

\$1.50 March 1980

In Backbeat ABBA's Hidden Millions: Songs, Soap, & Petroleum

HIGH FIDELITY

ICD © 08398

Shopping for a New Amp

What Counts and What Doesn't in Choosing a

- Receiver
- Power Amp
- Integrated Amp

Quick Amps - Difference?

Reports: Power Amplifiers and Parametric

& Sterling Speakers



37 CLINTON ST
 NEW YORK NY
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1980



03

**WITH ONLY ONE EXCEPTION,
THIS IS THE MOST REMARKABLE
TAPE DECK IN THE WORLD.**



But without exception it's the most remarkable reel-to-reel.

Today, many audio manufacturers are putting a lot less into their tape decks and charging a lot more for them. But when Pioneer designed their new RT-909 open-reel tape deck they made certain it had every conceivable feature an audiophile could expect.

And one feature that was totally unexpected. A reasonable price.

Even if you pay \$1500 or more for a so called "professional" quality tape deck, you'll probably still be getting a conventional single capstan tape transport system that is prone to wow and flutter.

Pioneer's RT-909 has a specially designed closed-loop dual capstan system that isolates the tape at the heads from any external interference. So you get constant tape-to-head contact. And constant, clear, accurate sound.

And while many of the expensive new tape decks have old fashioned drive systems that drive up heat and distortion, the RT-909 doesn't. Instead, it has a far more accurate DC motor that generates its own frequency to correct any variations in tape speed. And keeps wow and flutter down to an unheard of 0.04% at 7½ ips.

What's more, the drive system of the RT-909 is unaffected by fluctuations in voltage. So a drop in voltage doesn't mean a drop in performance. The RT-909 also has a logic system that ensures smooth, accurate speed change.

Most professional quality tape decks are designed for use outside the home. So the convenience features

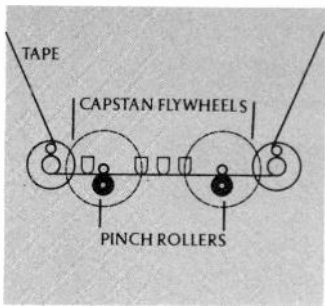
most audiophiles enjoy are nowhere to be found. The RT-909, on the other hand, offers automatic reverse, automatic repeat, and a timer controllable mechanism that lets you record a midnight concert even if you can't stay awake for it.

Examine our heads and you'll see Pioneer engineers at their very best. Our playback heads, for example, have a new "contourless" design that makes them more sensitive. They increase frequency response upwards to 28,000 hertz, and extend it all the way down to 20 hertz. So you not only get greater range than any other tape deck, but also any other musical instrument.

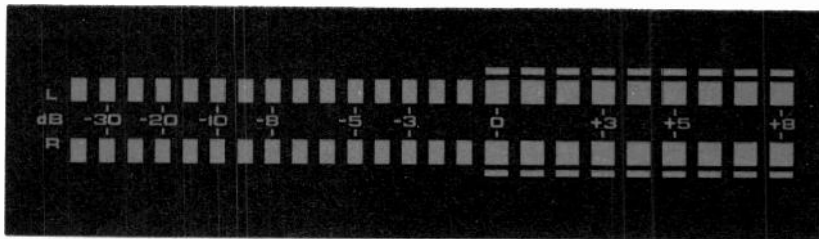
Of course, these features alone would make Pioneer's RT-909 quite a remarkable tape deck.

But the RT-909 also has a Fluroscan metering system that gives you an instantaneous picture of what you're listening to. A pitch control that lets you listen to music in perfect pitch even if it was far from perfectly recorded. Four different bias/equalization selections so you can use many tapes and get maximum performance from them all.

Obviously these advancements are very impressive. But there's still one thing even more remarkable than the technology we feature. It's the price we feature.



Pioneer's Closed Loop Dual Capstan Tape Transport System ensures constant tape to head contact.

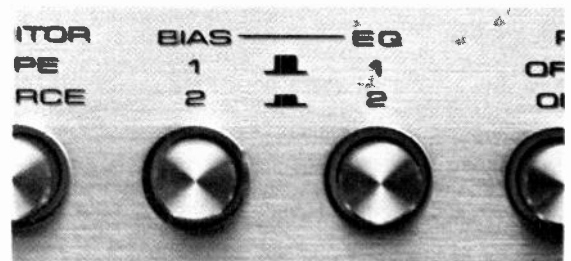


Pioneer's 24-Segment Fluroscan Meter gives you an instantaneous picture of what you're listening to.

PIONEER®

We bring it back alive.

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Independent bias and equalization for maximum performance from any tape.

The Experts Agree...it really works"

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Audio

... "Stanton Permostat kills record static forever"

Stereo Review.

... permanently desensitizes records with a single application"

STEREO

... "Dramatic results from Permostat Record Preservative"

CONSUMER ELECTRONICS

... "Topping the list of new record care products will be Stanton's Permostat"

Radio-Electronics ... "Just what (audiophiles) have been waiting for"

HIFI BUYER'S REVIEW

... "A dramatic demonstration... one application eliminates static electricity indefinitely"

HIGH FIDELITY trade news

... "If records are giving you static... it is time you got turned on to a new record care product... Permostat"

Rolling Stone

... "The newest anti-static product"

HIGH FIDELITY

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STEREO & HI-FI TIMES

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audio diges

... "Stanton Permostat... eliminates static charges"



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Mind Reader.



RX-2 from Mitsubishi Car Audio.

It's car stereo that knows your favorite stations.

It's car stereo that knows what time it is.

It's car stereo that locates the stations for you.

It's the RX-2 from Mitsubishi. An in-dash cassette deck with a digital AM/FM MPX tuner. The electronic pushbutton memory recalls up to six AM and six FM stations. Auto-search/manual-scan plus auto-reverse and auto-eject. The digital display indicates tuning frequency and time-of-day right before your eyes.

If you've been thinking about buying a car stereo, why not get one that will do your thinking for you.



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SOLUTION TO HIFI-CROSTIC NO. 51

Leonard Marcus:
[The] Posthumous [Career of J.S.] Bach

No atheist could fail to be caught up in that terrifying, desperate shriek of "Kyrie eleison" that opens the B minor Mass. Bach, whose thoughts were always with God, composed music of every shade of human passion—joy, comfort, ecstasy, awe, resignation.

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Technics

With all the receivers to choose from, how do you make the right choice? By comparing power, performance and price. It's the only meaningful way to tell how much receiver you're getting for your money. So compare.

Specifications	SA-101	SA-202	SA-303	SA-404	SA-505
Suggested Retail Price*	\$180	\$220	\$280	\$350	\$420
RMS Power Per Channel (rated bandwidth)	18 watts (40 to 20,000 Hz)	30 watts (30 to 20,000 Hz)	40 watts (20 to 20,000 Hz)	50 watts (20 to 20,000 Hz)	63 watts (20 to 20,000 Hz)
Rated THD	0.04%	0.04%	0.04%	0.04%	0.04%
FM Sensitivity (50 dB, stereo)	38.3 dBf	38.3 dBf	37.2 dBf	37.2 dBf	37.2 dBf
FM Selectivity	65 dB	68 dB	70 dB	70 dB	70 dB

*Technics recommended prices, but actual price will be set by dealers.

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

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

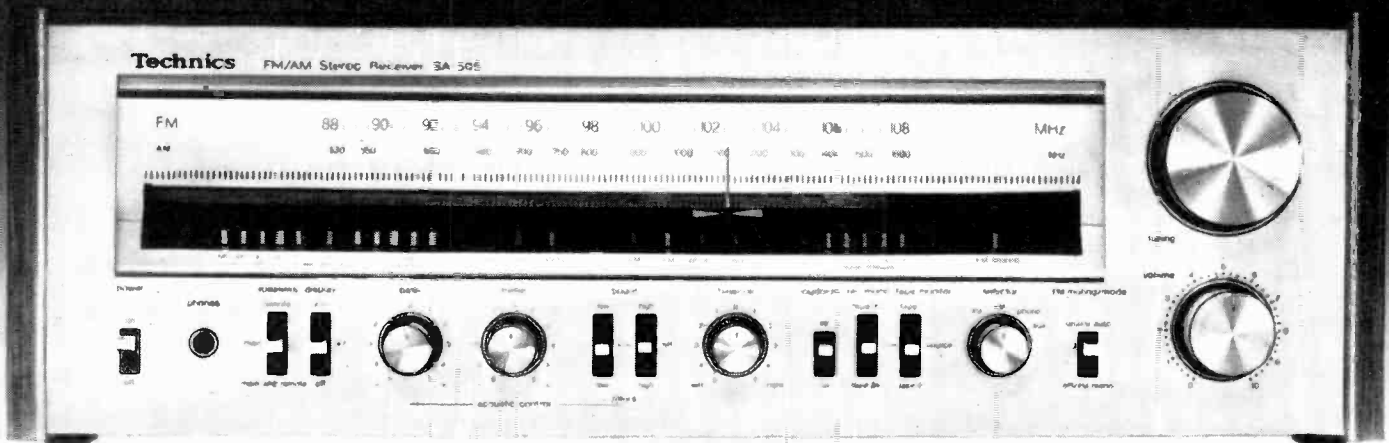
And when it comes to FM, all Technics receivers include MOS FET's for high sensitivity and low noise. "Flat Group Delay" IF stages for clean signal processing. And phase-locked-loop circuitry for accurate stereo imaging.

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

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

Cabinetry is simulated woodgrain.

Don't buy any receiver until you compare its power, performance and price to Technics.



McIntosh

"A Technological Masterpiece..."



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

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Circle 23 on Page 79

The Baton Passes

This is the last issue that will list as publisher Warren B. Syer, who for a generation led us, nurtured us, and set our tone. When, last December, Warren announced to his department heads that he was resigning as publisher of *HIGH FIDELITY* and *MUSICAL AMERICA*, president of ABC Leisure Magazines, and chairman of the board of ABC Schwann Publications, every one of us urged him to reconsider. In these career-minded times, when a corporate executive resigns, one does not usually expect such a response from subordinates. But then, you see, Warren has been a very special type of publisher.

A publisher is to a publication what a storekeeper is to a store: basically a businessman and ultimately responsible for everything in the business. The same qualities, talents, and predilections that make the one successful make the other successful. That is why it is as rare to find a major publisher, even (some would say especially) in the cultural fields, who had been trained in the arts as it would be to find a storekeeper who had started out as a Heldentenor or who had been a practicing photographer.

Warren had been both. And even after he realized that his talents lay elsewhere, he still brought to his business enterprises his intimate knowledge of, commitment to, and most important, love of music—particularly, of course, opera. (He has even continued to perform in local productions, only recently in Arthur Honegger's *Le Roi David*. Not many members of the publishing or musical business communities would have had either the ability or the inclination to do that.)

Warren's early business career was with the National Concert Artists Corporation, where he worked with, toured with, and became friends with such noted musicians as singer Ezio Pinza, pianist Jacob Lateiner, and violinist Aaron Rosand. He joined a fledgling *HIGH FIDELITY* in 1953, just two years after our inaugural issue, and by the end of

the decade had become our general manager. It is typical that he didn't don the title of publisher until 1962, although for years he had been running the magazine as chief executive, for Warren has always had a disdain for the ceremonial trappings of executive position. Visitors to the Publishing House often commented on the modest size and appointments of his office, and masthead scholars have noted that his name has always come last. He has never needed the superficial paraphernalia of authority to bolster his ego; he simply did his work with flair and gusto and went home to listen to the latest Janáček recording or to prepare a note to the editor vehemently disagreeing with a record review or, in our *MUSICAL AMERICA* edition, a concert or opera review. Not that he ever expected the editor to do anything about it (although, if it were stimulating enough, it might get printed under a pseudonym); he was just passionately concerned about great music, recordings, the equipment used for bringing the music into the home, and fine critical writing about it all. Had he not been our publisher, he would have been one of our most vociferous subscribers. No wonder that as a corporate officer his two most satisfying acquisitions were, fourteen years ago, *MUSICAL AMERICA* and, three years ago, the *SCHWANN* catalogs.

Next month, moving down a notch to the bottom of our masthead will be our new publisher, Leonard Levine, who has been with us for a dozen years, half that time in charge of our Chicago office, then as advertising director, most recently as our associate publisher. In this last position, he has been trained by a master for a year. (It was about a year ago that Warren first began seriously to consider that life had too many options for him to remain in the same job for the rest of his life.) If *HIGH FIDELITY* et al. can be considered Warren's children, Len can be said to have grown up with the family. Certainly his commitment to our finest traditions is beyond question.

Leonard Marcus

Introducing TDK's Optimum Dynamic.™

Normal bias tape taken to the optimum.



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

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

Well balanced sound.

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

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

Supplier to the U.S. Olympic Team



The test of success.

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



TDK
The machine for your machine

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*In the unlikely event that any TDK cassette ever fails to perform due to a defect in materials or workmanship, simply return it to your local dealer or to TDK for a free replacement.

Synthes

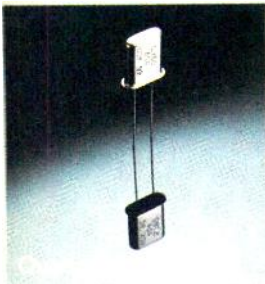
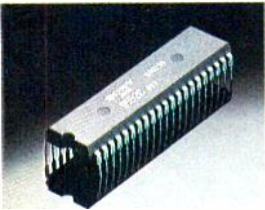
Sony's new receiver creates higher-fi with a computerized

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

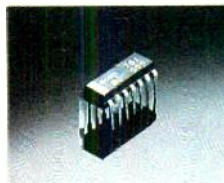
tuning, a versatile microcomputer and silent, uninterrupted power. The tuner section is so sophisticated that a highly stable quartz-crystal oscillator locks in AM and FM signals for brilliantly faithful reproduction of broadcast programming. And the microcomputer gives you tuning options that simply 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 electrofluorescent digits display frequencies. Bright green LEDs in a five-step array show signal strength. And red LEDs pinpoint your favorite stations at a glance.

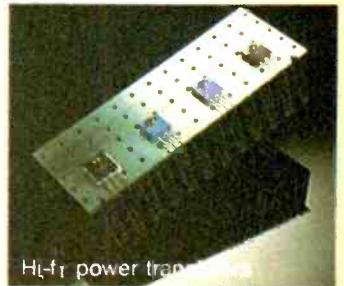
Consider the power of 55 watts per channel that propels the intimacy of the original performance through Sony's advanced DC amp technology. And a high-gain low-noise phono

ized Art.

tuner, a DC power amp and Pulse Power Supply.



And highly responsive Hi-fi power transistors artfully reproduce complex wave forms even at high frequencies and full output power.

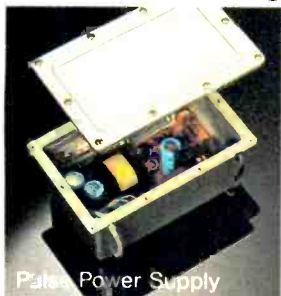


Sound is so clear that quiet intervals are quiet even at the highest listening levels.

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

STR-V55

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




It's also important to know that an efficient, compact Pulse Power Supply provides stable DC power even at peak levels.

SONY®

State of the **AR** it.



AR Verticals, the finest speakers in AR history. Audition them and be astonished. Left to right: AR9, AR92, AR91, AR90.
Your AR Dealer has literature or write AR, 10 American Drive, Norwood, MA. 02062.  TELEDYNE ACOUSTIC RESEARCH © 1980

Discs: RCA's SelectaVision to Challenge Magnavision



A technician prepares to play a SelectaVision disc

By the end of this year dealers should begin receiving their first shipments of RCA's SelectaVision video disc players. What makes this of more than common newsworthiness is that the company's top executives have promised their dealers to blanket the country with the product during the first quarter of 1981. And with an "all-the-money-that-is-required" attitude (president Edgar Griffiths' phrase), RCA will be making its greatest investment ever in any new consumer electronics product—including color television—because it sees the business not only as vying with traditional TV broadcasting, but as generating more income than all the broadcast networks combined by the end of the 1980s.

The question that comes to mind, of course, is how does it square off against the other major entrant into the video disc arena, the Philips/MCA Magnavision/DiscoVision system? While Magnavision discs are "read" optically, through a laser beam, SelectaVision uses a diamond stylus, riding in a groove, to sense signals capacitively. Its discs have 10,000 grooves to the inch, meaning that about 38 SelectaVision grooves could fit in the space required for an LP microgroove. The stylus is comparably small, and the turntable revolves at 450 rpm. Since RCA's disc (unlike MCA's) has such fragile grooves, it is protected from your fingers by a plastic sleeve. To play it, you insert the entire package into the player, then remove the sleeve; to retrieve it, you reinsert the sleeve.

RCA will make a major point of the price of its player, now anticipated to come in at under \$500, as against Magnavision's \$775 price tag. RCA's discs are expected to cost from \$15 to \$25; MCA's run from \$6.00 (for instructional programs) to \$25 (for first-run movies), give or take a nickel. The ordinary MCA disc can hold a half-hour per side, the extended-play disc an hour per side; RCA's discs hold up to an hour per side. MCA already has a sizable catalog, from Elton John in Edinburgh to fifteen Walt Disney productions; by the end of 1981, RCA plans to have a catalog of about 300, from Elton John in Moscow to sixteen Walt Disney productions. In the arts, MCA already has the Martha Graham Dance Company, a "Swan Lake," and a "Nutcracker" and is reported to be negotiating for some European opera productions. RCA too has announced that it will bring out ballets and operas.

Magnavision even includes jacks to enable you to play its programs in conjunction with your high fidelity stereo system, but RCA—at least initially—will stick with mono, anticipating that its no-frills, simple product will reach the most consumers with the most attractive price. This, along with its approximately 20,000 dealers vs. only about 6,000 for the competition, is where RCA's strategy seems to lie. By the end of 1979, Magnavision had still limited its marketing to Atlanta, Seattle, and Dallas but was planning to add enough cities so that it would at least cover the major U.S. markets by the end of 1980 before RCA's nationwide entry.

So the lines are drawn, and the battle is about to begin. This time, for once RCA and CBS—which has been licensed to manufacture and distribute SelectaVision disc—are on the same side, given an anticipated Europe-vs.-America tone to the fray. We won't even go so far as to hope that the best side wins. Remembering the incompatible quadraphonics systems, we just hope they don't knock each other out.

International Record and Tape Club
(formerly National Record Plan)

**WINTER DISCOUNT SALE
AT UP TO 45% OFF**

**SAVE TIME, SAVE GAS
SAVE MONEY & ORDER NOW
All Records —Classical,
Opera, Pop, Rock, Folk,
Jazz, Shows, Int'l, Country.**

List Per LP	Sale Price Per LP
\$3.98	\$2.49
4.98	2.99
5.98	3.59
6.98	4.49
7.98	5.29
8.98	5.99
9.98	6.69

For multiple sets, multiply sale price per LP by number of LP's in set. All other List Prices, your discount is 33%.

NEED CATALOG? Send \$1.25 for Schwann (plus 50¢ for postage and handling). If you order catalog, we extend sale ending date to give you more time to order.

**ALL PRE-RECORDED CASSETTES
AND 8-TRACK CARTRIDGES**

List Price Per Tape	Sale Price Per Tape
\$7.98	\$5.39
8.98	6.19
9.98	6.89

All other List prices, your discount is 30%.

SPECIALS OF THE MONTH

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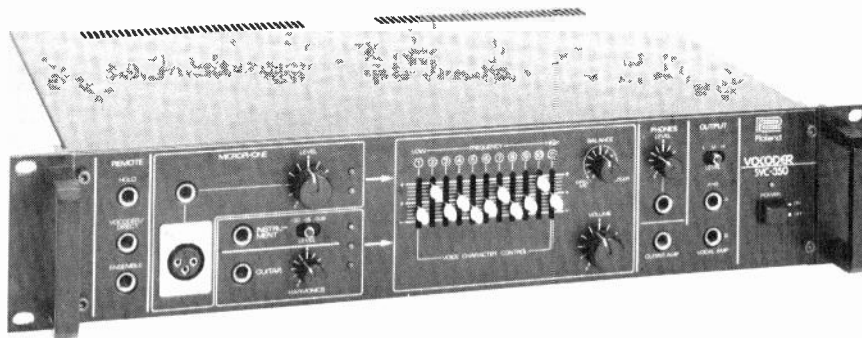
High Fidelity News



Another Two

The newest addition to the SAE Two line is the A-7 integrated amplifier, rated at 70 watts (18½ dBW) per channel for 0.05% total harmonic and intermodulation distortion. A fluorescent bar graph displays power output or level at the tape-recording jacks. Outboard equalizers or similar equipment can be accommodated via an external processor loop, and facilities for two-way tape dubbing are provided. Other features include defeatable bass, midrange, and treble controls. The A-7 is priced at \$400.

Circle 137 on Page 79



Teach your trumpet to talk

Among several new rack-mount products from Roland is the SVC-350 Vocoder, a synthesizer that processes the human voice and uses the resulting information to shape an instrumental input—making the instrument speak. Ten filters are used for vowel sounds, and another responds to hard consonants. An envelope follower then reacts to the volume of individual frequencies, and the frequencies of the musical signal are shaped accordingly. Both balanced and unbalanced program inputs can be used with the SVC-350, which bears a price tag of \$995.

Circle 138 on Page 79



Modern, moderate-cost delay

Arp's Mu-tron is a digital delay line intended for recording studio and live concert use. It uses delta-modulation encoding to achieve a variety of effects: vocal and instrumental doubling, reverb, echo, flanging, vibrato, and chorus. According to Arp, frequency response is always full bandwidth regardless of delay time setting. A "freeze" feature, which can be triggered by an optional footswitch, will hold a sound indefinitely in the memory, which employs 16k RAM chips. The Mu-tron costs \$795.

Circle 140 on Page 79



Ortofon + SME = Low Mass

Ortofon and SME have joined forces to create the 30H integrated cartridge and "carrying arm." Designed for low moving mass, it mates with the SME Series III and IIS tonearms and weighs 10.5 grams for an effective moving mass of 4.5 grams. The stylus has also been newly designed to reduce effective tip mass, which is said to be 0.35 milligrams. The Ortofon/SME 30H will sell for \$250.

Circle 141 on Page 79



Technics on a tangent

Marking the tenth anniversary of its introduction of the first direct-drive turntable, Technics is offering the SL-10, a fully automatic tangential-tracking model. The upper half of the SL-10's cabinet contains the tonearm, drive system, and microcomputer control block. The lower section contains the platter motor and quartz control circuit. A switchable pre-preamp is built into the SL-10, which comes equipped with a Technics moving-coil pickup and costs \$600.

Circle 142 on Page 79

Continued on Page 14

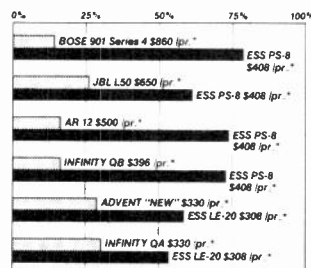
ESS Heil Wins Again

Comparative tests continue: students at Georgia Tech judge ESS speakers superior to JBL, Bose, Cerwin Vega, Pioneer, AR, Advent, and Infinity.

In the third of a series of blind listening tests, over 650 students at Georgia Institute of Technology judged ESS loudspeakers superior in overall performance to other top speaker brands. In previous tests, hundreds of students at U.C.L.A. and the University of Wisconsin at Madison had also judged ESS best in clarity, accuracy and freedom from distortion.

The controlled direct comparison tests, conducted under the supervision of an independent national testing laboratory, were designed to simulate home listening conditions. Loudness differences were electronically equalized and all speakers were positioned for optimal performance.

The students listened in groups of 30 or less to the same musical material played on each of the speakers in head-on comparisons, without knowledge of speaker brand



or model. They were then asked to choose the best sounding speaker. At U.C. L.A. and Wisconsin, the students chose ESS in 13 out of 14 comparisons, while at Georgia Tech ESS was chosen amazingly in 24 out of 24 comparison situations.

In all three tests, as the graph shows, ESS speakers were compared to and often chosen over far more expensive name brand models.

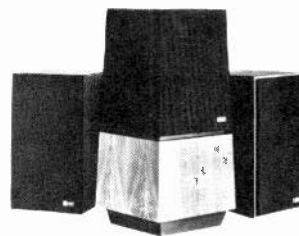
ESS technicians are calling the Georgia Tech demonstration "... our most complete victory. We used 19 different sets of speakers in the Georgia Tech comparisons, as compared to 11 at Wisconsin and 10 at U.C.L.A. — yet at Georgia Tech we won every comparison."

ESS's superiority is due to the exceptional performance of the Heil air-motion transformer midrange/tweeter.



This unconventional driver was invented by Dr. Oskar Heil (creator of the FET) and is licensed exclusively to ESS. It employs a pleated-folded diaphragm that *squeezes* air like a bellows rather than *pushing* it. The squeezing motion increases the air velocity 430% giving the Heil virtually "instant acceleration" for degrees of clarity, accuracy and spaciousness unattainable with conventional drivers.

Complete details of all three tests should be available at your local ESS dealer in the near future. But don't wait for the results, visit your dealer now. Take the ESS Listening Test for yourself. You'll appreciate the difference.



Take the ESS Listening Test yourself!



sound as clear as light

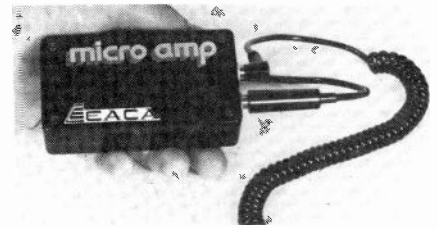
*Suggested Retail Price



Bye-bye boing and twang

The Master-Room XL-305 from Micmix Audio Products is a self-contained reverberation system designed to simulate live echo chamber sounds in the studio without adding unwanted effects such as boing and twang. It offers stereo capability, dry/reverb mixing controls, and a four-band equalizer section with a control range of ± 12 dB. Reverberant channel crosstalk is said to be better than -45 dB. The rack-mountable XL-305 costs \$1,195.

Circle 139 on Page 79



Gain to go

The EACA Microamp is an extremely compact, portable amplifier suitable for use with electric guitar, bass, or keyboards. The device is powered by two 9-volt batteries and is said to have a peak power output of 2.5 watts (4 dBW). The unit switches on automatically when a headphone plug is inserted into its output jack. Rated frequency response of the Microamp, which costs \$29.95, is 40 Hz to 20 kHz with a total harmonic distortion of 0.25%.

Circle 146 on Page 79

Continued on Page 16

Now get moving coil perfection for the price of a common cartridge.

Most music lovers dream of owning a fine moving coil cartridge. But it's been an impossible dream for many because of the high cost. Until now. Satin, world leader in moving coil technology, has brought the suggested retail price of a high-quality moving coil cartridge **below \$100**, well within the budget of most buyers.

Our new Satin 117Z has the extended frequency range, superb stereo imaging, gloriously open, spacious and—above all—realistic sound quality that Satin MC's are famous for.

User-replaceable stylus.

And like all the Satin cartridges, it features a unique user-replaceable stylus that you can change in seconds, like a common cartridge. The stylus is a perfectly formed diamond, with Satin's

exclusive single-point pivot and special magnet/lubricant damping system for high compliance and separation.

No transformer or pre-preamp.

And, of course, the high-output 117Z uses Satin's ultra-thin 10-micron aluminum ribbon coil and high energy magnet so you don't need an expensive noise-prone pre-preamplifier or transformer like most other moving coil cartridges. The 117Z connects directly to any quality amp, preamp or receiver.

Visit your authorized Satin dealer as soon as possible. For under \$100, why postpone perfection?

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The Measure of Quality

Circle 27 on Page 79

Select what you want in a record cleaner.

Convenience in use and storage.

You shouldn't need a separate shelf, elaborate motions or an act of Congress to clean your records. A comfortable, hand-held instrument that works best on a rotating turntable is ideal.

Effectiveness against micro-dust.

Tiny, invisible dust particles hide in delicate record grooves and can be ground into the vinyl. Only a slanted (directional) fiber using special ultra-small fiber tips can scoop up, rather than rearrange, this micro-dust contamination.

Effectiveness against chemical contamination.

Fingerprints and vapor-borne oils will deposit into channels of a record groove. Such contamination hides from adhesive rollers and all dry cleaning systems. Only a special fluid plus micro-fibers can safely remove such audible, impacted deposits.

Total removal of contamination/fluid.

Capillary action—the lifting of fluid by small fiber surface tension—is totally effective. You want to get contamination off the record, along with any fluid traces.

Lasting construction.

You want quality. A record cleaner can last a lifetime. A plastic wonder can crack into oblivion—or you can purchase the hand-rubbed elegance of milled walnut befitting the rest of your audio system.

Ultimate economy.

The value of a truly fine record cleaner is justified by the cost of replacing your record collection. Fifteen dollars is a small investment in long-term protection.

All of the above.

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Sansui



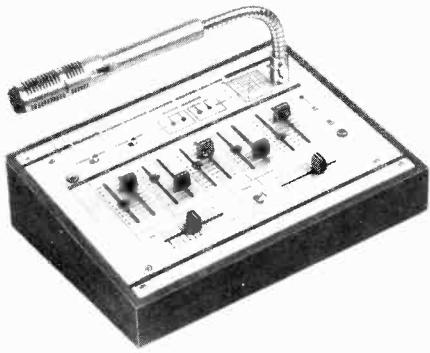
G-4700



G-5700



G-6700



Preamp/mixer from Numark

A combination preamp/mixer, the DM-1100 from Numark, is designed with the disco DJ in mind. The mixer has four stereo program inputs and two mike inputs; a headphone circuit is provided to monitor each. The phono preamp section is rated at ± 2 dB across

the RIAA equalization curve. The five slide controls have memory tabs to reference output levels. Price of the DM-1100 is \$199.95, and optional microphones and gooseneck range from \$59 to \$110.



In his master's car

At the top of RCA's auto-sound line is the 12R812 radio-cassette player, rated at 5.5 watts into 4 ohms for 10% harmonic distortion. The deck features automatic reverse, with locking fast forward and reverse and tape direction indicators. The radio section has electronic memory pushbuttons for programming of up to five FM and AM stations. A digital display gives station frequency and time, and a dimmer is provided for night driving. The 12R812 costs \$414.

Circle 143 on Page 79

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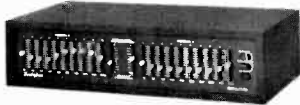
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5 EQUALIZERS
from \$249 to \$550



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3 STATE-OF-THE-ART
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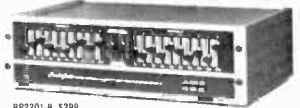
SP4001 \$549

SP4000 \$399 (Not shown)

3 CLASS H 250w AMPS
from \$649 to \$949



EA5003 \$949



RP2201-R \$299



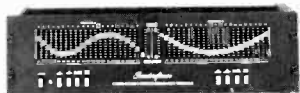
SP4002 \$699



MA5002—\$799
PA5001—\$649 (Not shown) 4H



RP2215-R \$370



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A speaker that knows its place

Boston Acoustics' A-200 speaker system is designed to be placed close to a wall for uniform and accurate tonal balance. An acoustic-suspension design, the A-200 employs a 10-inch woofer, 4-inch midrange, and 1-inch tweeter with

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Circle 81 on Page 79

Very separate. Very together.



They're the Jensen Separates. An individual system of special high performance woofers, tweeters, and midrange drivers. And by separating them in your car, you'll come up with a very together sound.

Why separate them?

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

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

Divide and conquer.

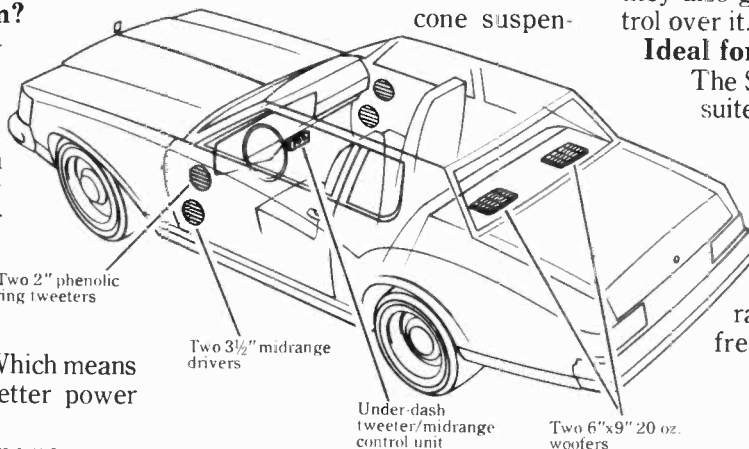
We developed the Jensen Separates to deliver every last high, low and midrange signal your music contains. And to overcome any possible acoustic problem you may encounter.

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

Two 3 1/2" midrange drivers

also mount in the upper front doors. And what a difference they make.

In this position their subtle 1,000-4,000 Hz middle tones fill in the gaps between treble and bass. While Flexair foam cone suspension



Two 2" phenolic ring tweeters

Two 3 1/2" midrange drivers

Under-dash tweeter/midrange control unit

Two 6"x9" 20 oz. woofers

sion provides the extreme sensitivity needed for smoother sounding music.

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

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

The control unit.

It contains two independent midrange and tweeter level controls for each channel.

So not only do the Jensen Separates deliver all of your music, they also give you the final control over it.

Ideal for bi-amplification.

The Separates are perfectly suited for a bi-amplified car stereo system. The woofers would then receive only the bass signals from one amp. While the tweeters and midranges receive the high frequency signals from another amp.

It gives the system much better power distribution for higher power levels, clearer music and less distortion.

Their time has come.

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

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crossovers at 450 Hz and 3 kHz. Both the tweeter and midrange are flush-mounted on the baffle so that the nearest cabinet edge is more than a half-wavelength away at any frequency in their operating range; this is said to reduce colorations caused by early reflections. Minimum recommended power is 15 watts (11 1/4 dBW), and nominal impedance is 8 ohms. Price of the A-200 is \$350.



An Absolute tower

Absolute Research Systems of Utah has announced the Oak Tower A-125 three-way speaker. The system's 12-inch woofer is loaded by a tuned port and handles frequency down to 35 Hz. The 5-inch midrange driver is housed in its own sealed enclosure. Three tweeters, one mounted on the baffle and one on each side of the enclosure, are claimed to offer exceptional high-frequency dispersion. Rated sensitivity of the A-125 is 94 dB at 1 meter for a 1-watt input. Recommended power is 125 watts (21 dBW). The Oak Tower A-125 is capped by a smoked-glass plate and costs \$329.

Circle 144 on Page 79

Caveat Lavator

If you're a fussy video cassette recordist, you may have been delighted to learn of the new head cleaners consisting of buffing tapes or pads built into VHS and Beta shells and selling in the \$25-\$30 range. Before you shell out the cash, be advised that, if improperly used, they can be downright harmful. The ones we know of so far—from 3M, Fuji, and Allsop—all contain explicit instructions designed to prevent overpolishing (i.e., wearing down) your heads. That in

Circle 45 on Page 79 ▶

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Cassette Deck



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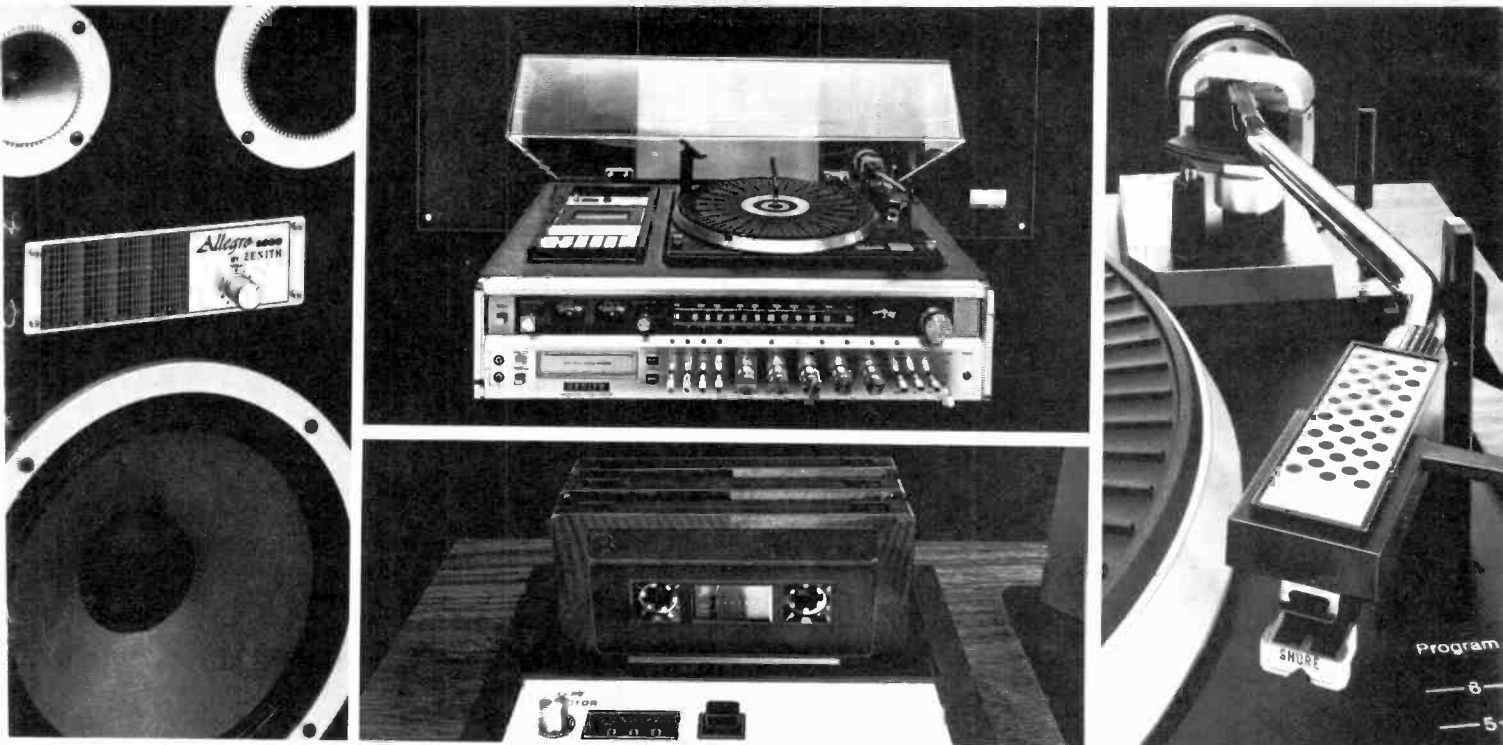
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Each of our belt-driven turntables has a sensitive S-shaped tone arm... balanced for the lightest possible touch. And you can set it down nice and easy with the viscous damped cueing lever. So you can be confident that the high quality magnetic cartridge and your valuable albums are well protected. There's also an

anti-skate control to help eliminate skipping and uneven record wear.

You have a choice of 8-track or cassette. There are even models with both. Whichever you choose, you'll get twin VU meters and the controls you need to assure the best possible tape recording and playback.

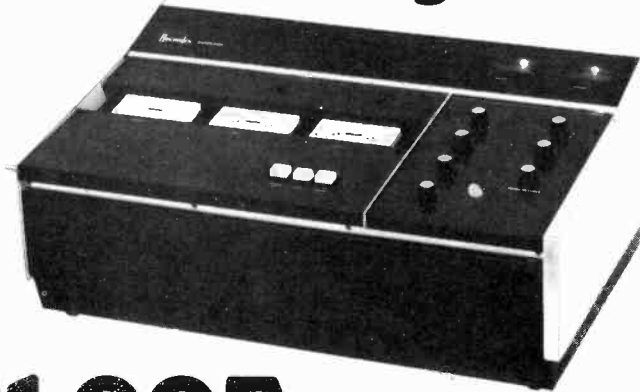
For fine, matched sound reproduction, choose Allegro 1000, 2000 or 3000 speakers. With woofers, tweeters and tuned ports. They're so efficient that comparable size air-suspension speakers need *twice* the amplifier power to match their sound reproduction.

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Recordex Super Pro four channel, stereo cassette-to-cassette duplicator offers features you'd expect from higher priced duplicators. Automatic pre-erase for all tracks. Guardian electronics to indicate faulty cassette operation. Automatic stop and rewind. Independent cassette transports to eliminate down time. 15 ips operation assures highest quality duplication in virtually all types of cassettes. Optional slave units available. For more feature information, write or call us: 1935 Delk Industrial Blvd. Marietta, Georgia 30067. (404) 955-7368.

Recordex
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Circle 32 on Page 79

20 HIGH FIDELITY

itself may be enough of a tipoff that caution is in order.

"The problem," says the national service manager for a major recorder brand, "is that you may lose the instructions or be interrupted while you're timing those few seconds of use. Or the kids may play the entire 'tape' while you're not at home; by the time you discover it, your heads have been destroyed. We would consider that abuse of the machine and therefore not covered by our warranty." Even if the deck were brand-new, the customer would be asked to pay \$150 for new heads and another \$50 or so for installation labor.

How often should video recorder heads be cleaned? An engineer for a New England television station told us that he cleans those on the station's professional models "once or twice a year. I've spent my life in video, and I don't believe a home video recorder head should ever need cleaning under normal conditions."



Small, to be Shure

The SM-17 miniature dynamic microphone from Shure is designed for mounting on a wide variety of acoustic instruments; an expansion mount and a spring clip permit several attachment schemes. The omnidirectional mike is intended for low-impedance mike inputs. With an aluminum case, 10-foot cable, cable clips, and additional brushings for the expansion mount, it is priced at \$76.80.

Circle 145 on Page 79

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Breakthrough

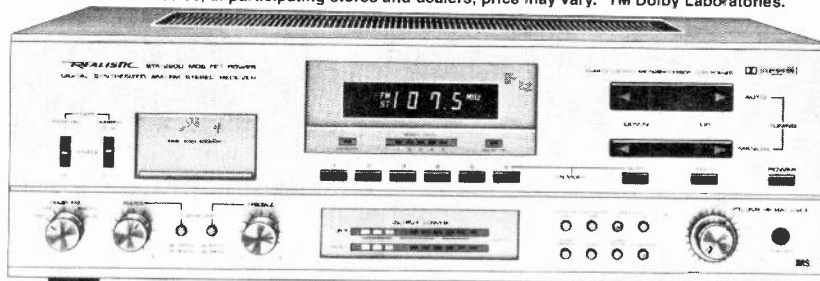
is a word that Realistic[®] uses very very very rarely. But nothing else describes our new STA-2200 all-digital receiver.

Could Radio Shack have scooped its peers (like Pioneer, Technics and Kenwood) in technology as well as features? Before you buy a conventional receiver that may be old-fashioned before 1980 is over, you can see what's really new at any of our stores. And decide for yourself!

The Computerized Tuner. Quartz-locked, microprocessor-controlled digital synthesis circuitry ends mechanical tuning errors and problems. No dial, no knob, no tuning meters. Instead, bright fluorescent digits display each station's frequency with absolute accuracy. Computer-type "feather-touch" tuning automatically scans up or down the FM and AM bands. Or you can select manual tuning. Store any six FM and any six AM stations in the microprocessor memory for instant recall. Even command the receiver to sample the stations in the memory, then touch-select the program of your choice. There's also battery back-up memory protection, Dolby* FM noise reduction, LED signal level indicators, and dual-sensitivity muting. And the display "off" is a quartz clock.

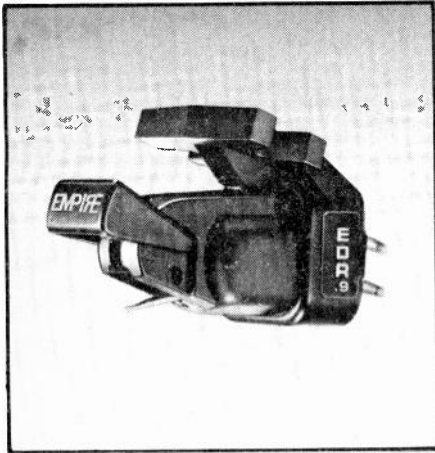
The High-Technology Amplifier. The Realistic STA-2200 uses a new generation of power transistors called MOSFETs. Their ultrahigh-speed operation brings you stunningly accurate sound reproduction through superior linearity, superior slew rate and in-audible TIM. They are more reliable than ordinary transistors and generate less heat. The amplifier features go on and on. 11-step bass and treble controls with turnovers for controlling ranges below 150 Hz and above 6 kHz. Tone control defeat. Hi-MPX filter. Monitoring and dubbing controls. And more. Power is 60 watts per channel into 8 ohms, 20-20,000 Hz, with no more than 0.02% THD. And one more thing: it's made by the same company that makes the breakthrough TRS-80™ microcomputer.

STA-2200 is 599.95, at participating stores and dealers, price may vary. *TM Dolby Laboratories.



