had in some time. All of the principals bring some pertinent credentials to their roles, and the conducting goes beyond the snap, crackle, and pop of the currently chic Verdians to some consideration of the mood and texture of individual scenes—especially welcome in *Luisa*, which is still widely thought of as a hybrid piece: two acts of "early" Verdi followed by one in which the composer suddenly hit his full middle-period stride.

Like most of the fashionable wisdom about Verdi, this is nonsense. In emotional terms, Act III is the most conventional part of *Luisa*. Luisa suffers; Rodolfo confronts her with the (fake) evidence of her infidelity and, before she can explain, poisons both her and himself; Luisa's father looks on helplessly; Rodolfo apologizes. Have you noticed how often the operas and operatic situations that acquire reputations for dramatic profundity in fact seem like rejected plots for Bette Davis movies?

And if the performers should decide

that Act III is the point of *Luisa*, the opera can be left for dead. The three scenes of Act I, remember, run more than an hour. If something hasn't happened by the time they end, you've lost your audience before Act II, and never mind Act III.

Although Lorin Maazel perhaps tries too hard to make the first two acts "dramatic," I like his determination to deal with the material on its own terms rather than ferreting out foreshadowings of later Verdi operas. In the fifteen years since RCA's premiere stereo recording gave us our first opportunity to explore the opera at leisure (along with the live performances that have come our way over that period), it has increasingly impressed me as a full-fledged masterpiece, on a level with *Ernani* and *Macbeth* among the pre-*Rigoletto* Verdi operas.

Interestingly, the scenes that held my attention in the DG performance are two usual throwaways: Federica's arrival and interview with Rodolfo in Act I (re-sampling the old Cetra recording, I was startled to find this scene missing altogether), and the Walter/Wurm duet in Act II.

In the latter, Wladimiro Ganzarolli pulls his voice together quite respectably (earlier on, he is even rougher vocally than

Richard Van Allan, London's Wurm), and the contrast between his gravelly timbre and Gwynne Howell's smooth bass is effective; lack of such contrast is the one serious reservation to be registered in regard to RCA's fine tandem of Giorgio Tozzi (Walter) and Ezio Flagello (Wurm). Maazel identifies more strongly than most conductors with the darker, weightier elements of Verdi's writing (listen, for example, to the force of the Act III orchestral *allegro moderato* over which Rodolfo demands to know whether Luisa wrote the incriminating letter to Wurm), and this scene has a nice sense of sinister life.

The Federica scene is more problematic, but again Maazel seems to me on the right track. The first appearance of the bouncy little tune to which she will make her entrance, as Rodolfo is on the brink of telling his father about his romantic intentions toward Luisa (something Count Walter emphatically doesn't want to hear), makes a striking impression. The tune does bounce, and so does produce an abrupt emotional juxtaposition—the uneasy foreboding of the Rodolfo/Walter scene vs. the innocence, even obliviousness of the music associated with the duchess' arrival—of the sort Verdi so enjoyed.

Already, though, there's a problem.

Federica's entrance music is built up of repetitions of that initial rhythmic motif (four staccato sixteenth notes followed by alternating eighth notes and rests), and, while each rendering of that motif has admirable bounce and balance, they all have the *same* bounce and balance. The music doesn't grow, evolve, develop dramatic resonance; it merely repeats.

Still, the DG performance of the Federica/Rodolfo scene has its points. Elena Obraztsova is the first Federica I've heard with a functioning chest register, so that "*Dall'aule raggianti*," for example, emerges as a complete tune rather than fading out as it dips down to and below the break. As usual, Obraztsova has trouble controlling the upper part of her voice and adopts a rather blustery interpretive pose. All the same, she still gives the duchess some dramatic stature. Rodolfo's music in this scene, which demands lightness, precision, and fluidity, especially around the break, is just difficult enough for Plácido Domingo to force him out of his emotional automatic pilot. And he even gives us some sense of a relationship with Federica, with whom Rodolfo did, after all, grow up.

"*Quando le sere al placido*" also goes reasonably well, and of course the basic quality of Domingo's voice is generally evi-

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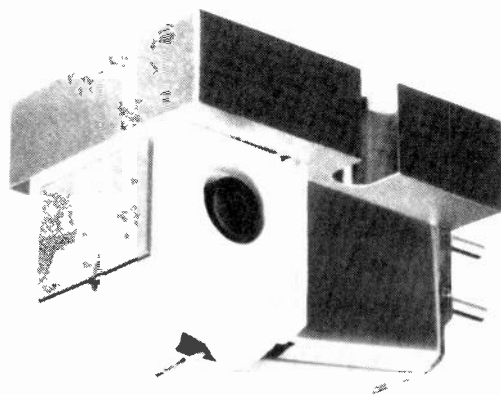
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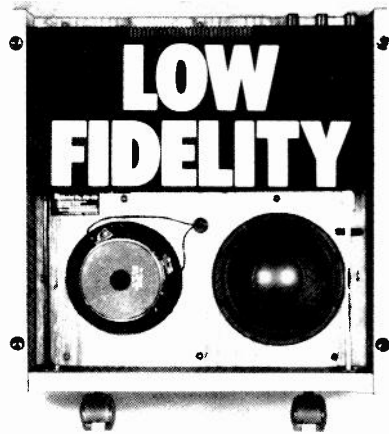
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dent. In the role's more forceful passages, it's nice to have a bigger sound than RCA's Carlo Bergonzi or London's Luciano Pavarotti commands, though the gain is partly offset by the strenuous, pressured quality of that sound above the break. Bergonzi, heard in one of his best recordings, still seems to me the class of the field.

While RCA's Cornell MacNeil also seems to me the best of the Millers, DC's Renato Bruson isn't bad, and in his first Verdi recording he has the advantage of not being Cappuccilli or Milnes or Wixell. His limitations may become equally fatiguing with more exposure, but for now it's possible to enjoy the steady, attractive quality he produces over the not-quite-an-octave from about F sharp up to E.

Miller's enraged reply to Count Walter's calling Luisa a "paid seductress" in the Act I finale ("*A me portasti grave insulto! lo fui soldato! Trema!*")—"You have insulted me gravely! I was a soldier! Tremble!"—falls almost entirely within these limits—only two notes dip below the F sharp—and here Bruson, abetted by Maazel's firm hand, is actually more impressive than MacNeil; note the fine, vigorous E of "*soldato.*" But when we get to the extended solo "*Fra mercanti ancora oppressa,*" which extends that limited range only a couple of notes in each direction (down to D, up to F and F sharp), Bruson's mask starts to slip off.

Katia Ricciarelli's Luisa is a problem, and the problem is exacerbated by the engineering. The problem is once again that she is a lyric soprano, and Luisa isn't, having among other things to soar over some dense ensembles. The DG engineers accomplish this by sticking a microphone on her tonsils, which may make for a louder sound but not for a "bigger" one. In addition, the close microphoning spotlights the prevailingly uncentered, edgy quality of Ricciarelli's timbre—something that I've never noticed in the open spaces of a theater but that dogs her work on records, even in roles within her grasp (cf. the Philips *Bohème*).

I hope it isn't necessary to add that all this spotlight microphoning—and it has become the norm in opera recording, Ricciarelli here being merely an extreme case—destroys any possible sense of theatrical context; the singers are all hermetically sealed within their safe little bubbles. RCA's Anna Moffo had an even lighter voice than Ricciarelli, but at the time of that recording hers was still a better-balanced instrument within its limits, and it was more plausibly recorded. (London's Montserrat Caballé has a voice closer to the proper weight, but it's all jumbled up—and it has nothing at all usable around and below the break.)

DG's sound is at least less murky than that of its Covent Garden *Fanciulla del West*, and the orchestra is fairly well recorded. The chorus, however, is again a distant haze, which produces a bizarre effect when Ricciarelli's souped-up voice sounds three or four times as loud. London's clear and spacious engineering gives its set an edge, but its cast can't touch RCA's, for whose sake I will gladly suffer the honest but prosaic conducting of Fausto Cleva and the boxy Rome studio sound. K.F.

Recitals and Miscellany

HELGE ROSWAENGE: Operatic Arias.

H Helge Roswaenge, tenor; various accompaniments. ARABESQUE 8003, \$6.98 (mono). Tape: 9003, \$6.98 (cassette). [From HMV originals, 1936-43.]

ADAM: *Le Postillon de Longjumeau*: Mes amis, écoutez l'histoire (sung in German). AUBER: *Fra Diavolo*: Pour toujours, disait-elle (sung in German). WEBER: *Der Freischütz*: Nein, länger trag' ich nicht . . . Durch die Wälder. Oberon: Seit frühster Jugend; Du der diese Prüfung schickt. STRAUSS, R.: *Der Rosenkavalier*: Di rigori armato. BEETHOVEN: *Fidelio*: Gott, welch' Dunkel hier! . . . In des Lebens Frühlingstagen. MOZART: *Die Entführung aus dem Serail*: Hier soll ich dich denn sehen. TCHAIKOVSKY: *Yevgeny Onegin*: Faint echo of my youth (sung in German). WAGNER: *Lohengrin*: In fernem Land; Mein lieber Schwan! LEHÁR: *Giuditta*: Du bist meine Sonne; Freunde, das Leben ist lebenswert.

The Danish-born Helge Roswaenge (1897-1972) was one of the most durable and prolific of recorded tenors. Primarily self-taught, he rose rapidly to the major theaters and passed most of his career at the Berlin and Vienna operas. The fact that he continued to sing in Berlin throughout the war years did not make things easier for him after 1945; though there is no suggestion that he was a Nazi, his countrymen did not easily forgive him his enjoyment of a privileged status in the Third Reich. For a time right after the war he tried to emigrate to South America and resume his original career as a chemical engineer, but this didn't work out, so in 1948 he returned to the stage and continued to sing until a considerable age, even making his American debut in 1963 at a Carnegie Hall recital.

Roswaenge's limited career outside the German-speaking countries seems to have been primarily a consequence of his

unwillingness to learn his roles in languages other than German, in which all of his recordings are sung (with such obvious exceptions as the *Rosenkavalier* tenor solo and the Verdi Requiem, as well as some Danish songs). Though he recorded some Wagnerian selections, Parsifal was his only Wagner stage role, so there was relatively little in his repertory to interest houses such as New York's Metropolitan.

