Super Noise Reducers: 3 New Units Challenge Dolby — Our In-Depth Report Including Lab Tests

plus tests of Cassette Decks from Lux, Dual, and Harman Kardon (HX)

The Smart Shopper's Guide to Budget Stereo Systems for $600 or Less

Sir Thomas Beecham His Life Through Records
changes in temperature. But even the best of them just seem to reduce drift instead of eliminate it.

The Pioneer PL-400, on the other hand, has a Quartz PLL servo system that keeps rotational speed at a constant. And keeps the PL-400 unaffected by temperature changes, voltage fluctuations and other powerline anomalies.

These features work to keep the PL-400 sounding like a much more expensive turntable. But without our specially designed Coaxial Suspension system, they wouldn't be nearly as effective.

This free floating suspension system isolates the platter and tonearm from the rest of the turntable. So even if the base vibrates, the platter and tonearm don't.

This means you can shake, rattle and roll a lot more with a lot less worry that your turntable is doing the same thing.

Even the tonearm of the PL-400 is designed to give you better sound. Its new "Mass Concentrated" design improves crossmodulation distortion and tracking accuracy. So you get more sound clarity and better channel separation.

All these features on a turntable the price of the PL-400 is unheard of. But Pioneer didn't stop there. The PL-400 also has full automatic controls. Including automatic lead-in, viscous damped cueing, automatic return, and automatic repeat. An easy to read one-stripe strobe that confirms platter speed accuracy. A quick start mechanism that starts the platter revolving as soon as the tonearm begins to move. And more.

So if you want to buy a $200 turntable and are just interested in great specs, there are any number you can buy. But if you're interested in a $200 turntable that will give you great sound there's only one.

The Pioneer PL-400.
INTRODUCING THE NEW PIONEER PL-400.

Today, most turntables in the same price range look practically the same on paper. But they don’t sound at all alike in your home.

Because equal specs don’t necessarily mean equal sound. In fact, specs are just a measure of the distortion caused by your turntable itself. They tell nothing about how your machine prevents distortion caused by your environment.

Pioneer’s new PL-400 turntable was designed to also keep external interference from coming between you and great sound.

Much of the success of our new PL-400 turntable revolves around our all new “Stable Hanging Rotor.” The world’s thinnest direct drive motor.

Unlike more massive conventional motors, the motor in the PL-400 is so thin, it allows the center of gravity to be at the pivot point of the rotating mechanism. So instead of the platter wobbling like a top, the platter on the PL-400 acts like a gyroscope to stabilize itself.

Although this technology is very difficult to understand, the result of it is very easily appreciated. You no longer are bothered by distortion caused by stylus mistracking or speed deviations. So you get just what’s on your record. Nothing added to it. And nothing taken away.

But this super thin motor does more than eliminate distortion. It also eliminates any space wasting elements used in conventional motors. And because it’s so much thinner than any other motor, the cabinet around the PL-400 is also a lot thinner. This 20% reduction in cabinet size means the PL-400 is 20% less likely to suffer from acoustic distortion.

Many turntables in this price range are direct drive. Some of them offer DC motors. Some of them have servo motors aimed at eliminating drift caused by...
IF ALL $200 TURNTABLES HAVE THE SAME SPECS, HOW COME THE PL-400 SOUNDS BETTER?
Music is full of color. Incredibly beautiful color. Color that you can hear... and (if you close your eyes) color you can almost see. From the soft pastel tones of a Mozart to the blinding brilliant flashes of hard rock to the passionately vibrant blues of the Blues.

In fact, one of the most famous tenors in the world described a passage as "brown... by brown I mean dark... rich and full."

Music does have color. Yet when most people listen to music they don't hear the full rich range of color the instruments are playing. They either hear music in black-and-white, or in a few washed-out colors.

That's a shame. Because they're missing the delicate shading, the elusive tints and tones, the infinite hues and variations of color that make music one of the most expressive, emotional and moving arts of all.

Music has color. All kinds of color. And that is why Sony is introducing audio tape with Full Color Sound.

Sony tape with Full Color Sound can actually record more sound than you can hear.

So that every tint and tone and shade and hue of color that's in the original music will be on the Sony tape. Every single nuance of color, not just the broad strokes.

Sony tape with Full Color Sound is truly different. Full Color Sound means that Sony tape has a greatly expanded dynamic range—probably more expanded than the tape you're using. This gives an extremely high output over the entire frequency range, plus a very high recording sensitivity.

There's even more to Sony tape with Full Color Sound, however. Sony has invented a new, exclusive SP mechanism for smoother running tape, plus a specially developed tape surface treatment that gives a mirror-smooth surface to greatly reduce distortion, hiss and other noise. Each type of tape also has its own exclusive binder formulation, that gives it extra durability.

Any way you look at it—or rather, listen to it, you'll find that Sony tape with Full Color Sound is nothing short of superb.

If you're not hearing the whole rainbow on your audio tape, try recording on Sony tape with Full Color Sound. Then you'll be hearing all the glorious full color that makes every kind of music, music.
Audio/Video

6 Video Topics
RCA and Matsushita get ready

11 High Fidelity News
Surveying the audio marketplace

18 CrossTalk

23 Equipment Reports
DBX 224 Type II noise-reduction system
Sanyo Plus N-55 Super-D noise-reducer
Nakamichi High-Com II noise-reducer
Luxman 5K50 cassette deck
Dual Model C-830 cassette deck
Harman Kardon hk-705 cassette deck

40 Noise-Reduction Systems
Do you get what you pay for?
by Robert Long and Edward J. Foster

46 Buying a Budget-Priced System
Good sound doesn’t have to be expensive
by Michael Riggs

Backbeat

89 Emmylou Harris
Buys Back the Farm
by Steven X. Rea

93 Pop-Pourri
“Urban Cowboy”: Country music stretches its legs
by Sam Sutherland

94 Pete Townshend’s “Empty Glass”
by Nick Beaumont

94 Pop Records
Gladys Knight & the Pips
Willie Nelson & Ray Price
Graham Parker

100 Jazz Records
Art Ensemble of Chicago
Chick Corea
Kenny Davern

102 SpinOffs: Jazz
by Don Heckman & John S. Wilson

Music/Musicians

50 Beecham: A Fuller Portrait
A look at Sir Thomas’ impressive career through his recordings
by David Hamilton

57 Behind the Scenes

59 Bartók’s Native Idiom
Linguistically accurate releases from Mercury and DG
by Paul Henry Lang

61 Digital Beethoven
How does the first complete opera sound?
by David Hamilton

64 Classical Records
The Philadelphia on Telarc and five other digitals

66 Critics’ Choice

86 Theater and Film
King’s Row

87 The Tape Deck
by R. D. Darrell
If you can find a receiver that does more.

Buy it. For specifications on our complete line of audio components, contact your nearest Scott dealer, or write H.H. Scott, Inc., 20 Commerce Way, Dept. 1R, Woburn, MA 01801.

Even after 100 plays your records will sound BETTER THAN NEW with Lifesaver!

Introducing LIFESAVER™, the multi-purpose record treatment from Audio-Technica. It's a long-term antistatic agent which lasts 100 plays or more. And a record preservative which protects against environmental attack and improves the effectiveness of any wet or dry record cleaner.

But LIFESAVER with DiscProtec™ formula is also a dry lubricant which sharply reduces record-stylus friction. Tests* prove lower harmonic distortion from a disc treated with LIFESAVER after 100 plays than from the first play of an identical untreated record!

Your records will sound cleaner and quieter from the very first play with LIFESAVER. And 50 or even 100 plays later they'll still sound better than new. Just one easy application protects your library for years.


* From independent lab tests reported by Len Feldman in Audio Magazine, February, 1980. Write for your free reprint.
Everyone knows what Technics direct drive does for performance and accuracy in our turntables. That's why 73 of the top 100 radio stations that use turntables use Technics direct-drive turntables. Now, for only $330, you can record your cassettes with the accuracy of Technics direct drive. And that says a lot about the Technics RS-M45.

So does its tape transport system. Especially when you consider what the RS-M45 has going for it: An FG servo DC direct-drive capstan motor. And while 0.035% wow and flutter can tell you a lot about our direct-drive performance, the world's only limited 3-year motor warranty tells you a lot more.

Equally impressive are the RS-M45's solenoid controls. They not only make switching from one mode to another simple and accurate, they also put minimal strain on the tape transport system.

And to put minimal strain on you, there's the optional RP-9545 remote control unit. With it, all transport functions, as well as record mute, can be operated from your easy chair.

Just as special are the RS-M45's fluorescent VU meters with auto-reset peak-hold. They're fast, electronic and highly accurate. You'll also like Dolby NR and a S/N ratio of 68 dB.

And if our SX record and playback heads make CrO₂ tape sound great (2C Hz-18 kHz), wait until you hear the increased frequency response (20 Hz-20 kHz) and extended dynamic range of metal.

Technics RS-M45 Direct drive and solenoid controls say it isn't your typical $330 cassette deck. In fact, compared to the leading brands, it's one of a kind. And that's very typical of Technics.