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

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

At \$200, the EDR.9 is expensive, but then again, so are your records.

For more detailed information and test reports, write to:

Empire Scientific Corporation
1055 Stewart Avenue
Garden City, New York 11530

EMPIRE



Circle 10 on Page 79

CrossTalk

Q. Some time ago I read an article on record care that advised against playing a record a second time until 24 hours had elapsed. Can you confirm the advisability of this?—Howard Baumel, Staten Island, N.Y.

A. Not really. Responsibly conducted tests have indicated that there is a vinyl fatigue/recovery cycle; others that seem equally responsible in their methodology have not. As a practical matter—and assuming an undamaged stylus that is correctly aligned, and so on—we have no qualms about playing a record two or three times at a clip. We often do it without audible deterioration in testing equipment, particularly tape equipment in which we want to adjust levels accurately before recording. But we wouldn't play our favorite direct-cut discs with a changer's auto-repeat cycle as background for a party any more than we would store master tapes near the permanent magnet of a loudspeaker.

Q. My JVC KD-65 cassette deck is not equipped to handle metal-particle tape but, according to the audio salesman where I purchased the deck, can be retrofitted for it. I'm somewhat confused, however, by the advantages this would bring: The owner's manual says that the deck will get a frequency response of 20 Hz to 19 kHz with ferrichrome tape, but a recent JVC ad states that the frequency response with metal-particle tape on one of its new decks is lower: 25 Hz to 18 kHz. By converting my deck to handle metal tape, would I be losing performance?—Joseph F. Rampello, Coram, N.Y.

A. You've put your finger on a problem that we've railed against for years: the lack of tape recorder standards. Even in statements made by the same company, as these are, there's just no way to make comparisons. When a manufacturer claims that a certain tape will result in, say, a frequency response of 20 Hz to 19 kHz and specifies neither the level at which the recording was made nor the spread of output levels within the specified frequency range, its claim is meaningless. Even specifications that include a range

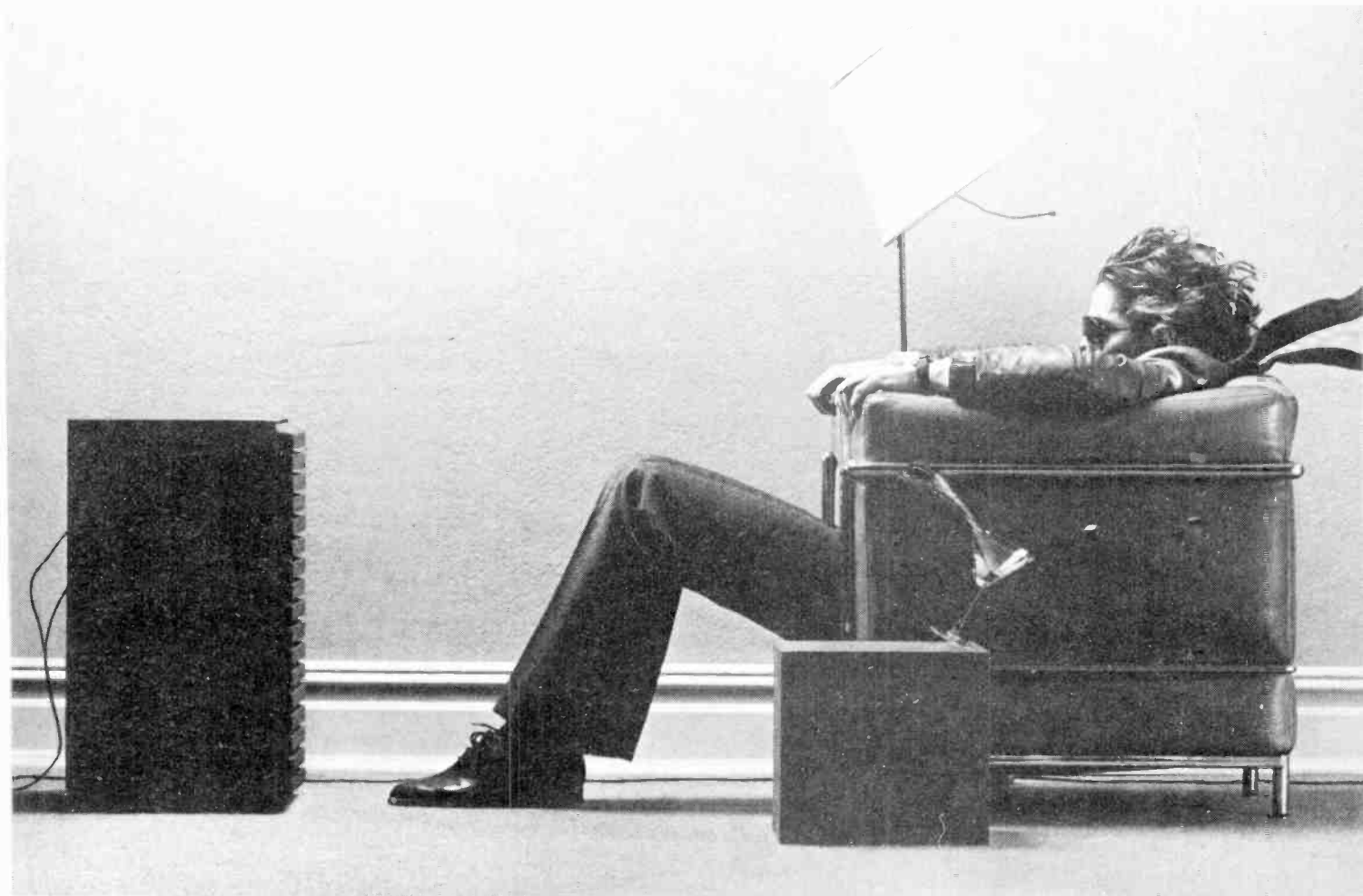
of ± 3 dB are misleading unless mid-range response really is near the assumed 0-dB reference; if it is at the "+3" maximum instead, the manufacturer is simply getting better frequency numbers by measuring cutoff at -6 dB (rather than at -3, as the spec implies). In JVC's claim for metal, you can only be sure that it is more conservatively put than the specs in the manual. But JVC informs us that it does not retrofit decks for metal tape. That doesn't mean you must rush out to buy a new deck. The additional high-frequency headroom and slightly better signal-to-noise ratios with metal-particle tape are a significant advance in the state of the art, but unless your recording needs (and habits) will make use of those capabilities, the extra cost is hard to justify.

Q. I have a quality phonograph setup—a Stanton 881S cartridge in an SME Series III arm mounted on a Thorens TC-160BC Mk. II turntable—yet when I play music that is quite loud the record acquires a scratchy, fuzzy noise after two to four playings. It is especially noticeable during loud French horn passages. The stylus force is set at 1 gram, so it probably is not tonearm resonance. Do you have any recommendations?—Steven Jackson, Kendall Park, N.J.

A. Yes: Set the tracking force correctly before you do any more harm. The recommended tracking force for the 881S is 1 gram, but in order to get that actual value, you must set the arm for 2 grams; the other gram allows for the brush, which is deadweight during arm balancing but becomes self-supporting while you're playing a record. If the SME is set at 1 gram, you're inviting gross mistracking and record wear in loud passages—and what you describe sounds like a classic case. But if you did understand the instructions and set the SME accordingly, the wear you're experiencing might be due to a bent cantilever or chipped stylus tip instead.

Q. When I set the controls of my J. C. Penney MCS Series 3233 receiver to play a tape from my Teac 350 deck, so that the tape switch is at Monitor 1 but the function switch stays

AFTER 500 PLAYS OUR HIGH FIDELITY TAPE STILL DELIVERS HIGH FIDELITY.



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

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

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

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

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

maxell
IT'S WORTH IT.

For lovers only

Soft music and soft lighting go together. Preserve the romantic mood. Robins ROBOLITE snaps on turntable dustcovers and illuminates the record. Lets you place the tonearm in the groove you want without turning on room lights or fumbling in the dark. Turns off automatically when the dustcover is lowered. Ask for a demonstration at your hi-fi dealer.



ROBINS
Robins Industries Corp., 75 Austin Blvd., Commack, N.Y. 11725

Circle 33 on Page 79

24 HIGH FIDELITY

on FM, I still hear the FM program faintly. The only way I can find to solve this problem is to set the function switch to an unused position: Phono 2 or AUX. I took the receiver to the service department, and they gave it a clean bill of health. When the problem persisted, I exchanged my receiver for a new one, which is just as bad. Is this problem inherent to the design, or is it one I am causing?—Dennis D'Amico, Concord Township, Ohio.

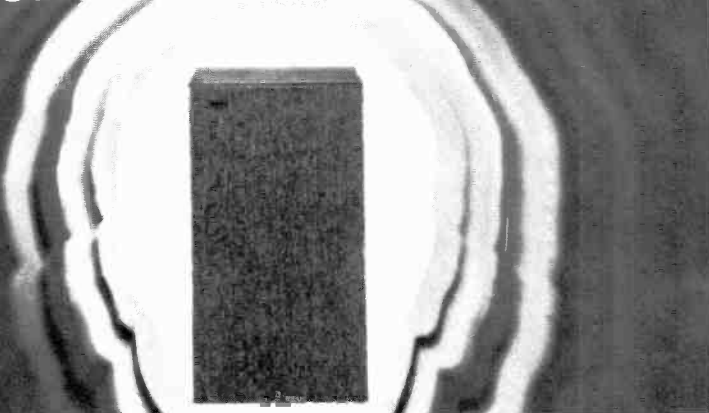
A. We are confident it is inherent in the 3233 and/or the 350. All equipment has some crosstalk between inputs, though it can be minimized in the switching and wiring layouts. The best designs take care to keep it inaudibly low, but the setup you describe is the hardest to control because the source (FUNCTION) signal must be present at the tape deck's input terminals—and therefore has maximum opportunity to influence other signal paths—and the tuner section (unlike the phono preamp) normally has an output signal whether or not you're listening to it. Our standard practice in listening to tapes is the one you mention: Turn to a source position that has no signal.

Q. I have been the proud owner of Klipsch corner horns, rated at 16 ohms, for some time. Recently I bought a Pioneer tuner/amplifier and was shocked to discover that it is rated for 4 and 8 ohms only. What do you recommend: that I sell the speakers or modify the amplifier?—George Schmidt, Glendale, Calif.

A. Neither. Since there are few 16-ohm speakers on the market and transistorized amplifiers (which generally are optimized for 8-ohm loads) deliver considerably less power into 16-ohm loads than into 8 ohms, amplifier manufacturers often omit 16-ohm ratings from their specs. That doesn't mean that the amplifier won't work with 16-ohm speakers, just that it won't drive them as hard. But the Klipschorns are among the most efficient speakers ever and therefore don't need a lot of power. We'd recommend that you hook up what you have as it is and enjoy it.

||| We regret that, due to the volume of reader mail we get, we cannot give individual answers to all questions.

THE CELESTION DITTON 332. ITS RANGE-ABILITY HITS YOU RIGHT IN THE EARS.



From the incredible gravura of a diva's high C to the seemingly subliminal low E of a string bass. From the explosion of a faraway cannon to the fragile ting of a triangle floating across the room.

That's Range-ability* in the Celestion Ditton 332.

Celestion's Range-ability is also pure pronouncement at any volume—from a level barely perceptible to an overpowering 107dB. Through it all, the Ditton 332 maintains exceptional linearity, imaging, dynamic range and high efficiency.

Celestion manufactures each com-

ponent for its speakers. The result is an integrated acoustic suspension system of superbly efficient elements backed by over 55 years of speaker manufacturing craftsmanship.

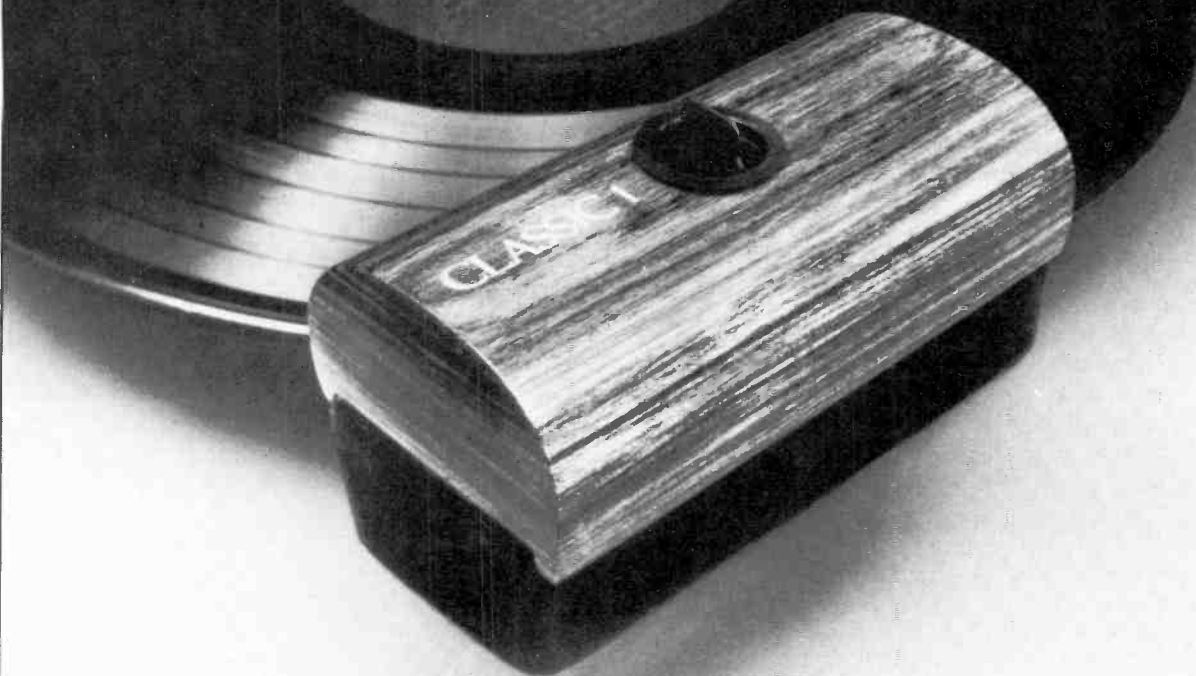
Your pair of Ditton 332 cabinets will look as good as they sound. Finishes of oiled American walnut or elm are available.

Range-ability. Finally, listening becomes an experience.

celestion
international 

Circle 7 on Page 79

discover . . .



The inside story of a classic.

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

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

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

At last, the CLASSIC 1 has the answer to safe and effective cleaning. Not only are static charges reduced, but the problem of residue formation is eliminated. Cleaning is safe and effective because inside the CLASSIC 1 is



the exclusive MICRO STOR SYSTEM which utilizes a humidification/cleaning process rather than a 'wet' technique.

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

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

Available at finer audio dealers . . .

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-Crostic No. 52 will appear in next month's issue of HIGH FIDELITY.

Solution to last month's HiFi-Crostic appears on page 4.

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

INPUT

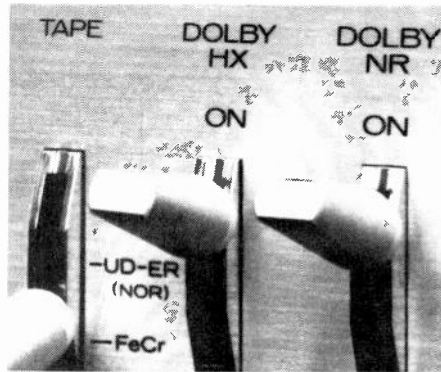
- A. Bach harpsichord composition (2 wds.)
- B. French composer (1683–1764): "Castor et Pollux"
- C. With Word O., operetta by Paul Abraham (2 wds.)
- D. Casals' widow's husband
- E. Renata Tebaldi's dog
- F. Set of piano pieces by Ravel (4 Fr. wds.)
- G. Birgit Nilsson's predecessor (full name)
- H. "_____ One," Cranko ballet to Webern's Passacaglia
- I. Austrian-American composer of "Brigadoon," "Paint Your Wagon"
- J. "Time _____," classic Brubeck album
- K. Conductor Victor (1892–1967) (2 wds.)
- L. German soprano (b. 1917): DG's Elektra (full name)
- M. Musical unit
- N. "Mignon" composer
- O. See Word C. (2 wds.)
- P. Chabrier rhapsody
- Q. Ackermann or Gerdes
- R. Conductor Gennaro (1886–1941), assistant to Toscanini at the Metropolitan
- S. Pas _____, a leap and alighting in the second and fourth position
- T. Trombonist/choral leader (b. 1916): "Laughter in the Rain" (full name)
- U. Movie composer (1901–70): "All about Eve," "Wuthering Heights" (full name)
- V. Be indebted to
- W. Kind of organ
- X. Of Meyerbeer, Beer
- Y. Richard Strauss song (2 Ger. wds.)
- Z. Bohemian composer (1824–84): "Wallenstein's Camp" (full name)
- YY. Popular group: "Phenomenon" on Chrysalis
- ZZ. Kurt Weill opera (2 wds.)

OUTPUT

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

DOLBY® HEADROOM EXTENSION: A Significant Advance in Cassette Recording

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



both bias and equalization pre-emphasis are momentarily lowered to increase the tape's high-frequency headroom far beyond the normal limit. Information about the high-frequency content of the music is derived from the recorder's Dolby noise reduction circuits, which are already programmed to scan the music in precisely the way required by Dolby HX*.

What Dolby HX means to cassette recording

Dolby HX makes it possible to make more accurate recordings of difficult

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

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

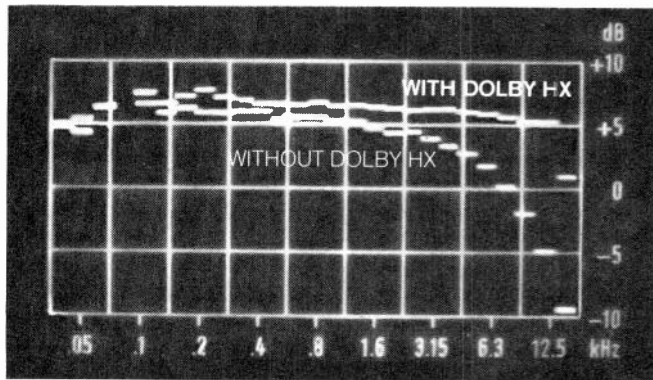


FIGURE 1. Pink noise recorded with and without Dolby HX on a low-cost iron oxide cassette tape, at an average level of -10 dB (referred to Dolby level).

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

Dolby HX

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

How Dolby HX works

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

Much of the time on most music, the bias with Dolby HX is relatively high for best performance at low and mid frequencies. But when unusually high-level high frequencies of the type which would cause tape saturation come along,

*Dolby HX is sufficiently complex to require engineering a deck from the outset for it, it is not practical to add it to an existing model

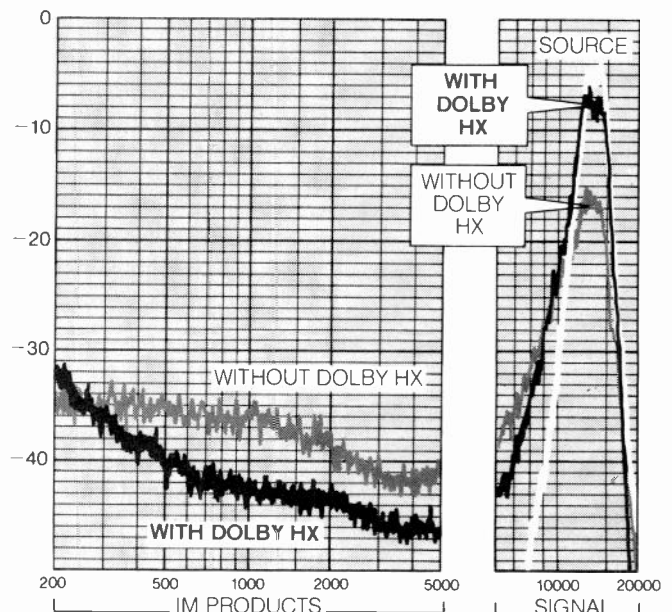


FIGURE 2. As well as increasing high frequency output, Dolby HX reduces IM distortion (The curves were obtained by first recording pink noise through a 1/2-octave filter centered at 12.5 kHz to simulate a musical signal such as a cymbal crash. The results were then played back and charted by a sweeping spectrum analyzer.)

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

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

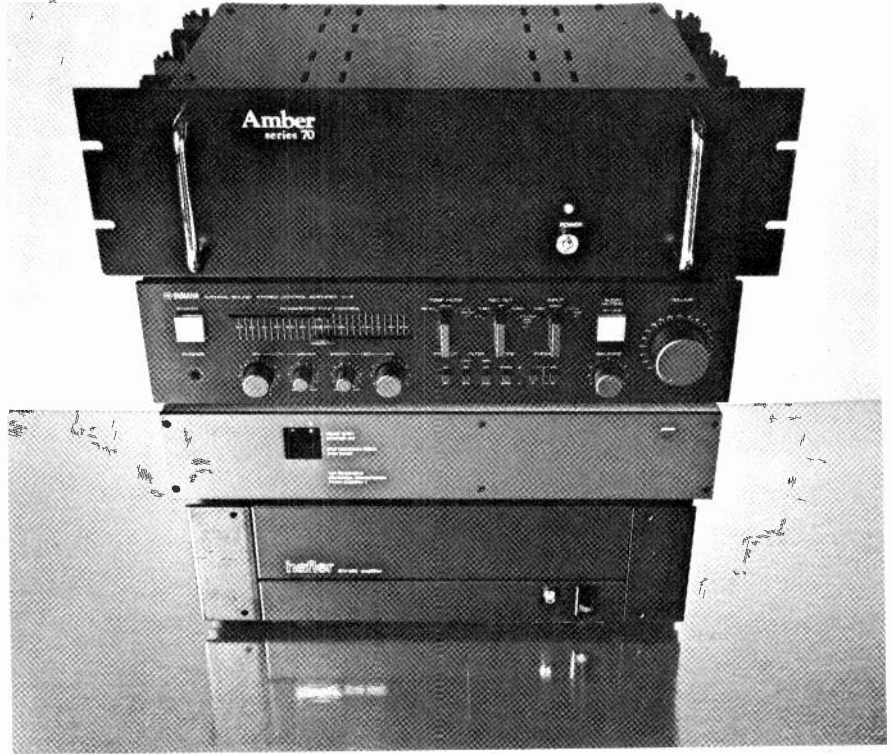
DOLBY LABORATORIES LICENSING CORP., 731 Sansome Street, San Francisco CA 94111, Telephone (415) 392-0300. Telex 34409.

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579 2237

DD **Dolby®**

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.



A Power Amp with a Difference

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.

Apt 1 power amplifier, in metal case. Dimensions: 17 by 3 inches (front panel), 10 1/4 inches deep plus clearance for connections. Price: \$641. Warranty: "limited," three years parts and labor. Manufacturer: Apt Corp., 148 Sidney St., Cambridge, Mass. 02139.

Apt's first amp, like the Holman Preamplifier that preceded it (test report, May 1978), is an astonishing product. Most high-quality equipment evolves by a process of accretion, as circuitry advances are assimilated into the fund of knowledge available to circuit designers everywhere. The process is responsible for the faddism from which audio design—particularly that of amplifiers—suffers in our time; if Problems A through X have been mastered, Problem Y takes on overriding importance, obscuring the possibility that better solutions to many of the "solved" ones might yet be found and enshrining any misconceptions that may crop up along the way. Apt has a different way of working and hence produces radically different designs. Like Descartes, its philosophy begins by going back to basics and, in effect, rebuilding the edifice of conventional knowledge. Its emphasis throughout is on real needs, which entails considerable investigation—and reinvestigation—of the phenomena of in-use systems.

In the present amplifier, for example, a unique approach to speaker matching has resulted from Apt's investigation of how existing speakers and amplifiers interact. (Conventional knowledge about clipping behavior and, in particular, the influence of reactive components in the speaker load and their effect on the driving amplifier proved inadequate.) The result is visible on the Apt front panel as a unique overload indicator. It is a square window that remains dark when there is no input but whose upper half lights green as soon as there is signal in both channels, confirming correct operation. Should either channel be driven to clipping,

"I AM BEETHOVEN!"

the madman
roared.

Could this wild-eyed figure
be the world's greatest
musical genius?

Hear the answer in the
inspired "madness" of the most
magnificent music ever composed.

If you saw this grotesque figure, you'd have thought he was mad. In truth, he was struggling with the desperation and fury of being too deaf to hear the orchestra play his music or the audience applaud it.

But Ludwig van Beethoven broke through the awful silence with tumultuous music that makes the listener's soul expand and the skin chill—as you will discover in the first album of the BEETHOVEN BICENTENNIAL COLLECTION from TIME-LIFE RECORDS.

Hear von Karajan and the Berlin Philharmonic
play the first six symphonies—free for 10 days.

Experience for yourself the surging force of composer Ludwig van Beethoven combined with the methodical force of conductor Herbert von Karajan in what has to be one of the most electrifying musical "collaborations" ever.

In five 12-inch LP stereo disks, recorded by the famous Deutsche Grammophon, you will hear the stirring Leonore Overture No. 3, as well as six complete symphonies, among them:

SYMPHONY NO. 3 ("Eroica") Described by one critic as "the greatest single step by an individual composer in the history of music."

SYMPHONY NO. 5 From brooding drum taps and weeping violins to a jubilant electrifying conclusion.

SYMPHONY NO. 6 ("Pastoral") A trip to the country—complete with nightingale (flute), cuckoo (clarinet) and quail (oboe).

No risk or obligation

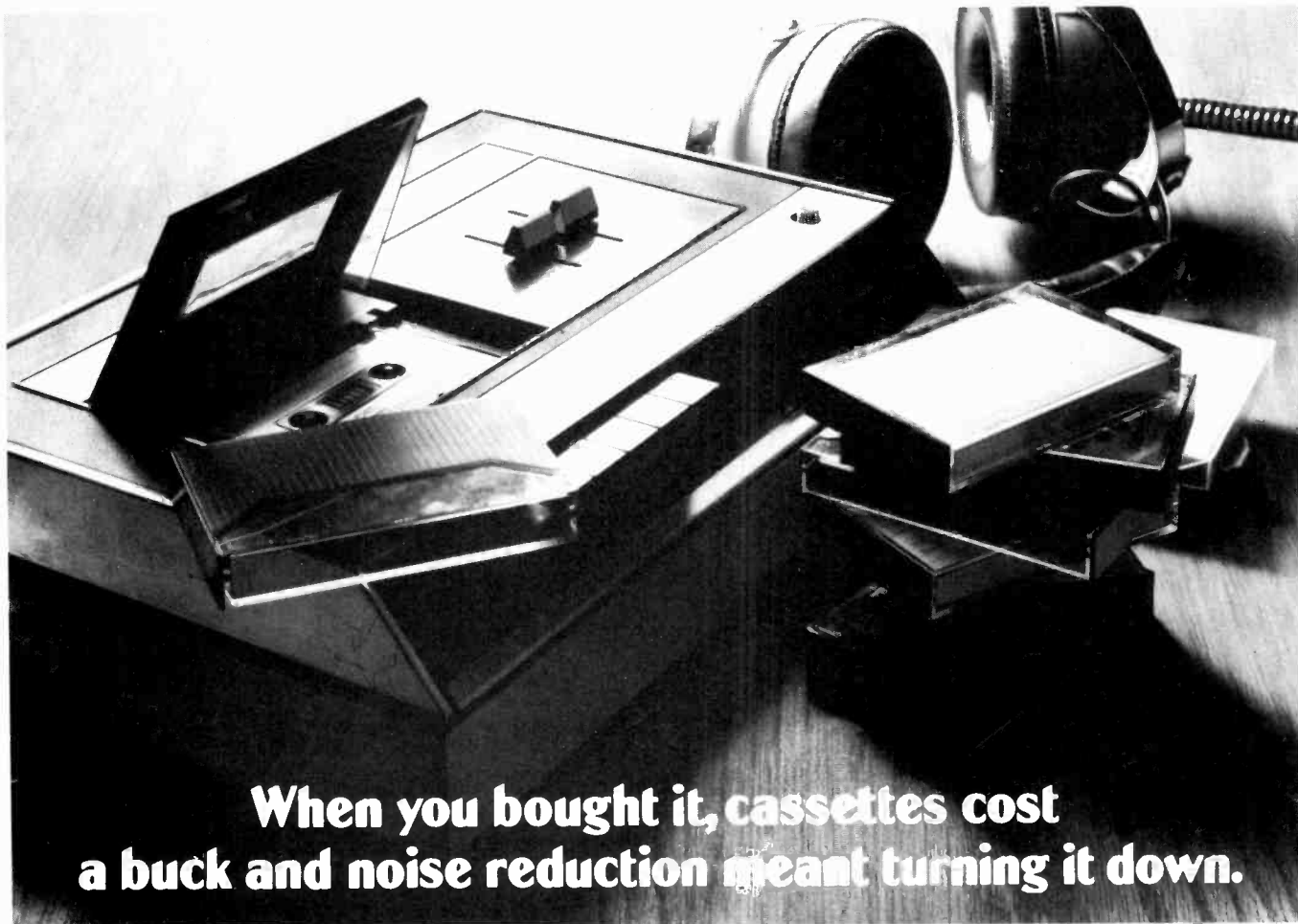
If you are delighted with Volume I, you may keep it for only \$24.95 plus shipping and handling. You will then enjoy free auditions of additional volumes in the Collection... symphonies, Nos. 7-9 (von Karajan)... the celebrated piano sonatas... and so much more. Otherwise just return it within 10 days and your subscription will be canceled. Mail the attached card today. Or write: TIME-LIFE RECORDS, Time & Life Building, Chicago, IL 60611.

The Ultimate Beethoven Collection:

All 9 Symphonies. 7 Overtures.
8 Concertos. 23 String Quartets.
50 Violin, Piano and Cello Sonatas.
52 Lieder. And much, much more.
Performed by today's foremost
virtuosos. Menuhin, Nilsson, Kempff, Fischer-
Dieskau, Fournier, The Amadeus Quartet, Richter

TIME
LIFE
RECORDS

BEETHOVEN BICENTENNIAL COLLECTION



When you bought it, cassettes cost a buck and noise reduction meant turning it down.

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

Aren't you glad you waited to get a new cassette deck?

Because the ultimate technology is here: metal particle tape.

Less tape hiss, higher highs, lower lows, louder output, a wider dynamic range of loud and soft passages ... in short, you can finally record a cassette that's virtually indistinguishable from the source.

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

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

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

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

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

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

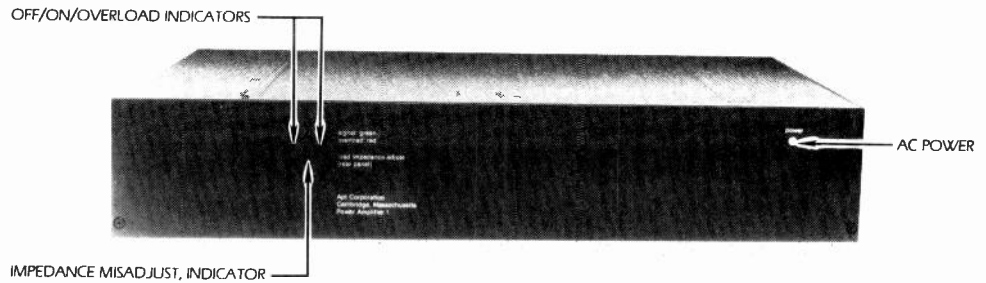
*Correct at time of printing

JVC[®]
US JVC CORP.



KD A8 with B.E.S.T. KD A3, KD A5

Now you're ready for JVC.



Apt 1 power amplifier

RATED POWER	20 dBW (100 watts)/channel
OUTPUT AT CLIPPING (both channels driven)	
8-ohm load	21¼ dBW (135 watts)/channel
4-ohm load*	21 dBW (125 watts)/channel
16-ohm load	19¼ dBW (84 watts)/channel
DYNAMIC HEADROOM (8 ohms)	3 dB
HARMONIC DISTORTION (THD; 20 Hz to 20 kHz)	
at 20 dBW (100 watts)	≤0.017%
at 0 dBW (1 watt)	<0.01%
FREQUENCY RESPONSE (at 0 dBW)	
	+0, -¼ dB, > 10 Hz to 43 kHz;
	+0, -3 dB, < 10 Hz to 270 kHz
INPUT CHARACTERISTICS (re 0 dBW; A-weighting)	
sensitivity	92 mV
S/N ratio	92¼ dB
DAMPING FACTOR (at 50 Hz)	195

Mono mode

RATED POWER	23 dBW (200 watts)
OUTPUT AT CLIPPING	
8-ohm load*	23¼ dBW (240 watts)
4-ohm load*	24¼ dBW (300 watts)
16-ohm load	24¼ dBW (280 watts)
DYNAMIC HEADROOM (8 ohms)*	2½ dB
HARMONIC DISTORTION (THD; 20 Hz to 20 kHz)	
at 23 dBW (200 watts)	≤0.023%
at 0 dBW (1 watt)	≤0.014%
INPUT CHARACTERISTICS (re 0 dBW; A-weighting)	
sensitivity	46 mV
S/N ratio	81½ dB
DAMPING FACTOR (at 50 Hz)	90

*These measurements made with impedance switch in low (nominal 2-4 ohms) position

its "corner" turns red. Unlike the vast majority of output meters and other displays, this one tells you just what you need to know, without requiring cerebration to translate 8-ohm calibration into the actual speaker impedance or to make allowances for dynamic headroom, signal peak factor, and meter ballistics. And since it works by comparing input and output waveforms, the Apt display will respond to any significant distortion mechanism—not just to clipping, though that is the most common mechanism in practice. But there's more. If, in monitoring its own voltage/current requirements, the amplifier discovers that it is working into an effective load of less than 5 ohms, it will light the lower portion of the display. If it does so, you resort to a back-panel switch that reoptimizes the power supply for a lower impedance range. Thus the Apt 1 has much of the load-matching potential of designs incorporating output transformers but without the limitations of the transformer itself. Very neat.

The data suggest what is going on. The 3 dB of dynamic headroom into 8-ohm loads means that the amplifier will deliver twice its rated power on musical peaks, a figure few amps can approach. (Dynamic headroom of about 1 dB is par.) In a conventional design, this would imply the need for protective circuitry to prevent trouble with 4-ohm loads, which draw twice the current for a given output voltage. (Unwanted by-products of common current-limiting schemes were among the most outrageous and unexpected of Apt's findings when it investigated existing designs.) By using separate power-transformer windings for the two impedance ranges, it built its own amplifier to deliver both ample dynamic headroom into 8 ohms and ample power free of spurious by-products into 4. As you can see, steady-state power is virtually the same into both loads with the switch at the appropriate positions. A "stiffer" power supply would have increased 4-ohm output capability at the expense of 8-ohm dynamic headroom—that is, sacrificed real music capability to "nice numbers" in conventional steady-state bench tests. As a result, the Apt will handle 2-ohm loads (set at 2-4 OHMS) with no more sweat than a conventional amp, optimized for 8 ohms, experiences with 4-ohm loads. A related advantage is that, if you decide to strap the two channels via the built-in switching—and hence alter impedance values—the Apt will still handle 4-ohm loads. Every other strappable amp we've measured is rated only for loads of 8 ohms and above in the strapped mode.

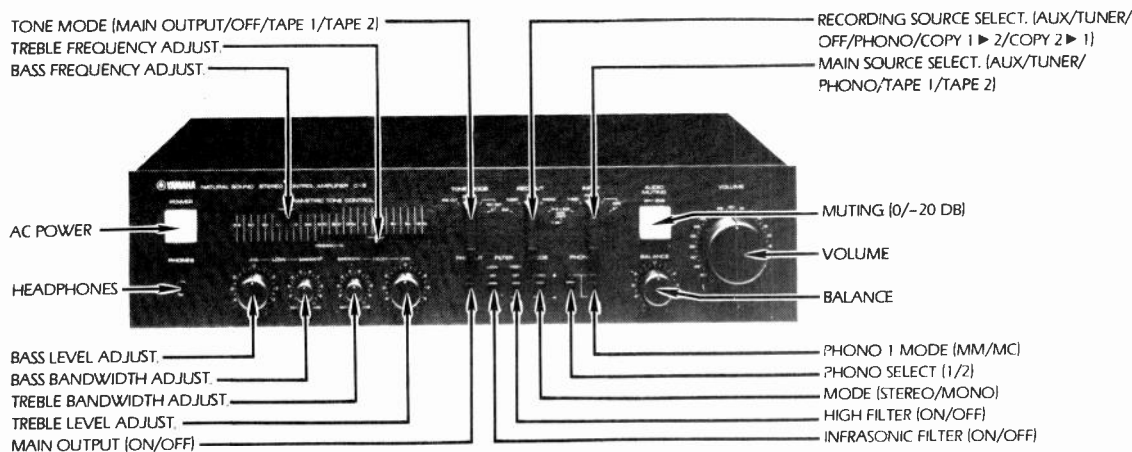
Obviously, we have been deeply impressed by the Apt 1. Its virtues are so sterling and so unmitigated by flaws that we expect it to attract a large following for whom it is the only power amplifier to own. It is superbly clean with an uncommonly wide variety of loads; it is powerful enough for any normal home application; and, not incidentally, it comes with an owner's manual that ought to be a model for the industry. We just don't see how you could go wrong in choosing it.

Circle 136 on Page 79

"Best-Ever" Tone Controls in a Great Preamp

Yamaha C-6 preamplifier, in metal case. Dimensions: 17¼ by 4 inches (front panel), 12 inches deep plus clearance for controls and connections. AC convenience outlets: two switched (200 watts max. total), one unswitched (200 watts max.). Price: \$450. Warranty: "limited," three years parts and labor. Manufacturer: Nippon Gakki Co., Ltd., Japan; U.S. distributor: Yamaha International Corp., Audio Division, P.O. Box 6600, Buena Park, Calif. 90620.

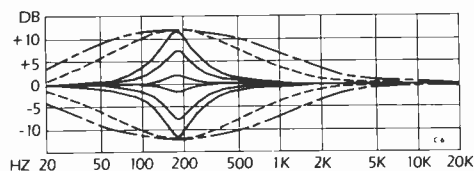
In most respects, the C-6 is the direct descendant of the C-2 preamp we



Yamaha C-6 preamplifier

OUTPUT AT CLIPPING	13.5 volts
HARMONIC DISTORTION (THD: 20 Hz to 20 kHz) aux or phono 1	<0.01%
FREQUENCY RESPONSE	+0, -¼ dB, 13 Hz to 39 kHz; +0, -3 dB, <10 Hz to 164 kHz
RIAA EQUALIZATION	
fixed coil (MM)	+<¼, -¼ dB, 20 Hz to 20 kHz; -1¼ dB at 5 Hz
moving coil (MC)	+<¼, -½ dB, 20 Hz to 20 kHz; -5 dB at 5 Hz
INPUT CHARACTERISTICS (IHF loading; A-weighting)	
aux	sensitivity 40 mV S/N ratio 91½ dB
fixed-coil phono	0.64 mV 79 dB
moving-coil phono	26.5 µV 84½ dB
PHONO OVERLOAD (clipping at 1 kHz)	
fixed coil	235 mV
moving coil	10 mV
PHONO IMPEDANCE	
fixed coil	48k ohms; 240 pF
moving coil	50 ohms
HIGH FILTER	-3 dB at 10 kHz; ca. 12 dB/oct.
INFRASONIC FILTER	-3 dB at 15 Hz; 12 dB/octave

TONE-CONTROL CHARACTERISTICS (treble control set "flat"; bass at its midfrequency, approx. 180 Hz)



- minimum bandwidth setting, level control at +5, +3, +1, -1, -3 and -5
- - - medium (12 o'clock) bandwidth setting, level control at +5 and -5
- · - maximum bandwidth setting, level control at +5 and -5

reviewed enthusiastically in March 1977. In that review we commented that the C-2's spare, subtle, less-is-more approach might be called classic or Apollonian, in opposition to the feature-laden C-1, which represented the Romantic or Dionysian aspect of audio design. Where, then, do we pigeonhole the C-6, which represents a superb synthesis of the two extremes? The best answer may be that it defies pigeonholing of any sort—that it is unique.

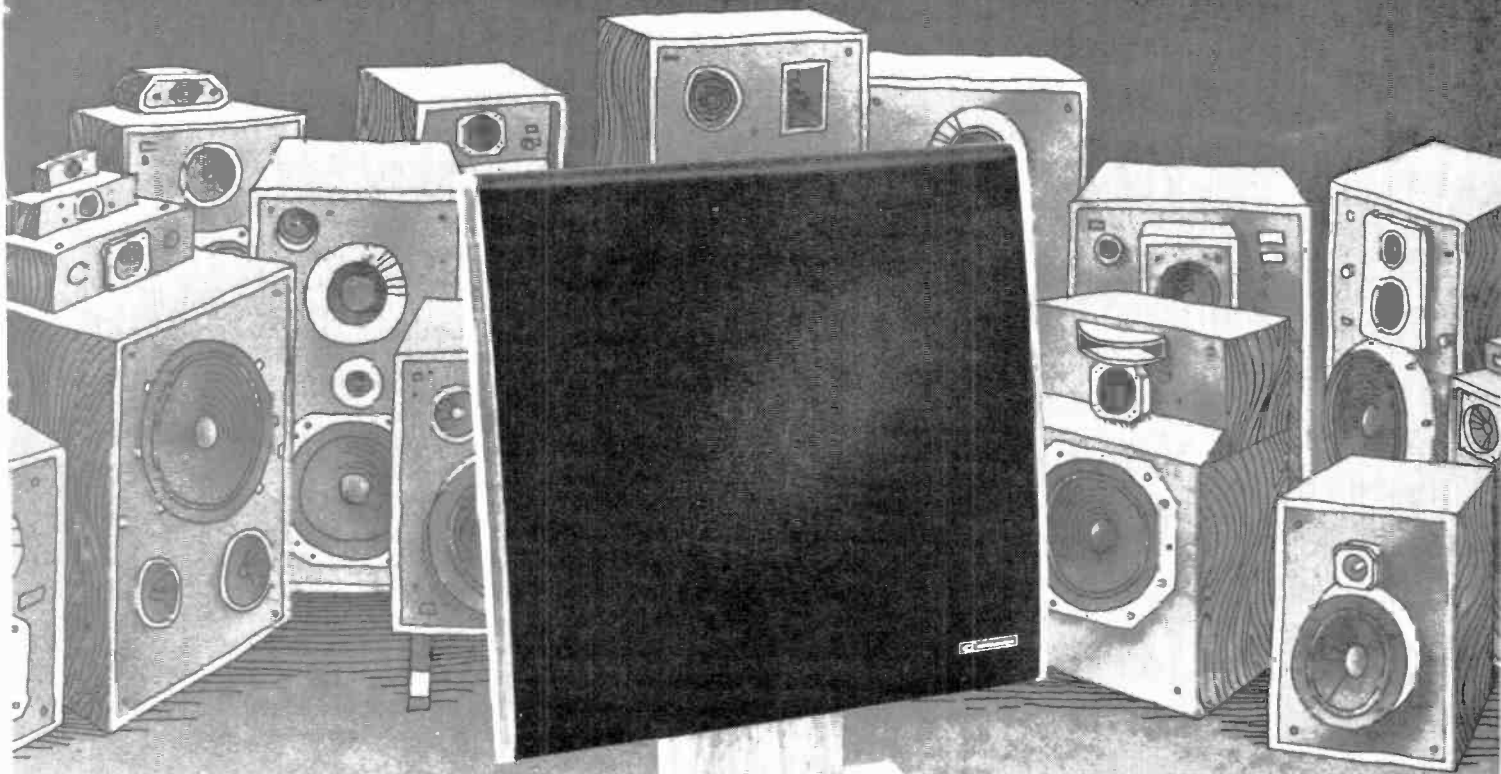
Before discussing why, let's review its points of similarity with the C-2. Its performance is very similar indeed, meaning that it is exceptionally fine. It is svelte both in looks (though the C-2 was even more so) and in tape circuitry. Whereas most preamps use buffers (isolation resistors or, occasionally, active stages) to prevent decks from loading down the preamp when they are turned off, Yamaha provides a switching option to cut off the recording outputs when the decks are not in use and thus provide total isolation. At the same time, this approach almost dictates the separate selectors for the main program source and for the recording-output source, which have the ancillary advantage of allowing different settings for the two so that, for example, you can dub a disc while you listen to FM.