Roswaenge's recordings are numerous—indeed, their number has continued to grow in recent years, as the archives of Nazi Germany's radio stations have gradually surfaced. His principal commercial affiliations were with DG/Polydor (1927-35) and HMV/Electrola (1935-44), but there were also discs for Parlophone/Odeon (1928), an impressive series for Telefunken (1932-33; recently reissued as Telefunken 6.42084), and scattered items after the war for Decca/London and others; the total of 78-rpm sides comes to more than 250. The live-performance material includes complete recordings of *Faust* (HF, July 1976), *Pagliacci*, *Rigoletto*, *Les Vêpres siciliennes* (all in German, of course), Verdi's Requiem, Strauss's *Ariadne* (without the prologue), and extensive highlights from many others. A good deal of this material has recently circulated on BASF and Acanta, and some of it had earlier incarnations on Urania and DG. A complete and generally accurate discography of Roswaenge was published not long ago in the English magazine *The Record Collector*, Vols. XXIII/5-6 (the 78s) and XXV/5-6 (the broadcasts and LP reissues).

Arabesque's Roswaenge recital draws on the HMV/Electrola recordings, made in what were probably the singer's peak years, when he sang so often in so many different German cities that Luft-hansa gave him a commutation ticket. Some of his most famous records are here: the Adam aria with its full-voice high D, Huon's arias from *Oberon* (which Roswaenge sang in a famous Salzburg revival under Bruno Walter), and Florestan's aria from *Fidelio* (which he sang under Toscanini at Salzburg in 1937). The Wagner and Lehár titles, published in 1942-43, are rare in their original form; doubtless the original press runs were very small. As a sampling of Roswaenge's repertory, Arabesque's program is not entirely representative, for his particular specialty in the German theaters was Verdi—not only *Rigoletto*, *Traviata*, *Trovatore*, and *Aida*, but the intermediate operas then much in favor in Germany: *Les Vêpres siciliennes*, *Ballo*, *Forza*, and *Don Carlos*. (He also sang *Otello* in a radio performance but never on-stage.)

What we do have on this disc is both impressive and frustrating. The voice was remarkable, wide in range (the low notes

firm all the way down to C, the top extending to the famous D), brilliant in tone though not particularly various in color, capable of dynamic modulation and expansive phrasing. His most comfortable expressive mode seems to have been the proclamatory, and in music to which this was suited he was without peer. Too often, in more intimate, legato writing, he fell into unpleasantly fierce and choppy phrasing. In the hands of a firm conductor (such as Toscanini or Beecham—cf. the famous *Zauberflöte* recording—or, one imagines, his Berlin mentor Leo Blech), he could restrain that

natural forcefulness and produce effects of considerable sensitivity. The present selections, except for the *Lohengrin* arias, are conducted by the routine Bruno Seidler-Winkler, who does not appear to have counseled sufficient restraint.

Characteristic is the *Fidelio* aria. The sheer sound is thrilling; the dynamic scale and the breadth of the phrasing are remarkable. Yet the opening recitative is just a string of phrases, without the cumulatively shaped line that we hear in, say, Patzak's or Vickers' performances (both of which benefit, to be sure, from much better conduct-

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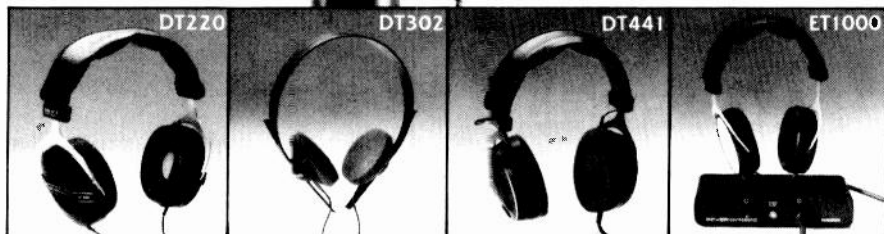
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ing). Prominent is the exaggeratedly forward diction ("neeechts") that Roswaenge sometimes favored. The aria itself is smoother, but rhythmically sloppy; only in the fast concluding section is the voice used at something close to its full artistic potential.

The sheer scale of the singing is also well illustrated by the *Oberon* arias (not sung, incidentally, in the familiar German versions by which Arabesque identifies them), and it is wonderful to hear a voice of this size and brilliance in "*Seit früherer Jugend*," though in truth the divisions are somewhat smeared; if in more recent times Gedda and Domingo have sung this more precisely, Roswaenge brings to it an amplitude, especially in the well-controlled quiet passages, that remains unique. As vocalism, the *Freischütz* aria is comparable, but the main melody is so sleepily conducted that it never makes its proper effect.

The two French arias are practically flattened against the studio walls by Roswaenge's tone and style. Even by German standards, Auber's gentle declaration of faithfulness is made absurdly militaristic (cf. Tauber), though the Adam piece (only two verses of the original three) is more relaxed than the singer's earlier *Odeon* version. Lenski's aria (like several other Russian titles, including the duet with Lemnitz from Tchaikovsky's *Enchantress*) stems from a brief vogue for Russian opera in Berlin, obviously concurrent with the Nazi-Soviet pact; here again we find the exaggerated diction and the choppiness, which also mar the earlier *Entführung* selection. The *Rosenkavalier* aria, though not quite cleanly phrased, is a tour de force of resplendent tone.

The last recordings of the lot, the Lehár and Wagner, show some vocal weariness. In the Wagner, one hears small but tangible technical uncertainties; the *Guiditta* arias, not as fierce as one might have feared, still constitute vocal overkill.

Most of these transfers have appeared previously on Electrola reissues; I would be happier with less top cut and less echo. The *Freischütz* and *Entführung* arias were transferred at the Rodgers and Hammerstein Archives in Lincoln Center, with more surface noise but a more plausible tonal quality. Arabesque's liner gives matrix but not take numbers, original issue numbers, and recording dates, some of them incorrect. There is no indication that the French and Russian arias are sung in German. The annotations are more effusive than factual. D.H.

CAROL WINCENC: Flute Recital.

Carol Wincenc, flute; Andras Schiff, piano*. [Jeffrey Nissim, prod.] MUSICAL

HERITAGE SOCIETY MHS 4180, \$6.95 (\$4.45 to members). Tape: MHC 6180, \$6.95 (\$4.45 to members) (cassette). (Add \$1.25 for shipping; Musical Heritage Society, 14 Park Rd., Tinton Falls, N.J. 07724.)

ENESCO: Cantabile et Presto.*
 HONEGGER: Danse de la chèvre. GAUBERT: Sonata for Flute and Piano, No. 1, in A.*
 DEBUSSY: Syrinx. FAURÉ: Fantaisie, Op. 79; Morceau de concours.*
 POULENC: Sonata for Flute and Piano.*

Carol Wincenc is surely the most attractive and promising flutist to appear on the American scene since Paula Robison. She has been principal flutist with the St. Paul Chamber Orchestra and with the Marlboro and other festival orchestras. In 1978 she won first honors in the Naumburg Foundation's flute competition, and that organization here sponsors her solo record debut—a most felicitous one in every respect.

The predominantly French and Romantic program combines such familiar flute "standards" as the unaccompanied Debussy and Honegger works and deservedly popular Poulenc sonata with the less often heard Enesco and Fauré display pieces, now lyrical, now bravura; and it adds a welcome resurrection of a charming, however lightweight, sonata by the once-renowned French flutist/conductor/composer Philippe Gaubert (1879-1941). Then too, for once in a recital of this kind, the pianist is no dutifully reticent accompanist, but an equal partner of distinctive skills and personality: the up-and-coming young Hungarian Andras Schiff. And while engineer David B. Hancock captures Wincenc' exceptionally richly colored tonal qualities (along with some intensely penetrating *ff* high tones) in vivid close-up presence, they are equably balanced with Schiff's brightly ringing piano sonorities in an acoustical ambience that is unusually expansive for chamber music. Moreover, the disc is well processed, with quiet surfaces, and in place of the seemingly inevitable jacket blurbs, there are genuinely informative musical notes by Harris Goldsmith.

None of this is to claim, of course, that the gifted Wincenc/Schiff pair is fully competitive with such notable teams as Nicolet/Herzog, Debost/Février, and Rampal/Veyron-Lacroix in the Poulenc sonata or that Wincenc' *Syrinx* will make us forget those by Baker, Rampal, Dwyer, et al. And remarkable as her range of tonal coloring undoubtedly is, one wonders how well she will be able to curb and vary it for baroque works, where quite another type of expressivity is called for. Meanwhile, she is off to a running start in what should be an outstanding recording career. R.D.D.

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The Tape Deck

by R. D. Darrell

Digital digs in

In its arresting digital-recording debut (discussed in a review last month), the CBS Mastersound series becomes the first audio-specialty line to feature simultaneous cassette editions—and for good measure, to process them on super-chromium (Crolyn II) tape with 70-microsecond equalization (premium priced at \$14.98 each). So at last we have, albeit in analog playback, digital recordings that profit not only from chromium's expanded frequency and dynamic ranges, but also from Dolby's elimination of noise.

All these advantages distinguish the only Mastersound musicassette to have reached me so far, an ultra-crystalline recording of the 1947 edition of Stravinsky's *Petrushka* (CBS HMT 35823). Conductor Zubin Mehta is more pointed and assured than in his 1968 Los Angeles Philharmonic version for London, and the New York Philharmonic, with Paul Jacobs as authoritative piano soloist, makes the most of the new technology's potentials. The lack of any real sense of personal involvement and relish prevents my ranking this at the top of the *Petrushka* discography, but surely no other recording has revealed more explicitly every colorful detail of this kaleidoscopic score. It keenly whets my anticipation of the other two initial Mastersound releases: Bernstein's latest Shostakovich Fifth and Maazel's Strauss tone poems.

London finally follows its pioneering digitally recorded cassette, Willi Boskovsky's spectacular New Year's Concert (LDR5 10001/2, July 1979), with three new examples, all conventionally processed on ferric tape stock (\$9.98 each). Consequently, the Dolby silencing, while first-rate, is not complete; moreover, none of the present scores is as much of a showpiece as some in Boskovsky's program. Nevertheless, digital technology's merits are evident in the lucidity and naturalness throughout—especially in Christoph von Dohnányi's Mendelssohn program with the Vienna Philharmonic (LDR5 10003). His tautly graceful *Italian* Symphony and *Hebrides* Overture would be ideal except for some edginess in the strings' upper registers; his *Calm Sea and Prosperous Voyage* Overture is ideal.

In the first digital Beethoven *Emperor* Concerto, Radu Lupu's sensitively poetic pianism and the overall sonic limpidity make for an imperial elegance that unfortunately is not matched by Mehta's routine accompaniment with the Israel Philhar-

monic (LDR5 10005). Another digitally recorded first, Mahler's Fourth Symphony (LDR5 10004), benefits even more from gleaming sonic illuminations and complete freedom from any feeling of gimmickery. But again the Israel Philharmonic, Mehta, and soprano Barbara Hendricks are all more dutiful than inspired. Except for the sound, there is no competition here for Horenstein's Monitor (55001) or other generally preferred versions.