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

How to tape your records as accurately as Technics direct-drive turntables play them.
VIDEO TOPICS

Video Disc Update

Although recent major announcements by RCA and Matsushita indicate that both industrial giants are busy lining up software suppliers for their noncompatible capacitance video disc systems, neither promises a consumer player before the end of the year. RCA’s SelectaVision is optimistically scheduled to make its appearance in the first quarter of ’81, and Matsushita’s VHD system late that year.

So far, the only consumer video disc players on the market—those only in selected regions—are Magnavox’ Magnavision and, since June, Pioneer’s VP-1000, both based on the Philips-developed optical (laser) system. Full national distribution probably will not be achieved this year.

Consumer reaction to the Magnavision player reportedly has been enthusiastic, but the machine has proven itself less than totally reliable. Especially troublesome is the player’s susceptibility to damage during shipping. Accordingly, Magnavox is preparing a second generation model, to carry an Mk. II suffix. It will be sleeker and more compact than the original, with more rugged internal components. The Mk. II player will not mimic the Pioneer VP-1000’s back-panel output to accommodate a PCM adapter for digital audio discs.

Strange bedfellows. The forthcoming competition for video disc dollars is causing at least one manufacturer, RCA, to forgo old rivalries in an attempt to counter Magnavox/Philips and Magnavision’s chief software supplier, MCA-Universal. As we have already reported, RCA’s archrival, CBS, has agreed to make and distribute video discs using the SelectaVision system. And Zenith will manufacture players for them. If future success can be forecast on the basis of current market shares for television sets, the RCA-Zenith combination might have a big competitive edge in this country with SelectaVision. At least eighty-one feature films are available to RCA via a licensing agreement with Paramount Pictures.

Matsushita has not been sitting by idly. The Japanese manufacturer—parent company of both Panasonic/Technics and JVC—has settled its internal conflict and canned the Panasonic Visc format, a grooved capacitance system said to be compatible with SelectaVision, in favor of the JVC-developed VHD (video high density) nongrooved capacitance approach. That announcement was quickly followed by news that Thorn/EMI had reached an agreement with Matsushita to provide programming and manufacturing support for the VHD system. And late news has it that General Electric has joined the VHD camp, a big boost to the system. Even currently nonaligned film companies are getting into the video disc business. Alan J. Hirschfield, vice chairman and chief operating officer of 20th Century-Fox, announced his company’s intention to release Fox movies on video discs and cassettes at approximately the same time they are released for showing in theaters. Claiming that the studio would be able to piggyback the advertising for the video products onto the $6 million or so necessary to promote a new film, Hirschfield sees no reason to assume that joint release would hurt ticket sales at movie houses. Fox began cashing in on the video market last year with its purchase of Magnetic Video, a manufacturer and distributor of prerecorded cassettes. Magnetic Video has already secured the rights to distribute discs and cassettes of seven Elvis Presley films, among others.

Video contest. While manufacturers of home movie cameras watch with alarm, the growing availability of portable video cameras and recorders is leading many would-be filmmakers—amateur as well as professional—to the tape format. To honor the achievements of these video artists, JVC conducts an annual Tokyo Video Festival. It is accepting entries for this year’s competition, to be judged in December. Top prize includes approximately $1,000, a trophy, a color video camera and portable recorder, and a fifteen-day trip to Tokyo. Entries may be on any cassette format (VHS, Beta, U-Matic) and should not exceed twenty minutes in length. Though there are no limits on subject matter, only original video programs will be considered.

Entry forms may be obtained by phoning Rick Sacks at (212) 752-8610. Tape copies (which will not be returned), completed entry forms, and a brief biography of the producer should be sent to JVC Video Festival, c/o Burston-Marsteller, 866 Third Ave., New York, N.Y. 10022. They must be postmarked no later than August 15. Last year’s prize was awarded for a twenty-minute color program on U-Matic tape entitled “Bubbling,” which showed people blowing bubbles with gum.

Last year’s grand prize at the Tokyo Video Festival went to Tomiyo Sasaki for her twenty-minute color program entitled “Bubbling.”

Circle 26 on Reader-Service Card
There are many reasons for owning the new Sansui SC-3300.

**Metal is just one.**

Metal particle tape could be the most exciting thing that's happened to tape recording in years. But to get the full benefits of metal, you need a special cassette deck — like the new Sansui metal-compatible SC-3300.

The great thing about the SC-3300, though, is that even if you're not sure about metal or are wary of the software expense, this deck still makes a great deal of sense. Here's why:

**SOUND QUALITY IS SUPERB.** The SC-3300 is designed to get the most out of any tape, including the newest pure metal formulations. We're using a special alloy record/play head that's particularly immune to saturation from the high bias currents needed for metal recording; and it's much more wear-resistant than even the strongest conventional heads.

The erase head, too, is special — a double-gap ferrite design that produces a 70dB erasure factor for beautiful low-noise recordings. Our new Roller Back holdback tension mechanism further improves sound quality by suppressing frequency-modulated distortion and reducing wow and flutter to a mere 0.04%.

**OPERATION IS EFFORTLESS.** The feather-touch controls of the SC-3300 are monitored by an LS/C logic chip tied to high precision solenoids. So you get the freedom you need to concentrate on the music you're making or taping. It's so foolproof that no matter how fast you push the buttons, the tape will never jam or stretch.

The unusually versatile tape selector system provides separate switches for bias and equalization, with numerical indications of the optimum levels for normal, chrome and metal tapes.

And our 16-segment/channel LED peak-level indicators make it easy to set just the right levels for maximum signal and minimum noise. They're calibrated in dB and indicate red if a signal is too strong.

**ALL THE EXTRAS, TOO.** For added convenience, you can connect the SC-3300 to a timer, and the logic circuits will start recording or playing any time you want. Sansui's exclusive Tape Lead-In feature automatically skips over the unusable leader and beginning portion of each tape.

And of course there's Dolby™ noise reduction, memory rewind, variable output and a computer-assisted pause control.

The brushed aluminum face and simulated rosewood cabinet of the SC-3300 perfectly complement our new Double-Digital receivers. We also have a complete line of matte-black finish metal-compatible models that come equipped with rack-mounting handles.

So, whether you're a strong believer in metal or just looking for a new cassette deck, visit your authorized Sansui dealer to see the best.

Dolby™ is a registered trademark of Dolby Labs Inc.

**SANSUI ELECTRONICS CORP.**

Lynchburg, New Jersey 07071 * Gardena, Ca. 90247
Sansui Electric Co., Ltd., Tokyo, Japan
Sansui Audio Europe S.A., Anwerp, Belgium
In Canada, Electronic Distributors
Few amplifiers can match Super-A for performance.
None can match this Super-A amplifier for value.

In prestigious audio salons across the country, the JVC Super-A M-7050 power amplifier is gaining a reputation as one of the world’s finest. For those willing to pay its substantial price, this amplifier’s utter transparency provides a listening experience matched by few others.

Now, JVC engineers have taken some basic design elements of the M-7050 and put them in amplifiers that are very reasonably priced. The sonic heritage of the M-7050 is quite striking in the A-X2 integrated amplifier. And its cost-performance is unequaled.

Super-A amplifier stage

By eliminating most of the measurable switching and crossover distortion, Super-A avoids the subtle harshness that afflicts some conventional Class-AB designs. As a result, the sound of the A-X2 is very smooth and natural, reminiscent of Class-A amplifiers.

Unlike regular Class-A amplifiers, however, Super-A does not require high idling current. So a powerful 40 watts per channel minimum RMS into 8 ohms, from 20-20,000 Hz, with no more than 0.007% total harmonic distortion can be generated without heavy heat sinks or high cost.

Zero TIM

Like the M-7050, the A-X2 shows no TIM distortion with the most accepted method of measuring TIM. This is because the A-X2, unlike some other low-distortion amplifiers, does not rely on heavy negative feedback. Instead, special care was taken to maintain extremely low phase shift and open-loop distortion.

You’ll hear the result as crisp, focused musical transients that give a lifelike transparency to the A-X2’s sound.

A-X2
Super-A Integrated Amplifier

Conventional
Class-AB
Jagged center line indicates the presence of high-order harmonic distortion. This is the result of transistor switching in some conventional amplifiers.

JVC Super-A
Center line shows minimal distortion in output waveform. Switching and crossover distortion (high-order harmonics) are notably absent.

S.E.A graphic equalizer permits independent adjustment in 5 tonal regions.

All this plus an equalizer

Even the best amplifier can be undermined by poor room acoustics, less-than-perfect associated components, or simply a difference between your tastes and the recording engineer’s. All this can be taken care of neatly with the A-X2’s 5-band graphic equalizer. It can also be used to equalize recordings on your own tape deck. Or it can be switched out of the audio chain entirely.

Other significant A-X2 features include direct power supply for high damping factor, LED peak power indicators, triple power protection, loudness control, a stereo/mono mode switch, connections for two tape decks (with dubbing) and two pairs of speakers.