New in this department is the C-6's provision for dubbing between the two decks for which connections are provided, a surprising omission in the C-2. And an immense advantage to the recordist is the fact that the tone controls now can be switched to any of four modes, affecting: the main feed only, the Tape 1 feed only, the Tape 2 feed only, or none of the above—that is, totally out of the circuit. Also new are the HIGH FILTER, which is useful for such things as submarginal FM signals, and the big illuminating buttons for AC POWER and MUTING. A step backward for some users, perhaps, is the omission of left-only and right-only mono positions from the mode switch.

But the difference is the tone-control system. There are three controls each for bass and treble: a FREQUENCY slider (with indexing lines that light up whenever the controls are switched in), a medium-sized LEVEL knob (for boost or cut, with a detent at the "flat" position), and a small BANDWIDTH knob. In other words, the system constitutes a two-band parametric equalizer. Our graph shows a family of curves that it will produce at just one FREQUENCY setting (180 Hz), but infinite variations are possible. With the sliders at their extremes (about 35 Hz in the bass and 13 kHz in the treble, in our measurements) and both BANDWIDTH controls at maximum, the LEVEL knobs behave like conventional tone controls. If you then move the sliders closer to the center of the frequency range, the result is like having an infinitely variable turnover for each range. Further variations are available via BANDWIDTH. If you want to boost the presence range, for example, bandwidth should be reduced somewhat; to tame high-frequency resonant peaks (typical of early electrical cutters or cassette recordings made on tapes too "hot" for a deck's built-in bias setting), still narrower bandwidth is needed.

Both on the test bench and in listening we found these options fascinating. Diversified Science Laboratories ran far more curves than are shown here, using every pen color in its arsenal to differentiate the various options, and all are remarkable in their symmetry and regularity. BANDWIDTH settings are unaffected by FREQUENCY, FREQUENCY by LEVEL, and so on; the results are not only ultrasmooth,

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The Dahlquist DQ-10 has become the most imitated speaker system in high fidelity. There's been a cascade of obvious imitations, with prices going up and down the scale.

But the Dahlquist approach is locked into patents embodying the solution to the critical problems of time delay *and* diffraction delay distortion. Thus, the impersonators can offer only the words, not the music of the original.

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DQ-10 its extraordinary qualities: the ability to reproduce music with unprecedented clarity and spaciousness. It just doesn't make sense to spend hard-earned money for an imitation (at any price), when you can have a pair of the original at surprisingly low cost.

Write to us and we'll send complete information on why the DQ-10 sounds the way it does. Or better still. Ask your dealer for a demonstration. You may find that you don't care *why* it sounds so great. Only that it does.

DAHLQUIST

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but ultrapredictable. And these qualities pay off in the listening room, where we assembled every recording we could find with response anomalies in need of correction. In example after example, the Yamaha came through superbly. The easiest way to correct peaks, we discovered, is to set BANDWIDTH to minimum and LEVEL for boost, then tune FREQUENCY until the peak is given its nastiest exaggeration. This establishes the frequency of the resonance, which then can be controlled by setting LEVEL for cut instead of boost, and experimenting with BANDWIDTH for optimum results in the surrounding frequency range.

The C-6 is not the only preamp with parametric controls, or even the only one we have tested. What sets it apart from the few similar models we know of is the design of the controls themselves. The fact that it can be used as though the controls were conventional is a big plus in households where some users are not particularly sophisticated in sonic matters, but even old audio hands reach instinctively for the controls they want because of their differentiation in size, shape, and placement. This certainly is not true, in our experience, of all-slider designs. Novices may still find the arrangement intimidating and easy to misadjust; many users will undergo considerable education in mastering it (and probably will learn more about audio in general in the process). We find it constitutes the most genuinely useful tone-control system we have ever encountered, bar none. It is far less appropriate as a speaker equalizer, to be sure, but we believe that that function does not belong on a preamp, where it can and will be tampered with, whatever claims may have been made elsewhere for dual-purpose program/speaker equalizers in preamps.

We consider the C-6 to be among the great preamplifiers. But if good audio design has solid precedents at Yamaha, so does faceplate labeling that is less than hold: we expect some users to complain about visibility, particularly in the row of small switches shadowed by the selectors above them, on the black front panel. Our recommendation is that you work out your listening setup and your room lighting to solve the problem; for a preamp of this quality, it's worth it.

Circle 134 on Page 79

Amber Series 70 power amplifier, in rack-mount metal case. Dimensions: 19 by 5¼ inches (front panel), 9 inches deep plus clearance for connections and handles. Price: \$450. Warranty: "limited," three years parts and labor. Manufacturer: Amber Electronics, Inc., 917-B Preston Ave., Charlottesville, Va. 22903.

Amber's first product, the Series 70 amplifier, suggests (as does its literature) that it plans to straddle the consumer and professional fields, perhaps with more emphasis on the former. From the outside, however, the amp looks almost forbiddingly professional: Such details as the rack-mount case, the mono (strapping mode) switch and the multipurpose (binding-post/banana-plug) output terminals on the back panel, and even the multiple fuses nearby all tend this way. And there is the usual three-pronged power cord, which can prove a minor hassle in some homes. But the input terminals are regular pin jacks (not the phone jacks of much pro gear). And, when you think about it, the fuses may be even more of a boon in the home than elsewhere. The all-too-common alternative hides them inside the amplifier. The roadie whose band goes dead because a fuse has blown at least should know where to look; the average audiophile must lug the amp off to the repair shop and wait in silence for its return.

That's about it for features; the rest of the story is in performance, which is powerful and clean, as the measurements at Diversified Science Labs show. The mono strapping option provides a considerable boost in output power at some measurable—though not, under ordinary circumstances, audible—expense in distortion and noise and the loss of a 4-ohm rating. All of this is predictable behavior in a strappable amp; it would have to be designed for 2-ohm operation unstrapped to operate successfully into 4 ohms strapped. As it is, the lab had to replace a fuse after running the Series 70 through the 4-ohm (unstrapped) clipping test.

The back-panel receptacles hold a total of seven fuses: for plus and minus power supplies in each channel, for each speaker, and for AC line power. The speaker fusing might generally imply some loss in damping factor because the loudspeakers see the fuse resistance as part of the amp's internal impedance (the

Welcome, Amber

Amber Series 70 power amplifier

RATED POWER	18½ dBW (70 watts)/ch.
OUTPUT AT CLIPPING (both channels driven)	
8-ohm load	18½ dBW (75 watts)/ch.
4-ohm load	20½ dBW (170 watts)/ch.
16-ohm load	16½ dBW (45 watts)/ch.
DYNAMIC HEADROOM (8 ohms)	1½ dB
HARMONIC DISTORTION (THD; 20 Hz to 20 kHz)	
at 18½ dBW (70 watts)	≤ 0.035%
at 0 dBW (1 watt)	≤ 0.035%
FREQUENCY RESPONSE (at 0 dBW)	
	+0, -¼ dB, 13 Hz to 21 kHz;
	+0, -3 dB, < 10 Hz to 83 kHz
INPUT CHARACTERISTICS (re 0 dBW; A-weighting)	
sensitivity	140 mV
S/N ratio	88 dB
DAMPING FACTOR (at 50 Hz)	345

tech talk:

-70db rumble

explained.

When it comes to stereo, what you can't hear can delight you. And the tech talk above demonstrates this. It's a measurement of a kind of noise that occurs in turntables. This measurement is called rumble.

Rumble is caused by motor vibration. Vibration that is transmitted to the turntable platter. The platter in turn transmits the vibration to the pickup or cartridge. The cartridge then translates the vibration into an audible electrical signal. A signal you definitely don't want to hear. That's why the specs on this page are so great. A figure of -70db represents rumble so minimal your ear can't hear it. And these are precisely the specs you get in the incredible MCS® Series 6602 and 6700 turntables.

The main reason for this amazingly silent operation is a direct-drive DC servo motor. A motor that is an integral part of the platter and, therefore, has fewer moving parts to

cause vibration. The result, virtually silent operation and constant speed. But great specs are just part of what you get in the 6602 and 6700 turntables. You also get a tracking weight adjustment control to help prevent damage to your records and stylus. A bias control that minimizes skating. A Shure cartridge valued at \$50.00. And, of course, silent operation. And when it comes to great turntables—silence is golden.

The MCS® Series 6602 and 6700 turntables. Only at JCPenney. Model 6602 semi-automatic turntable \$179.95.* Model 6700 fully automatic multiple play turntable \$229.95*

Prices higher in Alaska, Hawaii and Puerto Rico.

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

MCS® Series Audio Components sold exclusively at JCPenney.



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IT MAKES EVERYTHING CLEAR.

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Now there are two approaches
to low THD.

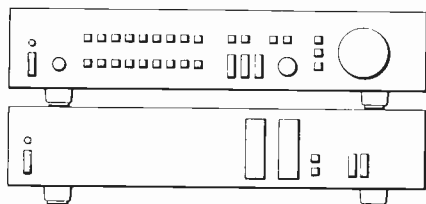
Ours gives you better sound.



Harman Kardon introduces low negative feedback design. High Technology Separates with low THD and inaudible TIM— for incredibly clean, open sound.

For the last few years, audio manufacturers have been rushing to bring you newer, lower THD (Total Harmonic Distortion) levels in their amplifier sections. And every year, they've accomplished this objective the simplest way they could. By adding more and more negative feedback, a form of electronic compensation that feeds the amplified music signal back through the circuit.

Unfortunately, this universal "cure" for THD—high negative feedback, typically 60-80 dB—creates a new form of distortion. It's called Transient Intermodulation Distortion, or TIM. And it's much more audible than THD. TIM causes music to become harsh, metallic and grating. And the spatial relationship of the instruments to become vague, smearing the image.



At Harman Kardon, our new 700 series amp and preamp give you low THD figures, too. But we did it the right way—by properly designing the amplification circuitry to deliver low THD even before we apply negative feedback. That keeps our negative feedback at just 17 dB. And our TIM level at just .007%. Well below the audible threshold.

The result is pure, clear, transparent sound and stereo imaging that places instruments and vocals precisely.

***Dolby** and the double-D symbol are trademarks of Dolby Laboratories.

Beyond TIM.

Of course all the Harman Kardon components incorporate our traditional ultrawideband design, which provides fast transient response and phase linearity. We also use discrete components instead of integrated circuits, which create their own distortion.

But beyond these major design considerations, we've also paid attention to all the small details.

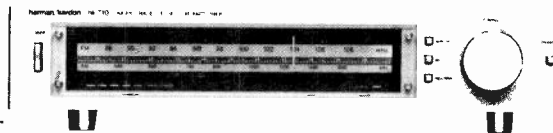
In the hk725 preamplifier, for instance, we used fixed resistor pushbuttons for tone controls. They introduce less distortion than rotary knobs. We also incorporated DC coupled FET front ends in both our 8-stage phono section and our high level stage. Again, less distortion. And improved signal-to-noise ratio.

On the hk770 power amplifier, we used two separate toroidal power supplies, which eliminate cross-talk and hum. And DC coupling, which provides tighter, more articulate bass.

Performance matched separates.

Once we designed the heart of our new 700 series High Technology Separates, we addressed the remaining components just as carefully.

The hk715 digital quartz-locked tuner gives you a full complement of features. It locks in to the channel center every time. And stays there, drift-free. It also has a memory subsystem that lets you store up to 8 stations and recall them instantly at the touch of a button.



We designed a linear phase analog tuner as well. The hk710. With an improved version of the phase-locked circuitry we introduced to the industry nearly 10 years ago. It remains the industry standard today for quality tuners.

Then there's the hk705 cassette deck. With metal tape capabilities, and a frequency response of 20-19,000 Hz (± 3 dB). And the all-new Dolby* HX headroom extension circuitry. It provides an added 10 dB of high frequency headroom, as well as a 68 dB signal-to-noise ratio that is comparable to open reel decks that cost twice as much.

Once we finished the inside, we went to work on the outside. To bring you a striking system of modular separates. Each measuring a compact 15.2" wide x 2.9" high.

These performance matched separates stack beautifully. They give you a noticeably cleaner, clearer, less distorted sound than any system anywhere near the price.

We suggest you audition them. But only if you're serious.

Once you hear the difference, you'll never be satisfied with anything less.

(For the location of the Harman Kardon dealer nearest you, call toll-free 800-528-6050, ext. 870.)

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

Toshiba has solved the problem of mistuning by eliminating the need for a center channel tuning meter. Instead, digital frequency synthesis uses a carefully selected quartz crystal to produce a stable reference frequency. In plain English, this system constantly corrects tuning errors. The result is the lowest possible distortion and absolutely no drift. Toshiba was the first to utilize this system in a receiver, and now we're using it again in our SA-850 receiver.

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

No unnecessary parts.

We've eliminated the center channel tuning meter, FM/AM dial scale and tuning knob. So you can tune automatically or manually with the ease of pushbutton selection. You get LED digital readout and 5 LED signal strength indicators.

You'll thank us for the memory and scan.

Actually, you'll thank digital frequency synthesis. Because only with



1. Behind this digital readout is a conventional tuning system. It requires a center channel tuning meter and manual tuning.



2. Behind this digital readout is a quartz-locked tuning system. More accurate, but it still requires a center channel tuning meter. And it still requires manual tuning.



3. Behind this digital readout is the Toshiba quartz PLL digital frequency-synthesized tuning system. A totally electronic system that's never subject to manual mistuning. Accurate to 0.0025%.

this process can you store 6 FM and 6 AM stations for instant recall tuning at the touch of a memory button.

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

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

Power you'll respect.

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

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

A preamp you'll appreciate.

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

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

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

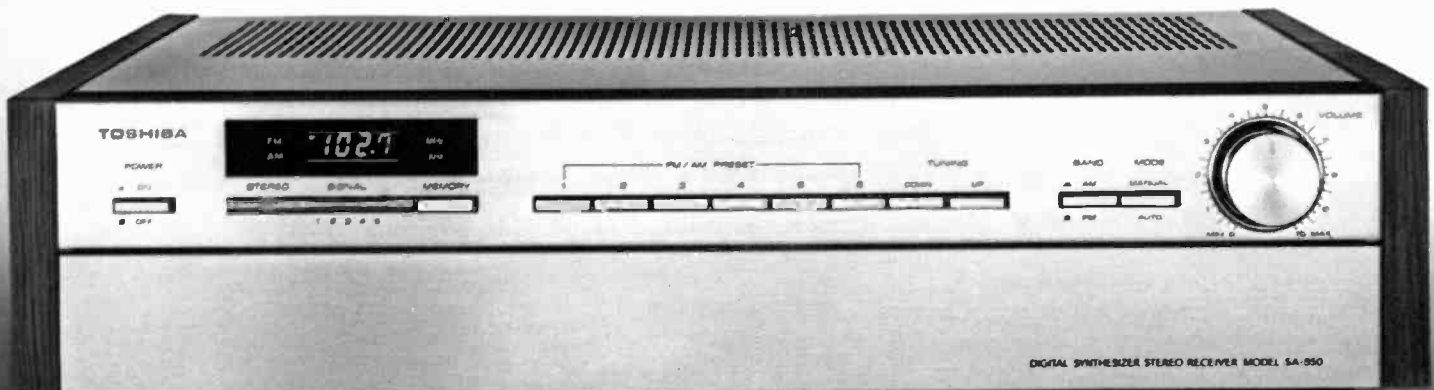
The Toshiba SA-850 digital frequency-synthesized receiver.

The next time you're looking at receivers, don't believe every digital readout you read.

Except ours.

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Again, the first.

Toshiba America Inc. 280 Park Ave., New York, NY 11710



DIGITAL SYNTHESIZER STEREO RECEIVER MODEL SA-850

Mono mode

RATED POWER	23 dBW (200 watts)
OUTPUT AT CLIPPING	
8-ohm load	23½ dBW (225 watts)
16-ohm load	21½ dBW (140 watts)
DYNAMIC HEADROOM (8 ohms)	2 dB
HARMONIC DISTORTION (THD; 20 Hz to 20 kHz)	
at 23 dBW (200 watts)	≤ 0.084%
at 0 dBW (1 watt)	≤ 0.069%
INPUT CHARACTERISTICS (re 0 dBW; A-weighting)	
sensitivity	70 mV
S/N ratio	80½ dB
DAMPING FACTOR (at 50 Hz)	95

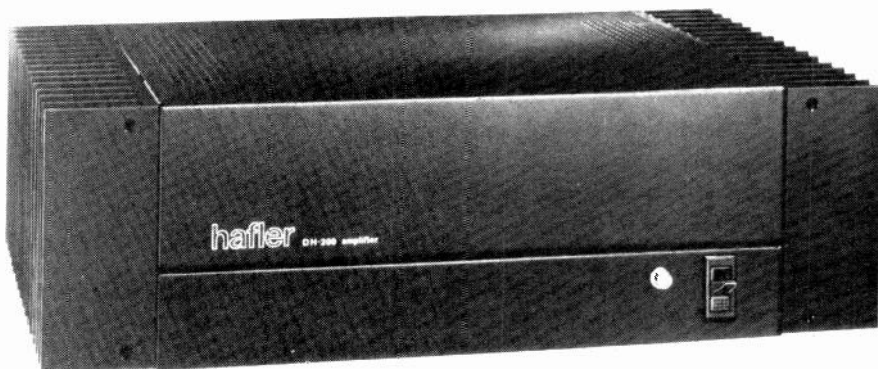
reciprocal of damping factor), yet the data show low-frequency damping factors that are very high strapped and extremely high unstrapped. We measure only at 50 Hz, as an index of the amplifier's ability to keep bass tight in driving the speaker; the figures may be lower at higher frequencies, but we consider this immaterial in today's equipment. There also is current limiting in the standard version of the Series 70 (which we tested); as an "audiophile option," you can buy a model (at the same price) without current limiting. In theory, this should reduce the likelihood that a reactive speaker load may induce protective misbehavior at levels below the amp's normal clipping. According to Amber, the fusing should normally provide all the protection you need. To this extent, the current limiting gilds the protection lily—at some possible expense in audible by-products.

Of more concern during DSL's bench tests was the Series 70's lack of a turn-on muting relay or similar device. In listening, we noticed no oddities at turn-on, though the test systems in which we used the amp include no other components with marked turn-on transients. If yours are troubled with this phenomenon (which we find increasingly common) and you turn them on along with or after the Amber, your speakers will take the full brunt of their surge. And DSL did observe appreciable surge from the Series 70 itself. Potentially more dangerous is the way this model distorts if high-level signals continue at its input after it is switched off. As its power supply discharges, output remains high, with increasing quantities of high-order harmonics; like the similar by-products of clipping, they could put quite a strain on tweeter voice coils. But this is admittedly a "what if" matter, not a question of observed misadventure. In using such an amp, fitted with a grounding plug, we always carry its AC cord directly to the wall outlet, so that it must be switched on individually. And, given that setup, we automatically find ourselves addressing its on/off switch last, whether in turning the system on or off. Conclusion: A muting relay of the type commonly built into power amps might have been nice, but we can live without it.

In playing our best program sources through the amp, we were delighted by what we heard. But we are with any good amp. Suffice it to say that the Amber Series 70 is a fine power amplifier and that you could spend considerably more on a model of comparable power without finding any overriding justification for the additional expenditure.

Circle 133 on Page 79

David (Hafler)'s MOS FET Goliath



Hafler DH-200 power amplifier, in metal case. Dimensions: 16 by 5½ inches (front), 10½ inches deep plus clearance for connections. Price: \$429.95 (\$329.95 in kit form); DH-202 mono bridging adapter (not tested), \$24.95; DH-201 rack-mounting panel, \$24.95. Warranty: "limited," one year parts and labor; kit, one year parts, \$40 partially refundable labor charge to correct miswiring. Manufacturer: The David Hafler Co., 5910 Crescent Blvd., Pennsauken, N.J. 08109.

Though the David Hafler Company is little more than a year old, its namesake and founder is anything but a newcomer to audio. As cofounder of Dynaco and its chief engineer for many years, Hafler earned for himself almost

Hafler DH-200 power amplifier

RATED POWER	20 dBW (100 watts)/channel
OUTPUT AT CLIPPING (both channels driven)	
8-ohm load	21 dBW (125 watts)/channel
4-ohm load	23 dBW (200 watts)/channel
16-ohm load	19 dBW (80 watts)/channel
DYNAMIC HEADROOM (8 ohms)	2 dB
HARMONIC DISTORTION (THD; 20 Hz to 20 kHz)	
at 20 dBW (100 watts)	<0.01%
at 0 dBW (1 watt)	<0.01%
FREQUENCY RESPONSE (at 0 dBW)	
	+0, -¼ dB, < 10 Hz to 25 kHz;
	+0, -3 dB, < 10 Hz to 115 kHz
INPUT CHARACTERISTICS (re 0 dBW; A-weighted)	
sensitivity	150 mV
S/N ratio	95½ dB
DAMPING FACTOR (at 50 Hz)	240

New Measurement Standards: In making comparisons between current reports and those published in the past, readers are cautioned to pay particular attention to the reference levels and similar test criteria cited. S/N ratios for electronics, in particular, are measured very differently now that we have adopted salient features of the new IHF amplifier-measurement standard. While we believe that the new technique (which also implies a saner approach to loading of all inputs and outputs) will result in measurements that more perfectly reflect audible, in-use effects, they cannot be compared directly to the numbers resulting from the former, more conventional lab measurements.

cultlike status among high fidelity cognoscenti for his innovative audio componentry. The DH-200 power amp, the new company's second product (the first being the DH-101 preamp), differs from any other American amplifier in its use of power MOS FETs (the acronym for metal oxide semiconductor field effect transistors). The basic MOS FET should not be unfamiliar to audiophiles; it has been widely used in FM tuner front ends for its excellent linearity and low distortion. Hitachi recently modified the device to accept the high current levels needed in audio output stages.

According to Hafler, use of power MOS FETs in the DH-200 affords several advantages. The fact that, unlike conventional bipolar transistors, they are not prone to thermal runaway, increases both long-term reliability and resistance to self-destruction under abusive operating conditions. Because of this inherent characteristic, Hafler was able to design the unit without current-limiting circuits. MOS FETs' characteristically high input impedance matches the requirements of voltage drive and thus achieves economies in circuitry topology. And their very fast switching allows the amp to respond to transients with a linearity that conventional transistors cannot match.

Like the products he designed for Dynaco, the DH-200 is available either in kit form or prewired. (We tested the assembled version.) After studying the well-written assembly manual and the diagrams that accompany it, we believe that consumers who have only a middling knowledge or experience in kit building can safely tackle the job. Audio modules (printed circuit boards and heat sink assemblies) for the left and right channels come preassembled and pretested, leaving the builder the relatively simple task of hooking up the switching and power supply circuits.

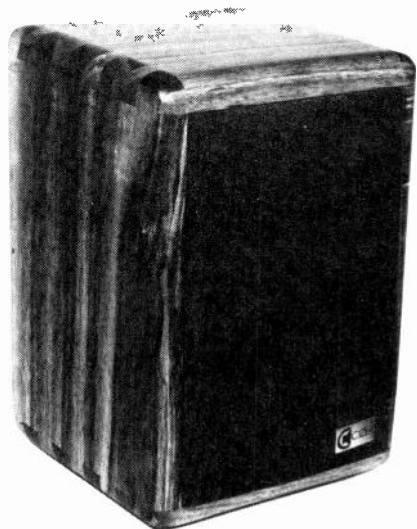
There is nothing frilly or gadgety about the design. Its black faceplate bears only a power switch and a thermal overload indicator. The back panel repeats this simplicity, with left and right inputs and speaker outputs grouped by channel. A pair of 2-amp speaker fuses are also accessible on the back panel, and the unit comes with two 5-amp fuses as well, for use when powering 4-ohm speakers at very high listening levels. There is no built-in provision for mono strapping. The optional bridging circuit board converts the DH-200 to mono operation with a rated output of 300 watts into 8 ohms. If you're one of those who thinks of rosin only as something you apply to violin bows, you can have the factory install the board.

Bench tests reveal that this is a very fine amplifier indeed. It is rated by Hafler at a total harmonic distortion of 0.02% (per FTC requirements); the most Diversified Science Laboratories could detect was less than half that figure, and distortion products generally proved too small for measurement at all. Steady-state power output also beats spec handily, and the generous dynamic headroom means that the equivalent of 22 dBW (160 watts) can be delivered into 8 ohms with typical music. And the whopping damping factor means never having to say you're sorry the amp can't control your woofer. The only technical refinement missing, perhaps, is turn-on delay circuitry. Since sharp turn-on transients from a preamp (if it does not contain its own delay relay) can threaten speakers, the owner's manual suggests a turn-on order to be faithfully followed: preamp first, followed a few seconds later by the DH-200 (which should be switched off first).

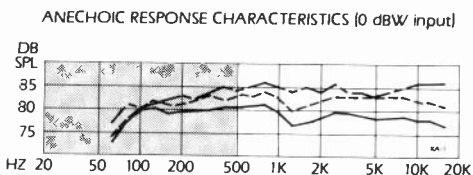
This amp sounds as good as the test data indicate it should sound; that is, it doesn't introduce any audible personality of its own. After an hour or so of use at relatively high listening levels, the heat sinks are still touchable. The audiophile searching for high technology and power output but not high cost will be delighted by the DH-200, particularly in view of the \$100 saving in the kit version. It looks to us as though David Hafler has yet another triumph on his hands.

Circle 135 on Page 79

A Bold Beauty from Cizek



Cizek KA-1 Classic loudspeaker



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

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

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

PULSED OUTPUT (at 300 Hz)
 118½ dB SPL for 35 dBW (3,200 watts) peak

"NOMINAL" IMPEDANCE 3.4 ohms

Cizek Model KA-1 Classic loudspeaker system, in wood cabinet. Dimensions: 9 by 13 inches (front), 8¾ inches deep. Price: \$590 per pair. Warranty: "full," five years parts and labor. Manufacturer: Cizek Audio Systems, Inc., 15 Stevens St., Andover, Mass. 01810.

The KA-1 "Classic" is well named, indeed: The materials and obvious craftsmanship lavished on this small, two-way system seem almost anachronistic in this cost-conscious age. In the place of particleboard and vinyl "veneer," Cizek has opted to form the enclosure of ¾-inch koa wood (from a tree native to Hawaii), and instead of simple glued bevel joints, corners are lovingly dovetailed and rounded on ¾-inch radii. The visual and tactile effect of such workmanship is, in a word, superb. Classic, too, is the acoustic-suspension operating principle of the speaker; though no longer the pre-emptive favorite it once was, air-suspension design did make stereo a practical reality and, in so doing, became an important part of our sonic heritage.

All this should not suggest, however, that Cizek has turned its back on modern techniques. Decidedly untraditional is the use of a synthetic material in the baffle board. Formed of a 1-inch thick slab of Acuthane (a dense plastic), the exceptionally stiff baffle board is claimed to provide excellent damping characteristics. Also part of contemporary thinking in speaker design is the foam pad surrounding the tweeter to head off spurious reflections from the baffle or cabinet. The speaker complement itself consists of a 6½-inch woofer and a 1-inch dome tweeter.

Unlike the first Cizek speaker (test report, June 1977), there are no frequency-contouring controls on the KA-1. But its extremely well-controlled impedance values, observed in tests made at CBS Technology Center, recall the earlier model. Though nominal impedance is on the low side at 3.4 ohms, the maxima (at the resonance frequencies of the two drivers) barely exceed 8 ohms.

Despite its diminutive size, this speaker can handle large amounts of power. It easily negotiated CBS's 20-dBW (100-watt) continuous input test without exceeding distortion limits and withstood up to 35 dBW (more than 3 kilowatts) of pulsed input before distorting excessively. Efficiency, predictably, is a bit low, part of the price one pays for a compact acoustic-suspension design.

At moderate listening levels, both second and third harmonic distortion average out to less than ½% over most of the audio band. At high levels (100 dB SPL), however, the situation is somewhat more complex, and they average about 1%, with peaks to 5% showing up in the second-harmonic tests and to 7% in third harmonic. It should be noted that harmonic distortion does not necessarily indicate poor sound; every speaker presents its own sonic personality in terms of its harmonic coloration, and in many respects we found listening to the KA-1 an exciting experience.

In terms of its stereo imaging, the Classic might be called an illusionist: Much of the music seems to emanate from in front of the speakers, giving it a right-there-in-the-room quality. Subjective opinions on this phenomenon differed markedly in our listening tests, with some auditioners applauding the immediacy and others wishing for more depth and subtler spatial definition between the speakers. Those whose tastes run to popular music were the most enthusiastic, classicists the harshest critics.

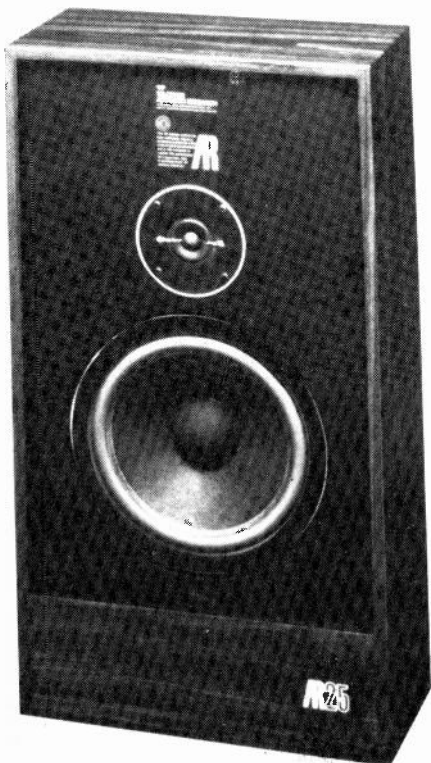
None, however, could fault the KA-1 for its ability to handle a wide musical spectrum for its size. Bass notes emerge with clarity and punch, and vocals (aside from the forwardness, which shows up most readily in the midrange) are exceptionally transparent. High-frequency reproduction, though judged excellent for a wide variety of instruments, emphasizes some details that might not ordinarily be heard at a live performance—the breathiness of flute tone or the attack of the bow on violin strings. While these effects certainly contribute a sense of drama, we are divided on whether this adds to or detracts from long-term listenability.

It's obvious that we have subjected the Cizek to tough scrutiny, but a speaker as distinctive as this demands it. There is nothing shy or retiring about the KA-1. Both sonically and cosmetically, it commends itself boldly to your attention, challenging convention. And that alone is a welcome trait in a world of many look-alikes and more than a few sound-alikes.

Circle 131 on Page 79

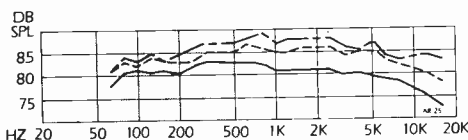
Continued on next page

Sterling Speaker for AR's Anniversary



AR-25 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)
81½ dB SPL for 0 dBW (1 watt) input

CONTINUOUS ON-AXIS OUTPUT (at 300 Hz)
106 dB SPL for 19 dBW (80 watts) input

PULSED OUTPUT (at 300 Hz)
119 dB SPL for 32 dBW (1,600 watts) peak

"NOMINAL" IMPEDANCE 5 ohms

APPROX. TWEETER CONTROL RANGE (re "flat")
-2 dB above 3 kHz

Acoustic Research AR-25 speaker system in vinyl-veneer cabinet. Dimensions: 11¼ by 21½ inches (front), 8 inches deep. Price: \$110. Warranty: "full," five years parts and labor. Manufacturer: Teledyne Acoustic Research, 10 American Dr., Norwood, Mass. 02062.

With twenty-five years of solid achievement to look back on, Acoustic Research has reason to celebrate, and it has chosen to mark its silver anniversary by introducing a speaker—named, appropriately enough, the AR-25—that pays homage to the past without ignoring the present. The two-way system's driver complement consists of an 8-inch acoustic-suspension woofer and 1½-inch tweeter. Unlike the company's classic bookshelf models, the drivers are aligned along the baffle board's vertical axis, an idea introduced in the AR-9 (test report, October 1978) to afford superior imaging qualities. The tweeter employs magnetic fluid in the voice-coil gap to help dissipate heat and thereby raise the tweeter's power-handling capability. The amplifier connections are screwdown posts on the rear of the speaker, and a two-position toggle switch immediately above them attenuates high-frequency response.

The positioning of the logo on the enclosure and the vertical alignment of the drivers seem to demand the speaker be used vertically, though we found no mention of this in the product literature. But its depth—a skinny 8 inches—is unusually well suited to bookshelves, which generally implies horizontal orientation. Our own evaluation of the speaker's imaging qualities showed that both vertical and horizontal placements offer good results.

In tests at CBS Technology Center, the AR-25 accepted 19 dBW (80 watts) continuous input at the onset of buzzing for a sound pressure level of 106 dB. In pulse power tests, it successfully handled peaks of 32 dBW (1½ kilowatts) for a deafening 119 dB SPL. The nominal impedance of 5 ohms at 140 Hz, an area with much musical energy, combined with the modest efficiency of the speaker, suggests heavy current demands on loud passages and would preclude paralleling two pairs of 25s from many solid-state power amps. Frequency response is remarkably flat over a wide portion of the audio band, with lots of output down to about 50 Hz. The very gentle high-frequency control starts rolling off response at 2 kHz but never exceeds 3 dB of attenuation.

The harsh-sounding third harmonic distortion products are extremely low at moderately loud listening levels (81½ dB SPL, at 300 Hz); even at very loud levels (100 dB) they average only about ½%. Second harmonic distortion remains vanishingly low at moderate listening levels, though at loud levels it is consistently about 3% through the midbass and lower midrange where most music energy tends to be. In its ability to reproduce transient waveforms, the AR-25 shows virtual mirror images of both the 300-Hz and 3-kHz pulsed inputs.

Auditioners were unanimous in appraising this speaker as a pleasant, musical performer. Its sound is neither dramatic nor intrusive, and the depth and definition of the spatial image it creates suggest the concert hall rather than, say, the cabaret. Instrumental timbres are well defined within the orchestral mix. Some of our auditioners whose tastes run to pop vocals found a certain reticence in the projection of voices and commented on a slight hollowness of tone; among those with a taste for the classics, the comments centered on the smoothness and subjective accuracy of the sound.

And when the modest price is taken into account, the AR-25 must be reckoned a remarkable achievement. It definitely warrants a hearing by the audiophile on a budget, who should find AR's implied invitation to join in celebrating the anniversary hard to resist.

Circle 132 on Page 79

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Paulina

Diana

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The Ella Fitzgerald/ Norman Granz Songbooks: Locus Classicus of American Song

by Benny Green

When producer Norman Granz (Jazz at the Philharmonic) acquired Ella's recording contract in 1955, he launched his "grand design": to rescue from oblivion the best of our songwriters' art from Kern, Berlin, and Gershwin to Rodgers and Hart, Mercer, and Arlen.

In 1955, after twenty years of slaving at the commercial galleys, Ella Fitzgerald terminated her recording arrangement with Decca. This unheralded event turned out to be of inestimable benefit not only to her, but also, curiously enough, to American music and its chances of ingratiating itself with posterity.

In her long years with Decca, Ella had with ease applied her astonishing talent to whatever forgettable morsels were placed before her. In looking back at the recorded output of those years, the student of such affairs can see that, whatever else might be said in defense of it, there was certainly no true sense of aesthetic direction. The chances are that Ella was simply seen as part of a stable of female singers and assigned materials on an accordingly casual basis. What nobody, including the singer herself, seems to have realized then was that she was a unique performer, ideally equipped to perform one specific duty that might otherwise go unperformed forever: rescuing from oblivion some of the finest work ever achieved in the field of the popular arts.

At this point a brief digression on the nature of American song is required. In the years between the emergence of

an indigenous song style, begun in the persons of Irving Berlin and Jerome Kern, and the final breakup of the old Hollywood studio system and the dissolution of its repertory companies, America enjoyed a golden age of songwriting. Yet in the musical theater of the 1920s and '30s, and later in the studios of Hollywood, words and music were placed last on the list of artistic priorities. The stars were deemed more important than their material, and dialogue was thought to be more prestigious than music; even the designer was considered more vital to the corporate success of a production than the songwriters.

Some idea of the degree to which this was true may be gathered from the remarks of Oscar Hammerstein II concerning the genesis of a hit show of 1925 called *Sunny*, which was:

... one of those tailor-made affairs in which we contrived to fit a collection of important theatrical talents. Our job was to tell a story with a cast that had been assembled as if for a revue. [Charles B.] Dillingham, the producer, had signed Cliff Edwards, who sang songs and played the ukulele and was known as Ukulele Ike. His contract required that he do his specialty between 10 and 10:15. So we had to construct our story in such a way that Ukulele Ike could come out and perform during that time and still not interfere with the continuity. In addition to Marilyn

Miller, the star, there was Jack Donahue, a famous dancing comedian; and there were Clifton Webb and Mary Hay, who were a leading dance team of the time; Joseph Cawthorn, a star comedian; Esther Howard, another; and Paul Frawley, the leading juvenile. In addition to the orchestra in the pit we had to take care of George Olsen's dance band on-stage. Well, we put it all together, and it was a hit.

When Hammerstein talked of "we," he meant himself and his partner Kern, and when he described *Sunny* as a hit, modesty forbade him to say why. Today the show is remembered, not as the production in which Ukulele Ike wowed them or Marilyn Miller made them swoon in the gallery, but as the theatrical pretext for the introduction of songs like "Who" and "D'Ye Love Me?"

What has all this ancient green-room gossip to do with Ella Fitzgerald? The answer has to do with another question: What would have happened to the music from *Sunny* if it had flopped instead of run for 517 performances? The fact that producers, backers, and audience all had placed music at the wrong end of the hierarchy of the musical theater meant that a show could close speedily despite the wealth of its score and that the songs wouldn't remain in the commercial consciousness long enough to be appreciated. Even worthy songs from successful shows had no guarantee of life beyond the theatrical productions. In fact it is one of the truisms of song history that the finest American items, born into an environment where their merits were neither fully perceived nor adequately interpreted by the performers who sang them, desperately required to be wrenched out of context and placed in the splendid isolation of a concept that acknowledged them for what they were: pearls in their own right.

Who today knows the plot of *Very Warm for May*, written in 1939 with music by Kern and lyrics by Hammerstein? Who cares about such an obscure failure? And yet, in retrospect, we can see that every dollar invested by its backers was money well spent because the score included "All the Things You Are." Fortunately, the song was strong enough, or lucky enough, to establish itself. But the

The English writer Benny Green appeared last in these pages with an appreciation of Fred Astaire as a musician (April 1979). He is at work on a biography of Ella Fitzgerald.

history of the musical theater in the twentieth century is peppered with deserving tunes that did not fare so well and that languished sometimes for as long as half a century before rediscovery.

In one sense the solution has always been quite simple. All that is required to rectify this sad working of aesthetic injustice is either an artist or a manager with the taste and determination to choose the best songs. Since performers tend to be more intuitive than reasoning, however, they seldom prove able to separate the wheat from the chaff. As for managers and a&r men, how would they even begin to discern quality when all their training and disposition has pointed them in the exclusive direction of the box office?

One person who had the ear, the intelligence, and the musical culture necessary for the job was Norman Granz. He had used Ella in concert with the Jazz at the Philharmonic series, and during these years he had suggested that Decca allow her to record quality songs created by the likes of Berlin and Kern. But the suggestion was snubbed. In 1950, Ella made a ten-inch album devoted to Gershwin songs, which would seem to indicate that Decca did indeed grasp the uniqueness of both singer and composer. But when it became apparent that there was no future for ten-inchers, the Decca moguls added four songs by other writers!

In 1955, Granz acquired Ella's recording contract. His first step was to record her in "The Cole Porter Songbook," the first production of its kind ever to give star billing to a composer. It might be said that, although the songs were worthy, few of them were in need of revival. But the songbook concept was vital to an understanding of American popular music. In assessing the talent of any writer, it is well to remember that quantity is as important as quality. A great songwriter is not someone who writes a great song, but one who goes on writing great songs. A composer might produce a "Laura" or a "Tenderly" without ever duplicating that one moment of melodic and harmonic felicity. Among the virtues revealed by the Porter double album was his range. He was shown in his light, whimsical mood and in his interludes of romantic gravity. His mannerisms, invisible in the context of merely two or three songs, suddenly be-

came obvious through reiteration. Only when we can examine the works of such men in bulk do their personalities truly emerge.

As it happened, the Porter LPs rescued almost nothing from oblivion and were somewhat blemished by the fact that the orchestral accompaniments

Granz's musical tastes were reflected rather than Ella's, although she must have realized how perfectly her style fit the music.

turned out to be perishable goods. Even so, they rank among the most significant popular recordings ever made. Regarding their symbolic value to Ella's career, Granz has said: "It turned out to be an incredible success commercially and, in a way, defined Ella, in terms of her employment for all the years that followed."

What did Granz mean by the remark that the Porter songbook "defined Ella"? He meant that it revealed her uniqueness as none of her Decca recordings did. In the old days she often was simply making the best versions of indifferent material; on this project she was making the best, and sometimes the only, versions of material worthy of her.

The Porter songbook also demonstrates the central paradox regarding the ideal presentation of standard music, which is that the singer must possess a vocal personality strong enough to avoid imposing it on the material. A Louis Armstrong or a Charlie Parker was able to manifest his creativity just by playing the written melody of a song because his instrumental timbre was so distinctive as to be unmistakable. Here Ella was in the identical position of a great soloist trying to make a song sound like itself instead of like *herself*. Only a singer for whom the conventional problems of intonation and diction had long ago ceased to exist could begin to tackle a task as demanding as thirty-one Porter songs. But the prime attribute of the songbooks in toto resides in Ella's ability to put a tight rein on her instincts as an improviser and to give the material readings of classical se-

renity that are faithful to the intent of the composer. It should be noted, however, that such faithfulness to the composer's wishes does not mean a slavish refusal to depart from the written notes: Her renditions of Porter's "Love for Sale" and "Night and Day" can serve as lessons in the kind of tasteful embellishment that sharpens the melodic contours without distorting them.

The Porter collection was revelatory, but what followed was increasingly more brilliant. The album devoted to Richard Rodgers and Lorenz Hart did sterling work in drawing notice to forgotten pearls. Two tracks in particular introduced another generation to aspects of Rodgers and Hart unheard for decades, "A Ship Without a Sail" and "To Keep My Love Alive." The former, with its unusual structure of an unrepeated twelve-bar theme, a middle eight, and then a last section, is one of the most moving ballads of its time—which happened to be the wrong time, for the show for which it was written, *Heads Up*, opened a few days after the Wall Street crash in 1929. "To Keep My Love Alive" was Hart's last completed lyric before his death in 1943, and its coruscating wit proved beyond any lingering doubt that he was then at the peak of his powers. Those listeners who came to Ella's recordings without previous experience of these songs and others like them were so infatuated as to give them unqualified allegiance, ignoring such minor flaws as the mediocrity of some of the orchestrations and the fact that some of the verses were omitted from extended catalog songs like "Manhattan" and "Mountain Greenery."

The Irving Berlin songbook more than its predecessors dusted off items of great value that had lain idle for years. "Now It Can Be Told" and "You're Laughing at Me," originally commissioned for Hollywood in the late 1930s, are among Berlin's best. "Lazy," dating back to the 1920s, was revealed as that rarest of songs, one that never doubles back on itself, its form being, in terms of four-bar blocks, an almost unprecedented ABCDEFGH.

Ironically, this album's musical director, Paul Weston, later voiced the opinion that the Berlin songs were hardly sophisticated enough to merit such reverential treatment. "They're all good tunes," said Weston, "but they didn't have the interest to me that a

Gershwin or a Kern would have, because melodically the Berlin songs are relatively simple."

To which amazing statement one is tempted to respond, "Relative to what?" These recordings are crammed with revelation, from the anarchic originality of the bar arrangements in "Let's Face the Music and Dance" to the two middle sections of "Cheek to Cheek" and including the astonishing fact that the "middle eight" of "Top Hat, White Tie, and Tails" is a middle ten. The truth is that Berlin was an innovator of restless energy and apparently endless resource.

As the songbook series proceeded, Granz's grand design became apparent: to create a body of recorded work that would fully represent the indestructible virtues of the popular song. And as the series began to score commercial as well as critical success, the scope of the operation became bigger. Certainly, Granz's musical tastes were reflected rather than Ella's, although she must soon have realized how perfectly her style fit the music. Granz has said:

There were many songs that Ella probably wouldn't have chosen and, as a matter of fact, never did after the projects were finished, because they didn't suit her as much as some of the primary tunes did. The more the project grew, the more I'd find songs, and I'd think, "Well, this ought to be included." And so you'd find you had sixteen tunes, and it seemed a shame to cut out four, so I thought, "We'll go to twenty-four." Then you'd get up to twenty-seven, and you thought maybe you could find more.

There is no question that the culmination was the songbook of the music of George and Ira Gershwin, recorded in 1958-59. Whereas Porter and Berlin had



Ella Fitzgerald and Norman Granz during the songbook recording sessions in the Fifties.

become acquainted with the recordings of their work only after completion and there had been no contact with Rodgers at all, Ira Gershwin cooperated with Granz from the beginning, expediting the presentation of obscure material and helping to select a mere fifty-three items from his late brother's vast reservoir of music. It is no doubt a measure of George Gershwin's stature that it required so many tracks even to hint at his range and fecundity.