London, unlike CBS, provides brief musical and technical notes (except, apparently by accident, for the Beethoven concerto), but there are no texts for the Mahler soprano solo.

Un-Czech Dvořák, Magyar Liszt

The latest musicassette editions of Dvořák's captivating Eighth Symphony have momentarily shaken my long-held conviction that quintessentially nationalistic music like this is done full justice only by native interpreters. For rarely has the lovely Eighth shown more poignant expressivity—though with ample robust strength—or been more luxuriantly recorded than in Carlo Maria Giulini's account with the Chicago Symphony (Deutsche Grammophon 3301 046, \$9.98). And perhaps never has it been done with greater sensitivity and grace, in a recording no less beautiful if slightly more distant, than by Colin Davis and the Concertgebouw of Amsterdam (Philips 7300 611, \$9.98).

Only if you're Czech, or if you remember the incomparably fresh folkishness and piquancy of native versions (especially Talich's with the Czech Philharmonic), can you detect what is missing in even the best non-native Dvořák readings. Of the non-Czech *New World* Symphonies recently made available, just one, recorded way back around 1958 by Rudolf Kempe and the Berlin Philharmonic, provides a strong enough measure of the work's essential virility and spontaneity. Together with an equally invigorating *Scherzo capriccioso*, this is a real triumph for Arabesque's "discovery" series (9019, \$6.98).

No non-Hungarian Liszt *Hungarian* Rhapsodies I've ever heard can match the verve, lilt, and unpretentiousness of Nos. 2, 3, 4, and 6 (orch. series) in Hungaroton's recent recording (MK 12062, \$8.98) by a provincial orchestra, the Szeged Symphony, and a conductor of no international fame, Tamás Pál. And János Ferencsik's latest version, with the Hungarian State Orchestra, of Liszt's magnum opus, the *Faust* Sym-

phony (Hungaroton MK 12022/3, \$17.96), is perhaps less dramatic but certainly less melodramatic, more graciously Romantic, and far more idiomatic than the recent Bernstein/Boston Symphony recording (DG 3370 022). And for good measure, the fillers are the episodes from Lenau's *Faust*, including the "Nocturnal Procession," far too seldom heard, and the more familiar *Mephisto* Waltz.

More quidnunc's quiddities

What a relief it is to shift from an interminable succession of "standards" to something novel by a favorite composer, new slants on hackneyed warhorses, or even something altogether outrageous! Try, for example, Schubert's *Seventh* Symphony, which he sketched in full but left to be posthumously orchestrated (by Weingartner), now recorded for the first time in stereo, I think, in Heinz Rögner's engagingly lightweight Berlin Radio Symphony version (Spectrum SC 216, \$4.50, plus \$1.50 for shipping; Spectrum, Harriman, N.Y. 10926). Or the Brahms *Haydn* Variations and Op. 34b Sonata edition of the F minor Quintet in the composer's own two-piano scorings played by the matchless Kontarsky brothers (Deutsche Grammophon 3301 100, \$9.98).

Then one Satie devotee can afford to miss the preposterous mixture of enticing 1974 Pathé-Marconi leftovers jumbled together in *Arabesque* 9053-L (\$7.98): nine delectable songs by Mady Mesplé with pianist Aldo Ciccolini; the complete, very odd puppet-opera *Geneviève de Brabant* (some half of which is a recited prologue); and the *Mass for the Poor* (a large part of which is for organ alone, here played by Gaston Litaize). But while the all-French artists there are most idiomatic, non-Satie specialists may be more readily won over by the lush romanticisms of John Lanchbery's ballet *trouvé Monotones* (his, Debussy's, and Roland-Manuel's orchestrations of the *Prélude d'Egmond*, three *Gymnopédies*, and three *Gnossiennes*). In this all-transcription program (Angel 4XS 37580, \$8.98), Lanchbery also conducts the Royal Opera Orchestra in *Jack in the Box* (orch. Milhaud), the *Morceaux en forme de poire* (Desormière), and two *Préludes posthumes* (Poulenc).

Finally, for the sheerly outrageous, risk the Canadian Brass quintet's Bach (*Pas-sacaglia*, etc.), Handel, Pachelbel, and "Frescobaldi" transcriptions, which are at the very least great fun (RCA Red Seal ARK 1-3554, \$8.98). **HF**

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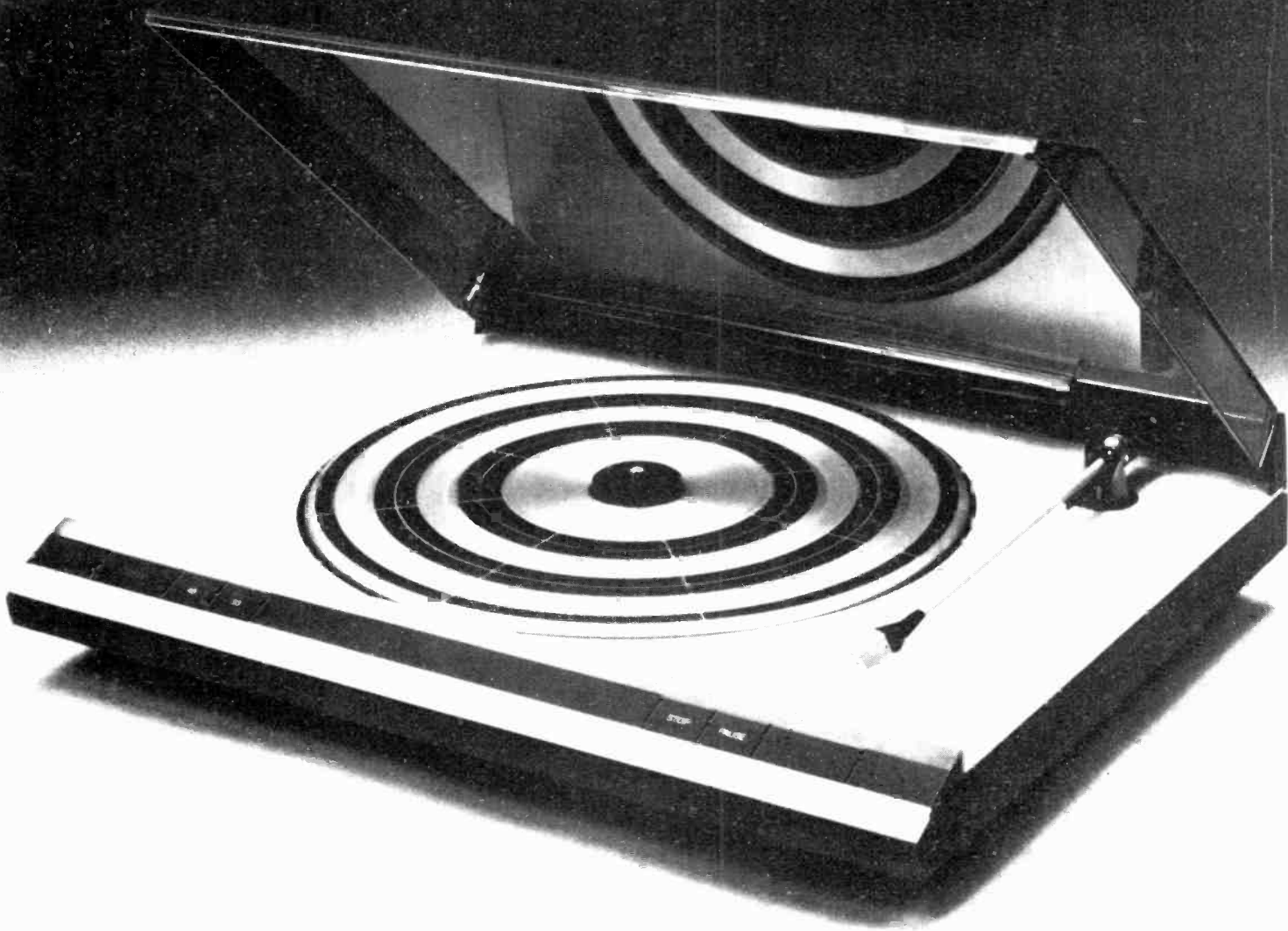
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Quincy Jones, Master Synthesist

by Stephen Holden

In a dimly lighted sitting room of his sprawling Spanish-style ranch house nestled in a Brentwood, California canyon, producer extraordinaire Quincy Jones smokes a cigarette and discusses Qwest Records, his new Warner Bros. custom label.

"I'm not into being a record mo-

gul," he says. "I just feel as though I finally got to an oasis where at last I can do what I want. Qwest will have only two or three artists in the next four years, but they'll be people with whom I have a total human and artistic communication."

At forty-six, Jones is a magnificent exception to F. Scott Fitzgerald's gloomy

assertion that there are no second acts in American life. A successful record company executive in the early Sixties, he recently returned to pop music after devoting the bulk of his energy from the late Sixties to the mid-Seventies to movie and TV scores, including that of Alex Haley's *Roots*. Though seventeen years ago, as an a&r man for Mercury Records, he produced Lesley Gore, her tinny teen anthems are miles away from the opulent pop/soul of Jones's recent platinum productions for Michael Jackson ("Off the Wall"), the Brothers Johnson ("Light Up the Night"), and Rufus & Chaka Khan ("Masterjam"). Jackson's album alone yielded four hit singles and topped the four million mark. Clearly Jones's current "act" is as strong, if not stronger, than its predecessors.

The first Qwest/Warner Bros. release was George Benson's "Give Me the Night" (for a review, see page 110). The second, currently in production, is an album by Jones's goddaughter Patti Austin. After that, he may resume work on a long-term multimedia project he calls "Evolution of Black Music."

Jones belongs to a select group of American musicians, Leonard Bernstein and André Previn among them, who can legitimately be called Renaissance men because their range of activities spans pop and highbrow genres. Born in Chicago and brought up in Seattle, he studied composition at the Berklee School of Music in Boston and (in the '50s) with Nadia Boulanger—the Parisian mentor of Aaron Copland and Virgil Thomson, to name only two. A talented jazz trumpeter and arranger, Jones was part of the bebop vanguard in the early Fifties and toured internationally with Dizzy Gillespie and Lionel Hampton. After leading his own band later in that decade, he worked as an a&r man and vice president of Mercury Records. While learning the record business inside out, he arranged and produced dozens of albums, including the first for his teenage friend from Seattle, Ray Charles. Among his numerous other productions during this period were LPs for Frank Sinatra ("Live at the Sands"), Sarah



Michael Jackson and Quincy: "Michael's a stone pro"

"The first time Michael sang *She's Out of My Life* in the studio, he cried during the last eight bars."