The A-X2 quite simply removes any need to postpone owning superb audio electronics. And if you need more power, four other JVC integrated amplifiers provide it along with similar technology and features.

800-221-7502

You can audition the A-X2 and other JVC integrated amplifiers at authorized JVC dealerships. For the location nearest you, please dial the above toll-free number (or in N.Y. State 212-476-8300). You’ll also want to audition JVC tuners, with their award-winning PTL (Phase Tracking Loop) system. Like our integrated amplifiers, they provide high levels of performance and extraordinary value.
AKAI INTRODUCES
THE NEW WAVE.

A brand new generation of integrated amplifiers and tuners filled with some of AKAI's brightest, most sophisticated wizardry ever.

Take the AM-U00, our top amp. With a hefty 68 watts per channel minimum RMS at 8 ohms from 20-20,000 Hz. And unbelievably, with no more than 0.008° THD. That's right, 0.008°.

You'll also find a pulsed power supply to minimize hum and noise, a three-position magnetic cartridge impedance selector including a moving coil head amp position, separate bass, midrange and treble controls and a clipping indicator light.

Two-color fluorescent power indicators complete the package. An incredible value at just under $350.

AKAI's new tuners are equally impressive.
Case in point, the AT-V04. A digital synthesizer with features such as a seven station preset memory that lets you store seven favorite AM and FM stations.

Plus automatic and manual tuning, digital readout and a two-level FM mute system.

Best of all, both are only two of the superb new wave of AKAI separates riding in on the same new wave that includes amps from $229.95 to $349.95 and tuners from $229.95 to $279.95.

For much more information, write AKAI, P.O. Box 6010, Compton, Ca 90224.

Suggested Retail Prices

AKAI
You never heard it so good.

AM-U00: Power Band (LHF), 6Hz to 60 kHz/8 ohms
AT-V04: Sensitivity (LHF), 10uV; Capture Ratio; 2:1; Stereo Separation, more than 54 dB (1kHz)
Class A Bedini

The Model 25/25 from Bedini is a Class A power amplifier rated at 25 watts (14 dBW) per channel from 1 Hz to 150 kHz with 0.015% THD. According to the manufacturer, the amp makes use of positive feedback circuitry to provide a constant-current source. The 25/25, one of five in Bedini’s line of amps marketed by Audio Electronics, costs $650; the other models range from $400 to $3,795.

Technics’ octave equalizer

The SH-8020 from Technics offers twelve bands of EQ per channel, with center frequencies in each spaced one octave apart from 16 Hz to 32 kHz. Features include a variable range switch (+12 dB or ±3 dB for fine control), EQ on/off switch, tape monitor switch, and gain control LEDs. When used with a tape deck, the unit can function as both a recording and playback equalizer. The SH-8020 sells for $350.

Kenwood gets belted

Offering belt drive with a servo-controlled DC motor, the KD-2100 is the least expensive of Kenwood’s three new fully automatic turntables. Its S-shaped aluminum tonearm is claimed to be compatible with most high-compliance pickups. Among other features are speed-adjustment controls, strobe, viscous-damped cueing, antiskating control, and repeat play mode. Wow and flutter is said to be less than 0.04% wrms and rumble below -67 dB (DIN-weighted). The turntable’s base is molded from Kenwood’s own resonance-reducing concrete and resin compound, and four isolation feet help reduce surface-borne feedback. Price of the KD-2100 is $183.

A Grace-ful arm

Designed for high-compliance, low-mass pickups, the Grace G-747 tonearm, distributed by Sumiko, features a detachable headshell, self-cleaning electrical contacts, and pure silver pickup leads. The rigid, damped aluminum arm tube is said to incorporate an ideal stiffness-to-weight ratio. The orthogonal bearing cone is case-hardened to reduce friction and increase durability. The G-747 sells for $275.
A multimode amp from Fender

Fender’s SRA-400 power amp offers the performing musician three mode options: two-channel stereo, two-channel mono, and single-channel bridged, all controlled by one switch. Amplifier output is controlled with dual 22-step calibrated attenuators, and color-coded, 10-segment LED power output displays are included on the front panel to aid in determining output in relation to distortion threshold. Transient intermodulation distortion is rated at 0.04%. The rack-mountable SRA-400, capable of supplying 200 watts (26 dBW) per channel in the stereo mode, is priced at $945.

Electro-Voice monitor speaker

Electro-Voice’s Sentry 100 studio monitor speaker employs newly developed drivers in a Thiele-aligned vented enclosure with a metal-reinforced grille. A two-way system, the Sentry 100’s driver complement consists of a dome tweeter capable of handling 25 watts (14 dBW) and an 8-inch woofer. An acoustic lens surmounts the tweeter for optimum high-frequency dispersion. Designed specifically for the pro/semipro market, the Sentry 100 costs $200.

Let there be RoboLite

Cueing records in dimly lit environments is a lot easier with the Robins Industries’ RoboLite. A battery-powered device, it snaps onto the bottom edge of a dust cover, and a mercury switch turns the light on when the cover is raised. The bulb housing can be swiveled to illuminate the desired area. The light is connected to the battery pack via a 3-foot cable. RoboLite comes without batteries at a price of $21.

Nomadic oak cabinet

Nomadic Furniture has added the D-5 to its line of equipment cabinets. Handcrafted from solid oak, the D-5 has adjustable shelves that lock into place and tempered smoked-glass doors and is designed to handle the size and weight of large components. The user-assembled cabinet comes with metal-to-metal threaded barrel nuts and an Allen wrench. The D-5 costs $260.

Discwasher improves upon itself

With a reformulated record-cleaning fluid and redesigned fabric pad, Discwasher’s D4 record-care system succeeds the popular D3. The new fluid is claimed to be as safe for vinyl as its predecessor, though substantially more active against surface contaminants. The pad is made of a softer material, the fibers of which are said to maintain their unidirectional orientation better than the older pad. Price of the D4 system, which includes pad, walnut handle, and 1¼-ounce bottle of fluid, is $16.50.

More
"...but it sounded sensational in the store."

You've just invested $800 in the hi-fidelity system of your dreams. Now it's turning into a nightmare. Where has the sound gone? The sound that sold you on the system? The answer is all around you.

**What a difference a room makes.**

Hi-fidelity systems are made to exact specifications. But, those specifications don't include your room dimensions and "personality": i.e., drapes, carpeting, ceiling height, etc. And, they all affect the sound your system ultimately delivers.

**How ADC Sound Shaper® equalizers custom-tailor sound.**

In a nutshell, ADC Sound Shaper® equalizers segment the audio frequency range and adjust the level of each segment to achieve the sound you want. And, unlike the basic "tone control," an equalizer can balance even the most difficult midrange frequencies.

An ADC Sound Shaper not only eliminates distortion caused by your room, it will actually improve the sound quality of your speakers, eliminate or reduce rumble, hiss and surface noise from even your old "goodies," improve record, tape and broadcast quality and, in the case of the Sound Shaper Two, allow you to make and dub studio-quality tapes without a studio.

**Re-mix records while you listen.**

A recording engineer mixes and balances music based on his ears. Which may mean that you don't hear what you want to hear.

With an ADC Sound Shaper, you can. Want more vocal and less instrumentation? -- You can have it. It's easy. And, the LED-lit side controls available on most models make it even easier, because you can visually plot the equalization curve.

**There's an ADC Sound Shaper to suit your taste...and your wallet.**

ADC makes several different Sound Shapers. Everything from the basic Sound Shaper One, to our top-of-the-line Sound Shaper Three, the Paragraphic™ equalizer.

For more information, just look for the "Custom-Tailored Sound" display at fine audio stores everywhere.

---

**Custom-Tailored Sound**

---

*ADC makes several different Sound Shapers. Everything from the basic Sound Shaper One, to our top-of-the-line Sound Shaper Three, the Paragraphic™ equalizer.*

---

*Sound Shaper® Frequency Equalizers*
McIntosh

“A Technological Masterpiece...”

McIntosh C 32

“More than a Preamplifier”

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

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

Keep up to date.
Send now - -

McIntosh Laboratory Inc.
Box 96 East Side Station
Binghamton, NY 13904

Name ____________________________
Address __________________________
City __________________ State ______ Zip ______

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

Mcintosh Laboratory Inc.
Box 96 East Side Station
Binghamton, NY 13904

Name ____________________________
Address __________________________
City __________________ State ______ Zip ______

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

High Fidelity News

Mixing with power

Roland Corp.'s PA-80 is a powered mixer said to deliver 40 watts (16 dBW) per channel into 4-ohm loads. The 6-input/2-output control center accepts signals from mikes, musical instruments, signal processors, and tape recorders. Each input channel has sliding fader volume controls, LEDs that warn of potential overload distortion, an on/off-effect selector switch, and panning controls. Rotary attenuator controls with a 40-dB range are provided, as well as dual-section equalizers, a built-in spring reverb, an echo effects buss for use with external signal processors, and record-out and headphone jacks. The PA-80 costs $695.