Nelson Riddle, the most effective of all the musical directors employed on the series, recalled later that a year was spent in research and orchestration, involving discussions with Granz and Ira Gershwin, before a single note was recorded. Was such painstaking diligence worth it? The answer may be found in the total effect of these records, which stand as a remarkably efficacious symbol of the great days of the American musical theater.

Among the revelations of this songbook was the ingenuity of the

verses. Gershwin was profligate, a man who would fling away an excellent melodic idea on a mere verse because he knew he could always write three more just as good tomorrow. The verse to "Someone to Watch Over Me" would have served almost any other songwriter as a perfectly acceptable tune; that of "Isn't It a Pity?" rings out like an operatic aria, so unexpected are its melodic curlicues.

Ella has testified that these were the occasions when she first really understood the function and the merit of the best verses: "There are so many songs that have such beautiful verses, but you never hear them. When Norman decided we would put the verses into a lot of the songs, people were amazed at how pretty they are." Originally written into musical comedies so as to provide a bridge from dialogue to music, they were not generally remembered afterward. But Granz remembered them and saw that they were preserved.

The four recordings devoted to

Duke Ellington's music are subtly different from all the rest of the songbooks because his band provided the accompaniment, which turned out to be more than accompaniment. Today much of the interest in the set involves the instrumentals. Other composers so honored in the series were Harold Arlen, Johnny Mercer, and Kern. And at the end of it all, there existed 237 tracks whose cumulative effect was to render immortal what many once took for the ephemera of Broadway between the years 1911-55. Every one of the songbooks had its celebration of forgotten pieces: Arlen's "Ill Wind" and "Out of This World," Kern's "Let's Begin" and "Remind Me," Mercer's "Travelin' Light," and Ellington's "All Too Soon" and "Love You Madly."

When asked why he had bothered to compile the songbooks, Granz replied, "I felt at the time the tunes ought to be done and that the best person to do them was Ella." His simple assertion seems certain to be posterity's opinion as well. **HF**

It was Norman Granz's Verve label on which the "Songbooks" were first released in the Fifties, and over the past four years three of them have been reissued with the same imprimatur, now a possession of Polydor. Following are listings of the contents of the three (note that only thirty of the original fifty-three Gershwin numbers are contained on the reissue).

Polydor tells us that, by the time you read this, "The Duke Ellington Songbook" should also be available in part. Plans for the remainder of the series (and the twenty-three Gershwin items still in limbo) are only in the talking stage. We urge interested readers to write to the Verve Collection, c/o Polydor, 810 Seventh Ave., New York, N.Y. 10019, asking that the entire series again be made available in due course. Ed.

THE COLE PORTER SONGBOOK.

Ella Fitzgerald; orchestra, Buddy Bregman, cond. and arr. VERVE VE 2-2511, \$8.98 (two discs, manual sequence). Tape: CT 2-2511, \$8.98 (cassette); 8T 2-2511, \$8.98 (eight-track cartridge).

All Through the Night; Anything

Goes; Miss Otis Regrets; Too Darn Hot; In the Still of the Night; I Get a Kick Out of You; Always True to You in My Fashion; Let's Do It; Just One of Those Things; Every Time We Say Goodbye; All of You; Begin the Beguine; Get Out of Town; I Am in Love; From This Moment On; I Love Paris; You Do Something to Me; Ridin' High; Easy to Love; It's All Right with Me; Why Can't You Behave?; What Is This Thing Called Love?; You're the Top; Love for Sale; It's Delovely; Night and Day; Ace in the Hole; So in Love; I've Got You Under My Skin; I Concentrate on You; Don't Fence Me In.

THE RODGERS AND HART SONGBOOK.

Ella Fitzgerald; orchestra, Buddy Bregman, cond. and arr. VERVE VE 2-2519, \$8.98 (two discs, manual sequence). Tape: CT 2-2519, \$8.98 (cassette); 8T 2-2519, \$8.98 (eight-track cartridge).

You Took Advantage of Me; Everything I've Got; Where or When; The Lady Is a Tramp; Here in My Arms; Blue Moon; Lover; Wait Till You See Her; My Funny Valentine; Bewitched, Bothered, and Bewildered; The Blue Room; Ten Cents a Dance; With a Song in My Heart; Spring Is Here; This Can't Be Love; Thou Swell; Little Girl Blue; Johnny One Note; I Wish I Were in

Love Again; It Never Entered My Mind; Dancing on the Ceiling; There's a Small Hotel; My Heart Stood Still; Mountain Greenery; I Didn't Know What Time It Was; I've Got Five Dollars; Have You Met Miss Jones?; To Keep My Love Alive; A Ship Without a Sail; Manhattan; Isn't It Romantic?; Give It Back to the Indians; I Could Write a Book; My Romance.

THE GEORGE AND IRA GERSHWIN SONGBOOK.

Ella Fitzgerald; orchestra, Nelson Riddle, cond. and arr. VERVE VE 2-2525, \$8.98 (two discs, manual sequence). Tape: CT 2-2525, \$8.98 (cassette); 8T 2-2525, \$8.98 (eight-track cartridge).

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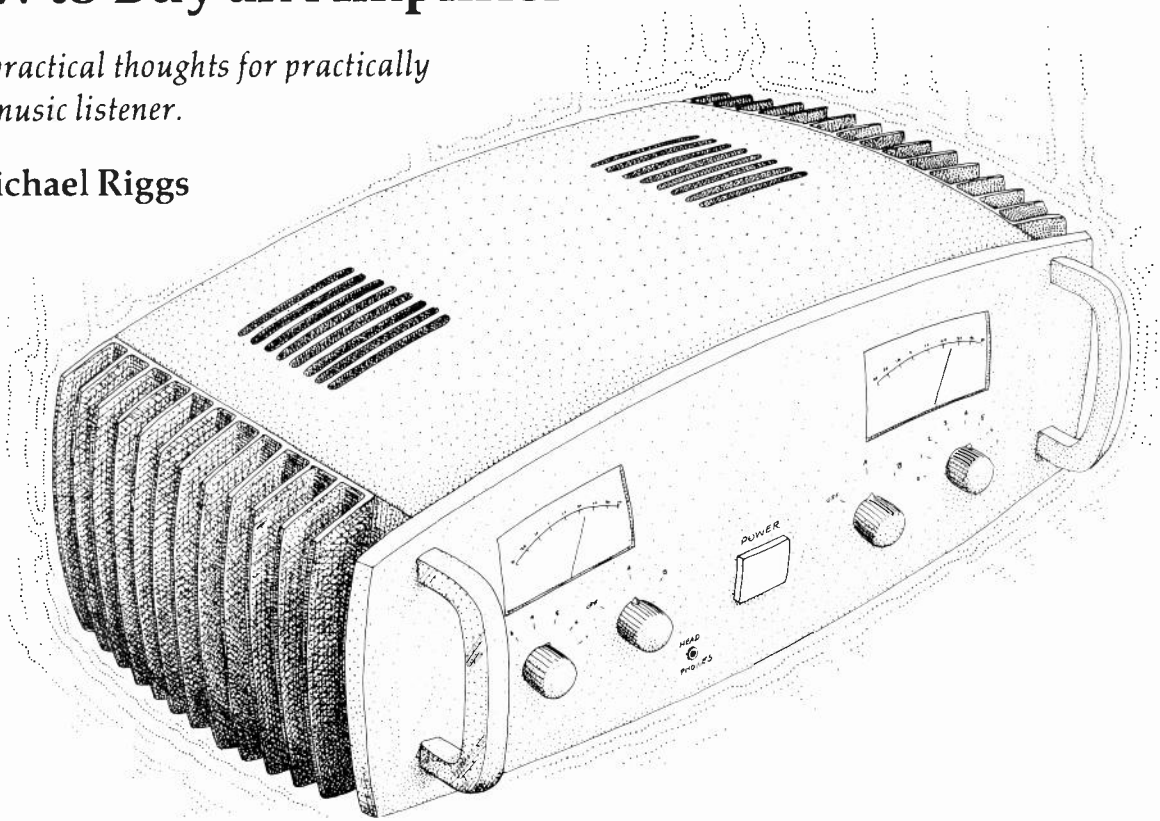
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How to Buy an Amplifier

Some practical thoughts for practically every music listener.

by Michael Riggs



Selecting an amplifier that will meet your needs is both easier and more difficult than ever before. It's easier because today's equipment is so good with respect to all the traditional criteria (frequency response, distortion, and so forth), and because power remains relatively cheap, despite inflation. The difficulty for the consumer lies in the seemingly endless variety of amplifiers currently available, some employing new technologies, others with distinctive convenience features, all claiming to be the best choice for somebody. The guidelines you find in this article are designed to help you make the selection process less confusing—more rational and enjoyable, and likelier to result in a wise investment.

Audio amplification is derived from two basic functional components: a preamplifier and a power amplifier. The preamp, as usually defined, is the system's control center. It provides inputs

for various sources, some means for switching between them, volume and balance controls, enough gain to boost weak signals (such as those from a phono cartridge) to a level suitable for input to the power amp, and RIAA equalization for disc inputs. The preamp usually performs several other functions as well—tone control, power switching,

In this age of integrated circuits, a receiver may perform as well as separates.

tape dubbing, and the like—but they're icing on the cake, and the kind of icing depends on the cook.

Power amplifiers are more consistent from model to model. They may do one or two other things, but their central function is to use the fluctuating output voltage of the preamp to determine how much of the power from the amp's

own power supply section will be available at any given instant. The principal feature distinguishing power amps is the amount of clean power they can generate.

How Many Boxes?

The shopper's first task is to decide how he wants these components packaged. The most popular configuration is the receiver—a preamp, amp, and tuner in a single box. This approach has many advantages, the foremost being economy. A component's cabinet and power supply typically constitute a significant portion of its expense. Reducing their number from three to one results in a tidy saving, and in this age of integrated circuits, three-in-one design does not imply inferior performance. In fact, because the designer determines the characteristics of all the electronics, he can optimize the parts for one another. A single housing also reduces the number of external connections and, therefore, the likelihood of radio-frequency interference. Unless you want either more flexibility or a state-of-the-art circuit de-

Michael Riggs, former editor of the Boston Audio Society's journal, often writes for HIGH FIDELITY.

sign that comes only in separate form, a receiver probably is your best buy.

The next step on the ladder is the integrated amplifier: a preamp and amp on the same chassis, but without a tuner. This probably is what you should be looking for if you find yourself admiring one receiver's tuning section and another's amplifying prowess—or if you just don't care about listening to the radio. Another possible reason for buying an integrated amplifier is that it often has more elaborate control features than a receiver in the same power class and sometimes more advanced circuitry.

For the ultimate in flexibility, you can go for a separate amp and preamp: Separates let you come as close as possible to getting exactly the features and performance you want, along with the

The principal feature distinguishing power amps is the amount of clean power they can generate.

latest technological innovations and refinements—and the highest prices. There's a lot of variety in this segment of the market, with a lot of claims and counterclaims, many of them difficult to assess, and more than a few new ways of doing things. A measure of technical sophistication can be a big help here and may save you from paying a premium for performance identical or inferior to that available at a more modest price. Expect to do some homework before you buy.

How Much Power?

Having decided how you want your power packaged, your next problem is to decide how much of it you need. Unfortunately, there is no single criterion. The basic factors you must consider are the efficiency of your loudspeakers, the size and "liveness" of your listening room, and your listening habits.

A few horn-loaded loudspeakers

have efficiencies of 20% or so and will produce ear-shattering levels in a typical living room with a 10-watt amplifier. They are the exception, however. The efficiencies of most high-quality domestic speaker systems hover around ½%, which means only that much of the amplifier's output is converted into sound in the room; the rest just warms up the speaker's voice coils. The practical result is that, if you want to play orchestral music at realistic levels in your home, there probably will be moments when you ask your amplifier for more power than it can provide, and it will clip. Clipping causes distortion, some compression of the musical waveform, and, in some amplifiers, a raspy or crackling noise. A little of this is usually tolerable, but if it happens too often, the sound will be harsh and lifeless, and your tweeters may be stressed literally to death by the resulting high-order harmonic distortion components.

The three palliatives for excessive clipping are lower volume, higher power, and more efficient loudspeakers. These are all tied together, though not in the most obvious way. Twice the power (or twice the efficiency) will not double the volume. The sensitivity of our ears is logarithmic, so for the subjective loudness to be doubled, acoustic power in your room must be increased by a factor of 10 or so. To reflect this effect, a logarithmic unit of measure called the decibel or dB, has been developed. The smallest perceptible loudness change is 1 dB, and a subjective doubling in loudness is equal to 10 dB (actually 1 bel, or Bell—named after Alexander Graham—and later divided into 10 deci-Bells).

Conventions have also been established for using the dB as a unit for sound pressure level (dB SPL) and for electrical power (dBW). In this system, 1 watt equals 0 dBW. Since every doubling of power is a 3-dB increase and a tenfold increase adds 10 dB, 2 watts is 3 dBW, 4 watts is 6 dBW, 40 watts is 16 dBW, and so on. By expressing loudspeaker efficiency—or, more correctly, sensitivity—in dB SPL, we can relate speaker output directly to amplifier power output. HIGH FIDELITY's test reports show speaker sensitivity as the average omnidirectional output in response to a 0-dBW (1-watt) midrange noise input; typical values are around 83 dB SPL. For such a loud-

speaker to produce 86 dB SPL, the output from the amplifier would have to be 3 dBW, or 2 watts. A 3-dBW change in power input from the amplifier makes a 3-dB SPL change in the speaker's output. Comparing this hypothetical speaker to another model with a sensitivity of 80 dB SPL, we see that the latter requires a power input of 3 dBW (2 watts) just to provide that original loudness level of 83 dB SPL and an additional 3 dBW—6 dBW total, or 4 watts—to reach 86 dB SPL. If such low wattage numbers seem small in terms of today's high-powered amps, remember that 3 dB more than 100 watts (20 dBW) is 200 watts (23 dBW), and 3 dB more than that is 400 watts (26 dBW). Those last few dB can be mighty expensive.

Your listening room and musical

The audible improvements offered by some amplifier designs may be more imaginary than real.

tastes are the final pieces to the puzzle. Take, for example, the more efficient of the two loudspeakers just discussed. To play loudly without distortion in a typical living room of 2,400 cubic feet, it probably would need an amplifier capable of 16 to 20 dBW (40 to 100 watts). For a room twice or half that size, add or subtract 3 dBW. Similarly, there might be a 6-dBW spread from a very live, reverberant room, which would require less power, to a very dead, absorptive one, which would require more. And again, a 3-dB change in the average listening level—little more than a touchup, to the ear—will halve or double your power requirements.

Many people, especially those with efficient loudspeakers, testy neighbors, or a taste for moderate listening levels, never need more than 13 dBW (20 watts) per channel, and most will find about 18 dBW (63 watts) adequate. Again, the law of diminishing returns begins to cut in rather sharply above 20 dBW (100 watts) for most listeners.

Further Complications

Before leaving the topic of power, we have to consider the fact that amplifiers really have more than one power rating. In addition to the standard FTC continuous power rating for an 8-ohm load, there are the amplifier's output capability into other load impedances (4 ohms and below, especially) and its IHF dynamic headroom rating. The latter expresses the short-term output capability in dB above its continuous rating. Such a figure more accurately represents the amp's ability to deliver power when playing music, which consists almost entirely of transients, rather than continuous tones. Consider, for example, an amplifier rated at 100 watts per channel (20 dBW) with 3 dB of dynamic head-

room and one rated at 200 watts (23 dBW) with no dynamic headroom. On most music, both will deliver up to 23 dBW even though the second amp looks twice as powerful in the FTC figure, which the law requires be the most prominently displayed in advertising.

Another important question is how well an amplifier can drive loads more demanding than an 8-ohm resistor. Most "8-ohm" loudspeakers have nominal impedances of 6 ohms, and a few dip down to 4 ohms. The lowest impedance of a loudspeaker rated at 4 ohms may actually lie below 2 ohms over a significant portion of the audio band. Impedances that low make severe demands on an amplifier's output transistors. By comparison to the standard 8-ohm test resistor, a 4-ohm load allows twice as much

current to flow from a given output voltage (all other factors remaining equal), and a 2-ohm load allows twice again as much. More current means more power but also more amp-killing heat.

To add insult to injury, almost all loudspeakers are at least somewhat reactive: Their impedances are not pure resistances, but include capacitive and inductive components that tend to store energy and throw it back at the amplifier. A few amps can take this kind of abuse and survive—either because they have output transformers to isolate them from the speaker load or because special care has been taken with their design in this respect—but most depend on protection circuits to sense dangerous situations. These circuits differ substantially from model to model in how easily they

A Short Course on Amplifier Classes

Each channel of a stereo amplifier has two halves; one handles the positive-going portion of the signal (the top half of a sine wave), and the other the negative-going portion. There are a number of different ways of using transistors to make this work, and these are the basis of the amplifier class system.

Class A amplifiers are designed so that constant DC bias equal to the amplifier's maximum output flows through each output transistor. With no input signal, these bias currents are balanced, and there is no output. If a positive-going signal enters the amplifier, its positive-going side will begin to conduct more current, while the amount conducted by the other transistor decreases accordingly. This unbalanced condition results in a current flow through the loudspeaker. As the input reverses direction, so does the current flow. The advantage of Class A operation is its extreme linearity and freedom from the "crossover distortion" that occurs whenever a transistor is turned on. In a Class A circuit, neither transistor is ever turned all the way off, which means, of course, that neither ever has to be turned on. Unfortunately, this mode of operation is very inefficient and generates large amounts

of heat, and therefore it requires the use of large, heavy heat sinks. Consequently, Class A amplifiers tend to be low-power, expensive, or both.

Class B amplifiers take the opposite approach. No current flows through either transistor unless a signal is present. This type of circuit is about 50% more efficient than Class A and runs very cool under most operating conditions, but it may generate significant amounts of crossover distortion.

The overwhelming majority of commercially available audio amplifiers strike a compromise, running Class A for very small signals and Class B for large signals. Class AB operation, as it is known, is slightly less efficient than Class B, but the reduction in crossover distortion is dramatic. There also are a number of proprietary circuits that seek to combine the virtues of Classes A and B (Technics' Class A Plus and Lux's Duo- β , as examples) by ingenious variations on the basic configurations.

Class D amplification, which can be almost 100% efficient and essentially distortion-free, is really a form of digital operation that enables transistors to work the way they really want to—as switches. The output of a pure Class D amplifier is a very high-frequency pulse train smoothed into an exact replica of the input by a low-pass filter. Unfortunately, this scheme is difficult and expensive to implement, and only a couple

of true switching amps have ever been available. However, a number of hybrids with highly efficient switching power supplies and conventional Class AB output stages are coming out.

A relative newcomer is Hitachi's Class G, which uses separate power supplies and output transistors to handle low- and high-level signals. Most of the time, the low-power amp carries the load, but when a big surge comes along, it passes the burden to its big brother. In all other respects, it is like a conventional Class AB amplifier with plenty of dynamic headroom. However, Class G is said to be substantially more efficient than strict AB operation. There is more potential for crossover distortion, but this does not seem to occur in practice.

Soundcraftsmen's Class H design is in a similar vein, except that it uses only one power supply and output stage. The trick is to run the power supply at a relatively low voltage until a musical peak appears, at which point the supply jumps up momentarily to catch it. The advantages are the same: high efficiency and dynamic headroom.

The lost letters, C, E, and F, are attached to modes of amplification that for one reason or another are not suitable for audio use. Also, at least one model—Carver Corporation's very light, very efficient M-400 "magnetic" amplifier—doesn't really fit into any of these classifications. M.R.

are activated and in the seriousness of their side effects. Some trigger infrequently and have negligible side effects; others come on strong very early and generate spurious high-frequency pulses that can, in some very bad cases, destroy tweeters.

It's hard to tell much about an amplifier's protection circuits from the outside, but there is a quick and dirty way of evaluating how well a unit will stand up to difficult loads. Look at its 4-ohm power ratings. If you have 8-ohm speakers, you want an amplifier that can deliver at least as much power into 4 ohms as into 8. Owners of 4-ohm or otherwise difficult loudspeakers should look for at least 30 to 40% more output capability into 4 ohms than into 8. If you're inter-

Extra features on preamps are icing on the cake, and the kind of icing depends on the cook.

ested in an amplifier that doesn't include a 4-ohm rating in its specifications, write the manufacturer and ask. If it refuses to answer or is evasive, forget that model.

Other Specifications

Having settled the power question, you're ready to move on to the finer points of amplifier design. Some of these are reflected in the conventional specifications: frequency response, distortion, noise, and so forth. In general, it's safe to say that the battle has been won in these areas.

Few modern amplifiers contribute significant amounts of noise, although some tube preamps still have problems. Look for a signal-to-noise ratio of 70 dB or better. Distortion is even less of a concern; forget about anything below 0.5%. This includes dynamic intermodulation distortion (also known as TIM, TID, DIM, and SID), which has been all the rage for the last year or two but now seems to be losing what following it had among engineers. And that implies that you can pretty much ignore slew rate

specifications, though a preamp with a high slew rate will tend to resist RFI better than a slower preamp.

While we're at it, we might as well dispense with a few other trendy concerns. Negative feedback, properly employed, is beneficial; it certainly is not a demon to be avoided at all costs. Other things not to worry about include phase shift and response at frequencies well beyond the limits of the audio band. In fact, there are good arguments for limiting an amplifier's frequency response below 20 Hz and above 20 kHz. A sharp infrasonic filter (12 dB or more per octave) will remove power-robbing, distortion-inducing record-warp signals and other ultralow-frequency garbage without in any other way making its presence known. Ultrasonic filters are more of a luxury item, but besides eliminating even the remotest possibility of TIM in later stages, they help combat RFI by stripping the RF off the signal before it can be demodulated into audio.

Flat frequency response is important within the audio band. Power amps and the high-level sections of preamps are generally very close to dead flat from 20 Hz to 20 kHz. Phono preamps, which incorporate a fairly elaborate equalization network to compensate for RIAA disc pre-emphasis, may be more loosely specified. A tolerance of ½ dB is acceptable; ¼ dB or better is common in the specs for expensive gear. The ear detects frequency-response differences very readily, so it is surprising that some otherwise excellent and pricey preamps have sloppy phono EQ.

A couple of other characteristics of the phono input deserve mention. Input impedance can have a strong effect on the system's frequency response when a phono cartridge is attached. Most pickups behave electrically like a filter, which must be terminated with a certain resistance and capacitance to achieve the flattest response possible. Industry standards require the phono preamp to provide a resistance of 47,000 ohms in parallel with an unspecified capacitance. The new IHF standards call for the manufacturer to state both the resistance and capacitance of the phono input if it presents a classic, well-defined input impedance to the cartridge. If the impedance is complex—that is, if its values vary with frequency—only the resis-

tive value (at 1 kHz) is to be listed. (HF follows this practice in its test reports.) Unless you plan to use a pickup known to be insensitive to preamp load characteristics—and most moving-coil models, among others, are—look for a classic input impedance with a low capacitive component, preferably no more than 100 picofarads or so. This will facilitate matching with a wide variety of cartridges and tonearms since adding capacitance is easy (some preamps even provide switchable capacitance). Subtracting it is another story, however.

Another important preamp specification is phono overload. Most phono sections will take at least 100 mV at 1 kHz, which is plenty. There's nothing wrong with having more (as long as S/N

The first requirement of intelligent purchasing is an appraisal of priorities: in power, features, price.

ratio has not been sacrificed to get it), but it's gilding the lily.

The last factor involved is not really a specification, but a design approach. Direct-coupled (DC) amplifiers use no capacitors in their feedback loops or signal paths—except, perhaps, at the input to block out potentially hazardous direct-current signals. Such amplifiers have one real and two imaginary advantages. The imaginary ones are low TIM and low phase shift. TIM has nothing to do with whether or not an amplifier is direct coupled; a DC amp will exhibit less phase shift than its capacitor-coupled brethren, but the difference is far from large enough to be audible. The real advantage of DC design is more graceful recovery from overload, and that tends to make clipping less conspicuous.

Features

All that's left are the convenience features. Of course, they often make all the difference when you require specific functions. A good example is the head amp, or pre-preamp, which is showing

up more and more often as a built-in feature to accommodate low-output moving-coil pickups. Another is tone controls. Preamps are especially diverse in their approaches to frequency response manipulation: Some avoid the whole issue, many others use the familiar Baxandall bass and treble controls, and others go whole hog with five- and even ten-band equalizers. Some of these devices can be used for loudness compensation, substituting for the usual separate loudness equalizer, which boosts bass and, sometimes, treble according to a formula intended to offset the ear's diminished sensitivity to some frequencies at low listening levels. Here, again, specific characteristics are all over the lot; but if the compensation is important to you, separate loudness and volume knobs are helpful in adjusting the compensation for your speakers' efficiency.

Among the more mundane preamp features are headphone outputs and muting switches, some of which kill the output altogether, though most cut it back by about 20 dB. Most preamps also have at least one tape monitor (some as many as three), usually with a tape-dub feature that makes interdeck copying possible without replugging leads and often without tying up your main listening signal path. In addition, some have an external-processor loop for patching in gadgets that would otherwise clutter up tape-monitor loops. Generally each tape or processor output should have a buffer amplifier or resistor to prevent distortion in the main path when the devices connected to them are turned off; occasionally the same objective is served without additional electronics by making these outputs defeatable.

Power meters, though popular, are of dubious value. In general, only the LED or "bar graph" displays are fast enough to provide an accurate indication of the amp's power output on short-duration peaks, and even these displays usually are inaccurate for anything but an 8-ohm load. Their only useful function is to warn of amplifier overload—a task that can be performed by a single indicator light for each channel. If you have a choice between metered and un-metered versions of an amplifier, you're probably better off buying the latter and pocketing the price difference, which can be substantial.

If you have a record collection with some years on it, you may want a mono switch to insure optimum playback of pre-stereo LPs and perhaps a good high filter (preferably with a slope of 12 dB per octave) to make scratchy 78s more listenable. And if the collection includes open-reel tapes with different mono programs on the left and right channels, left-only and right-only mono modes (in addition to the usual L+R) will be obligatory unless the switching on your deck already accomplishes the same thing.

A few preamps have features that are virtually unique. There is a mode control that is continuously variable from L+R mono through stereo to L-R (which can be used to manipulate the

depth and focus of the stereo image and as an aid to FM-antenna orientation) in the Apt Holman. There is the Sonic Hologram Generator in the Carver preamp. If you must have such a proprietary feature, choice is eliminated. But no preamp literally delivers every desirable feature, even ignoring low cost as a criterion. Therefore the first requirement of intelligent purchasing is an appraisal of your priorities—in power, features, and price. Be honest. If you're hung up on a brand name or a particular capability, admit it and select accordingly. It doesn't make any more sense to spend days making a "rational" choice and years regretting it than it does to fall for buzz-words and fail to fill your needs. **HF**

The Tube Mystique

Among the last decade's many audio developments, the resurrection of the vacuum tube must count as the most surprising. Tubes are bulky and fragile; they are relatively noisy and generate significant amounts of heat; and they wear out quickly. When used in a power amplifier, they generally require large, expensive output transformers to match them to loudspeaker loads. And the power consumed by their heater elements—which can exceed that needed for amplification itself—has to be counted an anomaly in this age of energy conservation. In all these respects, transistors hold the advantage.

Even so, there are enough audiophiles convinced that tubes somehow sound better than transistors to keep a small number of manufacturers of tube gear (Audio Research and Lux, most prominently) in business. Is it true? Do tubes sound better, and if so, why?

In fact, tubes do have a couple of points in their favor. Their characteristic distortion spectrum is softer than that of bipolar transistors: That is, they generate a lower proportion of high, odd-order harmonics, which tend to be more offensive to the ear than even-order products. As a result, they clip more gracefully than transistors and therefore generally with less danger to tweeters. Also, tube amplifiers' output transformers insure an optimum match to the

loudspeaker being driven. And tubes, like the new power MOS FETs, are not subject to the self-destructive thermal runaway that makes current-limiting protection circuitry necessary in most bipolar transistor amps.

But what about preamps—which are seldom, if ever, overloaded and don't have to drive loudspeakers? Tube preamps are more popular than tube power amps, despite the fact that transistor preamps usually have lower noise and overall distortion and more accurate RIAA equalization. And audiophiles more often use tube preamps with transistor power amps, even though purely technical considerations suggest the opposite arrangement. Nor is this the only contradiction. Infinity and Audionics recently introduced hybrid power amps, using each type of device in the place of the circuit where it is said to be most appropriate. Curiously, one uses tubes at the input and transistors at the output, while the other reverses their positions.

If none of this seems to make sense, recent experiments conducted independently by researchers in England, Canada, and the U.S. indicate that there is no reason why it should. [See the article by Daniel Shanefield in this issue.] The debate between bottled and canned power continues, but the audible distinction—if it exists at all—is vanishingly small in the context of concerns like cartridge/preamp or amplifier/speaker matching. **M.R.**

The Great Ego Crunchers: Equalized, Double-Blind Tests

Scientific methods, says the author, yield the startling conclusion that frequency response is the sole significant sonic characteristic in amps—and, perhaps, other components.

by Daniel Shanefield

The basic idea you will find in this article admittedly is controversial; one might be tempted to call it radical or possibly even dangerous. It seems to support the big, money-making, compromising factions within the high fidelity world and is antagonistic to some of the small, extremist vanguard, so I suppose it is ultimately "conservative." In particular, this idea could be dangerous to the egos of some well-meaning people involved with "high-end" audio equipment, which is a pity since such people (and, often, their egos) have been responsible for many major advances in audio over the years. In any event, it appears to be an idea whose time has come, and its promulgation seems inevitable.

The concept is that two components auditioned in an A/B comparison should be compared (for properties other than frequency response itself) by the use of both a frequency-response equalizer and a double-blind, secret-balot test. Now suppose that this is done in comparing Amplifier A, of average quality, and "high-end" Amplifier B, which is reputed to have outstanding sonics. In most comparisons, particularly with amplifiers, the equalized blind test will

cause the average component to be audibly indistinguishable from the high-end component! In other words, it is easy to make the two classes of components equivalent, simply by putting a graphic equalizer into the system and being scrupulously honest.

Since an equalizer controls only frequency response, a corollary is that a slight juggling of response curves can easily make some "good" components sound "excellent." Again, this is especially true of amplifiers, but it is sometimes true also with other components, such as phono cartridges.

A great deal of philosophy surrounds this idea, and the arguments touch upon questions of what it means to "believe" something and how we come to "know" something new. The issues are not yet settled, and more experimentation still needs to be done.

The Electronic Cold War

In the early 1960s, when Sherwood, Harman Kardon, Fisher, and other manufacturers developed transistorized amplifiers, some listeners claimed that they sounded "cleaner" and "more transparent" than vacuum-tubed amps. Others insisted that transistors sounded "hard" and "glassy," while tubes were "warm" and "musical." (Early solid-state amps probably did have a barely audible defect, later identified as crossover distortion, due to their Class AB operation, and it is possible that they also had an audible degree of transient intermodulation distortion, due to their limited open-loop bandwidth and heavy negative feedback.

These distortions were substantially reduced in later models, however, and their audibility in the improved products is questionable.)

Around 1970, the people who still believed that certain classic vacuum-tube (and other) designs were audibly superior to the newer designs began to get bolder about stating their beliefs. They were a minority, and most audio professionals were nonbelievers. The believers, who sometimes called themselves "golden ears," accused the professional majority of trying to pass off cheap equipment as good. During the next few years, several small-circulation magazines espoused the golden-ear point of view, though they often disagreed with each other in their conclusions about which components were truly excellent and even changed their minds drastically from issue to issue.

In 1973, I entered the fray by beginning a long series of experiments based both on listening ("subjective") and on instrument-measurement ("objective") criteria, in an attempt to resolve the argument. The following conclusions became apparent from the first few experiments.



Mr. Shanefield, an engineer with the Bell Telephone System, has long been associated with the Boston Audio Society.





1) In comparing a pair of components such as amplifiers, one can indeed sound different from the other when each is used in a given audio playback system. Measured frequency response of the two often varies by only $\frac{1}{2}$ dB.

2) Using a graphic equalizer (which is just a sophisticated type of tone control), a purposely induced change in the frequency response of a given component often is audible during fast A/B comparisons, even if the response curves vary only by about $\frac{1}{2}$ dB.

Although it has traditionally been thought that 1 dB is the minimum change that is audible (as it is in casual listening), it turns out that listeners who concentrate intensely can sometimes distinguish smaller differences.

3) Surprisingly, a slight change in the position of the equalizer's 1-kHz or 10-kHz sliders can give an unaware listener the impression of changes in "definition," "ambience," "depth," or other characteristics that we would not ordinarily associate with frequency response.

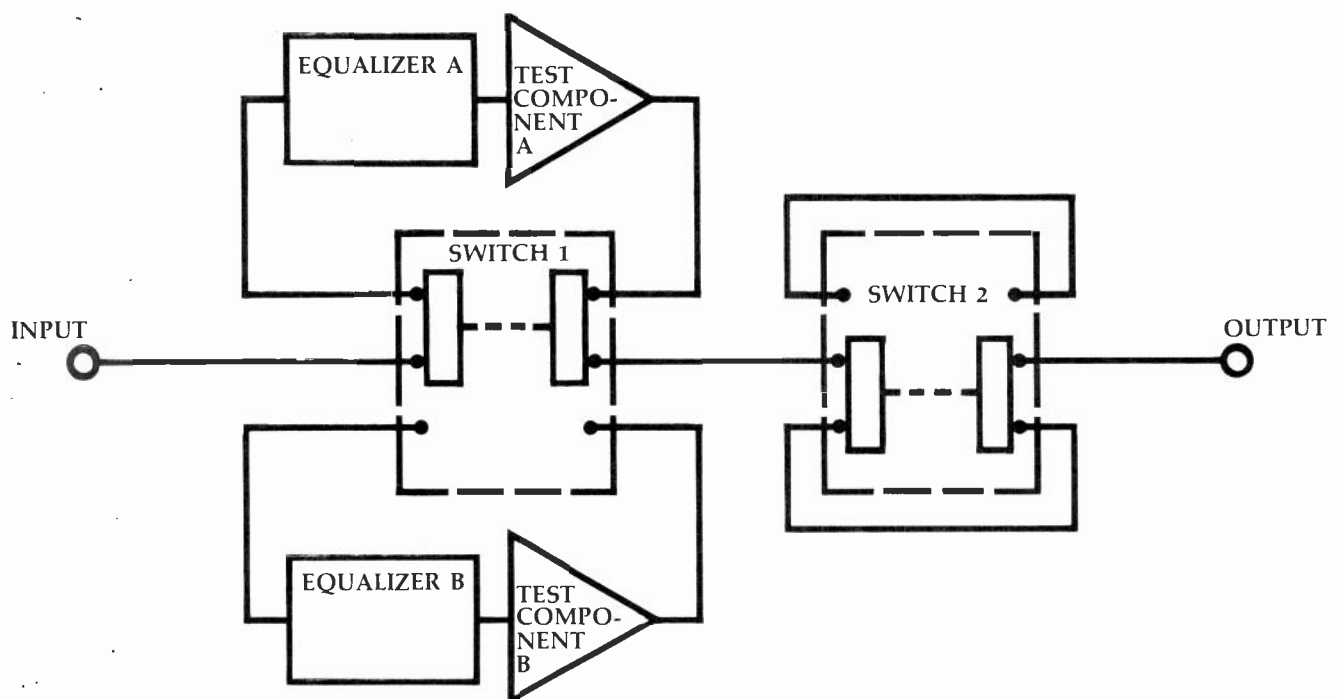
Evidently there are measurable differences that correlate with audible differences. But it is a well-known scientific principle, especially important in biological science, that correlation does not prove a causal relationship. Some other factor, which in this case might be something other than frequency response, could be causing the audible difference between amplifiers. But what if, by manipulating the frequency response alone, my colleagues and I could make all audible differences disappear? Would it not prove that response is the sole cause of the differences after all?



This possibility made the quest for the truth even more exciting. An equalizer was used to match the response curves of two amplifiers to within $\frac{1}{4}$ dB. Listeners still said they heard differences, however, and the more prestigious component usually was said to sound "better."

We then set up "blind" tests in which the listening jury did not know which amplifier was which. Once again, surprises were in store. There still was a tendency for jurors to hear differences, but the preferences seemed to depend

Fig. 1. The author's double-blind setup employs two switches. One chooses loop A or B, the other is wired so that it actually does nothing. Test director does not know which is which during setup. Either or both of components under test may be equalized in order to get the required identical response.





on who was running the A/B comparison at the moment! It became apparent that, if the person directing the test knows which component is which, the listeners can be influenced by subtle clues such as posture, eye motions, and especially the musical passages assigned to each component: A tester may unconsciously pick the best-sounding music for the supposedly best component. We thus concluded that all such tests should be "double-blind": Even the test director should not know which component is actually controlled by a given switch setting. (This can be accomplished simply by twisting a pair of patch-cord wires around each other before the cords are plugged into the controlling switch.)

Also, the jurors should do their listening one at a time, to prevent the more influential from affecting the others. When listeners are asked repeatedly to guess the identity of a component (even in terms of abstract designations A and B) and they feel that they will be embarrassed by a mistake, they will tend to report that the components all sound essentially the same. Poor hearing seems to be less humiliating than overconfidence. Therefore, all tests should be conducted by secret ballot. Jurors should be asked to place a ballot into a conspicuously locked box with a slot at the top, even if they could not hear any differences and submit blank ballots. They also should be discouraged from revealing their preferences after the test is over. All of these trappings are designed to promote a feeling of protective secrecy.

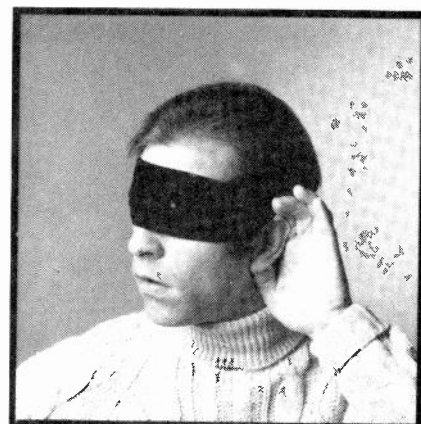
Tying the Double Blindfold

The exact manner in which these

tests are conducted is influenced somewhat by the expectations and demands of the jurors. Believers in subtle differences among amplifiers and other components frequently object to equalized double-blind tests. In fact, they often boycott such proceedings—though they are the most important candidates for jurors because it is they who claim to be sensitive to small sonic differences. Their most common objections are shown in the accompanying list, along with my counterarguments, designed to persuade skeptics to participate. The second list, however, contains a few demands that I agree are negotiable.

In addition, attention must be paid to several other details if meaningful comparisons are to be made. If music is played very slightly louder through Component A than through B, A will almost always sound "better." Some people are much more sensitive than others to this effect. To eliminate it, the amplitude levels of A and B must be made equal to within about $\pm 1/4$ dB. It is important to recheck the relative levels periodically throughout the test and re-equalize them if necessary. Quite surprisingly, many components drift significantly in loudness over a period of an hour or so, probably because of resistor heat-up. I have observed several A/B comparisons that were about to yield misleading results until a drift in level was corrected. Also, the A/B switch itself occasionally can be found to make audibly poor contact on one terminal.

Another requirement is to repeat tests often enough so that the effects of pure luck are minimized. Try tossing a coin ten times; logic tells us that the chances of heads or tails are equal for any toss no matter what sequence of results has preceded it. The sequence I obtained while writing this article was tails, heads, heads, heads, heads for the first five tosses of a nickel, which might lead an overly trusting observer to conclude that heads seems to predominate. The next five tosses came out heads, tails, heads, tails, tails, which could have been interpreted in the opposite manner. But over the span of ten tosses, results confirm the logical assumption. Hence my recommendation that each test be run at least ten times. The actual listening test also includes at least ten switchings, about half of them involving no change



in component. Any number of listeners can be used. The A/B comparison can take minutes or weeks.

A simple wiring setup for double-blind comparisons is shown in Fig. 1. Switch 1 substitutes Component B for Component A; Switch 2 does nothing. (Both switches must actually be in the circuit, so the listener will hear equal amounts of noise when each switch is changed.) To use this setup, the test director tosses a coin ahead of time and writes down the sequence as a program for switch changes. Heads indicates that the setting of Switch 1 is to be changed, tails Switch 2. Since the wires are all the same color and are twisted around each other, even the person who plugs them into the switching box does not know which is which. The whole situation must be decoded after the tests have been completed and the jurors' secret ballots collected.

One recent experiment compared two amplifiers, a Dynaco 400 (solid state, 200 watts per channel) with the power-amplifier section of a Lafayette LR-3030A receiver (solid state, 30 watts per channel). We used six disc recordings, chosen from the Philips, A&M, and Sheffield catalogs, played on a Thorens 125 turntable with an SME 3009 Series III damped arm and an ADC XLM phono cartridge. The preamp was a Dynaco PAS-3X (vacuum tube). A Soundcraftsmen 20-12 equalizer, a Russound TMS-1W switching unit with the resistors removed, and Magnapan MG-II loudspeakers completed the system. The listening room measured 16 by 23 by 9 feet and had four doors (which were open), five windows (closed, with the shades pulled down), plaster walls and ceiling, carpeted floor, and moderately heavy

furnishings. The peak amplifier power output, observed on a calibrated oscilloscope, was 15 watts per channel, generating 95 dB SPL on sound peaks at the listening position. The entire chain of components except the receiver was highly rated even by most of the golden-ear, small-circulation magazines.

The five jurors, of whom one was

female, ranged in age from twenty to forty-eight. Before the tests, three were believers in a probable difference in sound other than that of simple frequency response and two were non-believers, but all claimed to be open-minded. They did their listening one at a time. One juror listened approximately one hour per day for three weeks, with



Objections to Equalized Double-Blind Tests

Objections

Isn't it impractical to adjust an equalizer to perfectionist standards? The colorations that usually occur are unacceptable, since they prevent perfect fidelity to the original.

Don't equalizers add distortion? Most are specified to about 0.05% THD, which is not as good as the best amplifiers.

Couldn't the metallic contacts used for blind switching cause slight audible effects? Switches are far from perfect and therefore are unacceptable for the best systems.

Don't equalizers ring audibly—that is, resonate?

Author's Responses

There is already equalization in even the best recordings! The RIAA equalization involves a steep slope and is not always followed accurately. A rumble filter is used in almost all studios to remove ultralow-frequency air-conditioning noise, and various optional EQ "sweetenings" usually are added as well. It is better to compensate for these already-existing equalizations than to ignore them.

Yes, but the recording studio may have in its record-making system as many as ten components in series, each of which typically is specified at 0.1% THD. Lower distortions are usually sacrificed in favor of reliability at studios. Let's not be scared by our own equalizers just because we can see them.

Once again, modern recordings are always made with many metallic contacts in series, starting at the microphone and going on through switches, plug/jack contacts, and so on. We need to avoid bad contacts, but we can't avoid all contacts.

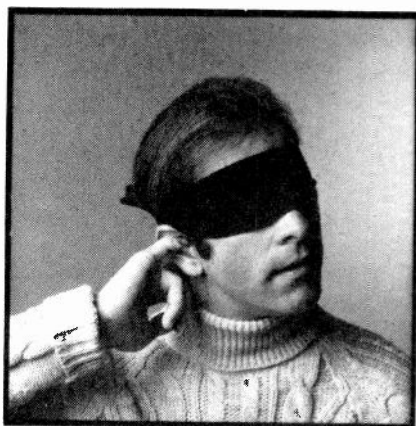
With most consumer-grade models there is no significant ringing when they are set for only a mild corrective action, such as -1 or +2 dB. With a square-wave test recording and an oscilloscope, you can easily see for yourself that tape recorders, disc cutters, phono cartridges, and, often, preamp RIAA de-emphasis circuits ring far more than graphic equalizers do. And when we have compared the sound of an amplifier without an equalizer against one fed via an equalizer, observing the precautions discussed elsewhere, no difference could be heard.

90 switchings; the others listened only a half-hour with 40 switchings each. All of the procedural suggestions described here were followed rigorously.

Two of the believers heard differences and wrote down their identifications as A or B throughout the tests. (They were not asked to identify which amplifier was better, more powerful, etc.) The other believer and the two non-believers wrote down identifications at first but later stopped as they decided that they could not be sure of differences.