Vaughan, Dinah Washington, Peggy Lee, Duke Ellington, Count Basie, and Billy Eckstine.

After leaving Mercury Jones took up film scoring, his first major work being Sidney Lumet's *The Pawnbroker*. It was followed by more than fifty others including *In Cold Blood*, *Cactus Flower*, *In the Heat of the Night*, *Bob and Carol and Ted and Alice* and *Dollars*. His last major soundtrack was for 1977's *The Wiz*. Why did he stop? "I don't enjoy it much now, because there are just a few directors who consider the music important enough to pull a composer in at the inception. They bring the film dramatically and cinematically as far as they can, and then they see which holes need to be plugged and they try to get the appropriate guy to come and fill in the holes—like a carpenter. The more sincere creators of film contact a composer before they start shooting—Sidney Lumet is one that always has, and I'd say Richard Brooks, because he really

has you in mind. You can get everything from a composer then, because he knows that you want him, and he'll give you everything he's got."

Though Jones wasn't the first black composer to score films, he was the first to be regularly employed by the major studios. "With *The Wiz*," he says, "I saw how color-conscious the studios can be . . . and the exhibitors and distributors. I heard some priceless lines—'The picture's all black? Mm hmm.' 'We don't want to turn our theater into a combat zone.' Those are the realities of today—that's what's going on. The movie game is very tough, you know, for everybody."

While still in it, Jones signed with A&M in 1969. His first album for the label, "Walking in Space," was recorded in one week (apparently between films) and won a Grammy for best jazz performance by a large group. His next project, "Gula Matari," also received a Grammy, this time for best instrumental composition and arrangement. Then in 1972, "Smackwater Jack" won the coveted award for best instrumental pop, rock, or folk performance. As artist/producer, he was applying the principles of movie-making to records, engaging all-star "casts" of jazz and soul musicians and blending their genres with elements of Swing, pop, and funk. That combination garnered mass popularity when, in 1974, "Body Heat" became his first gold album. It was followed by "Mellow Madness," which introduced Jones's personal discovery, the Brothers Johnson. "What knocked me out about them," he recalls, "was the way they played off each other like two African drummers. Louis' bass has this incredible thumping sound. His time and tempo are the tightest I've ever heard, probably because he learned by practicing with a rhythm machine instead of a drummer."

The "cast" of "Sounds . . . and Stuff like That!!", his last and most successful A&M record, included Herbie Hancock, Hubert Laws, Ashford & Simpson, and Patti Austin. Here, Jones's high-gloss orchestral soul style reached a peak of polish.

Aptly dubbed "symphonic funk," his arranging and producing styles reflect his experience as a black American who was reared on European culture and became interested in his African roots later. Jones's understandably relativistic

musical vision has been deeply enriched by his experiences as a world traveller. A 1956 State Department tour with Dizzy Gillespie's band, for instance, brought him to Rio where he had a chance to meet symphonic composer Heitor Villa-Lobos. "We were asked what we'd most like to see, and I said I wanted to meet Villa-Lobos. The next day, there was a note from Villa-Lobos' wife inviting us for lunch. And I'll never forget what he said to me, because it freaked me out. He pointed to a long line of books on the walls and said, 'That is the entire legacy of European music, but they've done it already. If I were twenty years old now, I would be in Birdland with you. You've got to deal with the music that comes out of the soil of your times.'"

He has, of course, been doing just that throughout his career—always looking for ways to stretch out, to explore, immersing himself in new projects and taking new directions. He recalls his experience in Lionel Hampton's band in 1953, the first group to use the Fender bass. "Monk Montgomery played it. We were leaving for Europe and Leo Fender came to him and asked him to try it out. The critics tore us up because it looked like a little guitar, and they thought we had no bass player. But the Fender bass changed American music. Once the bass was prominent enough to be heard like that, it had to have a different function. The first thing it did was to imitate the old bass singers from southern gospel groups. Then we got into a situation where instead of just a rhythm foundation, the bottom end was the source of all the animation, which meant that the people upstairs had to stay out of the way. Miles Davis' album "Bitches' Brew" is a great example. When Miles got that electric rhythm section with all the emphasis on the bottom, he had to change his whole approach, and he ended up playing the trumpet almost like a guitar."

What with this broad range of musical experiences, it's not surprising to find that Jones sees contemporary "fusion" jazz as inevitable—partly a result of technological advance—and strongly defends jazzmen whom some have accused of "selling out" to the trend: "It's very heavy for a jazz player who's developed his ears and his technique to a certain point to see a rock musician playing one or two notes or getting one little groove going and then



With George Johnson, one of his discoveries

being wiped away in popularity and economic benefit. Besides, no music's pure anymore."

In the three years since the release of "Sounds . . . and Stuff like That!!," Jones has gathered a small repertory company of artists and players who appear regularly in his productions. They include songwriter/keyboardist Rod Temperton (an ex-member of the white funk band Heatwave), string arranger Jerry Hey, his longtime engineer Bruce Swedien, and probably the hottest rhythm section in contemporary r&b recording: Rufus drummer John Robinson, bassist Louis Johnson, and African-Brazilian percussionist Paulinho Da Costa. All of them were involved in Benson's "Give Me the Night." "I've watched George's career for years," Jones says. "For a long time he was frustrated, because no one let him sing until 'This Masquerade.' On 'Give Me the Night,' I decided to explore the singer rather than the guitar player. Instead of a guitar player who sings, I treated him as a singer who plays guitar. One of my suggestions was that George not belt so much. You can get a lot of power in suppressed energy."

Jones is right. Benson's lighter approach on the title song greatly enhances his vocal presence. Not surprisingly, the same airiness also characterizes Michael Jackson's singing on "Off the Wall."

"There's a duality about Michael," Jones says. "He's absolutely innocent, but he also has a really old soul. The first time Michael sang *She's Out of My Life* in the

"What Sidney Lumet said about directing movies applies to producing records: 'If everything is okay, you let it keep going. But if it's not, you have to be able to tell why.'"



“Don’t Stop ’Til You Get Enough began . . . with a few of us sitting around the studio banging on Perrier bottles.”

studio, he cried during the last eight bars. I couldn’t figure out what he was relating to, because he’s not married or anything. Every time we did it, it pressed a button inside him, and he just couldn’t finish the song. And Michael’s a stone pro with incredible concentration. When Rod [Temperton] gave him *Off the Wall*, he took it home and studied it like an actor with a role.”

The basic groove of any cut in a Quincy Jones production is often determined by intuition. “You can feel it when something locks in and is airtight,” he says. “*Don’t Stop ’Til You Get Enough* began as an improvised percussion track with a few of us sitting around the studio banging on Perrier bottles. The arrangement was built around that groove.”

“The thing I like about producing,” he continues, “is that it pulls out everything you’ve been trained in. You’re dealing with singers, rhythm sections, finding tempos, getting the right keys. What Sidney Lumet said about directing movies, I think, applies to producing: ‘If everything is okay, you let it keep going. But if it’s not, you have to be able to tell why.’”

“I don’t write the string charts on the albums I produce, because as a producer, if you don’t take care of the master shots and deal with too many closeups, you forget what you’re making. I have a great relationship with arrangers. Usually we talk and decide where we’re going ahead of time. And I think I have the best engineer in the business in Bruce. He has a total musical background. He worked with the Chicago Symphony for eleven years. Twenty-three years ago he worked with Dinah Washington, Billy Eckstine, and Basie. If I’m directing the film, he’s my cinematographer.”

Jones’s theories about technology and music extend to his *Evolution of Black Music* project which he foresees as a two-record album, a movie, possibly a book, and—when the technology and marketing are ready—a video disc.

“I’ve been working on the project for seven years,” he says. “And even though it’s been interrupted, the things that have come along, like *Roots*, have dealt with it on a social level. In the beginning, I thought it would take only three months to find out what it was all about. But the amount of research is unbelievable. There have been times when I’ve

gotten carried away just studying one tribe like the pygmies in the equatorial forests. I try to imagine myself back there and figure out why they used certain instruments like the elephant tusk on hunts.

“The more you dig into African music, the more complex it becomes. At the same time, I want *Evolution of Black Music* to be simple enough for children to understand. One thing I’ve discovered is that most of the chronicling of the black social history in this country took place in the music. The music is the best history we have of what went down in each era.

“For instance, there was a hybrid input when the blacks came with the French to New Orleans and were familiar with Western composers like Mozart. . . . When the pure Africans that had a background in rhythmic and vocal inflection met with the guys that had a classical background, all the intermingling began. . . . You began to see fusions like ragtime.”

His speculations about music and society aren’t confined to the past. The shift in the rhythm of dance music from the two-beat of the Jimmie Lunceford orchestra to the sixteenth notes of new wave dance music he sees as reflecting the intensified pace of modern life. He also sees one of his own areas of expertise, contemporary “fusion,” as only one ingredient of a much broader musical fusion: “There was a time when the gospel people were here, pure blues players were over here, the rhythm & blues bands were doing one kind of thing, the mainstream jazz players were doing another, and they were all polarizing,” Jones says. “But now, people are starting to understand that it’s all in the same family. One style is a nephew, another a second cousin, another an illegitimate kid. I think the pieces are coming back together into something whole.”