Phase fidelity from DB Systems

For those seeking absolute phase fidelity, DB Systems offers the DB-7, a combination phase inverter, bandpass filter, and bridging adapter. The unit has buffered inputs and outputs, and its toggle switches allow for phase inversion in either or both channels with the audio system operating. Gain in the inverted mode is claimed to be held within $\frac{1}{2}$ dB of noninverted gain, allowing phase reversal without extraneous effects. Infrastronic and ultrasonic filters are built in. Price of the DB-7 is $159.95; its use requires a DB-2 power supply ($62) or a DBP-1 auxiliary cable ($13.95) if used with other DB Systems equipment.

NRBA Contra FCC

Lest the FCC move in “dangerous haste,” increasing the number of FM stations on the dial without fully considering all the ramifications, the National Radio Broadcasters Association has called for the formation of a joint industry-government committee to “aid the commission and protect the interests of the American public and the radio broadcaster.” That’s the gist of a letter sent by Abe Voron, executive vice president of the NRBA to Charles Ferris, chairman of the FCC.

In an interview with Voron, we learned that the NRBA is alarmed over the possibility that the FCC’s attempt to squeeze more FM stations onto the already crowded airwaves might seriously damage the economic viability of commercial broadcasters. “The FCC is acting more like a social agency than a technical-standards arbiter,” he says. “The proposals pending before the FCC, including tightening up FM station spacing and creating a new category of FM broadcaster, are aimed at providing minority groups with their own stations. The problem, however, is that real community-service broadcasting can only be accomplished by economically healthy broadcasters with the money to produce meaningful service programs. By further complicating an already extremely competitive situation, with many stations struggling just to keep their heads above water, the FCC may very well create a sort of radio ghetto—with everyone, especially the listener, suffering in the long run.”

While the NRBA sees economic consequences to broadcasters, we have already warned of the possible degradation in FM reception and the certain obsolescence of a great number of digitally synthesized FM tuners should channel spacing be tightened. In “The Feds Are Coming” ("Soundings," September 1979), we wondered, “Why is it that every time the FCC says it’s doing something ‘for the sake of FM,’ FM seems to be the loser?” The NRBA, we feel, is asking a similar question.

(More on page 17)
The continuing story of TDK sound achievement.

Parts Two and Three.

TDK's philosophy of constant improvement has brought you the most advanced tape formulation on the market. Yet, the best tape in the world is only as good as the highly complex transport system that guides it past the heads of your deck. So the next parts of our story begin where the tape starts. Part Two, the special TDK hub/clamp assembly. And Part Three, the leader. TDK discovered that if a hub/clamp isn't perfectly round, the tape gets wrinkled at regular intervals, leading to crinkling and uneven winding. These become problems you can hear. Like wow and flutter, poor head contact, loss of highs and actual dropouts in the music.

These imperfections are exaggerated by second-rate clamps. Some manufacturers jam a pin into a notch to secure the tape. The result is a dip that's passed on through successive tape layers. A hub/clamp assembly off by as little as the thickness of this paper can multiply problems in a dozen layers of tape.

TDK uses computer-designed molding equipment and the very best materials to produce a unique 45° "W" double clamp with a special double purpose. The inner surface secures the leader flawlessly to the hub. The outer clamp section completes the circle, which is then checked for roughness and circularity on a machine that enlarges 100 to 10,000 times. As a result winding is always precise. Tape is off to a smooth start. The colored clamp acts as a moving tape indicator. You'll see tape direction and running stability at a glance.

The high-visibility TDK leader also has a dual purpose. It's matched perfectly to the tape and precisely spliced with a strong adhesive. Its special design protects the tape from stress and doubles as a head cleaner. TDK leader actually cleans recorder heads in a single pass without causing wear. The special timing marks, spaced exactly one second apart, allow precise cueing.

As the TDK story continues, you'll be reading about the other achievements we've packed into every TDK cassette. TDK's synergistic philosophy is unique. Our engineers demand continuous, uncompromising improvement at every step. Every part is just as important as the whole. The result is finer sound. And far better music. With a TDK cassette, everything is made with that purpose in mind. Music is the sum of its parts.
Recently, we challenged our designers and engineers to solve an extremely difficult assignment: design a cassette deck that each of them would be proud to own.

The result is an impressive array of engineering, performance, and styling features. The remarkable KX-2060.

**Twin oscillator variable fine-bias adjustment** allows you to precisely adjust frequency response to get the best performance from every cassette tape formulation, including metal.

**Three head, Double Dolby design** provides true monitoring of Dolby-encoded signals while you're recording. And our unique Dolby calibration system lets you match input and output characteristics with the sensitivity of each tape for perfect recording and playback.

**Fluorescent peak meters** provide fast, 10 millisecond response to give you the most accurate musical peak information.

**High stability tape transport** uses our unique double back tension system to maintain constant tape tension and reduce wow and flutter.

There are even more innovative performance and convenience features engineered into our new KX-2060. Like light-touch solenoid function controls. 4-position equalization switching. Memory indexing. MPX filtering. And more.

See your Kenwood dealer for a demonstration of the new KX-2060. Why settle for any cassette deck, when you can own something truly remarkable.

For the Kenwood dealer nearest you, see your Yellow Pages, or write Kenwood, P.O. Box 6213, Carson, CA 90749.

*Dolby is the trademark of Dolby Laboratories, Inc*
**Shure’s mike adapter**

The Model A-27M adapter from Shure allows two microphones to be mounted on a single stand in a wide range of directional angles for better pickup of stereo ambience. Vertical separation of up to 4 inches and horizontal mounting on the same axis are among the configurations possible with the A-27M, which weighs 13.7 ounces and costs $22.05.

Circle 144 on Reader-Service Card

**Metal on a budget**

Sharp Electronics’ RT-30 is a metal-capable cassette deck aimed at the home recordist on a budget. It features a 12-LED peak level display and automatic program search system, separate EQ and bias selectors, and Dolby noise-reduction circuitry. The RT-30 costs $199.95.

Circle 142 on Reader-Service Card

**Correction**

An extra line that appeared in our June "High Fidelity News" item on the Omnisonix Model 801 imager apparently gave some readers the impression that the imager comes with a preamp. This is not so. Also, the correct price of the Model 801 is $179.95, not $149.95 as printed.

† Circle 17 on Reader-Service Card

**Are your records really clean?**

**Vac O rec**, the sure way.

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

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

Don’t put up with noise, or risk damage to your priceless records. See Robins Vac-O-Rec at your dealer. Manufactured in U.S.A. by Robins Industries Corp., Commerce, Calif. 1725.

Pat #3654650

Circle 25 on Reader-Service Card
Q. I have been reading about the virtues of the new low-mass phono cartridges but wonder if buying one would really prove beneficial in the arm on my Technics turntable. Many of my records are very warped, and ads for arm on my Technics turntable. Many of the effective mass and on the dynamic stylus pickups, in particular, on their combined groove in the presence of warps de-pends, in particular, on their combined mass and/or compliance raises the resonance frequency; raising one or both lowers the frequency and can push it down into the warp range. High-amplitude warps are most likely between about 5 and 7 Hz, so a pickup/arm reson-ance in this range is bad news. How bad will depend on the severity of the resonance, which is influenced by damping in both the arm and the pickup and by any decoupling compliance in the arm.

Chances are, considering the design of Technics arms and of current low-mass pickups, such a combination would improve warp tracking. But, obviously, we cannot make a blanket statement without knowing which Technics arm and which low-mass pickup you're proposing to combine.

Q. I own a Harman Kardon HK-3500 cassette deck with fine bias adjustment, and I am concerned that using its built-in test tone and meters might not be a reliable method of adjustment. In your test report [July 1979] of this deck you spoke of using FM interstation noise as an aid in setting bias levels. Could you explain this tech-nique?—Pedro A. Marrone, Panama City, Panama.

A. The HK-3500's meters are a mite cramped down at −20 dB, which is the level of the built-in 8-kHz test tone. However, thanks to the deck's two-in-one head, with separate recording and playback elements, you can use actual signals as an audible aid in setting correct bias values, switching back and forth between TAPE and SOURCE on the monitor switch and listening for best high-low balance replication. To use FM noise as the source, just tune to an unoccupied spot on the dial (switching out FM MUTE, of course), with the deck recording at between −10 and −20 dB and the Dolby switch off to prevent high-frequency saturation effects. Slowly turn the bias trim control through its settings until the taped copy of the input signal matches the tuner output.

Q. Last year I replaced all of my nine-year-old audio components with new equipment, except for the turntable. I hesitated on this because of the expected arrival on the market of the Philips digital audio disc player, which I understand will make traditional turntables obsolete. If the Philips player is still some time away from being intro-duced, maybe it would be wise for me to go ahead and purchase a standard turntable. What do you think?—Ralph G. Abbott, Anaheim, Calif.

A. By all means, buy a standard turntable if your old one is mis-behaving. Philips has demonstrated a prototype of a digital audio disc and a companion optical (laser-based) player but has made no marketing commitment so far. Besides, you won't be able to play any of your standard discs on the digital-disc turntable.