After the tests, the true sequence of A and B occurrences was decoded. This sequence was then compared to what had been written down by the two people who heard differences. Play by play, comparisons were made between estimate and truth. These two jurors turned out to be correct only about half of the time (19 out of 40, and 20 out of 40), which that experiment in coin tossing shows is almost certain to be the result of pure luck. In other words, none of these people was able to distinguish one amplifier from another.

In similar tests, with different equipment, people, and listening rooms, I have arrived at exactly the same conclusion each time: Most jurors give up, and the correct responses of the others are only within the bounds of chance. In fact, several other classes of components were also found to be audibly indistinguishable when their frequency responses were made equal, including vacuum tube vs. transistorized preamps, and some types of phono cartridges. This is not to say that all such comparisons would produce the same results, but it points out the importance of careful procedures if they are to be valid.



Further analysis showed that many components vary from sample to sample, with the frequency response curve tilting slightly, at random. For example, we compared three Dynaco 400 samples, both by measurement and by sound. Careful frequency response measurements showed that they were all within spec ($\pm 1/2$ dB between 20 Hz and 20 kHz), and yet they *did* differ by a few tenths of a dB and also differed in sound. It was also found that three Harman Kardon Citation 12 power amplifiers differed randomly in the same general manner.

Another effect that can cause frequency response variations is the interaction with neighboring components in the playback chain. Without the equalizer in the Dynaco/Lafayette comparison, for example, neither's response was flat to within $1/2$ dB. The equalizer, when carefully adjusted, limits such variations to within $\pm 1/4$ dB.

What Does It All Mean?

As I said before, since an equalizer was able to make two supposedly very different amplifiers sound alike, frequency response appears to be the only significant difference factor. Furthermore, if it turns out to be generally true that audible frequency response differences among amps occur randomly, rather than being immutably associated with all samples of any given model, then one person's opinion, after listening to a single (unequalized) sample, is utterly useless to another listener, at least for amplifiers. Sample-to-sample and system-to-system variations would be all that are actually heard in listening tests. Magazine reviews based on listen-

ing tests alone (no equalization or careful measurements) would offer no predictive advice for another sample in another system, except possibly for a few grossly bad amplifiers, which usually do not get reviewed anyhow.

These conclusions surely need independent verification by other experimenters, and as it happens, this has already been accomplished to some degree. After my initial report, printed in the Boston Audio Society newsletter in 1974, several people in the B.A.S. did independent experiments that yielded the same conclusions; these have also been reported. Some of the ideas involved have appeared in magazine articles in England and the U.S. recently, although I don't believe the whole story has been put together before now.

The implication is that "knowledge" is obtained only from tests that are repeatable by other people. But what about people who believe things in a cultist fashion, in spite of scientific proof to the contrary? Should they be scorned and their egos crunched? If a super-component of classic design is beautiful, rare, and reliable, with specifications near the ideal, believers and nonbelievers alike will want to possess it. The

purpose of this article most assuredly is not to throw too much cold light into all the warm, dark corners.

But for those readers who are interested in science, the truth can be a powerful force because it can be used like building blocks to construct bigger and better things that did not exist before. The potential is so great that we scientists must strive to keep our experiments as pure and undiluted as possible, preserving the power of the technique. This would free us to focus our attention on those more significant areas where a great deal of progress can still be made—optimizing the effects of reflected sound, the exploration of new noise-reduction techniques, the selection (or making) of better recordings, and many others.

My experiments indicate that listening tests by themselves are of no practical value in evaluating amplifiers, at least in the middle- to high-price ranges. Anyone who claims to dispute these statements should make sure that any observed differences in "sound" are not just due to imagination, resistor heat-up, temporary poor contact, or other such spurious factors, which can easily intrude and invalidate a listening test. **HF**

Negotiable Demands of the Golden Ears

Objections

Why must we switch quickly from A to B? Long-term listening is sometimes necessary for hearing subtle differences.

Shouldn't every element in the chain of playback components be what the golden ears have selected as being good enough to avoid masking differences?

Do we really need all this paraphernalia, with tricky switching arrangements and all kinds of awkward secret ballots?

Author's Responses

My own experience is that fast comparisons provide sensitivity to real differences, and long-term listening simply encourages imaginary ones. But I have to concede that both types should be tried.

Yes. Obviously any element that will mask the differences that the test is looking for will invalidate a result showing no difference. The problem is to get agreement about which components are good in this respect!

Most of the time, yes; some of the time, no. If the verdict of a test is "no difference," then the equalized double-blind procedure is not really necessary. It is only needed to eliminate imaginary effects in checking a perceived "difference." Similarly, Switch 2 in the diagram is not really needed in clear-cut cases—only in marginal ones.

Letters

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Censorship or Tact?

I was delighted to read, in your December review, that CRI has reissued Virgil Thomson's *Songs from William Blake* as sung by Mack Harrell—a recording I've long hoped would reappear. I was greatly disappointed, however, that one exquisite song, "The Little Black Boy," has been omitted.

Omitted? Or suppressed? One can't help wondering, in these muddle-headed times, whether some commissar of racial "rightthink" at CRI judged Blake's lovely and loving poem to be unacceptable in the '70s because of lines like "And I am black, but O my soul is white." If so, one can only deplore the lack of historical perspective and artistic understanding that informs such judgments. Our musical and poetic heritage should never be censored to suit political fashions in acceptable expression.

If such censorship was at work here, it reveals a truly racist (as opposed to color-blind) mentality. And it entirely misses Blake's loving spirit and message of brotherhood.

William Ewingson
Evanston, Ill.

It was no "commissar of racial 'rightthink' at CRI" who decided to expunge the fifth Blake poem from the re-release of Virgil Thomson's setting, but the composer himself. Thomson told us that, since the song "causes so much trouble among the blacks, I decided to leave it out for the time being. For those who want it, it's all published."

Political and social considerations have always influenced artistic expression, whether it was Bach basing *A Musical Offering* on a tune of Frederick the Great or Verdi deciding that *Un Ballo in maschera* really was all about intrigue in Boston.—Ed.

Darrell Times 2

Yours is a magazine with which I seldom find cause to quibble. A good deal of my monthly applause is regularly inspired by the confidently and, I believe, considerably expressed opinions of Harris Goldsmith, Abram Chipman, and R. D. Darrell. It is no criticism of Mr. Darrell, then, when I point out a small omission in his review of a recording of trios by Saint-Saëns and Lalo [November]. It is a pleasure to see two such works, composed at a time when serious chamber music was all but neglected in France, given their due.

Mr. Darrell states that for each work this "is plausibly claimed to be a premiere recording." I cannot speak for the Lalo trio, but I have had an excellent performance of the Saint-Saëns trio since 1972. The F major Trio, Op. 18 (1869), is coupled with the Piano Quartet in B flat, Op. 41 (1875), on an EMI/Pathé Marconi stereo disc, C 065 12075.

Christopher Greenleaf
Brooklyn Heights, N.Y.

In R. D. Darrell's review of *The Nutcracker* [December], this statement appears: "For the most sumptuous sound of all, though, one must go quadriphonic to the CD-4 disc. . . . RCA Red Seal (ARL 1-0027)." Is that a mistake? I have always been under the impression that RCA's quad series was ARD and that ARL refers only to ordinary stereo releases. Is the reviewer also implying that RCA's quad records are still marketed and therefore available for sale? My understanding is that they are not available anymore, period.

Richard Van Laven
New York, N.Y.

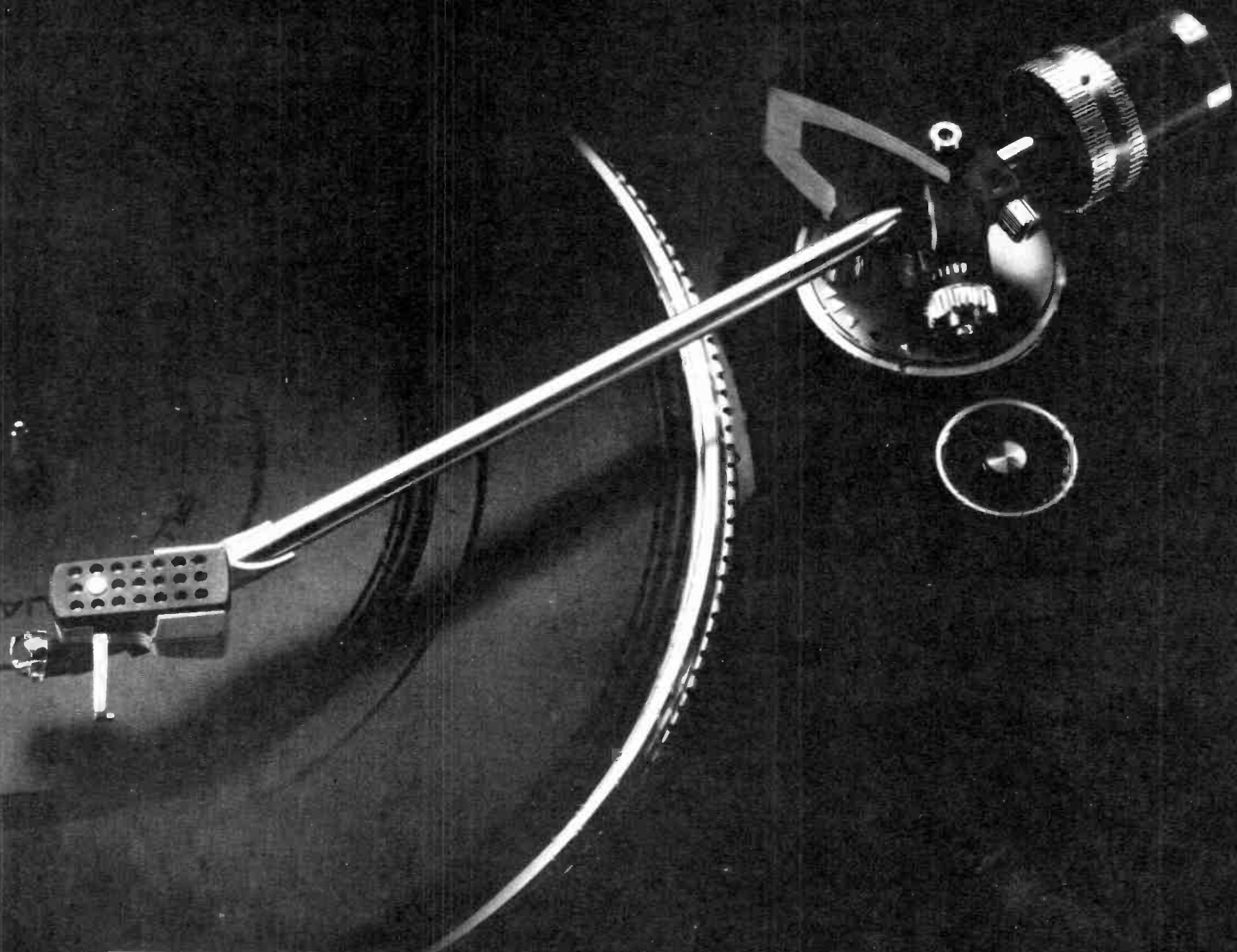
Mr. Darrell replies: I'm delighted to learn about the earlier Saint-Saëns trio recording. I've tried to be as tentative as possible when I am uncertain about matters of recording firsts, for I just don't have easy access nowadays to what is or has been available on European records.

Mr. Van Laven is correct in saying that the "ARL" prefix for the RCA disc refers only to the stereo release. SCHWANN adds a "Q" to show that a quad record is available but does not give its specific number. On the basis of the current catalog, then, the quad records that remain in stock are still for sale.

Out of the Vault

I've just finished reading David Rosenthal's article "Cracking the Vaults at Columbia and RCA" [December] and would like to add a positive point: The New York Philharmonic/Toscanini recording of the Beethoven Fifth made in 1933 is available, although in a limited edition. It is part of a four-disc set, the fourth in an annual series offered by the Neiman-Marcus stores, that spotlights the Philharmonic in recordings dating from 1925 to 1938.

Other Toscanini recordings included are the Nocturne (1925) and the Scherzo (1929) from Mendelssohn's *Mid-*



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Circle 38 on Page 79

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summer *Night's Dream*, "Dance of the Blessed Spirits" from Gluck's *Orfeo* (1929), and a 1936 recording of Rossini's *L'Italiana in Algeri* Overture. Other Philharmonic conductors featured are Willem Mengelberg, Sir John Barbiroli, and Sir Thomas Beecham. All of these recordings, with the exception of the Beecham, came from the RCA vaults and have not been issued in any form or re-released since their initial issue on 78s.

This set is listed in the Neiman-Marcus catalog as First Edition Series Four (71A) at a price of \$30 plus \$2.20 for handling. The address to write to is Neiman-Marcus, Box 2968, Dallas, Tex. 75221.

J. D. Weil

Hillsdale, N.J.

A Matter of Speeds

I agree with Harris Goldsmith's favorable assessment of Guido Cantelli's Seraphim recording of the Brahms Third Symphony [October]. He questions the slightly overdeliberate tempo for the first movement, but the "correct" tempo seems to have always been a controversial question among conductors and other musicians.

Robert Craft (in *Prejudices in Disguise*) mentions witnessing Arnold Schoenberg rehearse the first movement conducting six full beats to the measure as Schoenberg had heard and seen done in Vienna during Brahms's lifetime. This would necessitate a slow tempo. But one of the quickest tempos I have heard was that of a conductor associated with Viennese musical traditions, Felix Weingartner, on the discontinued Columbia ML 4512. B. H. Haggin reports the change in Toscanini's performance from "swift and light-footed" in 1929 to one with "greater breadth and weight" later (*Conversations with Toscanini*). And in an interview in the September 1979 *Gramophone*, Sir Georg Solti says of the Third: "The first movement is easy to get right on the piano, but you can't conduct it like that because, if you beat it in two, nobody has the pulse, and if you do it in six, it is too slow."

Martin B. Nass

New York, N.Y.

Correction

The address through which Julian Morton Moses' *Price Guide to Collectors' Records* can be purchased is: American Record Collectors' Exchange, P.O. Box 1377, New York, N.Y. 10022. An outdated address was given in our January article "Are Your Old Records Worth \$\$\$?"

◀ Circle 4 on Page 79

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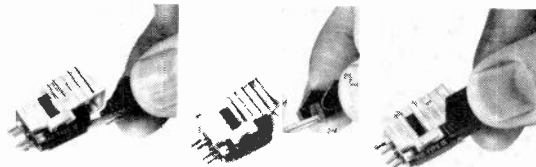
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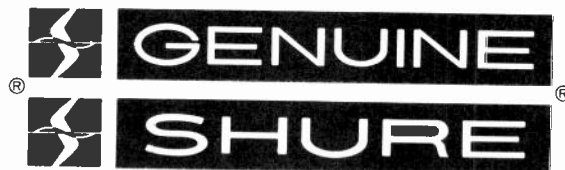
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Behind the Scenes

As reported last month, it's business as usual at London Records; with blithe disregard for any potential restructuring, activity proceeds at a hectic pace. Operatic recordings recently completed include two by Joan Sutherland, with husband Richard Bonynge conducting the National Philharmonic Orchestra. One of these, Massenet's *Le Roi de Lahore*, is the second digital opera recording undertaken by London, the first having been the Solti recording of Beethoven's *Fidelio*, about to be released. Joining Sutherland in the Massenet are Luis Lima, Sherrill Milnes, and Nicolai Ghiaurov; joining her in her other, more conventional project—Verdi's *La Traviata*—are Luciano Pavarotti and Matteo Manuguerra.

London also completed sessions recently at the Herkulessaal in Munich for Weber's *Der Freischütz*. Rafael Kubelik conducts the Bavarian Radio Symphony and a cast that includes Hildegard Behrens, Helen Donath, René Kollo, and Kurt Moll. This project represents another "second" for London—its second operatic recording in Munich. The first was Kubelik's recording of Nicolai's *The Merry Wives of Windsor* (OSA 13127), which also featured Donath.

Meanwhile, London's symphonic activity continues to flourish on both sides of the Atlantic. Projects completed in America include Berlioz' *Symphonie fantastique*, with Zubin Mehta leading the New York Philharmonic, Lynn Harrell playing the Elgar cello concerto with Lorin Maazel conducting the Cleveland Orchestra, and Michael Tippett's Fourth Symphony, with Georg Solti and the Chicago Symphony. The Tippett symphony was commissioned and given its first performance (1977) by the Chicago Symphony, which also took it along on a subsequent tour of European music festivals. This release will form part of a year-long celebration of Tippett's seventy-fifth birthday, which occurred on January 2.

Among recordings recently made in London are Shostakovich's Seventh Symphony (*Leningrad*), with Bernard Haitink and the London Philharmonic (recorded in conjunction with a Royal Festival Hall performance), and Sibelius' Second Symphony, with Vladimir Ashkenazy and the Philharmonia Orchestra. How on earth is Polygram going to keep track of it all if its takeover becomes fact? (The sale was not yet definite by mid-January, reportedly because Polygram was not happy about ac-

quiring analog disc pressing plants when digital technology was looming in the immediate future, and British Decca didn't want to be saddled with pressing plants after it left the record business.)

Deutsche Grammophon, one of Polygram's more traditional concerns, recently completed another operatic project of its own: Verdi's *Rigoletto*, with Carlo Maria Giulini leading the Vienna Philharmonic. The conductor interspersed recording sessions at the Vienna Musikverein with intensive piano rehearsals for the soloists, Piero Cappuccilli (*Rigoletto*), Ileana Cotrubas (*Gilda*), Placido Domingo (*Duke of Mantua*), Ghiaurov (*Sparafucile*), Moll (*Monterone*), and Elena Obraztsova (*Maddalena*). The rehearsals were as much dramatic as musical, with Giulini giving each singer detailed coaching on the words. And where in that great musical city of Vienna did the rehearsals take place? At the offices of Polydor, the Polygram subsidiary that oversees DG, in a small room that resonated deafeningly as one soloist tried to outdo another. During recording sessions of the famous quartet, an intimidating prospect for any artist, Domingo was reported to be at his most relaxed. His yodeling, however, will probably not appear in the final mix.

All eyes are on Nonesuch. So closely had the brilliant, dynamic Tracey Sterne come to be identified with the label and its innovative policies—including the commissioning of works to be recorded, the Explorer series, the cultivation (rather than the simple exploitation) of such artistic talent as Jan DeGaetani, William Bolcom, Joan Morris, and Paul Jacobs—that one can scarcely imagine it without her. Thus, not surprisingly, when Sterne was fired and all scheduled recording sessions canceled, insiders speculated both in private and in print that Nonesuch would cease as a production company and simply sell its remainders—or at most become another distribution company for European labels.

Spokesmen for Elektra/Asylum, a division of Warner Communications, Inc., and Nonesuch's parent company, insisted from the outset that production would continue under the label's new director, Keith Holzman. Holzman, whose varied past with the company includes having produced the Karl Ristenpart Schubert Sym-

phonies Nos. 1 and 2 and the Charles Mackerras Dvořák Eighth, told us that he expects to produce fifteen to twenty recordings per year, approximately the same rate as in the past, with particular emphasis on American chamber music.

The new projects will almost certainly involve extensive changes in the artist roster. Nonesuch will now "look west of the Hudson as well as east of it," Holzman said, "and hold recording sessions on the West Coast for the first time in its history." (He will run the label from his Los Angeles office.) One of the parent company's disagreements with Sterne was what it deemed her overemphasis on a limited circle of New York-based artist friends. Nonesuch hopes to retain some of them, but others are expected to repay Sterne's loyalty by shunning the new regime. Meanwhile, letters of protest—including one signed by ten Pulitzer Prize winners—have been pouring into the offices of Warner in New York and Elektra in Los Angeles from musicians, musicologists, composers, and even other record companies' executives who admired Sterne's directorship of the label.

The new twenty-five-month recording contract recently negotiated by the American Federation of Musicians with the major companies provides for an 8% wage increase in the first year and 7% in the second. With this burden added to the industry's already slumping economy, the major producers may be forgiven for failing to muster a great deal of enthusiasm for the union's concessions, somewhat more liberal provisions for "on-location" symphonic and operatic recordings and for the recording of chamber music.

To encourage additional employment, the union agreed to extend the special chamber music rate, which is cheaper than the symphonic rate, to recordings involving twenty-four or fewer players, but it specified that no product "recorded by more than nine players may be identified by name or inference with a parent symphony orchestra." Thus, producers may use, if not necessarily identify, substantial groups from major orchestras without having to pay the entire ensemble.

Anatol Vieru, Romania's most noted composer, has informed us of his forthcoming opera: *Dracula!* **HF**

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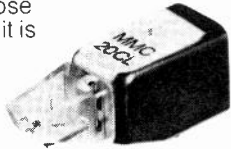


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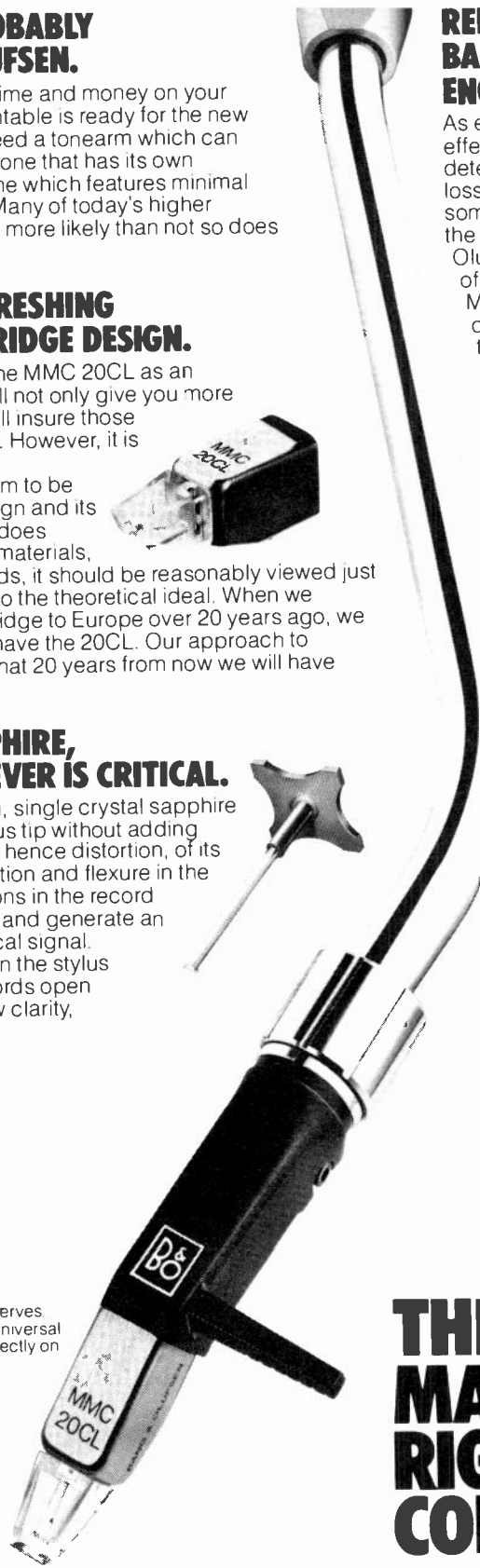


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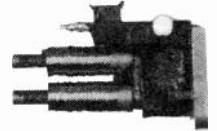


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Circle 5 on Page 79

Record Reviews

Berg's *Lulu* "Restored"

Teresa Stratas gives the performance of a lifetime in the first recording of Cerha's complete edition.

by David Hamilton

The vicissitudes suffered by Alban Berg's opera *Lulu* between the composer's death in 1935 and the first complete performance in Paris, more than forty-three years later, have been often and eloquently rehearsed. (They are concisely summarized by the English scholar Douglas Jarman in a talk included on the final side of the new DG recording.) As Pierre Boulez observes in his introductory essay, any controversy about the opera's third act is "superfluous"; that it hasn't been there all along was simply the result of bad luck and bad timing: Berg's unforeseeably fatal illness, the Nazi diaspora of his composer colleagues and ban on his music, and, finally, the twists and turns of his widow's emotional life.

Now at last *Lulu* can be discussed in correct terms, thanks to Friedrich Cerha's devoted "restoration" of the final act, about

which little need be said save that it is painstaking, self-effacing, and documented frankly and precisely. Cerha's pamphlet, published in German by Universal Edition, defines in specific detail his working methods and the areas in which he had to make his own decisions; this is summarized in his talk, also on the last side of the DG recording. Nothing I could say about Cerha's work should carry as much weight as the wholehearted approval of George Perle, the American composer and scholar who knows the material as well as anyone save Cerha himself, expressed in no uncertain terms at the Music Critics Association seminar last summer in Santa Fe, at the time of the American premiere of the completed opera. There remains some hope that among the unsorted Berg manuscripts in Vienna, a page or two relating to *Lulu* may yet be found to establish a definitive text for some of the few spots where conjecture has been necessary.

Naturally, the third act makes a difference to *Lulu*—rather, several differences. First, of scale: *Lulu* is now an opera of nearly three hours' length, some forty minutes longer than the old version with its ersatz Act III. Then, a difference of shape, for the palindromic aspect of the action—*Lulu*'s symmetrical rise and fall—now comes into its own as the opera's principal structural motion. Previously, we had all of her rise, but only parts of the fall—and of these, the second scene of Act II taken by itself even suggested a repetitive structure (*Lulu* moving on to a fourth husband) more than a change of direction, while the makeshift murder scene hardly sufficed to balance all that had gone before.

Musically, the incomplete version tended to emphasize the forms that govern the first two acts (respectively, the *Lulu*/Schön sonata movement and the *Lulu*/Alwa rondo), overshadowing the then-unfulfilled recapitulatory symmetry. Now we can perceive the opera to be formally denser than we had suspected. Like *Wozzeck*, it is very self-consciously constructed, using many traditional models, and Berg manipulated the text of Wedekind's plays to make the libretto fit his formal requirements. *Lulu* is more intricately woven than

Wozzeck, involving the intersection of the ongoing forms that dominate each act (the variations on Wedekind's "Procurer's Song" run through Act III) with the many returns of earlier material that generate the overall mirror symmetry.

The new act tangibly broadens the opera as well as lengthening it. Its first scene, set in a Parisian salon, introduces a variety of new characters, who populate three elaborate ensembles—a kind of music not heard previously, a degree of social density exceeding that of earlier scenes, and touches of almost operettalike parody. Between the ensembles, a series of duets shows *Lulu* threatened by the white-slaving Marquis and the greedy Acrobat, and even old Schigolch comes asking for money, though he agrees to help her by doing away with the Acrobat. Like earlier scenes, perhaps even more grotesquely, this one presents actions of great intensity yet surreal improbability in the external framework of drawing-room comedy—a dimension of dramatic irony that may easily vanish in a thoughtless production.

The final scene, too, adds much. Musically, it flows in an immense, gradual *ritardando*. *Lulu*, in a London garret, tries her luck as a prostitute, and her three customers are enacted by the singers who played her three husbands. Thus, the music associated with the Medical Specialist returns early on, at an almost comic speed. The Countess Geschwitz turns up with *Lulu*'s portrait, leading to an eloquent quartet led by Alwa and joined by Schigolch as well (one of the few failures of the recording, I'm sorry to report, for nearly everyone sings too loudly throughout). If the first client is almost funny—he refuses to talk and continually shushes *Lulu*—the next ones are more menacing: The second bashes in Alwa's head, and the last is Jack the Ripper, who kills both *Lulu* and Geschwitz. (Schigolch survives, having prudently taken off to the pub after Alwa's death.)

All of this casts reflections backward as well, even more than one might expect. For example, near the beginning of the Prologue, as the Animal Tamer begins to describe the forthcoming entertainment ("*Was seht ihr in den Lust- und Trauerspielen*

BERG: *Lulu*.

CAST:

Lulu	Teresa Stratas (s)
Fifteen-Year-Old Girl	Jane Manning (s)
Countess Geschwitz	Yvonne Minton (ms)
Lady Artist	Anna Ringart (ms)
Mother	Ursula Boese (a)
Dresser in a Theater/ Schoolboy/Groom	Hanna Schwarz (a)
Alwa	Kenneth Riegel (t)
Painter/Negro	Robert Tear (t)
Prince/Manservant/ Marquis	Helmut Pampuch (t)
Dr. Schön/Jack	Franz Mazura (b)
Journalist	Claude Méloni (b)
Professor of Medicine/ Schigolch/Police Officer	Toni Blankenheim (bs)
Animal Tamer/ Acrobat	Gerd Nienstedt (bs)
Theater Manager/ Banker	Jules Bastin (bs)
Servant	Pierre-Yves le Maigat (bs)

Paris Opera Orchestra, Pierre Boulez, cond. [Günther Breest and Michael Horwath, prod.] DEUTSCHE GRAMMOPHON 2711 024, \$39.92 (four discs, manual sequence). Tape: 3778 086, \$39.92 (four cassettes).

..."), the orchestra introduces some vigorously rhythmic music (Hans Redlich dubbed it "Circus Music"). This recurs briefly later in the Prologue (itself palindromically constructed), but nowhere else in the first two acts; a brief echo of it, in muted horns near the end of the final Adagio, remained in the old version a puzzle. Now we discover that this "Circus Music" is the principal material of those three ensembles in the third act, a principal thematic element in the opera's representation of society, and the familiar instances take on new meaning.

The network of such musical (and also verbal) relationships that Berg builds up is extraordinarily elaborate and of more than merely "cerebral" import (though it should never be forgotten that this purportedly most "human" member of the Second Viennese School was in fact the one most fascinated and stimulated by abstract complexity). The emotional impact of Berg's recapitulatory passages may be compared to that of the important reprises at the end of Wagner's *Ring* (e.g., in Siegfried's Narration), where the important themes have accumulated a considerable freight of significance, the recall of which in contrasted circumstances can be both ironic and poignant. When Jack the Ripper (Dr. Schön's double) arrives, Lulu hypes he will stay the night, but he says he hasn't time—to the same music that accompanied her hope (in Act II, Scene 1) that Schön could spend the afternoon with her instead of going to the stock exchange. Her need for Jack's love is underlined by the broad, almost Mahlerian melody we had first encountered in Act I as the closing theme of the sonata-form exposition—but over it we now hear the tightfisted Jack haggling about Lulu's price, insistent that he must have change for the omnibus in the morning!

One major function of the complex play of these elements is to underline the essential similarity of all the men in Lulu's life: Every one of them is interested in her only for what he himself wishes her to be. For her part, as she asserts in her second-act aria, she never pretends to be anything other than what she is, and it is their own fault if they are surprised by her actions. This basic conflict, with its consequences, never changes, whether Lulu is rising or falling in the world. It and many other important aspects of the opera are penetratingly discussed in Douglas Jarman's excellent study, *The Music of Alban Berg* (University of California Press), an essential book for any committed admirer of Berg's music, and especially of the two operas, which are treated at length.

The pattern of role doubling that



Teresa Stratas
For Lulu, animal intensity

Berg imposed upon Wedekind's plays even involves some of the minor figures. The assignment of the Theater Dresser, Schoolboy, and Groom to the same alto (obviously, one who is good at trouser roles) appears to be merely a way of reinforcing the overall déjà vu effect, without any more specific significance. On the other hand, three secondary aspirants to Lulu's favors, the Prince, the Manservant, and the Marquis, all taken by a buffo tenor, also share a series of variations on a chorale theme that runs from one act to the next. The Boulez recording follows Cerha's edition, which has one doubling wrong, due to reliance on a superseded early memo of Berg's: The Banker should be doubled with the Medical Specialist and the Professor, not with the Theater Manager. Presumably for economy's sake, Toni Blankenheim, the Schigolch, also speaks the very brief parts of the Medical Specialist and the Police Officer—harmlessly, since we hardly recognize him.

Before discussing individual contributions, let me assert that, by any standards, this is a remarkably fine performance. According to those present (including some participants), the initial Paris performance was rather ragged, and of course the production by Patrice Chéreau was enormously controversial—but what we hear on these discs is first-rate. Surely the precision of detail is partly due to the studio circumstances, where the singers had score in hand; the fidelity and rhythm is equal to that of Dohnányi's recording (London OSA 13120), far superior to that of the Hamburg (Angel, deleted) and Berlin (DG 2709 029) live-performance recordings (all

of them, of course, of the incomplete version and in no significant sense competitive).

No doubt because this studio recording took place in conjunction with live performances, we find in it an uncommon level of dramatic awareness from every participant. The cast may be short on vocal glamor, but they read their lines with much focus and sense of motivation. This quality is so general as to suggest an origin in that controversial director Chéreau, whose intelligent discussion of Lulu's character, in an essay in the DG booklet, also speaks in his favor. I would not want to pass judgment on a production that I haven't seen, but there is evidence here that more than mere perversity was involved.

The Paris Opera Orchestra is no world-class ensemble, but for Pierre Boulez it plays at an astonishing level. Here and there, a patch of insecure intonation or rough tone gives the musicians away, but most of the time they play so purposefully and expressively, not to mention accurately, that one hardly notices the minor glitches. It is, in fact, a characteristic example of Boulez working at his best level: transparent, logical, disciplined, involved. The Dohnányi performance, ravishingly played and markedly superior to all its predecessors, is neither as tight nor as insinuating as this one, though the contrast between the two is certainly instructive, and the Vienna Philharmonic's tonal qualities remain unique.

If memories of Boulez' *Wozzeck* recording (Columbia M2 30852), in which the precision and *intenzione* of the instrumentalists was scarcely matched by the singers, intrude at this point, let me put them to rest: These singers are accurate, and make their effects with the notes Berg wrote. First of all, Teresa Stratas gives the performance of a lifetime as Lulu, making sense of the music's expressivity and investing every line with vivid animal intensity. Even when she can't sing everything smoothly, she maintains her poise and gets the shape and color right. While choosing some of the easier options, she keeps enough of the high notes and coloratura that are, after all, an integral part of the role's musical profile. Her top Ds—and sometimes lower notes as well—are not especially beautiful, but they make sense, while most of the part is sung with lovely tone and penetrating musicianship.

I don't recall encountering Franz Mazura before; though his notes are occasionally less than precisely tuned, he makes a powerful and vivid Schön, a credible man of affairs and authority, of passion and frustration. Alwas don't grow on trees—they hardly grow at all; Kenneth Riegel's

greatest achievement is that, though he is working awfully hard, he manages to project a good deal of character above and beyond that apparent fact. The security of his upper range (including an optional high C sharp in Act II, Scene 1) is achieved at the cost of any soft singing up there. Robert Tear (Painter) has no such security, but is fortunately not required to ascend so high, and of course his customary musical accuracy and steadiness do count for a good deal. (For better or worse, his voice is instantly identifiable when it returns, as the Negro, in the final scene.) Toni Blankenheim—once the Dr. Schön of the Hamburg recording—is a fine Schigolch, with a chilling edge of menace as well as the more obvious touches of mordant humor. For some reason that I can't pin down, Yvonne Minton's well-sung *Geschwitz* doesn't make the usual sympathetic effect. The others all fit well into the picture.

The recording was made in the studios of IRCAM, Boulez' state-financed musical research institute in the Centre Pompidou in Paris. It's a close, rather dry pickup, with a clarity that well matches the attributes of the performance, though also entailing less sense of perspective and dynamic variety than one gets from the Decca/London sound for Dohnányi. Now and then the microphone seems to be fighting one of Stratas' top notes. The off-stage jazz band in the theater scene is exceptionally clear.

The seven scenes are neatly laid out on seven sides, which is not necessarily as satisfactory as it sounds. The turns come just before (in one case, just after) the interludes; while no stage action is thereby interrupted, these are sometimes points of high musical tension, and thus not ideal spots to break continuity. Still, none of them are as dumb as the two bad breaks in the London set. The leftover eighth side is devoted to three lectures, in three languages: Jarman on the opera's history (English), Cerha on its completion (German), and Boulez on the performance problems (French); the booklet includes translations into other languages. Since none of these speakers uses any musical illustrations, there's little advantage in having them in audible form. The booklet also includes a more general essay by Boulez and Chéreau's defense, as well as numerous production shots. The libretto translation is Arthur Jacobs' singing version—not ideal for this purpose, for it is sometimes less than literal, but I suppose there wasn't time to prepare another one if the recording was to go into rush release. Mercifully, the booklet gives only German and English librettos, though the essays turn up in the usual four languages.

Beethoven's *Waldstein*

Goldsmith on Vered

by Harris Goldsmith

Ilana Vered has proven herself as a temperamental if somewhat undisciplined artist in high Romantic literature, and her accomplished but rather unruly recording of the Chopin Opp. 10 and 25 Etudes (Connoisseur Society CS 2045, now available only in cassette form as Advent E 1018) left no doubt of her formidable, if slightly hard-toned, prowess. For all that hindsight, this release is revelatory, showing the Israeli-born musician to be an idiomatic interpreter of repertoire demanding a rigor I did not think she possessed.

To be sure, Vered's *Waldstein* Sonata is played with a degree of metrical freedom, with a Romantic broadening for the first movement's lyrical second theme. But the music certainly can take it, particularly since she maintains its basic angularity of phrasing and its heroic, acerbic sonority with no loss of delicacy or color. In many respects this performance is stylistically reminiscent of Rudolf Serkin's mono recording of 1952. Textually, Vered takes care to get the inner-voice accentuations right in the Adagio, and she observes the controversial long pedal markings in the rondo with total conviction. Only one quibble: The *leggiero*, *pp* octaves at the end are marked legato, and Beethoven's repeated 1-5 fingering makes it clear that he wanted them played as a glissando; she plays them non legato, from the wrist.

Schubert's *Wanderer* Fantasy is, in a sense, that composer's *Waldstein*. Both works are heroic structures, built up (like Beethoven's Fifth Symphony) from basic chordal ingredients, with incursions of vehemence tempered with heartfelt lyricism. Both, for all their symphonic scope, are quintessentially pianistic vehicles, and both require stridency and jewel-like symmetry to be held in perfect tandem. Their coupling is a marvelous idea, and I wonder why no label tried it earlier. As in the Beethoven, Vered's sonorous, athletic reading of the Schubert leaves little to be de-

sired. She is up on the latest scholarly amenities—duly changing the D sharp to D natural in the final bar of the slow section—and her technically forthright playing has been caught with telling impact and resonance. If the interpretation lacks some of the prismatic coloration and poetry of Curzon's ancient London recording or the riveting metric tautness of Fleisher's miraculously organized account (why doesn't *Odyssey* reissue it?), it nevertheless carries great conviction. This recording, both in sum and in part, is highly recommended.

The Reviewer Reviewed

Cooper on Goldsmith

by Kenneth Cooper

Not often is a performer given the chance to take on a critic, especially in print and on his own turf. Equally infrequent are the occasions when a critic is willing to throw himself to the lions, as it were, and taste a way of life that performers face daily. Some of us have been trying to confound the typesetters for years, not always so successfully as Harris Goldsmith does here: His new recording of Beethoven piano sonatas is thoroughly stimulating.

We know Goldsmith to be an expert critic and have come to expect from him a high level of integrity, literacy, and open-mindedness, with a minimum of invective, vanity, and technical display. His profound understanding that human life and artistic endeavor existed prior to the advent of stereo enables him to draw upon a broad stylistic experience; he does not discriminate against ideas on the basis of age.

Fortunately, the attributes of his thinking are evident in his playing. It is not surprising that he should have gained some insight into Beethoven's *Waldstein* Sonata,

BEETHOVEN: Sonata for Piano, No. 21, in C, Op. 53 (*Waldstein*). SCHUBERT: Fantasy for Piano, in C, D. 760 (*Wanderer*).

Ilana Vered, piano. [Tim McDonald, prod.] LONDON PHASE-4 SPC 21183, \$8.98. Tape: SPC5 21183, \$8.98 (cassette).

BEETHOVEN: Sonatas for Piano: No. 21, in C, Op. 53 (*Waldstein*); No. 31, in A flat, Op. 110.

Harris Goldsmith, piano. MUSICAL HERITAGE SOCIETY MHS 4005, \$5.20 (\$3.95 to members). (Add \$1.25 shipping; Musical Heritage Society, 14 Park Rd., Tinton Falls, N.J. 07724.)



Harris Goldsmith—thoroughly stimulating sonatas

having presumably heard all the recordings of it (upward of fifty-six, by my rough count), not to mention countless live performances. But refreshingly, his performance is engaging and spontaneously exciting, and it conveys important aspects of the work that some of the great pianists have overlooked.

Goldsmith's whirlwind concept of the first movement might have astonished even Toscanini. Other versions deliver certain phrases and details more sweetly, more lovingly, and even more strongly, but—as with Toscanini's music-making, or Solomon's, or Schnabel's—concentration upon detail seems frivolous or distracting in the face of such grand, sweeping gestures. This is not to say, however, that exquisite details are lacking. For example, at the beginning of the recapitulation (measure 156), an eighth-note value is traditionally added to "help" us hear the phrasing. In classical style, the ends and beginnings of phrases often occur at the same point; to separate them into discrete phrase units may result in a distortion of either or both. At the measure in question, the big lines meet at a single point that should sound instantaneous—as it does here.

In the comfortably slow *Adagio molto*, Goldsmith dares to observe the full eighth rests in the second and fourth measures, which many pianists clip off for fear the listener will lose interest, or worse, begin to cough. Without the full rest, the first

note of the next measure loses credibility as a downbeat, and the silences are not long enough to contrast with the continuity of the melody later on. These rests are not unimportant details: They aid the listener in proportioning phrase against phrase.

Without doubt, the most astonishing revelation in this performance is the courageous, positive, and untraditional stand Goldsmith takes on the matter of Beethoven's pedal markings. Here again, we are not speaking simply of details, but of the sonic texture and phrase structure of the entire finale; nor are we discussing the license that composers for the piano, including Beethoven, usually left to interpretive discretion, but a deliberate, carefully notated effect without which we have quite a different work. The crux of the matter is this: There are two kinds of material in the finale: the lyrical, usually soft melody with its rippling accompaniment and the rhythmic, loud, motivic material. In the lyrical portions, only tonic and dominant harmonies are used, and Beethoven intended not that the dominant *alternate* with the tonic, but that it be *superimposed* on the tonic—a far more imaginative sound. The lyrical material is thus better characterized by being *blurry*, while the motivic material (more active harmonically) becomes more greatly contrasted by being *clear*. In this way, the pedaling supports the musical structure and is indistinguishable from Beethoven's original intent in composing

the work. (In Beethoven's time, pianos produced the same effect, relatively: The blur from the damper pedal was somewhat less pervasive than on the modern Steinway, but so too were the attack and resonance of the tone.) Goldsmith has praised other pianists for attention to this point, but he puts the movement across in a way that makes us realize what we've been missing.

His portrayal of Op. 110 throws us fascinatingly into another interpretive dilemma, and again, historically, the problem seems to have been ours, not Beethoven's: Did he mean what he said, and dare we do it? Goldsmith's view once more is loud and clear in favor of following Beethoven's explicit directions, and the result is another Beethovenian masterstroke revealed. The second, inverted treatment of the fugue is marked first "*poi a poi di nuovo vivente*"—re-viving bit by bit (measure 136), and later "*poco a poco più mosso*"—more quickly, little by little (measure 172), with a crescendo to the very end. Beethoven's desire for a gradual acceleration from beginning to end of this section supports a very unusual event in a classical sonata—the placement of the climactic moment at the *end*, instead of at a point about three-quarters of the way through the movement. The *accelerando* incorporates a *Meno allegro* along the way (measure 168), with the triplet eighths written as sixteenths, thereby creating a new, slower eighth note, which then continues to accelerate. Many pianists have been baffled by what appears to be a sudden surge of rapid notes at the *Meno allegro* but is, in fact, a notational convenience. One should not hear a shift of gears at this spot. Although Goldsmith loses a little momentum in measures 174–178, while bringing out the fugue subject in the bass, the "geometric" progression of this fugue is beautifully controlled, and the huge structure of the movement—*Recitative/Arioso/Fugue/Arioso/Fugue* (inversion)—unfolds clearly and logically.

I have dwelt at length on particular aspects of Goldsmith's performances to the exclusion of others because they seem to epitomize the importance of his contribution. His accomplishment is of interest not solely because of his obedience to Beethoven's markings, but because he demands that the ideas they represent be understood. Now we are ready for the long-lost G in measure 134 of Op. 111, the rests in the introduction of Op. 81a, the *Hammerklavier* first movement at half note = 138—.

Harpichordist Kenneth Cooper, whose most recent recording—with flutist Paula Robison in Handel's flute sonatas on Vanguard—was reviewed in July, is not planning to record the Waldstein.

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Classical Reviews

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Scott Cantrell	Allan Kozinn
Abram Chipman	Paul Henry Lang
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BACH: Magnificat, in D, S. 243—See Stravinsky: The Wedding.

BEETHOVEN: Sonatas for Piano, Nos. 21 and 31. For a review, see page 71.

BERG: Lulu. For a review, see page 69.