Quincy Jones would be too modest to admit it, but he’s done as much as anyone to foster an Afro-American synthesis. His finest work is very sophisticated yet accessible, as it simultaneously incorporates extremes of funk and symphonic elegance. Even more than his soundtracks—through which he was instrumental in bringing jazz and r&b into the mainstream of incidental music—his pop works suggest a multi-ethnic musical celebration of life. Even as he chronicles the evolution of black music, Jones is contributing to that evolution. ♪

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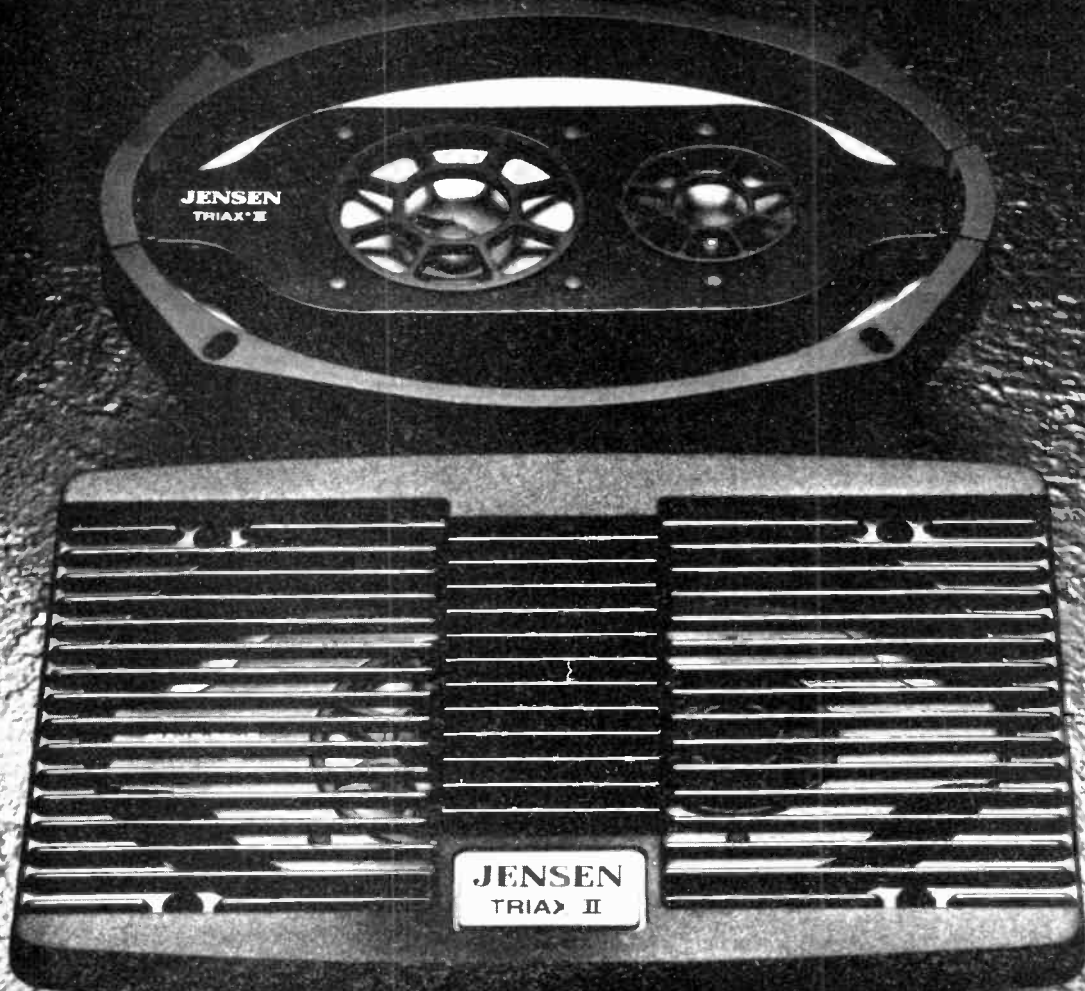
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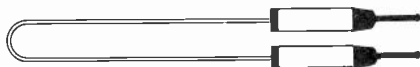
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Input Output: Instruments and Accessories



Two New Electronic Keyboards

by Fred Miller



Roland's Saturn SA-09 (top); Casiotone 201



According to its descriptive literature, the Casiotone Model 201 is a "unique kind of electronic keyboard instrument" that is "not an electronic organ . . . not a synthesizer." Roland takes the opposite approach with its Saturn SA-09, saying it "represents the merging of the synthesizer, organ, and piano." Both instruments offer a variety of sounds, with the 201 attempting everything from an electric piano to a Japanese koto, and the Roland hewing to keyboard derivatives.

Casio's 201 is a four-octave keyboard, and each of the twenty-nine white keys also activates a preset voice. In addition to a small speaker, power switch, and volume pot, the front panel controls include VIBRATO, TONE (a two-position toggle switch), TONE MEMORY (four positions), and PLAY/SET to play or engage the voices. If, for instance, you needed a glockenspiel, you would switch to SET, hit the appropriate key, flick back to PLAY and the entire keyboard will sound like a glockenspiel. You can switch among four voices during play by preprogramming the four positions on the TONE MEMORY's travel.

The voices of the Saturn, which are not preset, are more difficult to engage, but there are more of them to choose from. The selection begins in the SOUND SOURCE section: Four TONE SELECTOR buttons activate four different sound qualities, and four slider pots—marked 8', 4', 2', 1'—enable you to switch out of the octave in which you are playing and, with the faders, control the volume of that octave. Once you've got the basic sound you want, you can modify it by means of VIBRATO/ CHORUS, SUSTAIN, and ORGAN or PERCUSSIVE envelope. Changing sound during play is cumbersome, since there is no tone memory. Front-panel controls, in addition to the volume pot and master tone-control slider, include TRANSPOSE for raising the notes up or down the octave,

ACCENT, which adds a rather obnoxious beep at a note's inception, and TUNING, which alters the pitch of the entire keyboard within a half step higher or lower.

The SA-09's back panel has jacks for a sustain pedal and headphones, and stereo and mono outputs for connections to stereo amps or PA systems. The output also has a level switch for matching the amp or system being fed by the Saturn. GATE OUT is for interfacing with another electronic device; Roland suggests using the SA-09 with a synthesizer to produce a polyphonic synthesizer effect.

At the rear of the Casiotone, the AUX IN jack may be used to combine an alternate sound source with the 201's output (the owners' manual mentions a rhythm machine), LINE OUT to feed a tape

deck or stage amplifier, and the effects bus (ECHO IN/OUT) for external echo, graphic equalizer, flanger, ring modulator, or whatever. The volume and sustain pedal jacks are of the phone type, as is the mono headphone jack. I recommend using LINE OUT for a stage amp, since the front-panel speaker is woefully tinny-sounding. The only serious design deficiency I found is that the volume control is wired to both the built-in speaker and the LINE OUT jack, so when you turn up the level for LINE OUT, the speaker begins to rattle and distort. It would have made more sense to either build separate pots or to have a defeat switch for the speaker. (As it sits now, you would have to connect a dummy plug to the headphone jack to disable it.) The Saturn, on the other hand, exhibits no design problems, other than the fact that it's difficult to change settings during play.

Of the Casiotone's twenty-nine voices, only about six of them sound even remotely accurate. The electric piano, electric guitar, banjo, celesta, and a couple of the organ voices are fairly nice and, with a little equalization and a lot of imagination, can sound real. The remainder are way off base. Similarly, of the ten settings suggested in the Saturn's owners' manual, only the two organ settings worked for me. You can play up to eight notes at a time on the Casiotone, and as many as you want on the Saturn (I ran out of fingers after ten), and both offer a slew of options, from hard cases to foot pedals, at extra cost.

Both of these instruments are easy and fun to play, but I have a problem taking either one seriously, despite their "professional" price tags of \$699 for the Casiotone and \$795 for the Saturn. Both feel like toys, albeit expensive ones, a status further suggested by the absence of schematics or even block diagrams in their manuals. While I'd have no trouble using either as a short practice keyboard or for specific effects, I certainly wouldn't consider them to replace an electric piano, synthesizer, or organ, not to mention—in the Casiotone's case—koto, clarinet, or flute.

The 201 is among Casio's first entries into the musical instrument market, the company's main claim to fame being calculators and digital timepieces. Perhaps it should combine the old with the new—that way you could compute your withholding tax for the night's gig.

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Edited by Cynthia M. Pease

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Movies, Music, and Money: Who's on First?

by Stephen Holden

The recent slew of heavily hyped tie-ins between would-be movie blockbusters and their soundtrack albums underscores some deep changes in the record industry's artistic and economic philosophy. These changes began two years ago, when the two-disc soundtracks of *Saturday Night Fever* and *Grease* helped give the industry its best year ever. Each album was propelled up the charts by two or three simultaneously-released hit singles; each had vast teenybopper appeal. "Saturday Night Fever" was the more substantial of the two; in addition to containing three No. 1 Bee Gees hits, it was a well-balanced anthology of disco songs. But "Grease," aside from its specially-recorded hit singles, was arranged and performed in the crude style of a TV special. Its production was not state-of-the-art; more than anything, it was a deluxe souvenir item.

The success of these albums shook movie people's fixed notions about the relationship between films and music: If ten million kids would shell out two or three times the price of a movie ticket for a souvenir LP, they reasoned, then a hit soundtrack could be a valuable marketing tool—the perfect bait to hook them on the album's source. Similarly, "Fever" and

"Grease" challenged the wisdom of the record business' promotion practices and the accuracy of its assumptions about the marketplace. The fact that neither soundtrack received much FM airplay called into question the effect on album sales of rock a.o.r. (album-oriented-radio) exposure—the target of much label promotion. The success of these double albums also suggested that purchasers would pay the higher price tag if they perceived what they bought not only as a record, but as a "movie"—an experience—as well.

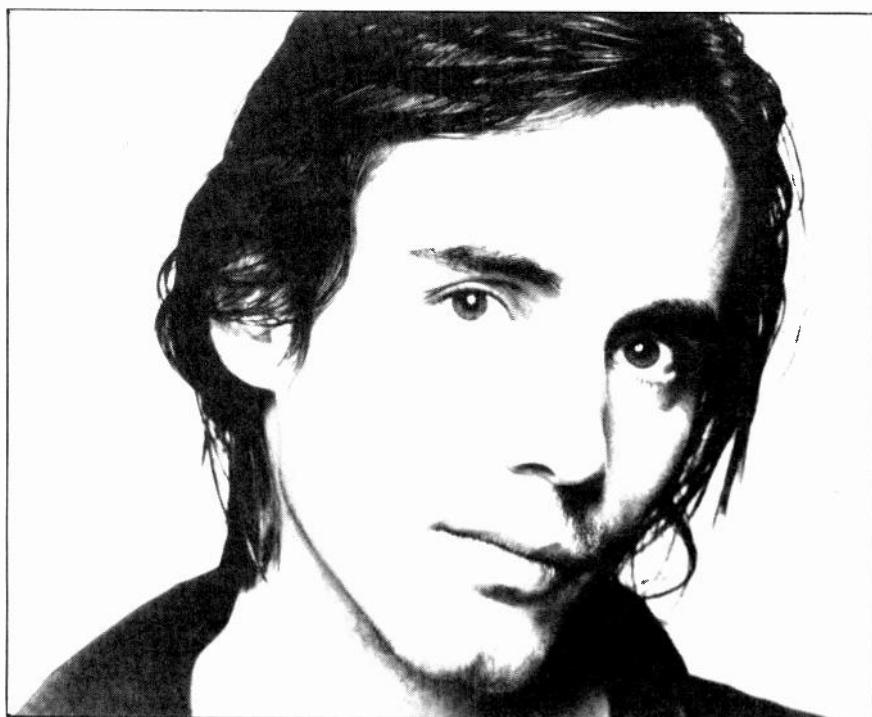
The phenomenon of "Fever" and "Grease" dramatically demonstrated that pop music was show business first and "art" only incidentally. Realizing this, record companies began thinking of LPs as part of large-scale multimedia projects. Several label executives became involved in the movie business, and an entente cordiale was formed between Hollywood's old guard and rock's new money (e.g., Twentieth Century-Fox and Arista). The products of that entente—which is expanding, what with video music's high profit potential—are finally appearing, and with a few qualifications they're a mediocre lot, even though most of them spell good economic news: With album sales plummeting and rock radio in decline,

soundtracks are doing better than most artist-oriented records.