Q. I have a Pioneer SX-838 receiver, which has provision for connec-tion to three pairs of speakers. I would like to connect one pair to the A terminals and one speaker each to the B and C terminals. The single speakers would be used as mono extensions in two separate rooms. Is there any danger to the receiver by leaving one channel un-loaded? Neither my instruction manual nor Pioneer's customer service depart-ment can give me any advice on this.—Robert Gaines, Austin, Tex.

A. With transistor amplifiers such as yours, there is no danger in volved in operating the unit with no connected load to one or both outputs. In amplifiers employing an output trans-former, operation without a load can cause it to overheat and burn out. | We presume, of course, that when you listen to the "remote" speakers you will switch the receiver to the mono mode, and that you will not be using your stereo pair at the A terminals simultaneously. If you do use combined A+B or A+C out-puts, you're likely to find that the sound in one channel of the main pair suffers because of the change in amplifier load imposed by the extra speaker. But, as long as combined impedances in that channel are not excessively low, there still should be no deleterious side effects.

Q. Recently I have been experi-encing some radio frequency in-terference in my stereo system and think that it might be leaking in through the 16-gauge zip cord that connects my ampli-fier and speakers. Would shielding 16-gauge speaker wire limit the problem?—Dr. Keith E. Stein, Reseda, Calif.

A. Probably. But shielded speaker cable usually has extremely high capacitance, and some amplifiers can li-tely oscillate themselves to death when asked to operate into such a load. Some manufacturers even warn that use of shielded cables will automatically void their amps' warranties. Double check the zip cord to make sure that it really is the culprit: Unplug all the amplifier in-puts and listen for the RFI. Also, with in-puts reconnected, make sure that the RFI does not respond to the volume control; if it does, at some minimum is sneaking in before the power amp. Assum-ing the worst case—that your speaker wire is acting like an antenna—the best bet would be to install a choke filter at the amp's output terminals to prevent the RFI from getting back into the amp's front end through its negative feedback loop. Since choke filters are not common items, ask an experienced local dealer for help in locating one. You might also get in touch with the engi-neer at the radio station you are inad-verently receiving and ask his advice.

We regret that, due to the volume of reader mail we get, we cannot give individual answers to all questions.
If lately your favorite recordings sound like they’re gradually unrecording, it could be the tape they’re on.

You see the oxide particles on some tapes just aren’t bound on very well. And when the oxide particles come off, your music could come off sounding faded and weak.

Maxell, however, has developed a unique binding process that helps stop those oxide particles from taking a hike. We also polish our tape to a mirror finish to reduce friction, the major cause of oxide shedding.

So with Maxell, even if you play a tape over and over, the music won’t disappear before your very ears.

IT’S WORTH IT.
**HIFI-CROSTIC No. 56**

by William Petersen

**DIRECTIONS**

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

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

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

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

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

The answer to HiFi-Crostic No. 56 will appear in next month’s issue of HiFi-Fidelity

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

**INPUT**

A. Costume, garment

B. Peruvian folk music quartet

C. Indolence

D. See Word H.

E. Set of six or more viols

F. "________ Wingrave," Britten opera for TV

G. Buoyant song

H. With Word D. opera by Word U. based on Shaw’s "Arms and the Man" (2 wds.)

I. Border of Word A.

J. Elgar variations

K. Lascivious, not chaste

L. Accent in a Gregorian chant

M. Panel on which a loudspeaker is mounted

N. Swiss soprano who sang Anna on one recording of "The Merry Wives of Windsor" and Frau Fluth on another (full name)

O. "________ e Strambotti," Malipiero string quartet

P. Cremona family of violin makers

Q. "The ________," Copland opera (2 wds.)

R. Benatzky operetta (3 Ger. wds.)

S. Yoruban musical (2 wds.)

T. English folk dance

U. Austrian operetta composer (1870–1954); see Word H. (full name)

V. Jazz guitarist Green; trumpeter Keppard

W. Hungarian conductor (b. 1912)

X. Light musical play (2 Fr. wds.)

Y. Russian-American composer born in China, 1911

Z. Victor Herbert operetta (2 wds.)

**OUTPUT**

<table>
<thead>
<tr>
<th>C</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>Z</td>
<td>Z</td>
<td>Z</td>
<td>Z</td>
<td>Z</td>
<td>Z</td>
<td>Z</td>
<td>Z</td>
<td>Z</td>
<td>Z</td>
<td>Z</td>
<td>Z</td>
<td>Z</td>
<td>Z</td>
</tr>
<tr>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
<td>W</td>
</tr>
<tr>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>U</td>
</tr>
<tr>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
<td>T</td>
</tr>
<tr>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
<td>S</td>
</tr>
<tr>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
<td>Q</td>
</tr>
<tr>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
<td>L</td>
</tr>
<tr>
<td>J</td>
<td>J</td>
<td>J</td>
<td>J</td>
<td>J</td>
<td>J</td>
<td>J</td>
<td>J</td>
<td>J</td>
<td>J</td>
<td>J</td>
<td>J</td>
<td>J</td>
<td>J</td>
<td>J</td>
</tr>
<tr>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
<td>I</td>
</tr>
<tr>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
<td>H</td>
</tr>
<tr>
<td>G</td>
<td>G</td>
<td>G</td>
<td>G</td>
<td>G</td>
<td>G</td>
<td>G</td>
<td>G</td>
<td>G</td>
<td>G</td>
<td>G</td>
<td>G</td>
<td>G</td>
<td>G</td>
<td>G</td>
</tr>
<tr>
<td>F</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>F</td>
</tr>
<tr>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
<td>E</td>
</tr>
<tr>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
</tbody>
</table>

**Circle 14 on Reader-Service Card**
Meet the music sculptor.
The new EQ400 car stereo graphic equalizer. Sensitive. Perceptive. And remarkably precise. Simply connect it between your stereo source and power amplifier.

Then reshape the response of your music to your own taste. Enhanced mid-bass...a little more sheen to the strings...a bit more bite on the brass. Contour, mold, enhance the music until it’s just right for your ears.

15 bands: total control.
That’s right. A full fifteen bands are at your command with this graphic equalizer. To shape your music like no other car equalizer can.

Looking at the EQ400 you’ll see five sliding controls with a ±12 dB range. Look closer, and for each control lever there’s a selector for three different bands. Fifteen in all.

Center frequencies controlled are:
- 60 Hz
- 80 Hz
- 125 Hz
- 160 Hz
- 250 Hz
- 400 Hz
- 630 Hz
- 1000 Hz
- 1600 Hz
- 2400 Hz
- 3500 Hz
- 5000 Hz
- 7000 Hz
- 10,000 Hz
- 14,000 Hz

Even more precision.
Our desire for precision doesn’t stop with the fifteen bands.

The EQ400 offers you more precise tuning within each band as well.
The top-mounted sliding scales on the EQ400 are physically almost twice as long as the short, front-mounted controls on most other equalizers. Which means far better resolution. For much more precise adjustments... and much more precise sound.

You can instantly compare any boost or attenuation you make with the equalization defeat switch. A front-to-rear fader control offers additional flexibility. And with its switchable 10/47 ohm input impedance, the EQ400 can be connected to any low impedance stereo source.

Slide out, tune in.
This is no ordinary under dash equalizer.
The EQ400 rests unassuming under the dashboard. That is, until you’re ready to use it.

Then... a slight pull slides it out to reveal a full, top-mounted illuminated control panel.

The top-mounted controls are easier to see, easier to reach and easier to use.

When you’re finished adjusting, just slide the unit back under the dash. That way the controls aren’t exposed where they can be accidentally bumped out of position. And meanwhile, an LED on the front glows to indicate the unit is on.

The same bracket can also be used to mount the equalizer right at your fingertips, between the bucket seats of smaller cars and vans.

Your own kind of sound.
No longer do you have to settle for someone else’s interpretation of your music.

Because now you can shape it and enhance it with music sculptor. The Jensen EQ400 graphic equalizer. Or the EQA3000 5-Band Graphic Equalizer with built-in dual 12-watt power amplifiers. Hear what they can do... soon.
TEAC TODAY:
THE ALL-TIME LOW IN TAPE NOISE.

On paper, the specifications look unbelievable:
- 80 dB signal-to-noise ratio
- 95 dB dynamic range
- 15 dB more headroom than you’ve ever had

The sound is so noise-free, it’s scary. And once you listen to the audio performance of the A-550RX, you’ll know that cassette recording will never be the same.

You’ll hear signal without noise or hiss. Louder louds and softer softs. And you’ll never have to be bothered by tape saturation again. All this because the A-550RX is the only mid-priced cassette deck ever to include integral dbx** noise elimination plus complete metal tape capabilities.

A few years ago, the dbx system helped us revolutionize professional recording. Now the same technology is helping us move cassette performance into a new era.

On the A-550RX, dbx II gives you broadband noise elimination and dramatically improved dynamic range. Signal articulation that’s better defined than anything you’ve ever heard from a cassette tape.