BIZET: Carmen.

CAST:

Carmen	Rosa Ponselle (s)
Micaëla	Hilda Burke (s)
Frasquita	Thelma Votipka (s)
Mercédès	Helen Olheim (ms)
Don José	René Maison (t)
Remendado	Giordano Paltrinieri (t)
Morales	Wilfred Engelman (b)
Dancaire	George Cehanovsky (b)
Escamillo	Julius Huehn (bs-b)
Zuniga	Louis d'Angelo (bs-b)

H Metropolitan Opera Chorus and Orchestra, Gennaro Papi, cond. [John F. Pfeiffer, prod.] MET 7 (three discs, automatic sequence) [recorded from broadcast, April 17, 1937]. Available with a donation of \$125 (including an *Opera News* subscription) or more to the Metropolitan Opera Fund, Box 930, New York, N.Y. 10023.

This is Number Seven in the Met's series of historic house recordings, released annually to raise money for the Metropolitan Opera Fund. Its "historic" aspect rests

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

◀ Circle 46 on Page 79

primarily in the fact that it becomes the first recording of Rosa Ponselle in a complete role to be placed on public sale. Moreover, the role is one she did not record even in excerpt commercially, caught at the 1937 performance that, as it turned out, was her last (a tour broadcast from Cleveland).

The enormous reputation of Ponselle will doubtless sell the album. Certainly it is understandable that the company would wish to mark the long association of one of its greatest artists and greatest draws—there is a true resonance from the farewell performance of a singer who debuted in the company of, and on equal terms with, Caruso, Amato, and Mardones. As it happens, the conductor and two of the comprimario singers who participated in that 1918 *Forza* with Ponselle also shared in the performance that closed out her career. Up from vaudeville at age twenty-one, she retired at forty.

But wouldn't one also suppose that in such a series, the Met would wish to offer only such recordings as might genuinely reflect honor on the house and its greatest artists? I would wishfully so suppose. But here we have a *Carmen* with all the properties of a tacky road-show effort flung before a timid audience that must have been wondering why it wasn't having a good time. Musically, stylistically, and linguistically it is a thoroughgoing horror that even we who plug for the bad old days could hardly defend, and except for its two principals, its cast does not surpass those that were to be heard on many a night from the barnstorming troupes of Charles Wagner or Fortune Gallo.

We might refer to this unsavory milieu more delicately were it the inescapable surrounding for a magnificent individual portrayal by its star. But, for all the evenings that must have been lifted by just such accomplishments from this same singer, we must see condemned to smug posterity's gaze the lyric equivalent of the skid on the banana skin. I am not, mind you, the first to say so. When first exposed midway through the previous season, Ponselle's *Carmen* was given reserved critical treatment by all the reviewers save one—the *Times's* Olin Downes, who gave it an unrestrained razz.

Downes, as I recall him from his later

years, was not an exciting or original critic. But he did have a solid all-round knowledge and a certain level sobriety. In this album's accompanying material, there is the suggestion that Downes's remarks on Rosa represented an overreaction, perhaps based in part on extracritical considerations. To Ponselle's defense are brought communications from those exemplars of critical detachment and motivational purity, Geraldine Farrar and Grace Moore.

The problems of Ponselle's final seasons at the house and the circumstances of her retirement are among the most apologized-for in the world of singers and their fans, a world that sometimes seems cantilevered from a frame of apologies and excuses to begin with. The matter goes beyond the understandable reluctance to allow damaging admissions about artists who are justly admired and loved, and even beyond the comprehensible (though, in a critic, inadmissible) investment in not quite hearing or seeing the off-nights or (hush!) the decline of such artists. (It often seems that the critics are the last, not the first, to notice change in an artist's work, either positive or negative—print will at last reflect what has been common observation in the profession for eight or ten years. Is this quite the way it should be? This attitude infers a threat that if we are so mean as to notice, the fragile soul in question just may pack up and go away, so there.)

Downes noticed, the rat. No, he didn't allow much for opening-night nerves or the recent flu bug, but his comments are by no means inapplicable to the performance given here, by a presumably calmer and healthier singer. They are handily accessible in the first volume of the company's annals.

No one, least of all Downes, denies the stature of this singer—indeed, that stature is the context for his strictures. But the fact is that while plenty of Ponselle's voice was left, the tessitura of her greatest roles was no longer comfortable for her. The season of 1934–35, when she sang Violetta and Gioconda, was her last to traffic in that territory; after that, only a scattering of performances in two roles—Carmen and Santuzza—that are commonly mezzo assumptions. These final Ponselle seasons coincided with the first regularized broad-

casts from the house, and thus with the first regularized private off-the-air recordings. Her only other complete performances on these recordings are another, earlier Carmen and a splendid 1935 Violetta, partnered by an extraordinary Lawrence Tibbett Germont—a recording that truly recalls how the music sounds from voices of authentic grand-opera size and timbre, controlled by techniques that still allow for the required flexibility and subtlety.

In the subsequent operatic snippets at our disposal, we hear a downward settling in process. Arias like "*Voi lo sapete*," "*Esser madre è un inferno*," and "*O divina Afrodite*" (*Fedra*) show, if anything, an increased breadth and richness in the timbre, chest tones of a wonderful, smoky power and singiness, and unusual depth to the occasional *forte* top notes. But Ponselle's selection of roles and arias tells us something, and the voice's edginess on bright vowels, the pressure that creeps in when high tessitura must be sustained, and the harder sound when she tries to float a *piano* all add to the picture. The voice was lowering a bit, and Carmen was a sensible direction to take, provided she could make a success of it. For a performing artist, "success" is measured in terms of public approval, critical acknowledgment, professional respect, and self-acceptance. They don't always go together.

Ponselle did everything one is supposed to do. She took time off and retained the exclusive services of a venerable coach, well soaked in the brine of the genre. This way of working is, thank God, unique to opera, and the innocence of it is an inexhaustible source of amazement. Beyond the fact that such coaches are often not only well soaked but positively pickled, there is a shining naiveté to the notion that one can arrive at an "interpretation" by going over and over lines, spoken or sung, for their meaning and inflection, by making one's choices in a creative isolation booth, even when the advice is really expert.

What emerged from all this, as heard here, was a performance that sits wrong in nearly every way. It is not that the voice is all *that* far from its best. Vocally, the main problem is that too much of the part rests in the voice's least beautiful segment, the lower middle, where many of the French vowel sounds add to the rather mouthy, tough timbre that, in the tessitura and language of her Italian roles, was generally only a mild and fleeting displeasure. But when she is actually troubling to sing, the voice is amply firm and resounding, the tonal quality above and below this patch still imposing and often beautiful.



Ponselle as Carmen
Amateurishly self-indulgent

The big trouble: Ponselle apparently lost trust in her vocal and musical gifts, and decided to force the issue by "acting" the role. I employ the quotes advisedly—the performance is amateurishly self-indulgent. There is a forewarning of the disaster in her otherwise admirable Violetta, wherein, in the *Scena della borsa*, Alfredo's entire denunciation is countered by a steadily intensifying barrage of whimpers, sobs, and screams. In a single scene, she undoes the audience compliance built up over two full acts.

In Ponselle's Carmen, this tendency becomes the basis of her "portrayal." There must be as many lines of spoken ad lib as there are of singing, and if she cannot find words, she resorts to sounds, as if not an on-stage moment must be allowed to pass undecorated by her voice. One certainly hears all the "coaching"—sure enough, this line is a question, that one a statement. The choices are invariably the most obvious and heavy-handed ones, and it is frankly hard to tell how much is the clumsy effort of an actress of little technique and taste, and how much the desperation of a performer

who has a compulsion to be the center of attention, even during the key moments of other characters. Her phrasing of the music betrays the same necessity to force climaxes and emotional effects, and altogether this Carmen is a strained, dislikable performance. Some memorial!

Her colleagues are headed by René Maison; to the extent that the recording has a hero, it is he. Maison's Met career was overlapped by that of the French-Canadian tenor Raoul Jobin, and with the latter's departure for France in 1950 the once-proud line of French dramatic tenors came to an end in New York. Maison was actually most admired in the Wagner repertory, wherein only the role of Walther brought him out from under the shadow of Melchior at the Met. His technical setup was in fact best suited to Wagner—ringing sound and good control in the upper-middle tessitura and a very solid lower range, but definite signs of squeezing and intonational shortfall above A.

Still, his Met successes included José, Hoffmann, and Samson. The Hoffmann (very intense, but vocally unpredictable) circulates privately. In his José it is good to be reminded of the sort of singer whose command of French language and style is complemented by a voice of some real depth and resonance. The B flats are on occasion sour and shy of pitch, but much of the vocalism has a firmness and brilliance that has more recently been offered only by singers well outside the French tradition, and the emotional commitment of his singing carries the listener a good distance.

Hilda Burke, the Micaëla, offers a pretty, not very colorful lyric soprano, a straightforward musical style, and poor French. Julius Huehn's Escamillo is far below the level of his Germanic characters in this series, for he has scant notion of the language or style, and cannot be said to be singing recognizable phrases much of the time. He does well enough vocally by the "Toreador Song," but falls to pieces both vocally and musically in Act III.

In both these roles and in most of the secondary ones, there is a provincial tone. Though only one or two of the comprimarios are positively poor, Louis d'Angelo's Zuniga is the sole rendition among them to observe an international grand-opera standard. The choral singing is only moderately effective, and while the playing of the orchestra for Papi is of a high standard and possessed of a kind of weight not often encountered these days, the reading also makes room for many ill-considered options and indulgences, as well as standard theater cuts of the time.

The sound, though never construable as hi-fi, is amazingly listenable for the source. The package offers a fancy box, the current Met libretto (once again the standard recitative version, translated by Francis Steegmuller), and the customary glory-to-the-Met booklet. As we used to say in Brooklyn in a nonoperatic context, wait till next year. C.L.O.

BRAHMS: Ein deutsches Requiem, Op. 45*. **BRUCKNER: Te Deum***.

R Elisabeth Grümmer* and Agnes Giebel*, sopranos; Marga Höffgen, alto*; Josef Traxel, tenor*; Dietrich Fischer-Dieskau, baritone*; Gottlob Frick, bass*; Choir of St. Hedwig's Cathedral (Berlin), Berlin Philharmonic Orchestra, Rudolf Kempe* and Karl Forster*, cond. **ARABESQUE** 8007-2, \$13.96 (two discs, manual sequence). Tape: 9007-2, \$13.96 (two cassettes) [from RCA VICTOR LM 6050, 1957*, and ELECTROLA 80010, 1960*].

Caedmon, long a respected name for spoken word recordings, makes its classical music debut on the Arabesque label with a well-chosen list of connoisseur reissues. The set at hand is truly a quality product, with suave processing and excellent remastering. I do not have a copy of the original RCA pressing of the Brahms, but, if memory serves, the new edition is cut at a higher dynamic level, with a firm bass line adding rugged strength to a reading I used to find admirable though somewhat precious and overly reverent. Perhaps it is I who have changed, but I now find Kempe's *German Requiem* a classic.

It is also classical, in that the lamented conductor's lucid and eloquent pacing, his remarkable purity of feeling, his ability to scale most of the work's dramatic peaks without heaving, hauling, and empty gestures add a dimension of reserve and shapeliness to this otherwise warmly traditional interpretation. And in the remastering, one can appreciate both the excellence of the original 1956 sound and Kempe's admirable sense for balance and clarity of texture. The woodwinds and harp are exquisitely etched, the brass round and supportive, the strings flowing and warm. This is a very sophisticated and polished performance, yet its emotional appeal is direct and natural.

The two singers are ravishing; Grümmer is positively beatific, and Fischer-Dieskau is in his best vocal estate (though he gained more intensity by the time of his later version with Klemperer, now heard to best effect on the imported three-sided pressing, EMI SLS 821). The

choral work is impeccable, and the Berlin Philharmonic plays as beautifully as it did in its three other recordings of the score under Karajan and Lehmann.

Bruckner's *Te Deum*—replacing Mahler's *Kindertotenlieder* on the original RCA pressing—is one of his many attempts at paraphrasing Beethoven's Ninth Symphony. It begins with dignity and emotional potency, but somewhere toward the middle inspiration falters and tedium (pun intended) sets in. The concluding *maggiore* climax sounds as if it were haphazardly tacked on, and the meandering violin scales in the middle remind me of the *Pezzo concertante* of G. F. Ghedini. (Now *there's* a switch: a composer who took his lead from Bruckner! He must have been the only one.) Forster's performance is expert and respectful but without the incisive power and thrust of Karajan's recent account (DG 2530 704) or Walter's historic one (Odyssey Y2 35238). **H.G.**

COUPERIN: Pièces des violes: Première Suite; Deuxième Suite.

Jordi Savall and Ariane Maurette, violas da gamba; Ton Koopman, harpsichord. **TELEFUNKEN** 6.42225, \$9.98.

CAIX D'HERVELOIS: Pièces de viole: Pièces du premier livre; Première Suite de la troisième livre.

Jordi Savall and Ariane Maurette, violas da gamba; Hopkinson Smith, baroque guitar and theorbo; Ton Koopman, harpsichord. **TELEFUNKEN** 6.42126, \$9.98.

DE MACHY: Pièces de viole: Suite No. 1, in D; Suite No. 3, in G minor; Suite No. 4, in G.

Jordi Savall, viola da gamba. **TELEFUNKEN** 6.42329, \$9.98.

When one thinks of the French baroque school of gamba playing, only Marin Marais, composer of five books of *Pièces de viole*, comes readily to mind. But here are three discs devoted to the repertoire with not a note of Marais. François Couperin is of course familiar, but chiefly for his keyboard and concerted pieces, while Louis de Caix d'Hervelois and Le Sieur de Machy are mere names—if that—to most of us. (The last is so obscure that the few reference sources that do list him cannot agree for purposes of alphabetization on where his surname actually begins.)

Not surprisingly, Couperin emerges as the best of this lot. The two suites from his 1728 *Pièces des violes* are consistently more interesting, sophisticated in design, and consciously well crafted than the works on the other discs. The suites contain several impressive big pieces in the for-

Critics' Choice

The most noteworthy releases reviewed recently

BACH: Brandenburg Concertos, S. 1046-51. Aston Magna, Fuller. **SMITHSONIAN RECORDINGS** 3016 (2), Dec.

BACH: Suites for Orchestra, S. 1066-68, et al. English Concert, Pinnock. **ARCHIV** 2533 410/1 (2), Nov.

BARTÓK: Piano Concertos Nos. 1, 2. Pollini, Abbado. **DG** 2530 901, Feb.

BEETHOVEN: Missa Solemnis, Op. 123. Bernstein. **DG** 2707 110 (2), Jan.

BERLIOZ: Harold in Italy. Suk, Fischer-Dieskau. **QUINTESSENCE PMC** 7103, Nov.

BRAHMS: Piano Concerto No. 2. Tirimo, Levi. **MUSICAL HERITAGE SOCIETY MHS** 4001, Dec.

DEBUSSY: Preludes, Book I. Rev. **SAGA** 5391, Feb.

DVOŘÁK: Cello Works. Sádlo, Holeček, Neumann. **SUPRAPHON I 10 2081/2** (2), Jan.

GERSHWIN: Orchestral Works. Fiedler. **LONDON PHASE-4 SPC** 21185, Dec.

GOUNOD: Faust. Freni, Domingo, Prêtre. **ANGEL SZDX** 3868 (4), Jan.

HAYDN: Lo Speciale. Kalmár, Fülöp, Lehel. **HUNGAROTON SLPX** 11926/7 (2), Nov.

HAYDN: Symphonies Nos. 82, 83. Marriner. **PHILIPS** 9500 519, Feb.

HINDEMITH: Mathis der Maler. Fischer-Dieskau, Kubelik. **ANGEL SZCX** 3869 (3), Feb.

MOZART: Don Giovanni. Raimondi, Maa-
zel. **COLUMBIA M3** 35192 (3), Feb.

MOZART: Quintets for Strings (6). Budapest Quartet. **ODYSSEY Y3** 35233 (3), Feb.

SCHUMANN: Orchestral Works. Bavarian Radio Symphony, Kubelik. **COLUMBIA M3** 35199 (3), Jan.

STRAUSS, J. II: Waltz Transcriptions. Boston Symphony Chamber Players. **DG** 2530 977, Dec.

STRAUSS, R.: Songs. Te Kanawa, A. Davis. **COLUMBIA M** 35140, Feb.

STRAVINSKY: Pulcinella. Abbado. **DG** 2531 087, Feb.

VLADIMIR HOROWITZ: The Horowitz Concerts 1978-79. RCA ARL 1-3433, Jan.

PLAY OF DANIEL. Pro Cantione Antiqua, Brown. **ARGO ZRC** 900, Jan.

GERARD SCHWARZ: The Sound of Trumpets. DELOS DMS 3002, Feb.

mally elegant style that characterized music at the court of Louis XIV—a chaconne and a sort of *tombeau*, titled "*Pompe funèbre*"—as well as a leavening of shorter, more tuneful works.

The phrase that came to mind while listening to Caix d'Hervelois was "country music." The clearly popular tunes, the frequent appearance of a drone bass (echoing the rustic French bagpipe, the musette), and the quasi-improvisational use of ornamentation at the beginning and end of lines have parallels in our vernacular music. In fact, what we hear on this recording is probably a good example of French pop from the early eighteenth century: The music is attractive, tuneful, and easy to listen to.

The first to publish music for solo viola da gamba in France was De Machy, whose *Pièces de viole* appeared in 1685. He was clearly a virtuoso performer bent on flaunting the possibilities of the new seven-string viol, unique to the French school. Musically the pieces are on a par with the operatic potpourris and character pieces that crowd nineteenth-century piano collections, but as vehicles for breathtaking display they are more successful.

Barcelona-born Jordi Savall is an impressive gambist. His big, fat tone, which I enjoyed immensely, may not appeal to devotees of the more restrained English school of gamba playing. His range is wide: In the virtuoso pieces he swoops up and down the strings with dazzling bravura; he digs into the popular style with enthusiasm; and his Couperin would delight even the most demanding ladies of the Sun King's court. In the Couperin and Caix d'Hervelois recordings (made in 1976 and 1977), he is joined by gambist Ariane Maurette and harpsichordist Ton Koopman, who provide an equally effective continuo accompaniment. In keeping with the folksy nature of the pieces by Caix d'Hervelois, the backup ensemble is enriched by a baroque guitar and theorbo, nimbly played by American lutenist Hopkinson Smith.

Telefunken's sound is impressive, and pressings are good; the English translations of the notes are, to say the least, quaint. S.T.S.

DVOŘÁK: Symphony No. 8, in G, Op. 88.

Concertgebouw Orchestra, Colin Davis, cond. PHILIPS 9500 317, \$9.98. Tape: 7300 611, \$9.98 (cassette).

Chicago Symphony Orchestra, Carlo Maria Giulini, cond. [Cord Garben, prod.] DEUTSCHE GRAMMOPHON 2531 046,

\$9.98. Tape: 3301 046, \$9.98 (cassette).

DVOŘÁK: Symphony No. 9, in E minor, Op. 95 (From the New World).

Concertgebouw Orchestra, Colin Davis, cond. PHILIPS 9500 511, \$9.98. Tape: 7300 671, \$9.98 (cassette).

Vienna Philharmonic Orchestra, Karl Böhm, cond. [Werner Mayer, prod.] DEUTSCHE GRAMMOPHON 2531 098, \$9.98. Tape: 3301 098, \$9.98 (cassette).

London Philharmonic Orchestra, Mstislav Rostropovich, cond. [Suvi Raj Grubb, prod.] ANGEL SZ 37719. \$8.98.

Slovak Philharmonic Orchestra, Zdeněk Košler, cond. MUSICAL HERITAGE SOCIETY MHS 4084, \$5.20 (\$3.95 to members) plus \$1.25 shipping (Musical Heritage Society, 14 Park Rd., Tinton Falls, N.J. 07724).

Continuing his cycle of Dvořák symphonies, Colin Davis offers an Eighth that improves upon the excellent standard he set with his Seventh (Philips 9500 132, April 1977), but his *New World* is less successful. The basic outlines are the same in all three performances: Davis' attention to structure is expressed with typical British sobriety and proportion. There are signs in the Eighth, however, of greater spontaneity, of letting the superb first-stand Concertgebouw players ad lib around the standard script. Philips' airy, beautifully balanced reproduction is kind to the orchestral felicities—the dark-sounding bassoons, the burnished strings, and the full-throated horns—and those who particularly admired the historic Szell reading with the same orchestra (again available in a respectable, undoctored mono transfer on London 23245) will find a close counterpart here. As for Davis' *New World*, there is nothing actively wrong with it, but tension lags periodically, and alongside some of the other outstanding versions, it seems a bit tepid and self-effacing.

Giulini's recent Chicago recording of the *New World* (DG 2530 881, July 1978) represented a considerable advance over his earlier EMI version in its architecture and dramatic sweep, and his new G major offers an even greater improvement over its deleted Angel predecessor, an affectionate but rather limp account. There is something in the Giulini/Chicago/Dvořák chemistry that counteracts the increasing tendency of this conductor toward soft-spined geniality (afflicting even the Giulini/Chicago Schubert symphony recordings and the Giulini/London Philharmonic Dvořák Seventh). As in the *New World*, the basic tempos are slow in the Eighth, but the control is ironclad. This is the G major as

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Toscanini might have rendered it. If some of the delicious woodwind detail is less clear here than in Davis' winning account, other detail—from the low brass and the timpani, for example—more than compensates in the biting, full-voiced engineering. In fact, I prefer this version to the Davis, superb though that is.

Böhm's first Dvořák recording, not surprisingly, stresses the composer's kinship with Brahms. This is another engaging *New World*, with sentiment and muscle held in perfect tandem, and with all the motivic writing clarified by the Vienna Philharmonic's poised execution and DG's first-class, transparent sound. There is a geniality suggestive of Bruno Walter's account (Odyssey Y 30045), but the level of sophistication is altogether higher. This is definitely a *New World* to live with.

I am not so sure about the Rostropovich, which stresses theatricality. If the cellist-turned-conductor surprised with his relatively staid Tchaikovsky (notwithstanding his apologia defending eccentricity), he pulls out all the stops here in the best Stokowski/Cinerama tradition. Precision of ensemble yields at times to the display of sensual color, and the beginning of the finale verges on rhetorical hysteria. For the most part, though, musical values are respected, and Angel's recording vies with the best in terms of clarity and power.

Košler's rendition is also a bit wayward but far more folkish and less dynamic. While his forces are patently of second-string caliber, they play cleanly, and the low strings are unexpectedly suave and dark. This may be a provincial interpretation (with big tempo fluctuations in the second themes of both first movement and scherzo), but it is quite appealing. Like Böhm—and unlike Davis and Rostropovich—Košler ignores the first-movement exposition repeat. The engineering is capable, the pressing acceptable, and the album design far more attractive than the MHS norm. H.G.

HAYDN: Armida.

CAST:

Armida	Jessye Norman (s)
Zelmira	Norma Burrowes (s)
Rinaldo	Claes H. Ahnsjö (t)
Ubaldo	Robin Leggate (t)
Clotarco	Anthony Rolfe Johnson (t)
Idreno	Samuel Ramey (b)

Lausanne Chamber Orchestra, Antal Dorati, cond. PHILIPS 6769 021, \$29.94 (three discs, manual sequence).

This first recording of Haydn's last opera, composed for Esterházy in 1783,

comes as a blow to those of us (pretty nearly all writers active in the Thirties) who with paternalistic benevolence consigned Haydn's operas to a mere backwater out of the mainstream of operatic history. For despite the stilted and repeatedly patched libretto and the old opera seria frame, this is music drama of the first water, and as we listen to this moving and beguiling music we realize that our mea culpas are not enough. The recognition that Haydn the dramatist represents a superior power among opera composers of his time, second only to Mozart, raises many questions that will require us to rewrite the history books.

Though coming a decade after Gluck's first "reform opera," *Armida* shows little if any trace of the reform; there are still a dozen da capo arias and many secco recitatives, supposedly banished by Gluck forever. Evidently, as I have long contended, the famous reform itself needs reappraisal. But while Haydn retained the pattern of the baroque seria, what he did within that exterior scheme is quite another matter. He filled the obsolete frame with a setting that was as far removed from the old seria as it was from Gluck, and this despite the hobbling restrictions of the ancient libretto. Another departure from Gluck is the consistently symphonic character of the orchestra, which nevertheless delivers genuine theater music in the high classic sense.

Why would Haydn end his operatic career with a seria, when previously he composed mainly comic operas? (Isn't it curious that Verdi did the exact opposite? After a long life spent composing tragic grand operas, he ended his active life with a marvelous comic opera.) Another great belated seria, Mozart's *La Clemenza di Tito*, was composed eight years after *Armida* and even included a castrato part, though by that time such singers were hard to come by. But *Clemenza* was commissioned by a very conservative court, whereas Haydn proceeded on his own, despite awareness of his prince's preference for comedies.

This opera is the work of a master dramatist, who carefully planned the mood changes of the plot, with tension and excitement rising from beginning to end. Being a seria, it has no finales, except for the customary brief *coro* of the protagonists at the end, and few ensembles. The sole duet and sole trio are both strategically placed. I cannot recall in eighteenth-century opera such a magnificently extended through-composed duet; the trio is also impressive with its little canonic imitations.

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(always excepting Mozart), and while Haydn outwardly follows the customary pairing of recitative with aria, these are not individual numbers, but closely coordinated entities. The old da capo aria is here too, but what variety in the reprises! Haydn does not rely on the usual (mostly meaningless) redecoration to vary the return, but inserts free accompanied recitatives, coloraturas, ritomels, and all manner of other imaginative changes and extensions. No fewer than ten great accompanied recitatives attractively alternate the fiery with the pensive and plaintive. In these powerful declamations, the ever-changing sentiments are faithfully followed, and the motifs cascade with inexhaustible invention. The arias are here melting, there starkly passionate, the spirited orchestra weaving its symphonic commentary around them.

Haydn composed a fine, highly dramatic overture, which uses motifs from the key arias, providing, instead of the usual curtain raiser, an intimate connection with the opera itself, as in Mozart's *Don Giovanni*. The musical character sketches are remarkable: The men are proud, treacherous, or moody; the heroine is womanly, loving, but unreasoning, with the latent fury of a tigress. Life is no farce in this work.

In the fadeless garden of opera, flowers and weeds commingle. *Armida* shows how often we judge prematurely and proves that those who cross their bridges before they come to them have to pay the toll twice. True, of course, until a few years ago no scores of Haydn's operas were available. But now, thanks to the excellent critical editions put out by the Cologne Haydn Institute (one of them used in this recording), we can see that opera afforded Haydn a complete expression of intellect and spirit, and though he had never visited the peninsula that is the wellspring of melody, he knew Italian opera to the core. Confident of his powers, maintaining an aura of unflappable, civilized composure, he is subtle and penetrating yet concrete in presentation. At his most felicitous, he is dramatic but wonderfully capricious in expression and not restricted by his themes.

Antal Dorati leads a strong, altogether satisfactory performance. He permits nothing merely pretty or cloying, fully appreciating that Haydn's bonhomie, which delights us in the symphonies, does not enter here. The conductor guides his singers and keeps his orchestra in constant, accurate ebb and flow and in excellent balance. Recitatives are admirably paced, and the continuo is of just the right strength. I wish only that Dorati would abandon his eternal strumming; he constantly arpeg-

giates, even when sharp chords—secco—are called for.

The maestro is aided by a very good cast. Jessye Norman (*Armida*) is a powerful dramatic soprano, who can also sing quiet lyric passages beautifully, floating pianissimos on high notes without losing vocal sheen or resonance, and coloraturas with ease and security. A perfect foil to her dramatic presence is the fresh-voiced Norma Burrowes (*Zelmira*). But make no mistake, this fine soprano can also summon power and volume and is absolutely steady in the heights. Claes H. Ahnsjö (*Rinaldo*) has a more lyric than dramatic tenor; he struggles a bit with the coloraturas and ventures warily above and below the staff but acquires himself commendably, especially in dealing with the frequent word and line repetitions. The other tenors, Robin Leggate (*Ubaldo*) and Anthony Rolfe Johnson (*Clo- tarco*), not highly endowed with vocal beauty, nevertheless hold their own. Samuel Ramey (*Idreno*) measures up to the women; his is a sturdy but flexible, mobile bass voice capable of fine nuances. Philips provides very good sound and intelligent notes. P.H.L.

MOROSS: Concerto for Flute with String Quartet*; Sonata for Piano Duet with String Quartet*.

Frances Zlotkin, flute*; Şahan Arzruni and Ron Gianattosio, pianos*; Richard Sortomme and Benjamin Hudson, violins; Toby Appel, viola; Frederick Zlotkin, cello. [Lesley Anderson-Snell, prod.] VARÈSE SARABANDE VC 81101, \$7.98.

Jerome Moross (b. 1913) is an American composer of the older generation who seems to have gotten lost in Hollywood. He first earned his living there, not as a composer of original film scores, but as an orchestrator of the scores of others; only in the 1950s was he able to renounce commercial orchestration and achieve original credits. His best-known film score was that for the 1958 *Big Country*.

This record reveals another side of Moross. The two lively works heard here in first-rate, bracing performances show him to be something of an American Poulenc, with the same crystal-clear handling of odd instrumental combinations, the same engagingly light touch, the same neatness and wit, the same spontaneous vigor. Then again, the simple, diatonic melodies and pervasive American rhythms give a curious, clean, outdoorsy feeling reminiscent of Copland in his folklike moods.

The sonata, dating from 1975, is marginally more successful than the

charming 1978 flute concerto. This is the first recording of either work, and engineer Fred Miller of Vanguard has done a very good job in capturing the effect of a live performance. I.L.

SCHAT: Symphony No. 1, Op. 27*; Septet, Op. 3*.

Concertgebouw Orchestra, Colin Davis, cond.*; Radio Wind Ensemble, Huub Kerstens, cond.* COMPOSER'S VOICE CV 7901, \$10 (add \$1.00 shipping; distributed by C. F. Peters Corp., 373 Park Ave. South, New York, N.Y. 10016).

Dutch composer Peter Schat attracted attention in this country last summer, partly because of the U.S. premiere of his opera *Houdini* (1977) at Aspen and partly because of his vociferous denunciation of what he called the overly technical, calculated, and unpleasant music of the 1970s. A student of Boulez, a follower of Schoenberg, and widely considered Holland's most accomplished composer, Schat called for a new look at composition with emphasis not on plastic formulas, but on the relationships between notes.

This philosophy, formulated in an essay in the Dutch Donemus Foundation newsletter in 1976, shows up in the First Symphony (1978). Like *Houdini*, it is a provocative work that finds the composer in search of an idiom sufficiently poetic to communicate with both players and listeners, but with no retreat to the language of the pre-dodecaphonic past.

Schat is only partly successful. A three-note motif—C, G, B—gives the ear an easy handle to grasp, and his use of classical sonata, rondo, and variation forms provides an underlying structural logic. Mixed with these elements are complex meters and thematic lines derived from serial techniques. The result is a compromise system, wherein sections of seemingly undisciplined orchestral rambling are punctuated with blaring, mechanistic chords slowly repeating the C-G-B motif. In fact, even after several listenings, only that motif emerges as memorable melodic material. Granted, that's more melody than one finds in the idioms Schat denounces, but it's not enough to sustain a thirty-seven-minute piece.

A larger problem is that of orchestration. The work was composed to celebrate the ninetieth anniversary of the Concertgebouw Orchestra, and Schat naturally wanted to take full advantage of the orchestra's resources. Unfortunately, so many things go on at once that long sections sound needlessly muddled—a situation not

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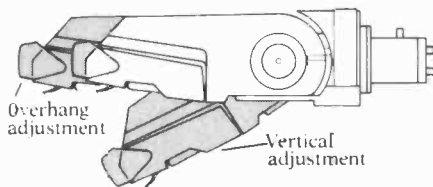
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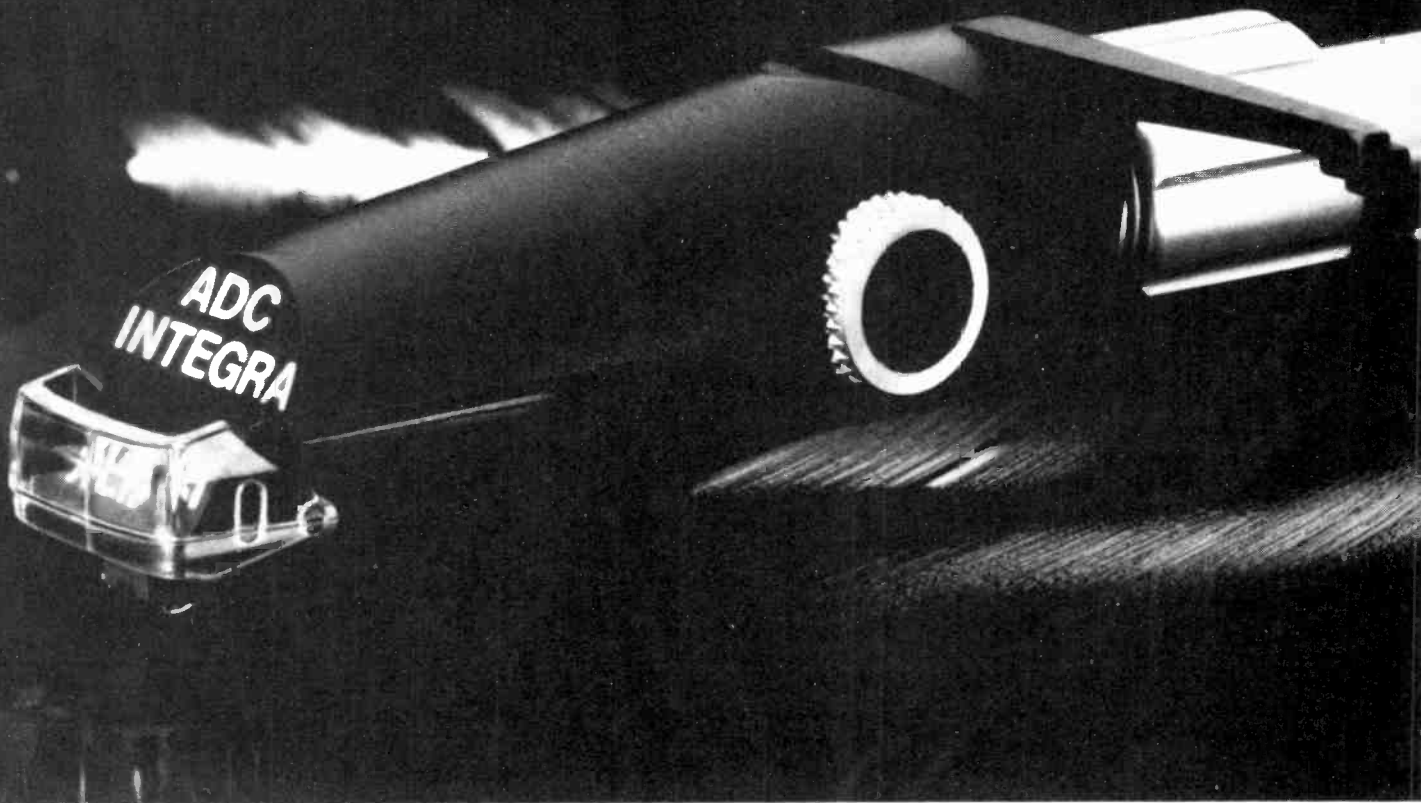
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helped by sloppy passagework and the distant live recording. But where the symphony works well, it works *very* well. The last two movements, combining kinetic thrust, compactness of ideas, and comparative economy of scoring, are rather exciting; Schat should tighten up the meandering first two and convince someone that the work should be recorded anew, this time in the studio.

The Op. 3 Septet (1957) is a perfect companion piece. It is a twelve-tone work, composed in Schat's student years, and, while he no doubt considers it light-years behind the symphony, it is nevertheless more pleasing. Here too, he relies on classical structures, but he clarifies his intent and sets down his ideas more cohesively. The instrumental colors—flute, oboe, bass clarinet, horn, piano, cello, and percussion—are used sparingly and held tightly together here by conductor Huub Kerstens. The studio sound is quite good. A.K.

SCHOENBERG: Gurre-Lieder.

Tove	Jessye Norman (s)
Wood-Dove	Tatiana Troyanos (ms)
Waldemar	James McCracken (t)
Klaus-Narr	Kim Scown (t)
Peasant	David Arnold (b)
Speaker	Werner Klemperer

Tanglewood Festival Chorus, Boston Symphony Orchestra, Seiji Ozawa, cond. Philips 6769 038, \$19.96 (two discs, manual sequence). Tape: 7699 124, \$19.96 (two cassettes) [recorded in concert, March 30 and 31, 1979].

COMPARISON:

Kubelik/Bav. Radio Sym.

DG Priv. 2726 046

For all the scale of its largest moments, much of Schoenberg's *Gurre-Lieder* is scored with the greatest delicacy; these extremes are what make it such a challenge for the recording producer: how to register both the mass and the intimacy without distorting either and without creating unnaturally shifting perspectives. Above and beyond this, of course, there is the problem of finding adequate performing forces.

Enough aspects of the new Philips recording—the sixth to date—are good enough to make disappointing its ultimate failure to achieve decisive superiority over the competition. The most immediately welcome feature is the singing of James McCracken, the first voice on records to meet the strenuous writing for Waldemar on equal terms. The other soloists are strong too, though less commandingly so in comparison with other recordings. The Tanglewood Festival Chorus does splendid work, especially in the spectral, much-divided



Tatiana Troyanos
Eloquent Wood-Dove miked too closely

polyphony of the final male chorus episode. The Boston Symphony plays very well indeed. The heights and depths of Schoenberg's inventive, richly textured scoring have been registered with remarkable firmness and clarity, especially if one realizes that all this was done under concert conditions in Boston's Symphony Hall.

And yet the whole adds up to something less impactful than the sum of those parts—and, disappointingly, to rather less than the overwhelming experience that was Ozawa's 1974 Tanglewood performance. Some of the reasons for this discrepancy can be isolated, and we'll get to them in a moment. Beyond such specifics, though, there is the less quantifiable but very real difference between a performance that is moving with a strong current of mutual certainty about its expressive purpose and destination, and one that has not yet jelled into such certainty. For some reason, that single Tanglewood performance in 1974 "worked," with an enlivening current of tension running from first note to last; the 1979 Boston performances did not reach that happy state.

As I've said, this kind of thing can be hard to pin down in musical specifics. I think you can hear some part of it, for example, in Tove's third song, "*Nun sag ich dir zum ersten Mal*," a slow piece with a syncopated accompaniment figure, and one in which a good deal of expressive rubato is quite appropriate. Here, Ozawa and Jessye Norman seem not quite certain of each other's specific intentions, of how much elasticity is desirable and when, and the net

effect is just slightly, but damagingly, soggy; what's wanted—and it is not a contradiction in terms—is *firm* elasticity, such as Ozawa and Phyllis Curtin achieved with such intensity at Tanglewood. Similarly, the orchestra doesn't appear to be quite at home yet in the tricky changing syncopations of the second tenor aria, and the result is stodgy.

Norman makes some gorgeous sounds in her four songs, not least a glorious climactic high B, and she sculpts the words with idiomatic sensitivity. She has surely absorbed the role, but one feels that she hasn't yet come to a full projection of it, as in her first song, where she seems to pull the tempo back from its initial correct momentum—this is still too self-absorbed a performance, for all of its splendor. (Fortunately, this is a rare spot where Ozawa lets the tempo flag; he's mostly very good about this, and has a real mastery of continually changing tempos, as in the Klaus-Narr episode.)

McCracken's difficulties with tempo go in the other direction: a tendency now and then to jump the beat. This is noticeable in the first song, which lacks a full measure of expansive repose—as does the related orchestral introduction, which sounds as if things haven't fallen into place yet, as if the orchestra players haven't been through it enough times to know precisely where in the total picture each one's individual notes fit.

That relatively minor problem (and an occasional tendency to attack notes from below) aside, McCracken simply wipes out any other Waldemar I have ever heard. He has all the notes (including a rich lower register), all the requisite vocal weight, the musical comprehension, and the sheer animal intensity to make it all credible and compelling. He can sing softly and sensitively too—but here the recorded sound does him and the other soloists an ill turn. They have been balanced so forwardly, and miked so closely, that they are right on top of us, while orchestra and chorus, though registered with clarity, are consistently on a lesser dynamic plane. This is unfair to the singers, reducing their apparent dynamic range, and to the orchestra, robbing it of full force; no setting of the volume control will make both elements sound plausible.

The close pickup also unflatteringly magnifies the natural vibrato of Tatiana Troyanos' beautiful voice into something more like a beat—certainly a distortion of the effect she makes in a hall. She sings eloquently, the voice thinning out a bit on bottom A ("*Still ist ihr Herz*") but otherwise radiantly secure all the way up to the con-

cluding high B flat. Kim Scown is a vivid and virtuosic Klaus-Narr, David Arnold a strong Peasant. Werner Klemperer leans more heavily on the grotesque aspects of the summer wind's wild hunt than have others; he is shy of sustaining words, which robs the buildup to the final chorus of its full potential. In musical matters, he does not dishonor the family name. (Contrary to the liner note by Karl Schumann, the speaker does not represent Waldemar, but rather the poet himself; Schumann also muddles the history behind the legend.)

A certain hollowness in the choral acoustic—not inappropriate to the ghostly hunt of Waldemar's men—is doubtless an inevitable consequence of recording in concert placement; it brings a less than natural mix of chorus and orchestra in the final pages. Despite this and the aforementioned flaws of balance, most of the Philips recording does greater justice to the mass and detail of Schoenberg's textures than does the coarse and overresonant sound that Columbia furnished for Boulez' generally very competent performance (M2 33303). The much earlier Kubelik set on DG (now demoted to Privilege status and thus significantly cheaper than the Boulez and Ozawa sets) belongs to a more conservative era of stereo recording, but is a good example of its period and remains the only modern recording to convey the work's continuity and tension. If I could have but one recording of *Gurre-Lieder*, it would still be Kubelik's.

A final point of superiority for Philips is the fine new translation of the poems made for the Boston Symphony program by Donna Hewitt. D.H.

SCHUBERT: Fantasy for Piano, D. 760 (*Wanderer*). For a review, see page 71.

SIBELIUS: Concerto for Violin and Orchestra, in D minor, Op. 47.
SCHNITTKE: Concerto Grosso for Two Violins, Strings, Cembalo, and Prepared Piano*.

Gidon Kremer and *Tatjana Grindenko, violins; London Symphony Orchestra, Gennady Rozhdestvensky, cond. VANGUARD VSD 71255, \$7.98.

Gidon Kremer is generally recognized as one of our outstanding young violinists. Only thirty-two, he has won important competitions (the Queen Elisabeth Competition in Brussels and the Fourth International Tchaikovsky Competition) and is now well embarked on an active concert and recording career. This new disc demonstrates that the Russian violinist is also an

unusually versatile musician, equally comfortable performing works in widely divergent compositional styles.

Kremer's rendering of the Sibelius is warm and committed, yet beautifully controlled. He is in full command of both the brooding lyrical outpourings so prominent in the work and the numerous passages of virtuosic brilliance. The recording more than holds its own with the best of the current competition.

But the point of special interest on this disc is the companion piece, Alfred Schnittke's Concerto Grosso for Two Violins, Strings, Cembalo, and Prepared Piano. (Unfortunately, one would not guess this from the cover, as the Schnittke, though it fills a complete side, is listed in letters considerably smaller than those accorded the Sibelius.) Schnittke is a Soviet composer in his mid-forties. Although his concerto is certainly no masterpiece, it offers a fasci-

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nating indication of the kind of music being written in Russia today by an extremely competent and relatively adventurous composer.

The work, completed in 1977, was composed at Kremer's request as a vehicle for him and Tatjana Grindenko, another young Soviet violinist. Its designation is apt: The term "concerto grosso" applies both to the cooperative and complementary relationship of the soloists to the ensemble and to the sequence of movements (Preludio, Toccata, Recitative, Cadenza, Rondo, and Postludio). Moreover, the work relies heavily upon characteristic melodic gestures and formal devices of baroque music, as well as the sort of motoric rhythmic drive typical of that period.

Yet the concerto is in no sense a dry academic exercise. Each movement has an unmistakable character, and the various neologisms are filtered through a distinctly contemporary sensibility. Only rarely does the music become openly triadic in structure; when this happens, the intent is often humorous, as in a very funny and clever tangolike episode in the Rondo. One occasionally hears echoes of other contemporary composers (there are some striking

similarities, though perhaps coincidental, between the Toccata and the third of Lukas Foss's *Baroque Variations*), but on the whole the work sounds fresh and personal. It is brilliantly written for the instruments and must be a joy to play.