But the music on the former suggests a general loss of faith in the latter as an art form: Most of these soundtracks lack a conceptual center and instead rely on one or two hits surrounded by lots of filler. Though *The Blues Brothers* movie and *The Rose* pillage rock and soul for their identities, it is their "stars" who are selling the soundtracks, not their music. "The Rose" album made it on Midler's screen presence, not on the quality of her Janis Joplin imitation. John Belushi and Dan Aykroyd are the Abbott and Costello of the '80s, who also happen to sing. *Roadie* purports to be a rock film, but the strongest cuts on its double album are country-oriented. *Xanadu*, a dizzy fantasy featuring Olivia Newton-John and the Electric Light Orchestra, is a Hostess Twinkie of gimmicky kiddie pop. The soundtrack of *Fame* (the movie musical about New York's High School of Performing Arts) is a confused mélange of musical styles; only the two numbers by Irene Cara, a junior Donna Summer, stand out.

The notable exception to all of this mediocrity is the two-disc "Urban Cowboy," which was compiled by knowledgeable rock entrepreneur Irving Azoff and features excellent music by Boz Scaggs, the Eagles, Bob Seger, Bonnie Raitt, Linda Ronstadt and J. D. Souther, Mickey Gilley, and newcomer Johnny Lee. The album combines Los Angeles, Texas, and Nashville styles of guitar-based pop/rock in a package that demonstrates, perhaps unintentionally, the range of white southern American pop. Ironically, "Urban Cowboy" is a lot stronger, and is doing better commercially, than the movie.

Though popular music is central to the story line in the majority of these films, the music itself is treated as only one ingredient in the total dazzling spectacle. Perhaps the quality of the scores makes them deserving of such status. Nonetheless, record companies have found that they can reap huge profits with these inferior-quality packages because they have a ready-made merchandising tie-in. With the cost of records astronomical and still soaring, developing high-grade musical talent has become a gamble—particularly in the eyes of corporate financiers. The pressure is on to deliver blockbusters, and the resulting media tie-ins are turning the record business into a three-ring circus. ♣



Jackson Browne: Of Growth and Credibility

by Crispin Cioe

Jackson Browne: *Hold Out*

Jackson Browne & Greg Ladanyi,
producers. Asylum 5E 511

Right at the top, I should state that I've never been a big fan of the so-called "L.A. sound." The East Coast's r&b-inflected rock/pop terrain is my congenial stomping ground, and over the years no amount of sunny production values, spanking clean guitars, and bright vocal harmonies has been able to turn me into a late-blooming California dreamer.

Yet I've always had to grudgingly admit that Jackson Browne's career and music have developed with a steady and impressive weight of their own. Here's a guy with some obvious technical limitations—a fairly narrow vocal range, rather pedestrian instrumental skills, and only a few trademark melodic hooks on which he hangs his tunes—who has nonetheless de-

veloped into one of the most popular and charismatic singer/songwriters of our time. More significantly, his appeal is based largely on an ability to write songs that project personal experience and insight without sounding overly precious or trite. For literally millions of fans, Browne is a modern, romantic Everyman, etching such culturally resonant phrases as "running on empty" and "don't let the sound of your own wheels drive you crazy" indelibly on the American pop consciousness. Still, while his significance has always been apparent to me, "Hold Out" marks the first time I can unequivocally call myself a Jackson Browne fan.

This album features an absolutely first-rate band that combines such J. B. staples as David Lindley's mellifluous guitars and Rosemary Butler's emotive support vocals with the newer additions of Russ Kunkel's oh-so-solid drums and ex-

Little Feat keyboardist Bill Payne's stirring organ chords. The group's beautiful use of space and contrast provides both singer and songs with dramatic support and drive that have often been missing. On *Boulevard*, for example, a slamming Keith Richards-style guitar riff sets the tune up and—along with Rick Marotta's pared-down, sledgehammer backbeat on drums—lends Browne's downbeat tale of L.A. lowlife absolute credibility. There was a time when I couldn't imagine Browne convincingly spitting out lines like "Nobody knows you, Nobody owes you nothin', Nobody shows you what they're thinking, Nobody baby," but *Boulevard* captures the flavor of Hollywood hustling as artfully and economically as a Raymond Chandler novel.

Ultimately, the songs here work because Browne seems to have gained the intelligence and sensitivity to consistently cast them in their own best light. On the first cut, *Disco Apocalypse*, he paints a roiling, vivid picture of the disco netherworld, while at the same time moving through enough harmonic and structural changes to prevent the tune from sounding like the conventional item. When the melody calls for notes above his range, co-singers Butler and Doug Haywood slide in and smoothly take over, with Butler in particular soaring exhilaratingly. *That Girl Could Sing*, *Boulevard*, and *Hold On Hold Out* show a pronounced Springsteen influence, but Browne doesn't try to be Bruce, so the effect is subtle and never out of character.

As for his much-vaunted autobiographical references, "Hold Out" picks up right where his last album, "Running on Empty," left off, and the material is rife with candid self-examinations. But as misogynistically driven and self-contained as Browne sounded on that last LP, he goes to equal lengths here to relate his recent and satisfying romantic involvement. (He remarried last summer.) *Call It a Loan* and *Hold On Hold Out*—which chronicle a man's coming to grips with his love for a woman—ring about as true as any love songs I've heard this year.

Unlike Dylan, who burst forth full-blown in the '60s with a surge of energy and a riveting personality, Browne's presence in popular music has developed gradually over the years. This is due in part to his musical growth, but also to hard work and just plain living. The fact



Benson the singer

that these have uncovered new areas of creativity for Jackson Browne makes him a rare talent indeed in the rock world.

George Benson: Give Me the Night
Quincy Jones, producer
 Warner Bros. / *Quest His 3453*
 by Sam Sutherland

Jazz fans dismayed by George Benson's transformation from respected jazz instrumentalist to soul matinee idol will be apoplectic when they hear his first collaboration with Quincy Jones. Benson has virtually retired his guitar to concentrate on his new role as a vocalist—and, most galling, he brings it off with great aplomb. Indeed, "Give Me the Night" may become his most popular work yet.

Before "Breezin'" parlayed his sizable jazz constituency into a far larger crossover audience, the Pittsburgh native loomed as a defender of the faith, preserving the rounded, swinging character of classic jazz stylists. If the arrangements and choice of material in Benson's CTI recordings hinted at a gravitation toward popular black music, his playing maintained its emphasis on improvisation and deft ensemble interaction.

Ironically, the guitarist's move onto the pop charts was as much a return to his roots as it was a step away from his jazz reputation. In fact, his earliest records, cut as a youngster, were squarely within r&b confines. When his prowess as an instrumentalist led to a "comeback" in his late

Continued on page 114

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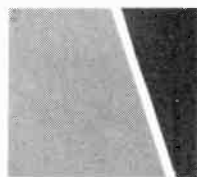
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Jazz Reissue Roundup

by John S. Wilson

Betty Carter: *Social Call*

Joe McEwen, producer
Columbia/JC 36425

Max Roach: *We Insist!*

Max Roach's *Freedom Now Suite*

Max Roach, producer
Columbia/JC 36390

The Lester Young Story

Vol. 5: *Evening of a Basieite*

Michael Brooks, producer
Columbia/C2 (two discs)

The Black Swing Tradition

Savoy 2246 (two discs)

The Modern Jazz Piano Album

Savoy 2247 (two discs)

Marian McPartland at the

Hickory House

Savoy 2248 (two discs)

Frank Foster and Frank Wess:

2 Franks Please

Savoy 2249 (two discs)
Bob Porter, producer

The Complete Benny Goodman, Vol. VI—1938

Frank Driggs, producer
Bluebird AXM 2-5566 (two discs)

The history of jazz reissues over the past thirty years can be described as a continuing intercorporate battle between the jazz fans and the accountants. At the moment, the former group is winning. Indeed, it would seem that we are in a golden age of reissues, as evidenced by an impressive list of series that have not only stayed alive for several years but, for the most part, are flourishing. Among them are the "two-fers" of Milestone, Prestige, Verve, and Savoy; Time-Life's "Giants of Jazz"; the Smithsonian Jazz Collection; Columbia's Contemporary Masters; the Commodore reissues; RCA's Bluebird label (the successor to Vintage, and before that Label X) and such smaller companies as Jazz Archives, Phoenix, Herwin, and Biograph's Dawn LPs.

The Contemporary Masters Series



Marian McPartland, c. 1952

combines reissues with previously unreleased material and sessions recorded for other labels. Among its current releases, "Evening of a Basieite" represents the last of the Lester Young recordings for Columbia (1940–41), with two Basie and two Billie Holiday sessions and alternate takes from all four. Michael Brooks's notes—which include quotes from Basie band members who had observed Young closely—have given the five-volume Young series an added depth. In this instance, Brooks discusses the dreadfully damaging war years.

In a sense, Betty Carter's "Social Call" is the most provocative of the Columbia batch because it shows how a record company can miss the mark on one of its finest artists. Side 1 is a previously released 1955 date, shared with Ray Bryant, which is made up entirely of standards but shows early indications of her quirky style. Twenty-five years ago that style may have seemed too adventurous, which may explain why her next session, in 1956, was not released at the time. But the material on that session is fresher and Gigi Gryce's arrangements and big-band backing show off the rich colors of her voice. It's the kind of readily accessible performance that might have had broad appeal, that could have given her then the



Benny Goodman, c. 1961

audience she waited years to reach. But it was not released.

Max Roach's "Freedom Now Suite," a searing performance when it was first issued in 1960 on the now-defunct Candid label, is still vital and impressive today, particularly for Abbey Lincoln's deeply felt singing and a magisterial appearance by Coleman Hawkins. Bringing this disc back to life was an intelligent move on Columbia's part.

Savoy was a small label that rose with bebop. Its Arista-distributed reissue series is a mixture of miscellaneous collections and star-focused albums, some of which were recorded for other small labels. In this batch, "The Black Swing Tradition" ranges from Fletcher Henderson recordings for Crown in 1931, to Savoy sessions by Hot Lips Page and Buck Ram in 1944, to 1939 and '40 Varsity sessions. Those include Stuff Smith, Buster Bailey (actually the John Kirby band), and four superb small-group cuts by Mary Lou Williams with some Andy Kirk sidemen.