And the A-550RX doesn’t stop there.

Full logic micro-switches control the high-stability transport. The A-550RX accepts our RC-90 remote control unit. And rack mounting hardware is available optionally.

So listen to something you’ve never heard before. The amazing A-550RX. You’ll hear completely noise-free cassette recordings with the broadest dynamic range available.

TEAC
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.


The DBX entry in the noise-reduction sweepstakes is, in some respects, the simplest of the lot. It has just three buttons on the front panel—no meters, no adjustments, no complications. There are level adjustments on the back panel, but they should not be needed unless one of the units to which the 224 is attached delivers significantly nonstandard levels. The reason for this external simplicity—and, presumably, a factor that helps keep the price relatively low—is the uncomplicated approach of the compander itself: Encoding is straight 2:1 compression, and decoding is straight 1:2 expansion, with no level/frequency-dependent exceptions. Since there need be no precise matching of decode levels with those of the encoder, no test tones or meters are needed either.

The "extra" in this system is its ability to decode the DBX discs, recorded both analogically and digitally, that recently have come on the market. Since such a decoder is inseparable from the discs with which it is designed to form a system, we will only refer you to the (generally favorable) reviews by R. D. Darrell in our issues of November 1979, page 94, and May 1980, page 70. The 224 permits simultaneous encode and decode of stereo signal pairs; the disc option essentially disables the encoder section and feeds source signals directly to the tape connections so that they can be recorded in encoded form and to the output via the decoder for listening. You can, of course, disable the decoder section as well, to play or record unencoded tapes.

In theory, the 2:1 compression ratio means the potential doubling of dynamic range; if your tape recorder can boast a 50-dB signal-to-noise ratio, with DBX it would manage 100 dB in playback. You must give up some of that potential in practice, however. In particular, the compression keeps maximum high-frequency content closer to maximum midrange content, and tape systems that presuppose normal spectral distribution (as the cassette medium does) can easily suffer overload as a result. Thus DBX tells you to keep recorded maxima on cassettes between –8 and 0 dB with peak-reading meters and between –12 and –3 dB with averaging meters; on open-reel equipment, the figures are –5 to +3 dB for peak-reading and –10 to 0 dB with averaging indicators. So the total dynamic range you can expect...
DBX Model 224 noise-reduction system

**THROUGHPUT FREQUENCY RESPONSE**

- at 0, -10, -30, and -40 dB
- at -20 dB: ±1/4 dB, 50 Hz to 20 kHz; +1/4, -3 dB, 2.6 Hz to 20 kHz

**THROUGHPUT S/N RATIO (re 0.5 V; A-weighted)**

- 98.8 dB

**DISC S/N RATIO (re 0.5 V; A-weighted)**

- 102 dB

**MAXIMUM THROUGHPUT LEVEL (clipping)**

- at 6 kHz (worst case)
  - 1.95 V

**THROUGHPUT HARMONIC DISTORTION (THD)**

- at 2 volts: ≤1.24%, 20 Hz to 20 kHz; ≤1.34%, 20 Hz to 20 kHz
- at 0.5 volts: ≤1.61%, 20 Hz to 20 kHz

*With the output of the encoder section connected directly to the input of the decoder section so that the test signal is fed through both: 0 dBm (at 1 kHz) used as reference level for both input and output of each section.*

will depend a lot on the recording medium, the metering, and the nature of the signal, but it can still run above 70 dB for cassettes and, perhaps, 90 dB with open reels.

That's a lot. But—as DBX is well aware—going for maximum dynamic range by way of this relatively aggressive “companion” can have its pitfalls. One of them is audible “breathing,” usually attributable to changes in instantaneous high-frequency content in response to sonic events elsewhere in the spectrum. DBX gives most of the credit for its avoidance of such problems to its time constants and to “true rms” sensing of signal values. Incidentally, the processing of the 224 and other Type II units (the only kind you will find on the consumer market, whether for recording or for playing DBX discs) is not identical to that of the Type I professional ones, with which they are incompatible in terms of correct signal recovery.

Earlier, we said that DBX uses no level/frequency-dependent “fudging” in its companion system. There is some manipulation of frequency independent of level. The response curves document what is, essentially, an infrasonic filter. It proves to be in the decoder section (where it can remove warp “signals” from DBX-encoded discs). In theory, extraneous information should be kept out of the encoder as well, since it will be stripped away by the bandpass character of tape-system response. (This is why multiplex filters are incorporated into Dolby equipment; without them, ultrasonics—stereo pilot and subcarrier, plus various distortion products—could influence the encoding but, since they are beyond the bandpass of the tape itself, be unavailable to the decoder, preventing correct signal recovery.)

DBX evidently uses other means (perhaps the bandpass of the level-sensing circuitry) to prevent such nonaudio signals from influencing the encode/decode process; we don’t find untoward behavior in copying from warped discs.

Though the response, measured through both encoder and decoder and shown in the graph, is otherwise very flat, DBX does apply some reciprocal frequency shaping in the two sections. In encoding, a dip is introduced between 1 and 15 kHz, with maximum effect (some 3–4 dB) between 5 and 10 kHz, and a rising characteristic above 15 kHz. The decoder has the opposite characteristic, with all the dB values doubled, since it is an expander. Whatever function this may serve to help DBX control potential “breathing” effects, it helps the recordist avoid tape overload with signals having a lot of information in this range. The “bump” in decoder response does push this range up toward clipping (at just short of 2 volts in Diversified Science Laboratories’ data, which is why the 2-volt distortion curve is not shown in this range), but in practical systems this works out to a level comfortably above tape overload and therefore does not limit system performance.

All compander noise-reduction systems require accuracy in the deck with which they are used if signals are to be recovered accurately. The DBX, like the others, can exaggerate response anomalies to some extent, depending on the signal supplied to it. More dramatic, however, is its response to fluctuations in output level due to dropouts or poor head contact of the tape. Any change is doubled, so that 3 dB of loss at the tape head becomes a 6-dB drop of level at the decoder output. Clean heads, high-quality tape, and reliable deck mechanics definitely are in order.

Given appropriate ancillary equipment and recording levels, the 224 works very well indeed. In comparing its effect with that of Dolby B, adjusted for equal peak levels on playback, we found that Dolby’s slight noise background (which is virtually subliminal, particularly with open-reel recordings and even with the volume turned way up) seems to disappear altogether. Transient behavior was judged good (see the in-depth article on noise-reduction systems in this issue), and replication generally excellent.

There are some caveats for the amateur recordist. Again, any inconsistencies of level in the recording medium are made relatively gross by the
playback expansion and were judged more disturbing with DBX than with Dolby B (whose effect, under similar circumstances, is to alter brightness, rather than overall level). Second, there is the mental process by which meter readings must be translated into their meanings with the DBX encoding. Casual recordists, used to ensuring simply that the meters seldom if ever go over the indicated 0 dB during recording, can get good results with Dolby B but not with DBX. When we tried recording this way, we judged the climaxes—particularly those loaded with highs—relatively congested in playback. So, for best results, DBX requires more care and better ancillary equipment than some home users may be willing to lavish on it.

In fairness, we would say that DBX (the 224 or any other Type II model) is not really meant for the casual recordist, who generally can satisfy his needs with the Dolby circuit built into all quality cassette equipment or with an open-reel deck, even an old one, running at 7½ ips. It is appropriate to those making live recordings or otherwise working with extra-demanding signals and therefore needing more dynamic range than Dolby can afford. And, of course, the 224 offers decoding of those impressive DBX discs. If you have the tape equipment and technique to go with it and want both the extra tape noise reduction and the disc capability, the 224 offers excellent value and fuss-free setup for the serious recordist.

**Super-D Is Here!**

Sanyo Plus N-55 Super-D noise-reduction system

**THROUGHPUT* FREQUENCY RESPONSE**

<table>
<thead>
<tr>
<th>HZ</th>
<th>20</th>
<th>50</th>
<th>100</th>
<th>200</th>
<th>500</th>
<th>1K</th>
<th>2K</th>
<th>5K</th>
<th>10K</th>
<th>20K</th>
</tr>
</thead>
<tbody>
<tr>
<td>1kHz</td>
<td>80</td>
<td>70</td>
<td>60</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td>15</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>10kHz</td>
<td>60</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td>15</td>
<td>10</td>
<td>8</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>20kHz</td>
<td>50</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td>15</td>
<td>10</td>
<td>8</td>
<td>6</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

---

**THROUGHPUT* S/N RATIO (re 0.5 V; A-weighted)**

- at 0 dB: 91.5 dB
- at -10 dB: 89.5 dB
- at -20 dB: 87.5 dB
- at -30 dB: 85.5 dB
- at -40 dB: 83.5 dB

**MAXIMUM THROUGHPUT* LEVEL (clipping)**

- at 20 kHz (worst case): 1.95 V
- at 1 kHz: 4.4 V


Sanyo's proprietary Super-D system comes as something of a surprise. Sanyo is the first company with a broad product range, much of it aimed at the general consumer rather than the specialist, to offer its own encode/decode system here. It turns out to be basically a 2:1-compressor/I2-expander scheme, but with some wrinkles. Diversified Science Laboratories' data show that frequencies to above 1 kHz are treated identically and subject to full "compansion" throughout the dynamic range. At 10 kHz, recording levels are reduced somewhat (which helps prevent saturation problems when signals are loaded with superhighs) by the encoder, and compression (and decoder expansion) ceases above Super-D's calibration level. At 20 kHz, there still is no compression at extremely high levels, and there is slightly less than full 2:1 compression within the normal dynamic range. These specifics are, however, of primarily academic interest since signal content generally will fall into the dynamic/frequency range in which they do not apply.