Kremer and Grindenko make a beautifully matched duo, and they are well assisted by Gennady Rozhdestvensky and the London Symphony Orchestra. The sound is good, although somewhat bigger than life in the Schnittke. The Sibelius is sonically more subdued—a clear case of matching sound with substance. R.P.M.

STRAVINSKY: *The Wedding**; *L'Histoire du soldat: Suite*.

Jann Jaffe, soprano*; Isola Jones, mezzo-soprano*; Philip Creech, tenor*; Arnold Voketaitis, bass*; Paul Schenly, William Vendice, André-Michel Schub, and Mary Sauer, pianos*; Chamber Chorus*; Chicago Symphony Orchestra members, James Levine, cond. [Jay David Saks, prod.] RCA RED SEAL ARL 1-3375, \$8.98.

STRAVINSKY: *Symphony of Psalms*. **BACH:** *Magnificat, in D, S. 243**. Anna Tomova-Sintov, soprano*;

Agnes Baltsa, alto*; Peter Schreier, tenor*; Benjamin Luxon, bass*; Chorus of the Deutsche Oper, Berlin; Berlin Philharmonic Orchestra, Herbert von Karajan, cond. [Hans Hirsch, prod.] DEUTSCHE GRAMMOPHON 2531 048, \$9.98. Tape: 3301 048, \$9.98 (cassette).

Not two years ago, Leonard Bernstein's recording of *The Wedding* (DG 2530 880, June 1978) seemed to me the most desirable version—and, indeed, the only respectable one using the original Russian text. That there was room for still further improvement is demonstrated by this new version, on the second disc in RCA's "Music from Ravinia" series. I described the DG version as "stunningly registered," and must now concede that the adverb was all too apt—the percussion was so brilliant and impactful that the piano textures were shortchanged. That was a big sound, but also relatively perspectiveless, especially by comparison with the precisely localized, transparent sound that RCA's producer Jay Saks and engineer Paul Goodman have achieved. More than in any other recording, we have here a vivid sense of the changing masses of sound, the endless vari-

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ety of textures, that Stravinsky elicits from his nominally limited instrumental ensemble. And the vocal placement—female chorus and male soloists on the left, male chorus and female soloists on the right—makes the most of the antiphonal potential of the writing.

Beyond all that, it's a performance of irresistible élan, along with wonderfully controlled steadiness; Bernstein had the élan, but once or twice would rush to a climax. Levine's solo team is firm and accurate, digging into the Russian words with relish, especially in the parlando passages. The chorus was prepared by Margaret Hillis, which is probably recommendation enough; they sound perfect to me, and so are the instrumentalists.

Would that the overside *Soldier's Tale* could be so unreservedly praised! The playing is impeccable and virtuosic; every detail in the score is set forth with care. What's wrong? Well, I'm afraid that Levine has kept too tight a hand on things, to a rather military effect—and the soldier of Ramuz and Stravinsky is, after all, one of the least military of men. The wit we hear in Stravinsky's own recording (available in a variety of couplings) has evaporated. Still, the record is desirable for the very best recording ever of *The Wedding*—though RCA lets us down by giving only an English translation, not the side-by-side transliterated Russian that is necessary to find one's place in the translation.

Careful preparation and attention to detail also mark the Karajan recording of the *Symphony of Psalms*. The wind playing in the opening fugato of the second movement is wonderfully specific, the opening pages of the third movement appropriately static and stressless—but the contrast to such moments when the Karajan arrhythmic style seems right is never forthcoming, and the technical expertise goes for naught. A more unexpected failure comes when the second movement almost dies from an undesirable ritardando in the "Et statuit..." passage. None of this is much aided by the recording, one of those shot-through-a-gauze jobs, like the camera techniques used for aging film stars—hardly necessary here, where there are no imperfections of detail to conceal, only the gross imperfection of basic misunderstanding.

At that, the Bach is a greater misunderstanding, turned into pastorals, lullabies, and lollipops. The "Omnes generationes" chorus is uttered as a cloud of undifferentiated notes, like a Ligeti or Penderecki pitch field wherein none of the individual notes is connected to any of the others. The ritornello of the "Esurientes"

minces, though the singer does not; she is utterly deadpan—they are all smooth and utterly inexpressive, in fact. Bach has been turned into aural wallpaper. Texts and translations are given, but hardly seem needed, for nothing in the performances evinces any intention to convey the significance of the words. D.H.

TCHAIKOVSKY: Concerto for Violin and Orchestra, in D, Op. 35; Sérénade mélancolique, Op. 26.

Itzhak Perlman, violin; Philadelphia Orchestra, Eugene Ormandy, cond. [Suvi Raj Grubb, prod.] ANGEL SZ 37640, \$8.98.

COMPARISON:

Oistrakh/Ormandy Odys. Y 30312

With this, his third recording of the Tchaikovsky violin concerto, Itzhak Perlman joins a handful of great violinists—notably Jascha Heifetz, David Oistrakh, and Isaac Stern—who have preserved surpassing performances of this work on records. Although I have not heard his second version on Quintessence (PMC 7056), the current one is world apart from his first, rather cautious effort with the Boston Symphony under Leinsdorf (RCA Gold Seal AGL 1-1266). At thirty-four, his technique and artistic imagination in superb balance, Perlman is perhaps the most rewarding violinist before the public today.

If there is a flaw here it comes early, in Perlman's first solo, where expressive intensity pushes him into questionable slides and indulgent vibrato. After this initial descent into sentimentality, he brings his expression under control. The intensity remains, but it underlies playing of extraordinary nuance, variety of color, and technical excitement. Technique is taken for granted, and a rich, warm tone is sustained in the most difficult passages as well as in the lyrical sections. The Canzonetta is restrained and very noble. But in the finale, one of the most formidable challenges in the repertory, Perlman achieves a brilliant, driving climax. Time and again the listener is struck by Perlman's musicality, his seamless bowing in long lines, and the clarity and intonation of his passagework.

Moreover, Eugene Ormandy and the Philadelphia Orchestra provide matchless support, as they did in two earlier great recordings of this work—Isaac Stern's second (first stereo) version (Columbia MS 6062) and the David Oistrakh reading that remains for me definitive. Once again, Ormandy and his orchestra are in top form, worthy of the challenge of a great solo performance: sometimes gently cradling the solo, sometimes vying with it; sometimes

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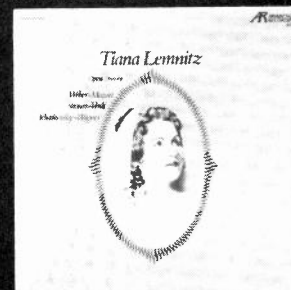
Madame Korjus' range seems to start where other coloraturas leave off, as amply demonstrated on this Arabesque new release, *Miliza Korjus: Opera Arias & Songs* (AR8013). Program Notes are written by Madame Korjus herself, who is today living in California, as vigorous and astonishingly beautiful as ever and pursuing her studies in preparation for a performance of nothing less than the operas of Wagner.

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echoing Perlman's phrasing, sometimes commenting on it; ever at one with the violinist, allowing him to expand upon his ideas when appropriate. Ormandy has always been a great collaborator in concertos, and this is one of his finest achievements.

With extremely rich and warm reproduction, this version ranks with those at the very top of the heap. The Heifetz/Reiner/Chicago Symphony account (RCA LSC 2129) is notable primarily for the solo performance, excessive solicitude for the violinist having reduced the collaboration to the status of a house-orchestra accompaniment. Stern's first stereo recording remains a major statement of the cut edition; highly personal in its lyricism, its dignity and probing sensitivity are matched by technical mastery. His recent longer version with Rostropovich and the National Symphony (Columbia M 35126, September 1979) is so flawed as to justify retention of the earlier recording in the catalog. The Oistrakh recording is now an irresistible bargain on *Odyssey*: With somewhat leaner orchestral reproduction, Oistrakh

gives a noble, searching reading with a strong Slavic flavor. P.H.

TCHAIKOVSKY: Symphony No. 4, in F minor, Op. 36.

London Symphony Orchestra, Karl Böhm, cond. [Werner Mayer, prod.] DEUTSCHE GRAMMOPHON 2531 078, \$9.98. Tape: 3301 078, \$9.98 (cassette).

Concertgebouw Orchestra, Bernard Haitink, cond. PHILIPS 9500 622, \$9.98. Tape: 7300 738, \$9.98 (cassette).

A Cleveland Orchestra, Lorin Maazel, cond. [Robert Woods, prod.] TELARC 10047, \$17.98 (Soundstream digital recording; distributed by Audio-Technica).

COMPARISONS:

Abbado/Vienna Phil. DG 2530 651
Markevitch/London Sym.

Phi. Fest. 6570 153

Try a blindfolded test of these recordings, and you'll probably be wrong three times. The excessive sobriety one fears in a Böhm Fourth (Tchaikovsky is relatively rare in his discography) actually

comes from Haitink; the self-indulgent eccentricity one expects from Maazel comes instead from Böhm; and the hairsbreadth precision and balance, textual fidelity, and objectivity one anticipates from Haitink come from Maazel.

Maazel's driving interpretation of the symphony should not be a total surprise to anyone familiar with his earlier versions with the Berlin (DG, deleted) and Vienna (London CS 6429) Philharmonic Orchestras. The new account is cut from the same cloth, and the detail and tautness are even more ravishing. Tempo relationships are finely judged. All I miss are the vibrance and affection in the molding of phrases heard in Abbado's similarly rigorous interpretation and in Cantelli's broadcasts, never commercially issued.

Maazel's latest has another telltale feature, the Telarc digital sonics. Such flawless balance, uncanny transparency on top, and powerful low transients are worth the extra cost. The second Tchaikovsky Fourth to appear in digital sound, Maazel's is even more impressive than Sanderling's

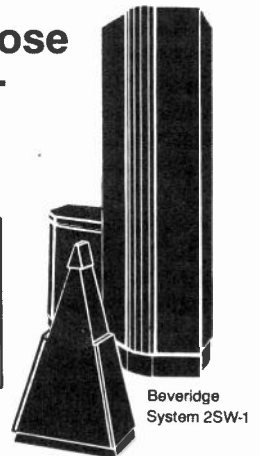
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Ann Murray. Reviewing Vols. 1-2 in this series (November 1978), Paul Henry Lang praised the boy trebles of the John Alldis Choir: If those women are boys, then I am the author of *Music in Western Civilization* (and would that both were true).

The collection directed by Michel Corboz duplicates none of the works in Philips' Vols. 1-4, which is good. The two solo motets do, however, appear on Elly Ameling's Philips disc (9500 556). Corboz' sopranos sing prettily and cleanly, but without Ameling's distinction: I was, however, very impressed by the choral pieces here, particularly the *Magnificat* in G minor, with its dissonant opening sequence and florid arias, very well managed by all the soloists. Perhaps their lighter, fluffier tone comes nearer to the sound of Vivaldi's *Pietà* girls than does the fully projected sound of the soloists on the Philips discs. Several records by Corboz and his Lausanne ensemble, which I have heard on the Erato label, have been surrounded by a quite intolerable and confusing acoustic: This one on Musical Heritage, licensed from Erato, is much clearer and more defined. Carl de Nys' sleeve notes are enthusiastic, but claim too much when they suggest that Vivaldi derived inspiration for his concertos from setting liturgical texts. It is no disrespect to these individual and enjoyable works to say that they are markedly less innovative than the concertos, which remain Vivaldi's most characteristic achievement. N.K.

Recitals and Miscellany

THE ALBERT COATES LEGACY:
Vols. 1 and 2.

RH London Symphony Orchestra, Albert Coates, cond. ENCORE E 301/2, \$8.98 each (mono) [from HMV/VICTOR originals, 1926-32] (distributed by German News Co.; also available from Encore Records, P.O. Box 14816, San Francisco, Calif. 94114).

Vol. 1: TCHAIKOVSKY: Symphony No. 3, in D, Op. 29 (*Polish*); *Francesca da Rimini*, Op. 32; *Hamlet*, Op. 67a. Vol. 2: RAVEL: *La Valse*. PROKOFIEV: *Le Pas d'acier* (excerpts). STRAVINSKY: *Petrushka*.

Conductor Albert Coates is a figure worth remembering and fun to listen to. Active in Russia, Germany, and England during his lifetime (1882-1953), he was apparently a colorful character who was

naturally drawn to swashbuckling, extroverted readings of the Franco-Russian literature.

A disciplined virtuoso he wasn't, and little of the orchestral execution documented here would pass muster with today's audiences or recording teams. Indeed, *Petrushka* (in its first complete recording and with minor editorial touches in scoring) is so loose in ensemble and thus so blunted in rhythmic impact as to make a less effective case for the music than almost any subsequent disc version. *La Valse* isn't a model of feline elegance either, but it isn't bloated and certainly isn't straitlaced. Coates maintains his metrical plasticity within a basically propulsive and lightweight frame, so the piece comes through with an appealing, old-fashioned sensuousness. The selections from Prokofiev's ballet *The Age of Steel* are lithe, robust, of a surging freneticism. I've rarely heard a more complete identification with the orchestral idiom of early Prokofiev.

The all-Tchaikovsky volume will be of obvious interest: Coates actually met the composer and had quite a reputation as a conductor of his music. The briskness, lack of mawkish sentiment, yet freedom and dramatic flair of these interpretations will explain that reputation.

If you wonder why all three of these works can fit on one LP, it's because Coates applied the blue pencil heavily. In *Francesca da Rimini*, originally recorded on four rather than the more usual six 78-rpm sides, he not only rushed things a bit and snipped out little repetitions or elaborations, but excised the entire lead-back into the storm music following the central love episode! And in accommodating the *Polish* Symphony on eight rather than ten shellac surfaces, he truncated all three middle movements to some extent. Nonetheless, I wish modern, more textually respectful conductors could lead the Third Symphony with some of Coates's utter abandon and freshness. It's a performance I never tire of, despite the obvious purist objections. And *Hamlet*, uncut, is pushed to the limits that sheer energy can reach.

These discs surely deserve welcome beyond the intrinsic merits of the performances. Usually, aging recordings by important artists are regarded by their labels as of low commercial priority, and their reissue may depend on under-the-counter operations that frequently do a slipshod job technically as well as in matters of labeling, annotation, and packaging. But Encore manages these transfers (by Ward Marston) with steady pitch, smooth side-joins, and no playing around with equalization.

The cover art is tasteful, packaging is sturdy, and the annotations by Christopher Dymont are scholarly, detailed, and honest about the warts on Coates's musical hide. Clearly, this "Legacy" represents a labor of love by and for connoisseurs of the early electrical discography. A.C.

Theater and Film

TIME AFTER TIME: Original film score by Miklós Rózsa.

Royal Philharmonic Orchestra, Miklós Rózsa, cond. [John Steven Lasher and Nicholas Meyer, prod.] ENTR'ACTE ERS 6517, \$8.98.

FEDORA: Original motion picture soundtrack recording.

Composed by Miklós Rózsa; Graunke Symphony Orchestra, Miklós Rózsa, cond. [George Korngold, prod.] VARESE SARABANDE STV 81108, \$8.98.

After a long period of relatively indifferent assignments (with the possible exception of *Providence*), the dean of living film composers has finally found a subject worthy of his talents. *Time After Time* elicits the full range of Miklós Rózsa's kaleidoscopic powers of mood painting, scene setting, and narrative pacing; it is his strongest, most vibrant and multidimensional score in more than fifteen years.

Rózsa has responded imaginatively to the exhilarating fantasy and sheer theatricality of Nicholas Meyer's conception: a canny mixture of ghoulish thriller, whimsical romance, and allegorical science fiction. In some ways, the music carries a greater dramatic charge than the film itself, at times overpowering a somewhat limp and lackluster production, which—in contrast to the masterly *Murder by Decree*—does not do full justice to the story's potential for tension, irony, and atmosphere. Away from the screen, the score is tremendously compelling: From the first assertive strokes of the suggestive, tritonal motto theme (which emerges boldly out of Rózsa's quotation of Max Steiner's legendary Warner Bros. logo-fanfare), this is authentic "movie music" in the old red-blooded, full-bodied symphonic sense.

There are numerous delights: the breathtaking glitter and fancy of the time-travel sequence; the festive, implicitly jazzy bustle of San Francisco streets; the sensuous abandon of the romantic encounters (complete with one of Rózsa's most insinuating love themes); the delicate modal pastels of the scene in Redwood National Park;

and, overhanging everything, the inescapable menace of the Jack-the-Ripper figure, whose musical signature works up into several frenzied fugatos. The second side contains just a few too many similar, sequential variants of the motto theme, but in the end Rózsa's unflagging fluency of intervallic transformation and melodramatic gusto sweep aside all criticism.

The whole effort recalls the composer's triumphant and timeless scores for the Korda fantasies from the Forties, *The Thief of Baghdad* and *The Jungle Book*, though without their pronounced exotic aura, of course. Inevitably other facets of his long and prolific career are evoked; the seductively melancholy *Time Machine* Waltz, for instance, is fully the equal of the famous *Lydia* theme. But the score offers much more than a compendium of pale echoes from the past. It creates and sustains its own distinctive sound-world, and Meyer (who is also coproducer and annotator of this record) is to be congratulated for permitting the music to play such an integral role in the shaping of his film. In short, this is the most exciting film score to come out of 1979.

For the most part, the reproduction is all we have come to expect from Entr'acte, and Rózsa's collaboration with the Royal Philharmonic is winning. However, the playing—particularly by the strings—does not seem quite as incisive and responsive in this studio recording as on the soundtrack. The second side of the review copy was pressed off-center; this is uncharacteristic of Entr'acte's exacting standards and will doubtless be corrected.

For a much more intricately plotted and psychologically complex film—Billy Wilder's *Fedora*, a tragicomic fable about celluloid illusions of manufactured beauty and immortality—Rózsa has composed a less spectacular but very personal and deeply felt score. Making economical use of several characteristic motifs full of mystery and foreboding, it projects a gripping sense of ineluctable fatality and irretrievable loss. This haunting score, like the film, reveals ever more subtle interrelationships and layers of meaning upon repeated hearing. It is evocatively played by the Graunke Symphony Orchestra of Germany in an appropriately distant and resonant acoustical ambience. P.A.S.

Correction: Harris Goldsmith's January feature review erroneously stated that Desmar's "Claudio Arrau: The Historic Recordings" was dubbed and pressed by Teldec in Germany; in fact, it was produced entirely in the U.S.



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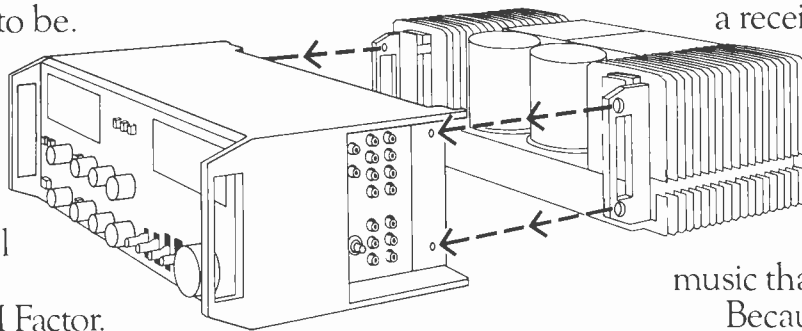
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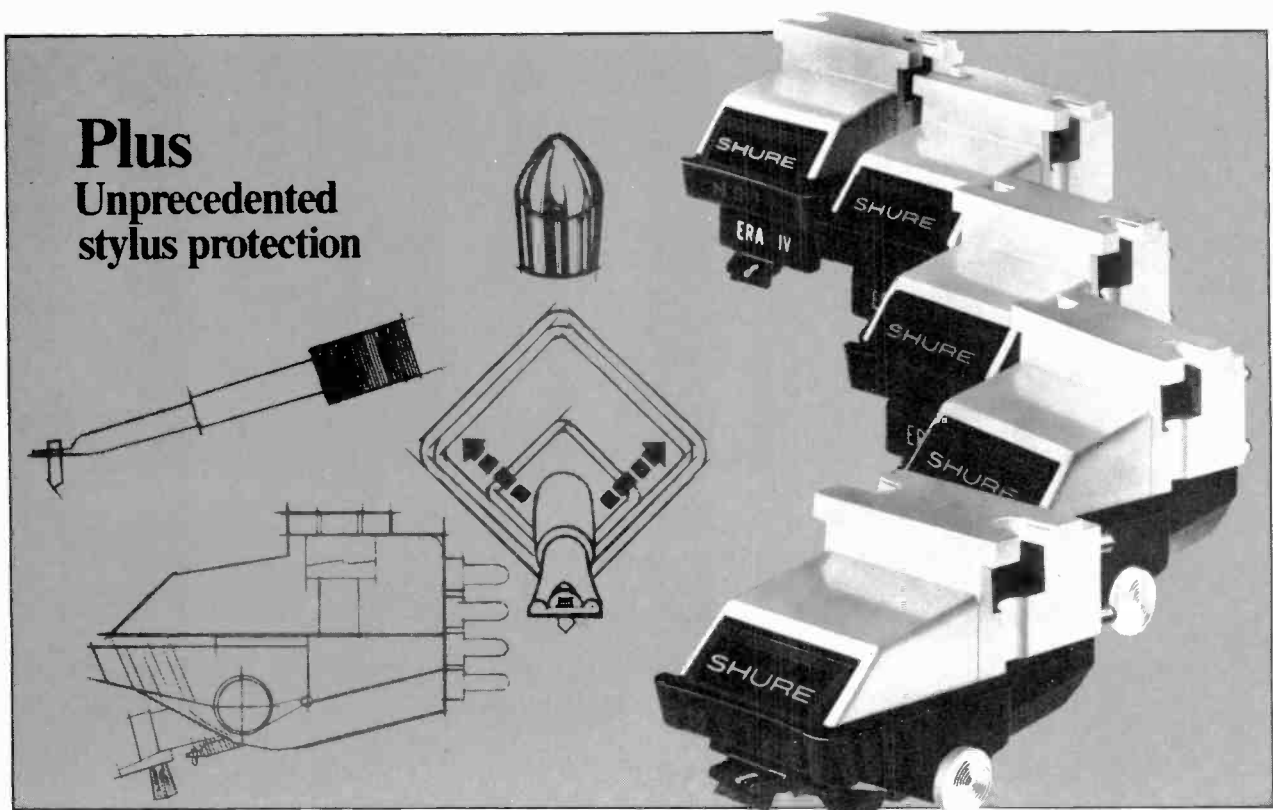
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M97EJ	Biradial (Elliptical)	1½ to 3 grams	Where slightly heavier tracking forces are required.
M97B	Spherical	1½ to 3 grams	
78 rpm Stylus for all M97's	Biradial (Elliptical)	1½ to 3 grams	For 78 rpm records.

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ABBA: Ready for the "Fortune 500"

by Sam Graham



Andersson, Lyngstad, Ulvaeus, Faltskog (in TV set)

They have been called the largest-selling group in the history of recorded music. They are established stars throughout the world, with only the U.S. not yet completely conquered. And they're one of the most profitable corporations in the world, based on a simple comparison of net vs. gross profits.

You've probably heard dramatic statements like these about ABBA, the Swedish pop quartet that toured our country for the first time last fall. By their own estimate, writers/producers/instrumentalists Bjorn Ulvaeus and Benny Andersson and singers Agnetha Faltskog and Anni-Frid Lyngstad have sold be-

tween 100 and 150 million records and tapes since 1973, thanks to their highly commercial brew of European melodies and harmonies and American rhythms (and enough hooks to stock a sizable meat packing plant). But vinyl wasn't the only cause of their incredible \$15 million net out of \$25 million gross profit in the fiscal year that ended on April 30, 1979. (Their third bonanza year in a row.) ABBA and their thirty-employee organization control an amazing number of other business interests, some of which capitalize on the group's image (T-shirts, posters, etc.), some of which are completely unrelated.

To look at these four wholesome entertainers onstage, with their matching jumpsuits, big smiles, and sleek good looks, one would hardly peg them as owners of art galleries, leasing and financing companies, and real estate and oil trading concerns. But theirs is a very canny business operation, designed to minimize the tax bite and maximize security for the group and their families long after *Dancing Queen*, *SOS*, and the others are mere gold records on a living room wall.

The story of ABBA, their music, and their money inevitably begins with Stig Anderson, the group's manager and principal architect of the financial empire. He has long been a fixture on the Scandinavian music scene, not only as a popular lyricist/translator, but also as owner of the Polar record label and Sweden Music, his country's biggest music publisher. Ulvaeus' pre-ABBA band was Anderson's first Polar artist, in 1964. Ulvaeus later joined with Benny Andersson, and together they recorded for Polar as Bjorn and Benny, with Stig writing the lyrics. The women came along later in the '60s (Benny and Frida are married; Bjorn and Agnetha were recently divorced), and, singing in English, the four of them moved from big hits in Scandinavia to a shot at the international scene. Agnetha and



Bjorn and Frida (above), Agnetha and Benny

To look at these four wholesome entertainers, one would hardly peg them as owners of art galleries, leasing and financing companies, and real estate and oil trading concerns.



Frida were increasingly featured, and with the two out front on *Waterloo* they won the 1974 Eurovision song contest. That started the snowball rolling—and the cash registers ringing.

Understandably, Anderson has just about given up his lyric writing. (He has written well over 2,000 songs.) "Somebody has to push the buttons," he says. "I have to be where it's important to be now, which is why I stopped writing. We control 100%: publishing, record royalties, production money. It's all split between the family, so you cover the costs, and after that it's all profit. We don't want to mix up music with money, but money always follows success and someone must take care of it."

To take care of it, one must have it—and that's not always easy under Sweden's stringent tax laws. "If you were not a corporation, but working as a private person," says Stig, "like a doctor, an author, or a musician, you once could actually be taxed for more than you had earned in a given year." That was because of so-called "social costs," which amounted to some 35 to 40% of one's gross income and were exacted in *addition* to standard income tax. "You could be earning even less than \$40,000," he continues, "be in a regular bracket of 65 to 70%, and, with the social costs, owe over 100% in tax. You were supposed to get the social costs back the next year, but what do you live on in the meantime? People were screaming when they understood how it worked."

About five years ago, the law was relaxed a little: "You pay the social costs," he says, "but now you can deduct them immediately." Still, one can be in a bracket as high as 80%. "The only thing you can really do is build up your company, let it grow, and sell the shares one day if you wish. That cuts the taxes to about 40%."

And build they have, like developers on a newly discovered island paradise—but never desultorily and always, they say, with an eye for quality over quantity. They have established four major companies: Polar Music International, Sweden Music, Harlekin, and Sarimner. PMI, the biggest and most diversified, is owned jointly by Anderson (50%) and the four performers (12.5% each). It controls most of the outside, non-musical interests



and collects record royalties, not only for ABBA, but for Allan Pettersson, a serious contemporary composer in Sweden, and for Ted Gärdestad, a popular singer.

PMI also collects the money from sales of ABBA merchandise. Some of that is more or less universal: T-shirts, posters, ABBA clogs (manufactured in Sweden by Tretorn), monthly magazines (50,000 copies per month in England alone, at 40 pence each), belt buckles, pen and pencil sets, jigsaw puzzles, and the like. But a great deal is manufactured for specific regional markets. In England, for instance, you'll find a variety of ABBA mugs and an ABBA soap bar with a cassette tape depicted on one side. "That one's a bit light-hearted," says London-based merchandising manager and "financial genius" John Spalding, but no one's laughing at sales of 200,000 during the last Christmas season. Now they are introducing two new colognes, one for each of the ladies. Frida's scent, since she's a redhead, will be fiery and mysterious, while the blonde Agnetha's will be lighter and sunnier—or something like that.

In Japan, there are wastebaskets and a line of lightweight clothing for the kiddies. In the U.S. and Canada, Burt Ward (Robin on the old *Batman* TV series) is in charge of merchandising and fan clubs, overseeing the sale of tour books, official ABBA satin disco visors, and so forth. If that all sounds a bit exploitative, Spalding explains that "we try to keep this kind of thing down, but if we don't do it ourselves, the pirates will."

AH Graphic, the first extramusical investment ABBA made, also falls under the aegis of Polar Music International. Intended "both for business and for pleasure," the Stockholm art gallery wholesaler is "one of the biggest in Europe," says Stig, and is valued at \$1.5 million. He goes on to explain PMI's founding of its second nonmusical company, Invest-Finans: "We're like a small bank with a lot of cash. We wanted to increase our return from it, so we got into leasing and financing." Leasing includes "almost anything" from fishing boats to computers to Xerox machines to alarm systems, with items bought one at a time and leased out accordingly. Financing involves loans to "builders, various companies, and even individuals," with each deal worth "roughly

\$60,000 and no less than \$20,000." PMI's real estate company, Solax, owns several commercial buildings—shops, offices, etc.—in Sweden. Stockholm's Sport Palace, where the group's new Polar Music Studios are located, is owned separately by PMI and does not come under Solax' aegis.

Sannes Trading is perhaps the most pointed illustration of Stig's and ABBA's aim to "take out as little money as possible personally and put it back into the corporation." It is also the link among three of the four major companies—Polar Music International owns 27.5% of it, Sweden Music 10%, and Harlekin 12.5%. The other half of Sannes is owned by a Sweden-based Far Eastern trading concern called Beijer Invest, which—through Sannes—enables them to be paid in industrial goods and oil from sales of their records in the East, rather than money. (Perhaps coincidentally, Beijer also owns a fish-canning concern called Abba, founded long before ABBA.) This year, Sannes will become simply Pol-Oil and specialize in importing oil and gas from, among other places, the Arab republics and then reselling it (some to the U.S.) through the "spot market" in Rotterdam.

Sweden Music, the second major company, was founded in 1960 by Stig and is still owned completely by him. "This is the biggest publisher in Scandinavia today," he says. "We've bought up many old Scandinavian publishers, giving us rights to songs from the '20s and so on, and I purchase new catalogs all the time." One of his more recent acquisitions includes the unpublished works of the deceased Evert Taube, one of Sweden's most popular singer/songwriters of all time. Sweden music also administers Scandinavian rights for many U.S. publishers, including A&M's Rondor Music, Ivan Mogull Music, MCA/Leeds Music, and the publishing arm of Decca Records. And part of its income comes of course from the company that publishes ABBA's sheet music, Union Songs.

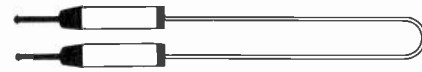
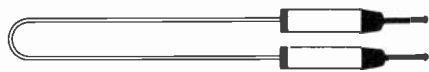
Owned jointly by Sweden Music and Harlekin is Polar Music, the newest company, which essentially is Polar Music Recording Studios. "We treat ourselves as we treat anyone else who wants to book time there," says Anderson. "It's hard for us to get time in our own studio, which we

think is one of the most modern facilities in the world." Albums recorded there include ABBA's "Voulez-Vous," as well as Led Zeppelin's "In Through the Out Door," and a Genesis project.

The third major company is Harlekin, owned equally by the four members of ABBA. Harlekin collects the composers' shares of the record royalties from PMI and also controls the touring activities of the group—the only aspect of the entire operation that is not profitable. Tour organizer Thomas Johansson estimated that "we may break even" over the course of the tour's forty-one dates (twenty-three of which were in Europe), at venues with an average seating capacity of about 12,000. Apparently, the expense of mounting a lush and "quality" stage show negates the possibility of turning a profit, even from consistently sold-out houses. But, as with many acts, ABBA tours primarily to promote record sales. "Someday," Anderson laughs, "I'd like to play Red Square in Moscow—that's a four-million-seater. Of course, it would have to be festival [unassigned] seating."

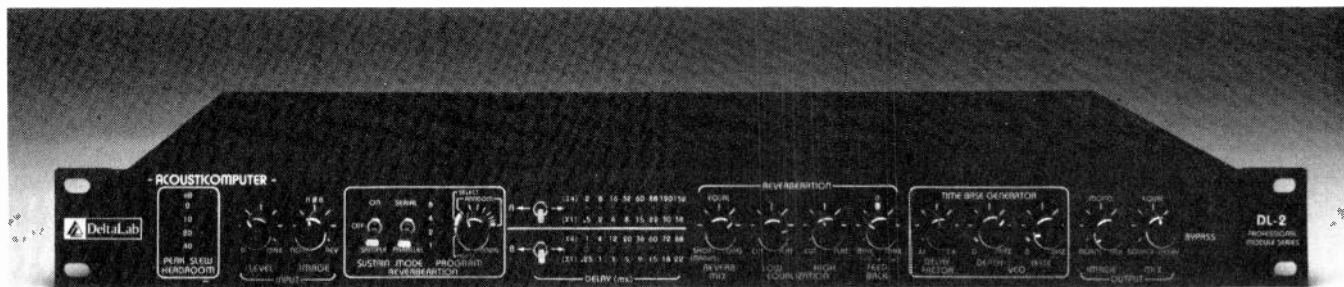
Though dependent upon PMI for capital, the investment partnership between Stig and ABBA is considered a separate entity within the ABBA financial complex. Called Sarimner, its holdings include a trading company in Sweden (Commerce), a huge shopping center in Skoevde, Sweden, and the Monarch bicycle factory. "Sarimner has enabled us to stay in Sweden by making some private investments," says Stig. Of the 150,000 shares, or 37.5%, of Monarch stock they own, he comments, "With the energy crisis people are really buying bikes. This is one of the biggest factories in Europe, so we should do all right."

Surprisingly, Stig still attributes their enormous wealth to luck: "This kind of thing can happen in show business. Nobody planned ABBA, but you can hit a few jackpots if you're lucky." Clearly, that isn't all there is to it. Talent, a little luck, and a lot of keen business sense have put ABBA in a league of professionalism—and wealth—that few other popular music enterprises will ever attain. ♣



The DeltaLab Acousticcomputer

by Fred Miller



About three years ago, in the first issue of BACKBEAT, I reviewed Norlin's Polymoog synthesizer and waxed virtually rhapsodic about the exciting developments that were taking place in the applied audio biz with respect to integrated circuits and microprocessors. At that time, the biggest news in recording studios was Eventide's \$5,000 digital delay unit—big news because, for the first time, one source offered a variety of special effects. The Polymoog was innovative because it combined the ease of simple electronic keyboard operation with the sophistication of a complicated synthesizer.

Already the revolutionary aura of those instruments has faded. Since their introduction, we've seen digital recording become a practical reality, with several studios boasting 32-channel machines using 1-inch tape with a signal-to-noise ratio of better than 90 dB, no wow and flutter, inaudible distortion, and higher fidelity than ever. We've seen the advent of guitar synthesizers, cordless transmitters, computer operated mixdown, and Giorgio Moroder's all-electronic disco record zooming up the charts. While all this technology has brought an undeniable backlash—including the emergence of new wave music, the resurgence of heavy metal rock & roll, and the rediscovery of the acoustic piano—it nonetheless has become a part of our lives.

What's to come in the Eighties? Digital consoles and recorders will be a reality shortly, video discs with digital

stereo sound are in the development stages, and the day will soon arrive when a home recorder can make a better recording with a couple thousand dollars' worth of equipment than the big 48-track remote trucks did in the 1970s. So fasten your seatbelts and get ready for yet another decade of mind-blowing innovation.

Though the subject of this month's column won't exactly put you in shock, it is a stellar example of how technology has enabled us to stuff more flexibility into smaller and less expensive packages. The DeltaLab Research **DL-2 Acousticcomputer** is a digital effects device with an uncannily wide range of capabilities. In addition to offering the usual doubling and thickening effects, it can be used as a stereo digital delay, since it has two independent channels with their respective inputs and outputs. The sixteen reverb programs stored in its memory make it possible to simulate anything from concert-hall acoustics to cardboard tube echo. You can also achieve a broad variety of flanges with it and, when coupled with an external reverb device (such as a live chamber or EMT plate), delay the onset of reverb to create what used to be called "tape slap." And, of course, it generates all kinds of R2D2 space sounds.

The DL-2 is quite complex, but its well-thought-out owner's manual comes complete with suggested setups, much as a synthesizer manual comes with a patch book. Several of its features are particu-

larly well planned and executed: both balanced (XLR) and unbalanced (phone type) input and output jacks, which can be used at the same time; an input level control for both channels with LEDs to indicate peak level; and two additional rows of LEDs to show the delay ranges of channels A and B. As with other delay devices, the DL-2 uses a feedback circuit to lengthen the delays and includes the fairly standard mix pot to blend the original signal with the processed one in the ratio of your choice. There is an internal voltage-controlled oscillator for modifying the delay signal, a sample and hold generator for random reflections of the original sound source, two bands of equalization, a stereo reverse pot, and a time-base generator that can be operated in conjunction with the VCO. This enables the user to expand the range of the delay times by a factor of four, so that the delays may occur from a minimum of 0.25 milliseconds to a maximum of 240 milliseconds since the delays may be used independent of each other (PARALLEL mode) or cascaded (SERIAL mode). The back panel includes two jacks for footswitches—to either bypass the DL-2 or to repeat the events just created—and one for an external control oscillator from another source, such as a synthesizer. You can also interface the Acousticcomputer with an optional module that expands its memory capability by as much as 2 seconds of delay time.

Among the effects suggested
Continued on page 112

The Pursuit of Rock Credibility

by Stephen Holden

A sad example is Bette Midler's attempt to be the new Janis Joplin.

The semireligious aura that hung over late-Sixties rock culture still lingers like a sickly perfume.

Not long ago I received a call from a successful pop songwriter-turned-recording-artist. It was a week before the opening of her Broadway show (she had written the lyrics), and she fretted about its possible ill effects on her "rock" image. It wasn't on Broadway that she wanted to be taken seriously; what mattered more than anything was that she maintain what she called her "credibility with *Rolling Stone*." Her attitude, shared by many of her professional peers, is an outgrowth of Seventies FM radio and pop music criticism. Both are decidedly pro-rock: both tend to view pop—and in particular, theatrical pop—as old-fashioned, inauthentic "schlock." In short, the very antithesis of rock's hipness, soulfulness, and raw emotion.

The semireligious aura that hung over late-Sixties rock culture still lingers like a sickly perfume, and every writer/performer coming up today seems to feel entitled to the same spiritual certification accorded the Beatles, the Stones, and Dylan. Given today's cynical climate, it's questionable how many rock stars still believe in rock as a spiritual-populist revolution. Many are simply exploiting the myth and the rock-star-as-god image. My Broadway songwriting acquaintance's assumption seemed to be that the right rock image—"the Edith Piaf of Rock, the Judy Garland of Rock, the Female Billy Joel"—was the key to success. But when I asked her if she had ever seen Joel perform, she admitted she hadn't. She seemed, in fact, to have no real sense of an audience. To her, "rock" stardom had little to do with affecting people's lives, but was a social badge to wear in music-biz circles.

What these new pop personalities who long for the hip cachet that the word "rock" implies don't realize is that "credibility with *Rolling Stone*" reflects credibility outside of New York and Hollywood tastemaking circles—in the unchic real world of people they wouldn't want to know socially. For real rock stars, like politicians, have grass-roots constituencies. When they perform they represent these constituencies as role models, sex symbols, and, yes, sometimes even spiritual avatars. By contrast, the theatrical songwriter/performer is traditionally a more detached professional. Is the rock audience—predominantly teenage boys—the natural constituency of an upper-middle-

class New York woman in her thirties with a Broadway background and no real acquaintance with folk music, country, or blues? Obviously not. This woman should have recognized the Broadway audience as the nearest thing to her natural constituency and approached it with pride rather than disdain.

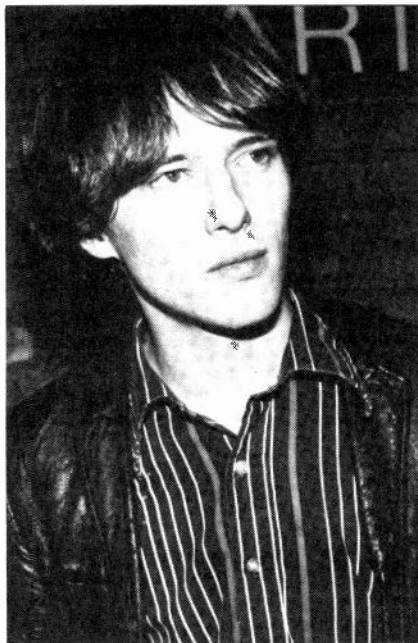
The dismissal of theatrical pop ("parents' music") and its audience is as absurd as it is modish. Take, for example, the Bee Gees. After they carved a niche in history with *Saturday Night Fever*, they were compared to Glenn Miller, who invented the signature dance sound of his era. If any recording figure has achieved immortality, it's Miller. But they publicly objected to the comparison, because Miller doesn't belong in the "rock" pantheon.

Some pop artists even undermine their own gifts in their pursuit of rock credibility. On his recent album, "Born Again," Randy Newman—one of pop's greatest melodists, orchestrators, and all-around intellectuals—offered a collection of snide rock novelties. Watching him perform one of them (*Parts*) on *Saturday Night Live*, I was horrified. Here was a sophisticated musician portraying a teenage exhibitionist in a "hip" rock song with no tune and no ideas. An even sadder example is Bette Midler's attempt to be the new Janis Joplin. Though her acting in *The Rose* blazes with energy and insight, her singing in the movie is atrocious. Midler is physically unequipped to be a rock singer. As a comedienne-chanteuse she is a genius. But in her recent Broadway show, *Divine Madness*, so much of the music featured her gratingly strained rock singing one would think she was ashamed of the cabaret style that had made her a star.

Rock's big bucks are certainly one reason these artists victimize themselves, though all of them have had enough success to do pretty much as they please. A pop act shouldn't feel compelled to earn credibility with a rock audience or with rock critics any more than a rock band should set its sights on Broadway and the theater-party crowd. But nowadays, nobody wants to be himself—if he can just get away with posing as Jesus, Bruce Springsteen, or the Beatles. Ultimately, these artists are hurting their own careers, for audiences can only be as true to them as they are to their artistic selves. ♣



Marianne Faithfull



Lloyd—his first solo LP

**Catfish Hodge Band:
Eyewitness Blues**

Freebo, producer. Adelphi AD 4113
by Crispin Cioe

Small record labels aren't exactly making a comeback, since they never really went away, but a significant number are clearly holding their own these days. Why? Because big labels, always hot on the trail of the next big trend, have abandoned some forms of pop music that are still popular. Hence, last year we saw a Chicago blues renaissance led by Alligator records, George Thorogood's phenomenal success on Rounder, and Geoff Muldaur and Paula Lockheart's strong LPs on Flying Fish. Add to this list Bob

"Catfish" Hodge, now on Adelphi, who has survived a couple of record deals and the usual bar wars with his voice and musical direction remarkably and delightfully intact.

Though Hodge made several albums on major labels in the late '60s and early '70s (I played saxophone on his "Dinosaurs and Alleycats" for Westbound/20th Century), "Eyewitness Blues" is the first I've heard of him in five years. Like Thorogood, he is a master of the bar blues format; unlike Thorogood, he covers few tunes or blues standards since he's an accomplished and disarmingly direct songwriter.

Catfish is now living and working out of the Washington, D.C. area, but he wears his native Detroit rock & roll roots like a heart on his sleeve and, most importantly, he does so with his unmistakable Motown-inflected voice. His version of the Temptations' eternal *It's Growing* (called *Every Day It Grows and Grows*), bespeaks the fascination and dedication that so many white Detroit rockers (starting with Mitch Ryder in the early '60s) have long had for classic black r&b and gospel. The rest of the material here is original, ranging from slide guitar blues (with several outstanding and emotive solos from Jim Thackery) to slippery, lowdown funk in the same league as Little Feat's good stuff.

Hodge has long been a friend of and collaborator with such L.A. luminaries as the Doobie Brothers and Bonnie Raitt (whose longtime bassist, Freebo, produced this album). And while his roots have remained raw and close to the surface by choice, his polished songwriting reveals a wealth of experience. *To the Left* treats infidelity with philosophically bittersweet good humor over a slow, steamrolling fatback groove. *Down Over the Border* is a hair-raising tribute to New Orleans r&b, complete with some genuine second-line rhythms and Jimmy Powers' strong harmonica fills.

"Eyewitness Blues" is produced with a no-frills clarity that fits Hodge's personality to a tee and allows his acerbic humor to shine through. *Record Executive Blues*, more or less an autobiographical account of his career in the music biz, is replete with between-verse asides like "Now stop all that jive, Clive." The music world could use more Catfish like Hodge, and I'm glad he's resurfaced with an exceptionally tasty blue-plate special.

Marianne Faithfull: Broken English

Mark Miller Mundy, producer
Island ILPS 9570

by Toby Goldstein

Marianne Faithfull cut her first record, *As Tears Go By*, fifteen years ago. She was seventeen and fresh out of pre-convent boarding school—a wispy, blonde, blue-eyed dream. But dreams die hard, and as the Sixties crashed so did Marianne—into the nightmare of a junkie's life. Her last American release, in 1969, was the desperate, dirgelike *Sister Morphine*, in which her own life was mirrored in the song's message of insatiable craving.