One full side of "The Modern Jazz Piano Album" is devoted to George Wallington, with Side 1 containing some early Lennie Tristano. Some rare, idiomatic Herbie Nichols and four surprisingly lackluster Dodo Marmarosa numbers comprise Side 2. "Marian McPartland at the

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Campi—the authentic item



Winski—self-conscious

Continued from page 110
teens. Benson was still hewing closely to blues sources, as borne out by his first major band assignment as guitarist for soul jazz organist Jack McDuff.

With Jones at the production helm, the setting of this album is undeniably stylish, and with Benson's lissome singing tested by uptempo dance grooves and hushed ballads, he proves he can hold his own against other singers. What's missing is the subtlety of his best instrumental works, a quality more important than any generic allegiance.

"Give Me the Night" recalls Michael Jackson's epochal "Off the Wall" in both style and substance, and the very loftiness of that comparison tends to work to Benson's disadvantage. The resemblance is hardly an accident. Apart from sharing Jones's kinetic rhythm arrangements and shimmering orchestral settings, this project also takes much of its shape from the songwriting of Rod Temperton, prominently featured on "Wall." Except for the title song, which is rescued from its banal partying imagery by flashes of melodic richness, none of the songs here matches Temperton's work with Jackson. Benson the singer, while gifted with a precise delivery and accurate pitch, still seems to be testing different vocal models. His earlier attraction to Stevie Wonder's melismatic readings now are augmented by nods to Jackson and other current chart heavies.

Inferior material and vocal derivativeness would be minor flaws for an unknown singer, but Benson's oldest fans will find them glaring when set against his authority as an instrumentalist. On his first Warner Bros. albums with producer Tommy LiPuma, he had finally been given

the room to develop his own ensemble style, an opportunity that led to a spicy balance between fleet solos and taut rhythm work. Here, what playing there is seems confined mostly to rhythm patterns. Even on the two instrumentals, Jones's rigid rhythm sections prevent any really fluid interplay.

In short, the less you know about Benson, the more likely you are to enjoy this new set. Older fans, who may view it as a great guitarist, are advised to seek out Benson live, where he still flexes the skills virtually unused here.

Ray Campi & His Rockabilly Rebels: *Gone, Gone, Gone*

Ron Weiser, producer
Rounder Records 3047

Colin Winski: *Rock Therapy*

Denny Bruce, producer
Takoma TAK 7083
by Sam Sutherland

Stuttering guitar, walking bass, galloping snare, hiccuping vocal. The earmarks of American rockabilly are obviously back in fashion, evidenced by both general new rock trends and the emergence of such revivalists as England's Matchbox and L.A.'s Kingbees. Yet if any one group can take credit for generating renewed interest in this '50s country/pop style, it's a little known Californian band fronted by a fortyish school teacher with a thickening waist and deep circles under his eyes.

Ray Campi settled in the San Fernando Valley at the end of the '50s, resigning himself to teaching after various

stabs at film and recording work. But when he crossed paths with an Italian-born rockabilly fanatic named Ron Weiser, Campi found a fervent (if hardly well-heeled) sponsor, and a new band, the Rockabilly Rebels, was born. Campi and the Rebels found their own cult locally, and overseas they became objects of worship to young English and European teens fed up with assembly line pop.

That band broke up before a major label release could be recorded, leaving as a legacy only their raw-sounding Rollin' Rock sides, some of which are included on this LP. Campi has since formed a new band, while one of his younger partners from the Rebels, Colin Winski, gained the support of producer Denny Bruce. Neither man's current work is likely to race up the charts, or even capture as much attention as the more diluted efforts of such stylists as the Kingbees, but students of roots rock might want a close look.

"Gone, Gone, Gone" is a hybrid of material and musicians from the Rockabilly Rebels' previous stab at a "pop" package, an English album released by Radar as "Wildcat Shakeout." Though it would be difficult to translate Campi's on-stage antics to vinyl, much of his good-humored verve has been preserved here. *Rockabilly Rebel* is a fast-talking homage to the stone-country roots held dear by even the most surly rockabilly purveyor, while the album's title song and *Wildcat Shakeout* are archetypes for the rockabilly dance rave ups of yesteryear. Produced by Weiser, whose Rollin' Rock logo signifies his funky production style (he records in his living room), the results are affable and unpolished.

Winski's solo debut was masterminded by Denny Bruce, who brought in crack musicians like Jerry McGee, Ronnie Barron, Larry Taylor, and Chris Darrow. Yet despite the higher caliber of players and the crisper sonic finish, Winski seems more forced in his ducktailed pose. Neither his own songs nor the revived rockabilly chestnuts approach Campi's performances, which revel in an unbridled partying spirit that makes Winski seem self-conscious.

Martha and the Muffins: Metro Music

Mike Howlett, producer
Virgin VA 13145

by Crispin Cioe

Less art rock than art-pop, this is an auspicious debut by a young Toronto

band that promises to take what might loosely be called new wave aesthetics one step further into the pop music mainstream. Pitched on middle ground between the Pretenders' jangly guitar wash and the B-52s' tinny reductionism, Martha and the Muffins purvey a slickly droning but melodic approach to songwriting that, combined with just a touch of garage-band funk, sounds contemporary without being cloyingly trendy. That approach has already met with public approval in England: Earlier this year the independently-released single *Echo Beach*—an evocative tale of a dreamlike place "far away in time" narrated by a bored "nine till five office clerk"—went to the Top 5 there, which led to the group's signing internationally with a major label.

At the core are two Marthas, Johnson and Laddy, whose generally unaffected vocal attitudes give the nod to Debbie Harry. But these Muffins' lyrics are more disconcerting, as heard in particular on the catchy but tart *Paint by Number Heart*. Supporting this sensibility are Mark Gane's skillful nouveau-psychedelic posturings on guitar and synthesizer, the two Marthas' elemental keyboards, and Andy Haas's nicely loping, sometimes-raunchy alto sax. Carl Finkle on bass and drummer Tim Gane keep a rock-steady pulse that never lapses into mere rinky-dink time-keeping. Martha and the Muffins make quite a nice package, one not nearly as sweet as the name would suggest.

The Rolling Stones: Emotional Rescue

The Glimmer Twins & Chris Kimsey,
producers. Rolling Stones
Records COC 16015
by Crispin Cioe

Like all the best work these tarnished angels have produced, this album has wonderful nooks and crannies. When the Stones record, so the story goes, they work long and hard consecutive hours in the studio, developing their tunes and arrangements out of the sheer experience of playing together. I've even heard that they'll try to record one song's basic rhythm tracks in a night, and if the tune doesn't jell during the session, they drop it for lack of freshness.

These working methods help explain the gorgeous ramshackle looseness the Rolling Stones can project on vinyl. And while "Emotional Rescue" may not match the sheer, low-down excitement of "Exile on Main Street" (nothing in rock &

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style difficult, sometimes impossible, to penetrate. On "Film Noir," he has chosen an ideal program for himself: a mixture of themes from, and original interpretations of eleven dark-timbred ("noir") films.

The sheer personal romanticism of his playing, dominated as it is by impressions and reactions rather than rhythms and energies, lends itself perfectly to the programmatic images evoked by films like *Spiral Staircase*, *All About Eve*, *Pinky*, *Touch of Evil*, *The Pawnbroker*, *Blue Gardenia*, etc. *Eve* is played, according to Blake, as seen "through the complex Bette Davis figure." It and *Le Boucher* (the Chabrol film) are among the best performances I've ever heard from him; they are harrowing experiences, music at the service of the visual images. Almost as good are *Blue Gardenia*, with saxophonist Daryl Lowery, and *Garden of Delight* (a Blake original), with Ted Curson on trumpet—although Curson has a tendency to noodle away pointlessly at times.

Blake is at his best on the solo tracks or when accompanied by one or two instruments. When the ensemble grows in size, however, his effectiveness diminishes. The strongly rhythmic *Key Largo*, *Pinky*, and *Streetcar Named Desire*, for example, expose his difficulties with the crisp articulations of traditional jazz phrasing. *Touch of Evil* and *The Pawnbroker*, the largest ensembles, have all the problems of jazz school avant-garde. If this is Blake's idea of "Third Stream," then it's time he did a bit of re-evaluating.

At its best, however, "Film Noir" is his most accessible album. I'm not sure if "jazz" or even "third stream" (a phrase I've always hated) is the best description of Blake's music, but I do know that there were moments here when he provided a different perception of films I thought I knew very well. For that kind of experience I'm willing to give up labels and just sit back and listen.

Sam Rivers: Contrasts
Manfred Eicher, producer
 ECM 1-1162
 by Don Heckman

Sam Rivers' fine new album triggers a surprising sense of nostalgia. More than anything else, it recalls the multilayered complex of styles of the '60s avant-garde movement that first brought this saxophonist/composer to national attention. But unlike that music's more dogmatic practitioners, Rivers has never been too proud to throw in a few fun moments.

Continued on page 120

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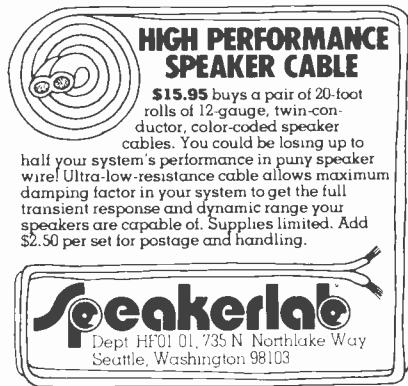
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Most of a piece like *Verve*, for example, would be at least as acceptable in a Saturday night bar as in a Soho loft. Generally, and perhaps intentionally, Rivers waits until the end of a piece to let the avant-garde dogs loose. (Try that in a Saturday night bar and you'll quickly be back in Soho.) But even his "out" music has a certain warmth and charm that softens the abrasiveness of some of the more unusual sounds.

That Rivers is an older musician is evident in his fluent boppish lines on *Zip* and *Dazzle* and in the unabashed lyricism of *Solace*. He is also beginning to find some coherent construction to underpin his basically improvisational music. On *Dazzle*, his wild, screaming, high intensity tenor saxophone runs counter to a cool, didactic series of sustained phrases from trombonist George Lewis. At the end of the piece he reverses the elements. The effect is a bit schizophrenic but fascinating, and it provides the listener with an anchor point from which to observe the free-sailing improvisations.