This certainly is true when Super-D is to be used with a cassette deck or in recording from FM. Cassette tapes tend to shear off the very top of the frequency range, often with some help from the head's gap width, making 20-kHz response weak or downright unattainable; stereo FM's 19-kHz pilot inhibits audio response above about 15 kHz, and Sanyo provides a multiplex filter switch to prevent any residual pilot from disturbing the encode/decode process, further sheering off ultrahighs. And cassette tapes' overload curves (even for metal formulations) drop so rapidly as frequency goes above 10 kHz that extremely high levels (which don't naturally occur in music anyway) couldn't be managed in the frequency stratosphere even if the Super-D were to continue its 2:1 compression characteristic into this region. With live recording on open reels, on the other hand, you might well find some signal components falling in the encoder's noncompressing range, depending on your approach to headroom and level adjustment.

While Sanyo's manual never makes an issue of the point, Super-D does
Manufacturers' Comment

We invite rebuttal from those who produce the equipment we review. The comments printed here are culled from those responses.

Teac CX-650R bidirectional cassette deck, July 1980. The unit uses a stereo record/play head in a rotating assembly, not a “four-track (dual stereo) record/play head” as stated in the report.

Roy Kamin
Teac Corp. of America

*With levels simulating an ideal tape-recorder setup and feeding the output of an encoder (one unit) via an amplifier with 15 dB of gain to the input of a decoder (second unit) so that the test signal passes through both amplifiers.

seem to be engineered with the cassette in mind. The manual tells you to turn on the calibration tone, which registers at -5 dB on the N-55’s own fluorescent bar-graph meters, and adjust your deck’s recording level for a -5 indication on its meters. You then record the calibration tone and play it back as a reference for playback calibration (at the Play level screw adjustments). From then on, you are to use the metering display on the N-55, rather than that on your deck, to assess recording signals, avoiding anything over +3 even momentarily. Since this is 8 dB above the -5 calibration point and the metering is ahead of the compressor, the actual signal value fed to the tape from a +3 maximum would, in theory, be only 4 dB above calibration, or at -1 dB on the deck’s metering. Usually, that would mean about -3 or -4 dB DIN. This is a reasonable headroom allowance for cassettes, considering Super-D’s behavior as a whole, but overgenerous for best possible dynamic range in open-reel equipment. The advanced recordist will want to experiment, however, since the manual does not take up the question of varying tape types and playback EQs and their respective influence on headroom, particularly at high frequencies.

The prospective user should note two things from the foregoing. First, the actual Super-D calibration will depend on that of the deck’s meters; change to a deck with a different 0-dB reference, and the setup procedure will yield different absolute levels on the tape. It might be a good idea to leave a reference tone at the head of each tape (a practice we follow in making Dolby open reels) in case you do change decks and need to know how to align playback for existing tapes. Or you could record a reference cassette with the test tone from the N-55 and use that in aligning other decks. The matter should not be crucial with cassettes, however; as we said earlier, the chances of your making Super-D cassettes that employ the frequency/level zone in which the companding action is nonlinear are not very great, and as long as you stay within the linear zone in both recording and playback, signal recovery should remain accurate even with a sizable discrepancy in alignment.

The second factor will be of more moment to many recordists: the N-55’s metering, which you are asked to use in preference to your deck’s. It is not as comprehensive as that on the better decks since its scale runs only from -20 to +5 dB and nowhere resolves differences of 1 dB or less per step—to say nothing of such niceties as a peak-hold function. Sanyo is quite right in asserting that its display is better than any conventional meter at measuring transients. It responds to within 3 dB of full value for pulses as short as 1.2 milliseconds in the recording mode and overshoots by only one display division (with pulses of 20 milliseconds or more). And remember that the metering is ahead of the Super-D encoding compressor; every difference of 2 dB in the input signal will amount to only 1 dB at the tape input, making the metering less critical than usual to that extent. Still, if you’re particularly fond of your deck’s display, you may regret having to give it up. You can, of course, continue to look at it (we would expect a critical and intelligent recordist to look at both); but compression in the signal makes it seem unresponsive, and normal meter-reading habits can be misleading with the compressed signal.

Super-D itself works about as well as claimed. Throughput response (with the encoder section feeding the decoder directly, without an intervening tape system) shows a slight rise centered at about 7 kHz, and the multiplex filter adds its own little bump just below the extremely sharp cutoff, but these minor perturbations are smaller than those often encountered in cassette response itself. Subjective noise banishment is materially greater than with the standard Dolby B circuit, though quantitative noise suppression will depend on the calibration of your deck’s meters and the rigor with which you follow Sanyo’s maximum-level instructions.

If, for example, its dictum that you never run over +3 dB on the N-55’s meter is appropriate when it is mated with a recorder whose own meters are calibrated to DIN values—and the DSL data indicate that it should be unless the tape you use has unusually poor headroom and/or the music you record is exceptionally demanding at high frequencies—then you would have 6 dB of unused headroom if you switched to a deck whose meter 0 dB is 6 dB below DIN. And since the decoder expands by a ratio of 1:2, 6 dB of wasted headroom on the tape translates to 12 dB of wasted dynamic range in the final output signal. Admittedly, this example is rather extreme, but if you subtract that 12 dB of “waste” from the data’s throughput S/N ratio of better than 90 dB, you can see that almost 80 dB of

HIGH FIDELITY
Noise Reduction From (and for) Cassette Specialists

Dynamic range might still be left. The DSL tests confirm that such figures can be realized in practice.

So we can say with confidence that Super-D will significantly lower noise levels for those recordists working from signal sources of greater dynamic range than can be managed with Dolby B. Not all cassette recordists fall into this category, of course, and relatively few devotees of open reels do. We consider the N-55 to be most appropriate to the cassette format, for which it apparently was designed.


For some years, we have been aware that Nakamichi was actively examining noise-reduction systems to assess their potential for the cassette medium in which the company has been, arguably, the leading specialist. The very first model that established it in this position, the 1000, included Philips’ DNL (an after-the-fact dynamic noise filter, designed expressly for cassettes, as opposed to a reciprocal encode/decode system) as well as Dolby B. But essentially the interest seemed to be in something that would offer even more noise reduction than Dolby B, presumably via a similar encode/decode method, and the best possible control of potential undesirable side effects. When Telefunken’s professional (and very expensive) Telcom noise-reduction system appeared as a competitor to Dolby A, Nakamichi spokesmen expressed considerable admiration. But the real opportunity came when AEG-Telefunken boiled the pro system down to a much simpler home format and developed an IC for it.

Telefunken’s home system is called High Com. Using the same “chip” but a different, incompatible application of it, Nakamichi has called its High-Com II. For the present, at least, it is available only in this outboard unit, which contains a single pair of companders (one for each channel) that can be switched for either compression encoding or expansion decoding. If you have a monitoring deck and want to hear the decoded signal off the tape while you are recording it, you will need two units—one for recording and one for playback. Only for the cassette perfectionist, you say? We agree; indeed, we see any super-performance alternative to Dolby B (which is widely accepted as making a satisfactory high fidelity medium of otherwise excellent but noise-prone cassette equipment) as of interest only to recordists whose demands transcend ordinary criteria. But perhaps we are all perfectionists at heart.

Transfer-function data, measured at Diversified Science Laboratories, show operation to be (predictably) more complex than that of straight companders. At high signal levels, all frequencies are compressed 2:1 in encoding, but the lows (to above 1 kHz) are recorded at a higher level than the top, with 10 kHz about 3 dB below, and 20 kHz about 5 dB below, a 1-kHz signal of the same input level. The purpose of this differentiation, evidently, is to add more high-frequency headroom than would be afforded by equal treatment at all frequencies. The transfer characteristic alters from 2:1 compression to straight 1:1 recording, beginning with the low frequencies and continuing upward as the signal level drops. Signals below 100 Hz are free of compression by the time the level is about 20 dB below DIN 0 dB (depending on system calibration), while another 15-dB drop in level is needed before 20 kHz, too, is free of compression. As a result, the ultrahighs—though they
Nakamichi High-Com II noise-reduction system

THROUGHPUT* FREQUENCY RESPONSE

- at 0, -10, -30, and -40 dB
- at -20 dB, +1/2, -1 dB, 20 Hz to 20 kHz
- with infrasonic & multiplex filters

intrasonic: -3 dB at 26 Hz, 24 dB/octave

THROUGHPUT* S/N RATIO (re 0.5 V; A-weighted) 80% dB
MAXIMUM THROUGHPUT* LEVEL (clipping) 4.6 V

THROUGHPUT* HARMONIC DISTORTION (THD)

- at 2 volts ≤ 1.5% 20 Hz to 20 kHz
- at 0.5 volt ≤ 1.02% 20 Hz to 20 kHz

*With levels simulating an ideal tape-recorder setup and feeding the output of an encoder (one unit) via an amplifier with 15 dB of gain to the input of a decoder (second unit) so that the test signal passes through both were recorded at a lower level than the midrange when input level was high—now are recorded at a higher level. This keeps them farther above residual tape hiss in encoded form and therefore allows greater hiss attenuation relative to program highs in decoding. And, of course, all signal frequencies are recorded farther above residual noise than they would be without the compression in the upper part of the dynamic range.