Given Faithfull's pathetic decline, even if "Broken English" had been a total failure, I would have been cheered by its mere existence as evidence of some kind of new discipline in her life. Fortunately, the new album shows more: It is a series of cautionary tales sung by a true survivor. No longer content to delicately breathe her way through pretty ballads with a girlish soprano, Faithfull has dropped her register by more than an octave and sings with crackling sorrow, like a mourner at her own funeral. It is not pleasant, but it is undeniably convincing.

Producer Mark Miller Mundy brings out the doleful timbre with muted, steady percussion, resulting in the contradictory feeling that one is invited to the dance, but the beat is from a distant cortege. Faithfull's backing musicians, several of whom collaborated with her on the title song, include Sixties stalwarts Steve York, Darryl Way, and Steve Winwood. Individual glories are kept to a minimum, though, with the emphasis instead on creating a starkly dramatic backdrop for Marianne. This is heard at its best on the lengthy closing piece, *Why D'ya Do It?*, where a tense, tight rhythm underscores the singer's cathartic, venomous howls at an untrue lover. Even the outside material is appropriately chilling, especially her version of John Lennon's *Working Class Hero*.

Back in the '60s, Marianne was cast as a working-class villainess, with her "sex and drugs" escapades splashed across newspaper headlines. But the lessons of others' cruelty and of her own years of vulnerability have been absorbed. Marianne Faithfull no longer passively watches the tears go by. Instead, she finds strength in open weeping.

Richard Lloyd: Alchemy*Michael Young, producer**Elektra 6E 245*by **Steven X. Rea**

Lurking in the shadows cast by frontman Tom Verlaine, guitarist Richard Lloyd supplied a lean, luminous sheen to the tense, angular rock evocations of the now-defunct group Television. Lloyd's and Verlaine's respective guitar excursions, alternately frantic and shimmering with cool, were the stylistic signature of that New York quartet, and neither's virtuosity passed unnoticed. What did go unnoticed during the group's five years together, however, was Lloyd's ability as a songwriter—a vestige talent brought to the fore with an affable vengeance on "Alchemy," his first solo outing.

Joined by former Television bassist Fred Smith, guitarists Matthew MacKenzie and Jim Mastro, and drummer Vinny DeNunzio, Lloyd hangs out his true colors: a penchant for pure pop mined in the mid-'60s Anglo vein (read Beatles), framed in a trebly curtain of busy guitars, group harmonies, and a smattering of syncopated Cars-like synthesizer (provided by producer Michael Young).

Unlike the ethereally neurotic ramblings of Verlaine, Lloyd's songs pursue relatively mainstream lyric and musical paths. *Misty Eyes* is a snappy pop paean to childhood romance (references to playing doctor and all), with Lloyd burrowing into a hazy, harmony-laden hook on the heels of a gentle, fluent guitar intro. *Should Have Known Better* gloms more than its title from the Beatles: Lloyd lifts a solo straight from George Harrison's book (circa "Revolver"). But the song's real charm lies in the singer's own ironic sensibility—his slightly nasal, cheery voice strikes a stark contrast to the tune's I-got-burned-in-love sentiments. *Woman's Ways* recalls the Beatles even more, Lloyd's shrill *Love Me Do* harmonica offset by DeNunzio's thumping bass drums. The latter's bottom-heavy beat plants *Woman's Ways* and the rest of "Alchemy" on rock-hard turf—*In the Night* literally erupts into its sprightly chorus from a groundswell of dense, thudding rhythms.

While Lloyd proves himself a deft pop craftsman, there's a grittier, more intent, introspective persona lurking beneath the album's surfaces. On the title track he is "talking about things that ex-

plode." the sorcery-shrouded lyrics nicely juxtaposed with a lightheaded melody. *Number Nine* races along like a runaway train, propelled by a distraught run of guitars that collide head-on with Lloyd and the band's emphatic vocal choruses.

"Alchemy" appears to be a real sleeper. Though *Misty Eyes*, *Woman's Ways*, and *Should Have Known Better* traverse Top 40 terrain, Lloyd's debut has yet to parlay its title's art into actuality—that is, the alchemist's trick of turning lead (or in this case vinyl) into gold. But commercial success or no, it is a work of substance and style, conjured up by a rock & roller with a touch of the old wizard about him.

M: New York-London-Paris-Munich*Robin Scott, producer**Sire SRK 6084*by **Sam Sutherland**

A quick scan of year-end commercial and critical "best of" lists suggests M remains something of a mystery, despite the global success reaped by *Pop Muzik*, his/its first single. For depending on which roundup you consult, you'll find producer Robin Scott's studio concept classified as both soloist and group.

That confusion is only partially resolved by the first M album, which uses an instrumental ensemble and female vocalist to provide the musical firepower but remains clearly dictated by Scott's bizarre pop vision. Like *Pop Muzik*, "New York-London-Paris-Munich" soaks up international styles to play like a short wave receiver with a crazily spinning dial. Disco, chamber music, bathetic film scores, military fanfares, big-band choruses, and avant-garde synthesizers wink in and out of the arrangements as Scott declaims his coolly free-associative observations on modern man, modern woman, and modern music.

Less a lyricist than a sloganeer, he interlaces poker-faced aphorisms with nonsensical quotes from nursery rhymes, ad jingles, or colloquy. Because he recites any and all of those with the same deliberation—which sometimes approximates the pear-shaped locution of a prime minister and at others sounds like the lewd titter of some newly liberated headmaster—Scott's psychobabble comes across as both silly and sinister. At his best (*Pop Muzik* and its successor, *Moonlight and Mu-*

zak) he conjures up a feverish, end-of-a-decade vision of collapsed cultural barriers, a world in which aborigines probably drink Coke and clerics do the Freak. Behind the oddly cheerless vitality of the rhythm arrangements, which often hew to Eurodisco cadences, are glimpses of failing economies (*That's the Way the Money Goes*), sexual combat (*Woman Make Man*), and other signs of the times.

There are problems, though, principally created by this British producer's sense of instrumental scale. Relying on a rhythm section, keyboards, and occasional reeds, Scott is at his best when he accentuates the spareness of his ensemble; when he attempts to capture a more sweeping orchestral palette, his band's shortcomings become more apparent. Even with those flaws, though, "New York-London-Paris-Munich" offers enough moments of arch humor to make him and his coyly spectral "group" worth watching.

Madness: One Step Beyond*Clanger & Alan Winstanley,**producers. Sire SRK 6085***The Specials***Elvis Costello, producer**Chrysalis CHR 1265*by **Toby Goldstein**

The music that predated reggae in the West Indies was a sound variously called ska, blue beat, or rock steady. Given the long-standing British propensity to newly interpret yesterday's trends, it was only a question of time before this mid-'60s dance style would fall into the hands of young players and emerge as polished high stepping.

Madness and the Specials are considered twin leaders of Britain's ska revival, and, judging from recorded as well as live performance, both bands have the potential to bring that music to a far wider U.S. audience than reggae ever saw. For a start, neither is overtly political. Second, the Specials' multiracial lineup gives it a shot at crossing the chasm between black and white audiences. But the most durable component of the groups' appeal harkens back to *American Bandstand*'s classic phrase, "It's got a good beat, you can dance to it." They achieve a joyous amalgam of rock & roll's kineticism and rhythm & blues' subtle coerciveness by replacing reggae's deliberately spare guitar

leads with the rocking bleat of saxophones and fudge-thick keyboards, all the while maintaining a relentlessly throbbing bass.

While their stage shows indicate a fondness for spectacle, the bands' debut recordings leave no empty spaces. Madness is a sextet with an honorary seventh member, Chas Smash, who contributes backing vocals and "fancy footwork." The group is out to make party music, and as stated on the album's closer, *Chipmunks Are Go!*, "You call it madness, I call it gladness." The title track of "One Step Beyond" introduces Madness' madness with the blare of Lee "Kix" Thompson's robust saxophone and a jive command to "get up off your feet to the groovy, groovy beat." The lyrics deal with nothing more serious than girlfriend trouble (*My Girl* and *Believe Me*) or a hapless *Mummy's Boy*, and the best tunes are instrumentals totally dedicated to the joy of dance.

Madness' easygoing acceptance is contrasted by the Specials' seriousness. Although the members of this seven-piece group are young, they've already been burned by one manager, which prompted their first record, *Gangsters* ("Bernie Rhodes, don't argue! . . . Are you planning a bootleg LP?"). On "The Specials," their pointed remarks are cloaked in chief writer Jerry Dammers' keyboards and Horace Panter's masterfully threatening bass lines. Elvis Costello's light-touched production concentrates on refining the group's homegrown anger, much the same way his own best productions do.

It's possible that the Special's seriousness also comes from a thorough grounding in punk rock. Lead vocalist Terry Hall spews venom in a style reminiscent of Johnny Rotten, best observed in the group's cover of Rufus Thomas' *Do the Dog*. Even when the tempo is restrained—as on *Too Hot* or their second single, *A Message to You Rudy*—Hall's anger can be discerned brooding under the surface. Americans may not go for the rock-steady revival the way the U.K.'s new generation of "rude boys and girls" has, but as 1980 trend-setters the Specials and Madness are the leaders of the pack.

MUSE: No Nukes

Jackson Browne, Graham Nash, John Hall, & Bonnie Raitt, producers. *Asylum ML 801* (three discs) by Don Shewey



Pink Floyd: Gilmour, Waters, Mason, Wright

Last September at Madison Square Garden, Musicians United for Safe Energy (MUSE) presented a series of five anti-nuclear-power benefit concerts. "No Nukes" is drawn from those concerts, and its producers faced a formidable task—i.e., compressing more than twenty hours of music into a two-hour, three-record set while retaining the balance of political, commercial, and musical elements that made the concerts work in the first place.

Without question, they have succeeded. Adhering to the series' original purpose, the album spotlights several overtly political songs ranging from the merely didactic (John Hall's *Plutonium Is Forever*, Gil Scott-Heron's *We Almost Lost Detroit*) to the visionary (Jackson Browne's *Before the Deluge*) to the anthemlike (Hall's *Power*, which once seemed too lame for a movement's theme song but is the most moving cut on "No Nukes"). And the Doobie Brothers numbers that frame the set—*Dependin' on You* and *Takin' It to the Streets*—implicitly underscore the antinuke movement's appeal for grass-roots involvement.

The remainder of the package is devoted to sheer entertainment, with commercial interest ensured by the appearance of superstars James Taylor, Bruce Springsteen, Crosby, Stills & Nash, the Doobies, and Browne. Further entrée to K-Tel heaven is provided by respectable

reproductions of hit singles by Nicolette Larson, Raydio, Chaka Khan, Bonnie Raitt, Ry Cooder, and Poco. Side 2 contains three pleasant surprises: a stirring rendition of *The Times They Are a-Changin'* by Taylor, Carly Simon, and Graham Nash; an angry and unusually complicated new Nash song called *Cathedral*, which deals with acid-tripping in Winchester Cathedral; and a gorgeous Nash and Browne duet of the folk ballad *The Crow on the Cradle* featuring David Lindley's brooding fiddle.

But much of the LP's superstar material is inessential. Tom Petty's *Cry to Me* and Jesse Colin Young's *Get Together* are washouts, and the supposedly exhilarating Taylor-Simon duet on *Mockingbird* sounds like you had to be there. Although undeniably exciting, the much-ballyhooed Springsteen numbers—a tough *Stay with Browne* on lead vocal and a Mitch Ryder medley—seem anticlimatic. The album's most outrageous miscalculation is the inclusion of three entire CS&N tunes yet only one minute's worth of *Sweet Honey in the Rock*, a fantastic black feminist a cappella quartet.

Apart from the merits of individual cuts, "No Nukes" is exquisitely edited for a seamless flow of music and sense of occasion. And though it may lack the countercultural mythos of "Woodstock" or the musical consistency of "The Last Waltz,"



its mixture of high quality and consciousness makes it an estimable showcase for the artists who have taken a stand and lent their talents to MUSE.

Pink Floyd: The Wall

David Gilmour, Bob Ezrin, & Roger Waters, producers
Columbia PC2 36183 (two discs)

Pink Floyd, Dave Gilmour's and Roger Waters' nom de guerre, has gone from being the premier art-rock psychedelic band to literally cornering the mass market on full-blown paranoia (although Talking Heads are seriously angling for a piece of that action). With "The Wall," it becomes pop's undisputed dark underbelly, the perfect British counterpart to Supertramp's hygienic sensibility. Just as Supertramp's hugely successful "Breakfast in America" sported ultraclean, sophisticated production and vaguely optimistic lyrics that seemed like "Sgt. Pepper" updates, "The Wall" is a bleakly depressing, pessimistic view of insanity in an insane world. It's also a brilliant double album of tortuously precise music that draws on everything from folk music to rock-disco to Stockhausen.

The lyrics tend to deal either with the general plight of any man in the modern world or with an aging rock star's flights between psychosis and catatonia. Side 1 paints a dank picture of growing up, in modern England specifically, where every outrage and infliction of pain is "just another brick in the wall" of psychological defenses that, ultimately, the individual builds around himself. And who but Pink Floyd would have a chorus of British schoolchildren singing over a brooding, minor disco pulse: "We don't need no education, we don't need no thought control. . . Teachers leave the kids alone." Song after song reflects the dread horror of "skating on the thin ice of modern life."

The immaculate production of "The Wall"—especially the synthesizer treatments and vocal layering (the doubled bass voices in *Mother*, are brilliant)—render the Gilmour/Waters vision all the more horrific. On *Don't Leave Me Now*, the rock star persona begs his girlfriend not to go, "When you know how I need you, To beat to a pulp on a Saturday night," while dreamy and thick synthesized chords drift away in liquid echo patterns. The album's penultimate song, *The*

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Trial, is a Kurt Weill-inspired tour de force, with the singer being “caught red-handed showing feeling . . . of an almost human nature” against an expressionistic orchestration.

It's the authors' very humanism, balanced with their inspired production and compositional styles, that makes “The Wall” so stunning. As much as this music made me cringe at times (some of it is genuinely scary), the album has an underlying edge of warning and concern, which makes it all the more powerful.

Bonnie Pointer

Jeffrey Bowen, producer
Motown M7 939R1

by Christopher Petkanas

This listener hardly would have guessed that one-fourth of the Pointer Sisters—Bonnie—would defect smoothly from the nest and claim a rather strong spot for herself. There just didn't seem to be room for another black female singer majoring in dance music, particularly one whose vibratoless sound, while not disagreeable, is consistently parched and sandpapery.

Well, I was wrong. Pointer's second solo album is a fresh, brave, and imaginative concept work comprising five well-chosen Motown standards (all by Holland-Dozier-Holland), plus an eerie ballad that she cowrote. At twenty-five, she reflects a tough maturity beyond her years, checking in as an earthy, rustic singer who pulls no punches.

I Can't Help Myself (The Four Tops), *Jimmy Mack*, *Nowhere to Run* (Martha and the Vandellas), *When the Lovelight Starts Shining Through His Eyes*, and *Come See About Me* (the Supremes) are recast in Jeffrey Bowen's spare, concise production. Assuredly, the material retains every bit of its infectiousness and pertinence, yet each makeover is also creative. For one thing, Pointer's sincere treatments are not as descriptive of a universal condition. For another, she is not the lusty, feline singer Diana Ross is. (Indeed, it is impossible not to hear the latter's familiar vocal coming up from behind.) What she has done is to pluck these songs out of the stratosphere and bring them soulfully down to earth. Bowen aids her, to cite just one example, by fighting the inherent sentimentality of *I Can't Help Myself*. Backed by a great body of sawing

strings, thumping hand claps, a rapid-fire guitarist, and her own neat background vocals (Pointer arranged and sang them on every track), the number now tells of the joys of being helpless. The one new cut, the somber and bluesy *Deep Inside My Soul*, is compatible with the body of the album. It is a pained, introspective performance in which Pointer tries to fight her way out of the maze that is her soul.

The Grammy-winning songwriter is a confident improviser. While she is by no means a versatile artist, she is uninhibited by lyrics, moves around naturally inside of a song, and imparts a sense of spontaneity. It should be noted that “Bonnie Pointer” was mixed and mastered on the 3M 32-track Digital Mastering System, which has afforded unusually clean sound.

Pretenders

Chris Thomas & Nick Lowe,
producers. Sire SRK 6083
by Sam Sutherland

Although “Pretenders” marks the formal American debut for this British quartet, a string of import singles for Real Records has already earmarked the band as one of the most distinctive in the latest wave of new rockers. Songs like *Tattooed Love Boys* and *The Wait* have employed a number of familiar post-punk effects—jackhammer rhythm guitars, skeletal bass lines, and crashing codas. But they also offer something new in lead singer and principal writer Chrissie Hynde, whose sharp-eyed lyrics and classic rock stance make their best songs instantly memorable.

Unlike the big-voiced belters that have dominated the past year's bumper crop of women rockers, Hynde has modeled her style on the vocal attitudes of male provocateurs like Mick Jagger and Jim Morrison. Like those singers, she reaches for conversational nuance, sneering, sighing, or gasping as the situation dictates. Like them, too, she doesn't flinch at the sexual violence rippling through her lyrics. *Tattooed Love Boys* sketches a carnal initiation as exuberant as it is threatening, one that offsets the conventional view of feminine vulnerability with Hynde's own toughness. And on *Brass in Pocket*, she transforms a woman's longing into a strutting, triumphant inventory of her own strengths. You believe her when she says she'll win and know that victory

will come through persistence, not wan romanticism.

This is a young quartet, and its age shows in the rough edge that sometimes blunts the music's force but more often animates it. That inexperience also helps explain the few lapses into self-indulgence, such as Hynde's overly chatty recriminations to a married lover in *Private Life*. On the band's first single, Ray Davies' *Stop Your Sobbing*, Nick Lowe attempts to de-emphasize these flaws with a characteristically soft-focus production approach. But Chris Thomas, who produced all the other tracks, has opted for a more straightforward documentary treatment that risks crudeness to capture the band's formidable energy. The risk pays off. Rock fans will likely agree that the Pretenders aren't just posing. They're real contenders.

Wreckless Eric:

The Whole Wide World

Various producers
Stiff USE 1

by Steven X. Rea

In all of Stiff Records' stable of musical oddballs—from early signings like Nick Lowe, Elvis Costello, and Ian Dury (of the three, only Dury remains with the label) down through more recent folks like Lene Lovich, Pointed Sticks, and Jona Lewie—none is as wacky as Wreckless Eric. The singer/songwriter/guitarist occupies a unique position in the realm of rock & roll, one that is well on the far side of lunacy. Part jester, part fool, part tragic hero, he zealously parlays his personable perceptions of the universe into tightly structured three-minute rockers that are consistently up there with the best of Britain's new pop.

Stiff's first independently distributed U.S. release, “The Whole Wide World” is a compilation of Wreckless Eric's sundry U.K. singles. A and B sides both. It is produced by people like Lowe, Dury, and the Motors' Nick Garvey and backed by an assortment of uncredited Stiff house musicians. Eric's world view is crazily alive and innocent (a view only children and the slightly mad seem to share) and unabashedly romantic. (*I'd Go the Whole Wide World*, produced by Lowe, is an inspirational bit of avowed true love; a theme with variations that recurs on the spry *Hit & Miss Judy*, the Anglo/French



Reconnex Cherie, and on Veronica and Semaphore Signals.

Most of the LP's thirteen compositions clip along with an upbeat bounce, bass and drums guiding an uncluttered coterie of guitars, occasional keyboards, and an even less frequent saxophone. *Reconnex Cherie* and the paranoia-tinged *Brain Thieves* both sport slightly off-key sax solos that are endearingly awful—matching the endearing awfulness of Wreckless Eric's thin, quavery Cockney voice.

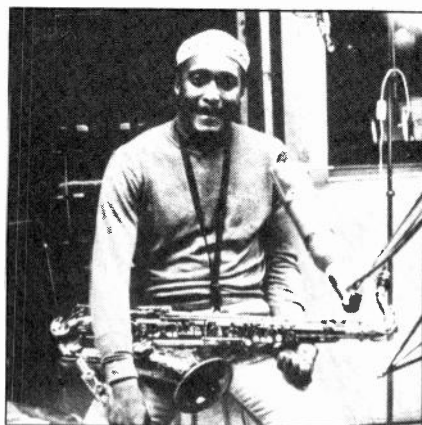
He has a knack for writing truly infectious melodies chock-full of hooks. What make his music decidedly uncommercial, however, are his own intrusions onto these alacritous tracks. "I might just as well be walking on the surface of the moon," he croons on one song, self-admittedly out of touch with reality. But while Wreckless Eric wanders the spacy wonderlands of his mind, he also demonstrates a keen grasp of life's truisms. On the hard-edged *Take the Cash (K.A.S.H.)* he displays a down-to-earth financial savvy. On *The Final Taxi* he delivers a sensitive assessment of death: "There's only one destination in the final taxi."

Wreckless Eric provides a quirky, whimsical alternative to the bland, all too amalgamous strains of most of today's pop music. He can be funny, but he shouldn't be dismissed as simply a joke. "The Whole Wide World" has substance to it—tangible, intelligent, and kind of strange.

|||≡ JAZZ ≡|||

George Adams: Sound Suggestions
Manfred Eicher, producer
 ECM 1-1141
 by Don Heckman

It seemed for a while that the loft jazz movement of the late Seventies might turn out to be all sound and fury and no substance. Fortunately, a number of recent recordings—from performers as diverse as Air, baritone saxophonist Hamiet Bluiett, and tenor saxophonists Bennie Wallace, David Murray, and now George Adams—suggest that an important new generation of jazz artists is once again emerging from the canyons of lower Manhattan.



George Adams

Adams has been around awhile, working for the last two decades with bands ranging from r&b stalwarts Sam Cooke and Hank Ballard to perennial avant-gardists Gil Evans and the late Charles Mingus. The experience shows. He brings a density of expression—an intelligent understanding of jazz history, if you will—to his playing that is matched by only a few of his contemporaries, Sam Rivers among them.

This is Adams' first outing as leader on a nationally distributed label, and the results are uneven. The rhythm team of pianist Richard Beirach, bassist Dave Holland, and drummer Jack DeJohnette seems peculiarly out of sync with Adams' solo playing. Only on the collectively improvised sections—the loose, do-your-own-thing episodes—is there any sort of coming together.

Paradoxically, Adams does interact quite well with tenor saxophonist Heinz Sauer, whose light, centered tone contrasts his darker, gutsier sound. And, just to prove that even the most creative avant-garde players have a taste for ham, he has included a peculiar blues called *Got Somethin' Good for You* on which he sings in a style that can most generously be described as a cross between Kermit the Frog and Lightnin' Hopkins.

Roy Eldridge: Little Jazz
Inner City IC 7002
 by John S. Wilson

After a decade of playing at Jimmy Ryan's in New York, trumpeter Roy Eldridge has settled into a routine in which vestiges of his old fire and power emerge only toward the end of an evening when

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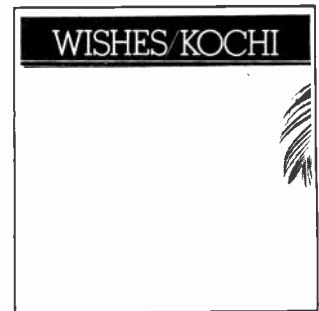
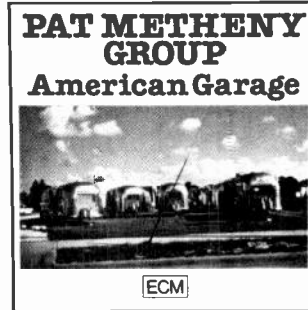
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SpinOffs

Jazz

by Don Heckman



**Anthony Braxton:
Alto Saxophone
Improvisations 1979**

*Michael Cuscuna, producer
Arista A2L 8602 (two discs)*

What we have here is two discs' worth of Anthony Braxton's solo alto saxophone improvisations. The artist has also provided elaborately complex program notes for each of the ten original "compositions," but I'll bet you won't understand them any better than I did. His improvisations are fairly typical follow-the-squiggles-and-see-where-they-take-you avant-garde stuff. Fact is, a number of far lesser-known academic musicians do it considerably better than he does. The three "traditional" tunes—*Red Top*, *Giant Steps*, and *Along Came Betty*—expose him as a moderately gifted improviser who is getting tremendous mileage out of intentional obscurantism.

**Don Cherry, Dewey Redman, Charlie Haden, Ed Blackwell:
Old and New Dreams**
*Manfred Eicher, producer
Warner Bros./ECM 1-1154*

This is three-fourths of one of Ornette Coleman's best quartets, with tenor saxophonist Dewey Redman replacing Coleman. The group's performance not only proves how smart Coleman was to pick them in the first place, but also shows how far each player has come in the past decade. Highlights are a superb twelve-minute version of Coleman's clas-

sic *Lonely Woman*, Ed Blackwell's brilliant drumming on *Togo*, and Charlie Haden's dextrous bowed bass sounds on *Song for the Whales*. Manfred Eicher's usually flawless production is marred this time, however, by a mix that is dominated by too-far-forward bass and drums.

Larry Coryell: Tributaries
*Michael Cuscuna, producer
Arista/Novus An 3017*

Putting Larry Coryell together with fellow guitarist Joe Beck and bassist John Scofield was, on the face of it, a pretty good idea. Yet it seems to work only in brief spurts and sparks. John Coltrane's *Equinox* is perversely fascinating, and Coryell sounds fine on an overdubbed solo track, *Solo on Wednesday*. But despite the excellence of the players, a sameness permeates the proceedings; a good rhythm section capable of more variety would have helped.

**Masabumi Kikuchi:
Wishes/Kochi**
*Masabumi Kikuchi, producer
Inner City IC 6021*

Here's one more confirmation that jazz is a universal language. Masabumi Kikuchi is a Japanese keyboardist who has performed with (among others) Miles Davis, but the dominant influences here are the sparse epigrams of the

haiku contrasted with long, sweeping shakuhachi-like melodies. Saxophonists Dave Liebman and Steve Grossman adapt very nicely to what can best be described as Oriental jazz fusion.

**Pat Metheny Group:
American Garage**
*Pat Metheny, producer
Warner Bros./ECM 1-1155*

The increasing slickness of performers like guitarist Pat Metheny suggests that this brand of fusion jazz is rapidly moving into a level of technique first, substance later. If mindless, rapid-fire arpeggiation represents Metheny's idea of jazz improvisation, then it may be time to number him among his more logical contemporaries in the world of commercial pop music.

Ray Pizzi: The Love Letter
*Ray Pizzi, producer
Discovery DS 801
(117 N. Las Palmas Ave.,
Los Angeles, Ca. 90004)*

Tenor saxophonist Ray Pizzi—who also plays bassoon, flute, oboe, soprano sax, and you name it—is not as well known as he deserves to be. Not yet signed with a major label, he is obscurely active in the L.A. studios and mostly can be heard wailing behind a *Starsky and Hutch* car chase or delicately underlining a love scene in a *Movie of the Week*. This Discovery album includes

some of his finest jazz work on record. It might be hard to find, but Pizzi's passionate re-examination of the Italian jazz saxophone style is worth the effort.

**Ralph Towner:
Old Friends, New Friends**
*Manfred Eicher, producer
Warner Bros./ECM 1-1153*

Oregon guitarist Ralph Towner's music is darkly moody—certainly too much so for casual listening. But it is also far and away the most provocative of the many solo recordings by Oregon's various individual members. The difference lies primarily in Towner's unusual skills as a composer, and in the stunning playing of bassist Eddie Gomez and trumpeter Kenny Wheeler.

Denny Zeitlin: Soundings
*Phill Sawyer, producer
Arch Records 1770*

San Francisco pianist/psychiatrist/composer Denny Zeitlin challenges Keith Jarrett's solo-piano primacy with this fascinating new collection of improvisations. His playing is every bit as interesting as Jarrett's and yet totally different—more compositional in nature, and more varied in tone and texture. An invaluable album for piano fans. (Be sure also to check out his brilliant score for *Return of the Body Snatchers*.)



Continued from page 105
 he is loosened up. But "Little Jazz" (also Eldridge's nickname), recorded in 1950 when he went to Europe with the Benny Goodman sextet, serves as a good reminder of how its namesake can sound in full and enthusiastic flight. Side 1's personnel is drawn primarily from Goodman's group: Zoot Sims on tenor saxophone, Dick Hyman on piano, Ed Shaughnessy on drums, the great French bassist Pierre Michelot, and singer Anita Love. On the second side Eldridge is backed by Michelot, pianist Gerry Wiggins, and drummer Kenny Clarke.

This was Little Jazz's first encounter with European audiences, and he responded to their eagerness to hear him. Despite the fact that he is known for his fiery attack and crackling open tone, Eldridge also plays brilliantly with a mute, as proven by some of the best moments of "Little Jazz." In the quartet, his muted playing has an airy delicacy in settings that range from the driving, uptempo *Wild Driver* to the jaunty and relaxed *Goliath Bounce*. With the Goodmanites on *Undecided*, his muted work takes on the coloration of Charlie Shavers (Shavers originally played the tune with the John Kirby Sextet) and then shifts to his own spare, flowing style. There are also strong samples of his big, glowing open horn on several ballads and on some duets with Love, who takes on the role that Anita O'Day once played opposite him in Gene Krupa's band.

Flairck: Variations on a Lady
Cees Schrama, producer
 Polydor PD 1-6243
 by Don Heckman

Let's get the name straight, first. In that peculiarly cute way with words that plagues some Europeans when they deal with English, these Dutchmen devised the name of their group by combining "flair" with the medieval Dutch word "*vlereck*," which can mean either "scoundrel" or "nimble-fingered."

So much for etymology. More important is the fact that Flairck is one of the most musically fascinating new groups around. Its instrumentation (and it is an instrumental group—no vocals) of guitar, bass, flute, and violin puts it in the chamber jazz category, but it often plays with a pointed rhythmic intensity that more than

makes up for the absence of percussion. Odd rhythms abound—5/4, 7/4, 6/4, and the like—moving in and out of the texture, and always with ease and comfort. These are not musicians who play in weird meters to sound weird.

The longest piece, the 21-minute *Variations on a Lady*, was composed by guitarist Erik Visser, as was most of the music. (Curiously, he is the only member

of the group who is not classically trained.) It is absolutely stunning. It includes, among other things, a gorgeously romantic opening melody (lovingly articulated by violinist Judy Schomper), a witty Bachian parody, some off-the-wall Irish jig rhythms, a jazzy, Brubeckian 5/4 section, and a dramatic violin cadenza from Schomper.

Continued on page 111

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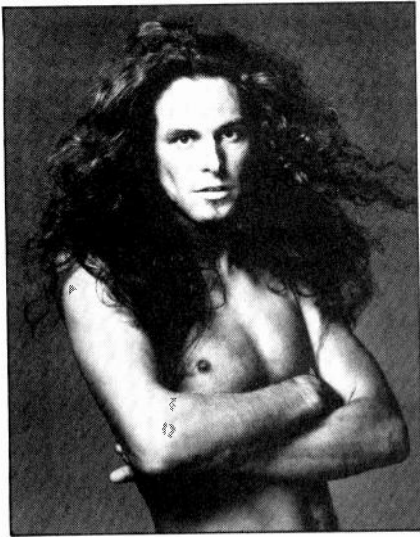


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Music in Print

by Elise Bretton



Nugent—ready for Eighth Avenue

Musical Highlights from *Rocky II* and *Rocky*

Big 3, 11 songs, \$4.95

Bill Conti has composed a percussive, pile-driving score for both *Rocky* and its scion, *Rocky II*. The music as notated for piano is not difficult to play, but it seems a bit shallow without the rich orchestral textures. Included, of course, is *Gonna Fly Now*, in both its original and disco versions. Conti has penned a rather more ordinary melody for *Rocky II*'s featured song called *All of My Life*. His wife, Shelby, is his lyricist-collaborator on that one, though her biography erroneously insists that she has titled it *All the Time*. She can write that one for *Rocky III*.

Ted Nugent: *State of Shock*

Warner Bros., 10 songs, \$7.98

This is yet another of Ted Nugent's apoplectic efforts to convince us, and himself, of his irresistibility to women. Nine pages of priapic color photos—including a shot of Nugent seated next to a stag's head (for added symbolism, of course)—are included to complement the sexist tone of the master's lyrics. Here's one, from *Take It or Leave It*:

You must do some sharing.
I show you how to pay.
I give you lots of pleasure.
You can win or lose.
You must make your decision.
Now you got to choose.
You got to take it or leave it,
take it or leave it."

Had enough? Energetic he is. Persuasive? Perhaps, to a few fresh off the bus. But the same can be said of any aging Eighth Avenue john along the Minnesota Strip. Don't buy this folio.

100 Great Rock Songs of the Decade

Warner Bros., 100 songs, \$9.95

This corpulent collection introduces a new note in music publishing double-talk: the flexible decade. Included among the 447 pages of designated chart hitters of the '70s (*Love the One You're With*, *Desperado*, *Summer Breeze*, *Dream On*, *Evergreen*, to name a few) are '68's *Mrs. Robinson* (Paul Simon), '67's *Chelsea Morning* (Joni Mitchell), and '66's *Wedding Bell Blues* (Laura Nyro).

Other examples abound for the lynx-eyed to spot. Of course, these compositions and their writers sowed the seeds for important '70s musical trends, and their inclusion is by no means frivolous. True representatives of the decade include Elton John, Fleetwood Mac, America, the Doobie Brothers, and Foreigner.

The Genius of André Previn

Big 3, 20 songs, \$5.95

For the jazz-oriented musician, composer/conductor André Previn has assembled a delightful potpourri of tunes transcribed in the feathery, improvisational style we used to call "cocktail piano." Previn's choices include *Laura*, *Cabin in the Sky*, *Don't Blame Me*, and *It Happened in Sun Valley*, as well as his personal tour de force, *Like Young*. There are no chord symbols, so "faking" is out of the question, but playing the music exactly as notated will bring smooth and satisfying results.

Carly Simon: *Spy*

Warner Bros., 9 songs, \$7.95

"Spy" presents Carly Simon as a woman very much in transition. In quest of her next hit, she has gone overboard in striving to astonish us with the extensiveness of her singing range. It's hard to imagine anyone other than her singing some of these melodies, and, while vocal acrobatics and stylized phrasing may benefit her recording career, the folio purchaser should be spared such gimmickery. The material, however, is heartfelt, well-accountered, and commercially imposing. One exception is *Memorial Day*, a rambling cantata of confused images more suitable for the analyst's journal than for the printed page.

Al Stewart: *Time Passages*

Warner Bros., 9 songs, \$6.95

Commercial success hasn't prevented Al Stewart from turning out some classy contemporary ballads. "Time Passages" is a soft-rock, impressionistic grouping particularly suitable for cabaret performers who want to sing about something other than their contemplated navels. I recommend this folio unreservedly.

Triumph: *Just a Game*

Warner Bros., 8 songs, \$6.95

The photography is unflattering and the folio's cover a cataclysm, but the music of this tight little combo should more than make up for it all. Much credit is due to our friend, the Unknown Transcriber, whose playable piano-vocals accurately reflect the intent of writers Rik Emmett and Gil Moore. My particular favorite, *Suitcase Blues*, could have been just another kvetch from a show-business malcontent, but Emmett has harmonized his melody with some unusual jazz progressions in the Hoagy Carmichael tradition. If somewhere there's another Billie Holiday waiting for the Big Break, I recommend this song to her producer. ♣

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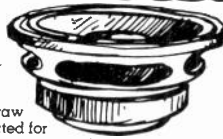
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There are moments when Flairck recalls the Incredible String Band and Pentangle; then it surprises us and digs into improvisations that speak of an affection for Django Reinhardt. Flairck clearly has that most valuable of skills, the ability to surprise—as well as the ability to delight. Now if only it would do something about that name.

**Django Reinhardt:
The Versatile Giant**
Inner City IC 7004
by John S. Wilson

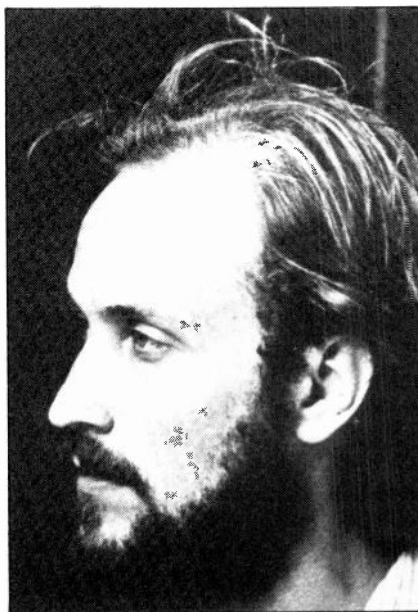
As an overview, "The Versatile Giant" is an oddity. It is made up of some of Django Reinhardt's earliest and latest records, with some of his disastrous 1946 American appearances with Duke Ellington's orchestra sandwiched between. But the focal point of his work, the Quintet of the Hot Club of France, is represented only by two very early selections, *I Saw Stars* and *Confessin'*.

This is not to say that the set does not have some interesting moments. It opens with an August 1934 recording of *Tiger Rag*, on which Django is accompanied by his brother Joseph on rhythm guitar and Martinique bassist Juan Fernandez. As a demo made to attract critics' attention it is a rarity, and it shows how fully developed his guitar style was prior to the organization of the Quintet. The two Quintet selections, recorded just one month after the demo, show how the group used the solo styles of Reinhardt and Stéphane Grappelli—accompanied by two guitars and bass—as the basis of its musical form from the very start.

Django's visit to the U.S. in 1946 to play with Ellington was a personal disappointment to him, for, though a virtual unknown here, he had expected to be hailed as a hero. It was also a disappointment to his small core of American fans: He had just taken up the electric guitar, inspired by Charlie Christian, and had not yet acquired the facility that he had on acoustic. The three Ellington samples, performed at Chicago's Civic Opera House, are further diminished by poor recordings. Django is in much better form a year later, back in Paris, sharing solo space on three pieces with clarinetist Michel de Villers. The disc's last two selections are 1951 air shots of rough sound quality. While

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Scofield—who is who?

Django's playing is fluid and rhythmic, it does not have the inventive authority of his earlier, prewar work.

John Scofield Quartet: Rough House

Horst Weber & Matthias Winkelmann, producers
Inner City IC 3030

John Scofield: Who's Who

John Scofield, Mark Bingham, & David Baker, producers
Arista/Novus AN 3018
by Don Heckman

It's hard to know what to make of guitarist John Scofield. That he is a solidly competent—maybe even gifted—jazz artist is beyond question. Pick any track at random from these two records and you will hear a performer who will never get his fingers caught under the strings of his guitar.

The question of *who* he is is more difficult to answer. The Inner City "Rough House" album apparently was recorded first, during a European tour in December of 1978. It reveals a straightahead, hard-swinging guitarist who seems to have deep bebop roots. One hears a bit of Joe Pass and Jim Hall in his playing, lightly seasoned with a trace of early John McLaughlin. The Arista/Novus album—apparently recorded in 1979—might just as well have been made by a different player. Pure fusion reigns, and the pieces (all by Scofield) are dominated by the dissonant-melody-against-vague-modal-har-

mony that plagues so much contemporary jazz. Scofield's improvisations are filled with the flashy runs and rapid-fire pyrotechnics that too often pass for imagination these days.

I suppose we should congratulate him for his ability to adapt to different environments. But the fact is that he makes this adaptation with craft rather than invention, with technique rather than ideas. And he's too fine a musician to make such superficial demands upon his abilities. The few moments in which he is really challenged—by the powerful piano work of Hal Galper on the Inner City album—Scofield responds with some fleet, momentary impressions of just how good he can really be. But, as the title of the Novus LP suggests, he's going to have to sort out a positive identity for himself.

Continued from page 98

in the owners' manual are rotating speaker, chorus vibrato, simultaneous reverb and phasing, doubling, and digital sample flanging. And there are more. Some of the effects we used were reverb, echo, flanging, tape slap, chorusing, and vibrato. Our field-testing showed the DL-2 to be a clean machine. The manufacturers' specifications for dynamic range are excellent (80-90 dB), and frankly I never even thought about noise when I used it—it just wasn't a factor. The variety of sounds it produced was virtually infinite, and the unit's size and design makes it extremely convenient to use: It takes up all of 1¾ inches of rack space, and the basic features mentioned above, particularly the jacks and the metering, make it relatively easy to deal with under pressure. A word of warning: The Acousticcomputer is a complicated device, and it takes considerable practice to zero in on a specific sound or effect. But spend enough time with it, and you'll be greatly rewarded.

I was in all cases impressed by the performance of the DL-2. The reverb-beration characteristics are diverse and can be quite real sounding (compared with other similar devices), the quality of the delays is beyond reproach, and the flanging is certainly adequate. Finally, it's a high-quality versatile tool with a very affordable price tag of \$1,750. DeltaLab Research has planted its best foot firmly in the Eighties.

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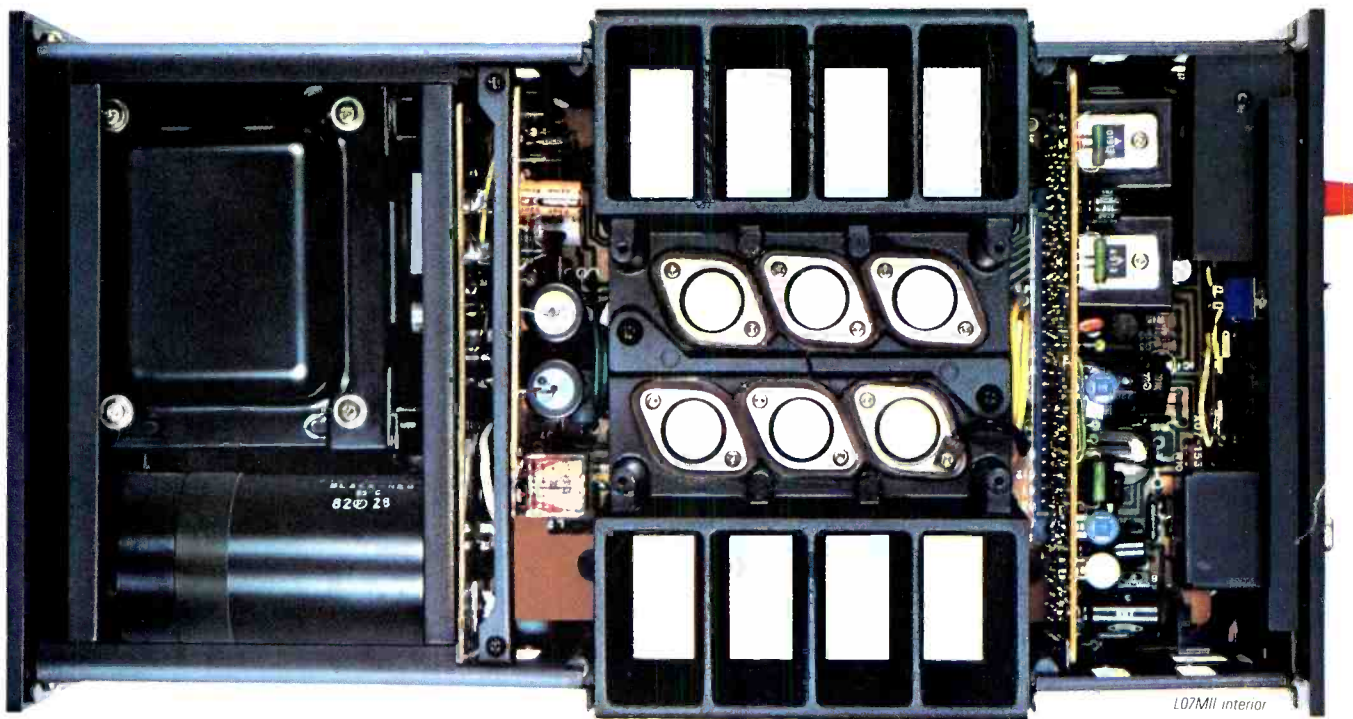
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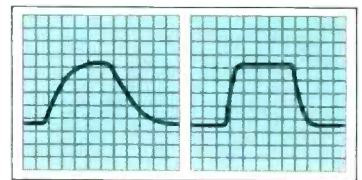


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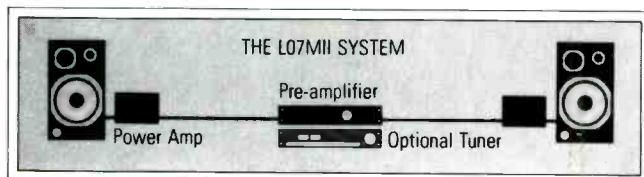
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