Other pieces reveal Rivers' range: *Images* uses some familiar avant-garde techniques—floating time, wide interval melodies, pantonal harmonic interaction, etc.—to produce an eerie, programmatic-sounding excursion that would serve nicely as a film score. The similarly episodic *Circles* is a musical explosion in reverse, its bits and shreds of sound slowly imploding. More predictably, *Lines* starts and stops à la Ornette Coleman and then, in traditional jazz fashion, springs a soprano sax solo that demonstrates how deeply imbedded Rivers' roots are in the rich soil of the jazz past.

His association with the "new music," in fact, may be doing him a disservice. He is imaginative, even innovative, to be sure, but he is also an improviser with a wide enough range to reach a far more diverse audience than he does. Maybe Billy Joel could book him as an opening act for his next tour.

**Eric Schneider and Earl Hines:
Eric and Earl**

*Dave Feinman, producer
Gatemouth 1003
(Gatemouth Recording Co., 90
Madison Ave., Island Park, N.Y. 11558)
by John S. Wilson*

Although Eric Schneider has played in Earl Hines's quartet for two years, this is the first time they have re-

Continued on page 122

New Acts

by Steven X. Rea

John Anderson

Norro Wilson, producer
Warner Bros. BSK 3459

This is one of the best country debuts to emerge from Nashville for some time. Anderson sings with a plain-tive, down-home eloquence that at times suggests Merle Haggard. He handles the tried and true country themes of cheatin', drinkin', and lovin' with great aplomb, be it on his own material (like *The Girl at the End of the Bar*) or on an array of tunes by new Nashville writers.

Broken Home

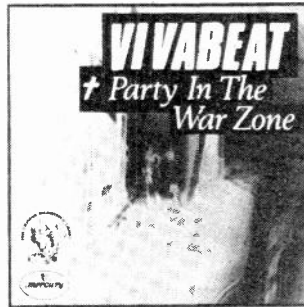
Robert John "Mutt"
Lange, producer
Atlantic SD 19274

Fronted by songwriter/vocalist/guitarist Dicken, this Anglo quartet recalls three of producer Robert John Lange's previous projects: City Boy, the Records, and Graham Parker. Specifically, Broken Home brings to mind the stylized arty rock stance of the first, the crackling pop guitars of the second, and the tough, gutsy rhythms of the third. It's a good mixture when the songs are up to snuff, which, unfortunately, can be said of only *Shooting All the Lights Out* and *Stop Looking at Me*.

Elektrics: Current Events

Peter Ker, producer
Capitol ST 12093

New York rockers known in their prelabel days as the '80s, the Elektrics come off like a new wave version of the Monkees, which is a compliment. Singer Carl Womer's



Some Lovin' Tonight and bassist Chris James's *We Are Americans* and *Anyway* are infectious pop ditties rife with hooks and harmonies. However, about halfway through the album, all the aural cotton candy—good as it is—starts to clog the ears.

Gus: Convicted

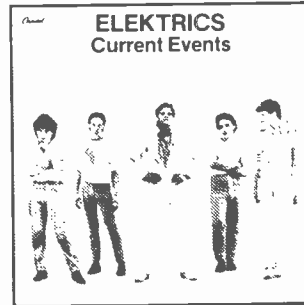
Eddie Leonetti, producer
Nemperor NJZ 36502

Gus decided to assuage all the folks who have been waiting for the new Bruce Springsteen album with his own impersonation of the Boss. Ian Hunter's ghost also makes an appearance (*Ain't Love a Crime*), as does Thin Lizzy's (*Drivin' Into the Sun*). Gus finally shows a glimmer of wit when the scraggly guitar chords of the Beatles' *I Want You* swerve into the LP's closer, *So You Busted Paul McCartney*.

Huey Lewis and the News

Bill Schnee, producer
Chrysalis CHR 1292

Six-man Bay Area HL&TN travels the same terrain as every other new group crawling out of the studios: sparse, heady rock strong on the pop side, tough on the rhythms, with at least three-part harmonies and one song with a title like *Don't Make Me Do It*. That said, Lewis and company dish out a couple of tailor-made singles—*Who Cares?* and *Trouble in Paradise*.



Garrett Morris: Saturday Night Sweet

Adele Kown M. Holmes Jr.,
producer. MCA 5119

MCA insists this isn't a comedy record, but don't be fooled. It's a full-blown disco/soul/reggae extravaganza (complete with one side in three movements and a finale), and the *Saturday Night Live* comedian sings amidst all the busy-ness with a deadpan determination that in the end is just plain laughable. Reggae aficionados note: Burning Spear and Wailer Robbie Shakespeare lend their services to Morris' modern-day classic *Different Is Not Better (It's Just Different)*

René & Angela

Skip Drinkwater &
Bobby Watson, producers
Capitol ST 12077

Soul duo René Moore and Angela Winbush apply their winsome, sugary harmonies to a selection of romantic ballads and funky, up-tempo tunes. The only nonoriginal is the Eagles' *Hotel California*, which fits surprisingly well into this pleasant enough, if not awe-inspiring, pop/soul debut.

Vivabeat: Party in the War Zone

Jeffrey Lesser, producer
Charisma CL 3102

This coed L.A. ensemble plays electrorock à la Gary Neuman and Ultravox.



The most intriguing cut here is *Man from China*, a demented clown with an incongruously chipper whistle carrying the melody line. The rest flounders in a sort of lightweight, artsy new wave ennui. Bowie and Sparks often come to mind, and then you wonder why you're not listening to them instead.

Paul Warren & Explorer: One of the Kids

Peter Coleman, producer
RSO RS 1-3076

Songwriter/guitarist Paul Warren has been plugging away on the L.A. club circuit for years and at one time was the lead singer in Ray Manzarek's Nite City. Though Warren is an able guitar player, his material rarely transcends the level of ho-hum rock & roll, especially when he sings about his long quest to land a recording contract on *A and R Man*.

The English Beat: I Just Can't Stop It

Bob Sargeant, producer
Sire SRK 6091

Like Madness, but unlike the Selecter and the Specials—three purveyors of the British ska revival—the English Beat knows how to record with clarity and power. Punched-out dizzy dance rhythms provide a backdrop for the hardy, robust saxophone of fifty-year-old Jamaican reedman Saxa. Terrific party music.

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Ralph Sutton

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corded together. The unusual thing about this disc is that the seventy-four-year-old celebrated jazz pianist gets second billing to the virtually unknown young saxophonist. Yet Schneider not only holds his own with Hines but is frequently the dominant performer.

In live appearances it has been Hines's custom, understandable at his age, to play only two or three numbers and let Schneider carry the group the rest of the way. One would think that this could disappoint an audience expecting to hear Hines. But listeners tend to be quite satisfied with Schneider, and "Eric and Earl" shows why.

Hines does not conserve his energies in the studio the way he does in person, and he solos in full, characteristic fashion on all of the nine numbers here. When not soloing, he gives Schneider superb accompaniment, notably in establishing and emphasizing the easy, punchy beat that makes *There Will Never Be Another You* swing with irresistible insistence. With the additional support of Duke Groner on bass and Barrett Deems on drums, Schneider alternates between tenor and alto saxophones. His playing is exuberant, confident, and enthusiastic and shows polished reflections of his sources. On alto the influence is essentially Johnny Hodges, particularly on the ballads, with echoes of Charlie Parker at brighter tempos. On tenor Schneider is less openly derivative, but when he gets into the slow, emotional lines of *Memories of You*, Ben Webster is clearly a source.

The program is an imaginative mixture of Hines-related material (*Second Balcony Jump* from his big-band book

and *Struttin' with Some Barbecue* from his association with Louis Armstrong), old ballads (*All of Me*), newer ballads (*The Nearness of You*), a familiar Ellington tune (*In a Mellotone*), and a neglected bit of Ellingtonia (*Sherman Shuffle*). Schneider shines through all of them, and his erstwhile boss helps to keep him in the most favorable of settings.

**Ralph Sutton & Jay McShann:
The Last of the Whorehouse
Piano Players, Vols. 1 and 2**

Charlie Baron, producer
Chaz Jazz CJ 103, CJ 104
(Chaz Jazz Records, Box 565, North Hampton, N.H. 03862)
by John S. Wilson

In September 1979, at his annual jazz party in Boulder, Colorado, Dick Gibson asked Ralph Sutton and Jay McShann to play some piano duets with bass and drum accompaniment. They worked together so rewardingly that Charlie Baron, in the process of forming his new Chaz Jazz label, took them to New York in December and recorded them with bassist Milt Hinton and drummer Gus Johnson, who has toured Europe with both pianists.

"The Last of the Whorehouse Piano Players" is the result, and these two volumes contain some of the most joyous jazz ever recorded. Sutton is known primarily as a stride pianist; McShann is apt to be associated with the blues. But these discs find them in several additional contexts: boogie-woogie, ballads (from *Am I Blue* to *Girl of My Dreams*), rollicking jazz (*Little Rock Getaway*), and an airy pastel reading of *Ain't Misbehavin'*. They even sing, Sutton finding his sources in Fats Waller with a gruffly shouted *Truckin'*, McShann showing an open, almost belting style on *All of Me* that is miles away from his blues singing, and turning to pure Teagarden with a little gospel on his own *I'll Catch the Sun*. Most importantly, the two mesh beautifully at the keyboards. The community of spirit between them is remarkable, as they expand upon—rather than merely double—each others' performances. And back of it, putting them on wheels, is the swinging drive of Hinton and Johnson.

These discs, available only by mail, are part of a projected seven that show Sutton in a variety of settings. Baron has made an eight-inch sample disc containing one selection from each. It can be obtained, along with an order form and prices, by mailing \$1.00 to Chaz Jazz Records.

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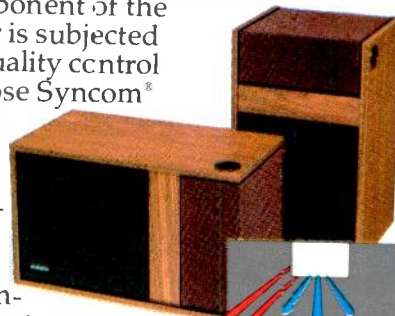
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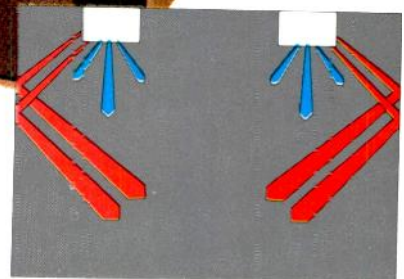
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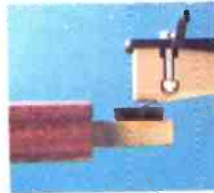
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