Why does Nakamichi dispense with compression at the bottom of the dynamic range, giving up some potential noise reduction? We can think of a number of advantages, but the most obvious concerns tape hiss in playback. Since the low levels at which hiss exists are not subject to expansion in decoding, hiss level does not fluctuate in response to signal levels unless the latter are high enough to mask the hiss. Thus a major source of audible "breathing" effects in unsophisticated compander systems is forestalled.

Another specific of the circuitry should help: the dual-band sensing, which not only is responsible for the greater maximum compression range in the highs than in the lows, but is credited with maximum transient accuracy. The time constants evidently are different in the two frequency ranges, with that for the highs quick enough to preserve the "edge" of transients and that for the lows slow enough to prevent the compander from "tracking" infrasound and other high-amplitude lows as though they were transients. Nakamichi does supply both multiplex (19-kHz) and infrasonic (high-pass) filters, with an either/both/both switch, to minimize the possibility of compressor response to extramusical information that, because of the cassette's bandpass characteristic, will be unavailable to trigger fully reciprocal behavior in the expander. This is an excellent idea with any outboard compander noise-reduction system, in our opinion. The alternative is to rely on preamp filters, which can vary widely in design, or that in the compander's signal-sensing circuitry, which seems a chancier approach in general; any filters on your deck are useless for this purpose since the input already has been through the compressor before it reaches the deck.

Setup is quite easy. The calibration mode delivers a tone at 0 dB on the High-Com II's meters (which are calibrated from -40 to +10 and read peak values). You set your deck to record this tone at its 0-dB level, then play back and adjust for a 0-dB reading on the noise reducer once again. The adjustments can be made with recording-level and output-level controls on your deck; in our view, it is more practical to set these controls to maximum and then use the input and output controls on the back of the High-Com II. That way, the unit is permanently calibrated to the deck, and recalibration of the deck (after other uses, with the High-Com II turned off) is simply a matter of returning deck controls to maximum. If you use more than one deck with High-Com II and the 0-dB meter reading does not occur at the same recorded level on each (it may not, even if the decks are of the same brand), recalibration for each will, of course, be necessary.

The recorded results—as well as what we call the throughput measurements in the data, substituting a "wire with gain" for the deck—strike us as exemplary. Response is quite flat. Distortion is fairly low (by tape-recorder, if not amplifier, standards) and unusually well behaved for a compander: It contains mostly second-order products, with significantly less intermodulation distortion than can appear. This, again, may be in part a by-product of the dual-band approach.

The biggest bonus of Nakamichi's approach, however, is in headroom extension—adding, in effect, to both the top and the bottom of the dynamic range of the deck to which High-Com II is attached. Most noise-reduction systems (at least in their basic forms) do nothing for headroom and often compound the problems involved in squeezing high-level highs within the drooping high-frequency overload curves of typical cassette tapes. High-Com II, by lowering levels (with respect to the midrange), is in this region and by continuing its downward compression up into what would normally be the overload range, squeezes more "problem" signal—not less—past the tape's limiting curve. Thus cassette-deck response curves at -5 dB (on the High-Com II meters) look more like those we are used to seeing at -10, those at 0 dB look more like -5, and astonishing response remains even at +10 dB. The throughput noise figure must be understood in this light; actual noise with a tape recorder between encoder and decoder can run 70 dB or more below meter zero, which still allows several dB of usable headroom (depending on the deck's meter calibration), so total dynamic ranges in the neighborhood of 80 dB are not difficult to realize in practice.
We consider High-Corn II to be engineered with exceptional thoughtfulness about the variables of real-world cassette behavior. If we have any criticism in this respect, it is that Nakamichi chose to tie noise-reduction calibration to a variable—deck meter calibration—rather than an absolute recorded value. (Users who want an absolute reference for deck interchangeability could always use a Dolby test tape to align playback and then adjust recording level to suit it.) We also are getting somewhat tired of squinting at black faceplates in weak room lighting. But aside from these peevish pouts, High-Corn II impresses us as yet another significant creation of a company that has led us to expect triumphs.


Next to the massive (and, usually, mass-market-oriented) Japanese industrial giants that produce audio gear, Lux is one of a handful of relatively small and strictly audio-oriented companies that stand out not only because of their dedication to our field, but because of their individuality of approach. The 5K50 certainly is a case in point. It is individual to the point of being controversial, with a sophistication of approach that belies the short time (less than two years) that has elapsed since we first heard that Lux planned to produce tape equipment.

Let's begin with what is bound to be the model's most controversial feature among American audiophiles: the unique approach to tape biasing. At first glance, there would appear to be nothing new—a bias-adjust knob, a built-in oscillator, and a "beacon" (actually, an LED) on which the bias tuning can be assessed. But the beacon, unlike the devices in most other adjustable-bias decks, gives you no unequivocally "correct" calibration; instead, it merely indicates a preferred range and leaves the user free to choose a setting within that range. The ultimate tuning instrument, in Lux's view, is not the LED, but the ear. And here U.S. recordists should pause to consider the implications.

Japanese recordists evidently have been doing so for a long time. From a variety of sources, we are given to understand that they are in the habit of choosing a tape formulation for its appropriateness to a given source signal—this brand for emphasizing plucked strings, that for dramatizing the woodwinds, something else for jazz combos, and so on—cherishing the subtle differences that distinguish one from another. In this catechism, a certain amount of high-frequency peaking due to underbiasing can be used to bring out "sparkle," while a subtle rolloff due to overbiasing makes the most of "mellow" sounds, and the flattest measurable response is not necessarily the best response for a specific purpose.

Though, frankly, we don't subscribe to this position (deliberate response alterations, even subtle ones, are best made with the precision that only a good equalizer can afford, in our view), it is not to be brushed aside lightly. Slight changes
in high-frequency response can induce subtle highlighting—dramatization of specific properties to make the recorded sound seem even more "real" than the original. A paradox? If so, it is one that has been keeping equalizers busy in the world's recording studios and mixdown rooms for years. Furthermore, the use of only one or two frequencies as a measure of "correct" bias adjustment is only an approximation in a recorder that makes no provision for adjustment of recording EQ, particularly since no home recorder has provision for assessing distortion. So it can be argued that, with a tape quite different from the formulation used as a model for factory adjustment of a given tape-switch setting, a single adjustment parameter can't guarantee optimum bias; thus, the ear is a better arbiter than the usual meter—or, as in this case, an LED that lights as you raise bias into the "preferred range" and extinguishes when the bias exceeds that range.

The 5K50 also allows Dolby-tracking (sensitivity) adjustment via the same oscillator setting. On the bottom panel are a Dolby-adjustment switch that raises the oscillator level to the calibration point (0 dB on the fluorescent display) and a set of screwdriver trimmers—a stereo pair for each tape setting. This, too, is bound to be controversial among American recordists. The fact that each general tape has its own adjustment minimizes the need for trimming if you stick with the same formulation for each. But some fastidious recordists may feel more like grease monkeys when they have to go under the deck; depending on the ease with which you can remove it from your setup, this can be an irksome task.

A number of other features are unusual, if less controversial. The monitor switch's OFF position is most useful to prevent feedback during live recording. The search offers its cue and review functions even while the deck is in play. You can't go directly from stop into recording pause; you must press the interlock and play, then quickly, if you don't want the tape to move) pause. The peak hold metering retains maxima indefinitely, until you switch back to normal metering. The recording-head azimuth adjustment has its own position of the oscillator switch, to provide an appropriately high test frequency, and a dual-LED beacon on the head mount to tell you when azimuth is tuned to that of the playback head. The tape counter reads real time if you buy Lux's own cassettes. And then there is the optional AK-1 remote control, which plugs into the back of the deck. It duplicates all the front-panel transport controls except search and adds buttons for auto play and auto rewrite. If you press both, the tape will repeat continuously; if you also press memory on the deck itself, each rewind in the cycle will be only as far as the 0000 you have set on the counter. Short of a programmable microprocessor, we don't remember such flexibility of automatic transport functions.

Diversified Science Laboratories checked the deck with three tapes: Maxell UDXL-II (with the "Cr02" selector position) as our basic Type 2 chrome-equivalent, TDK MA (and the "EX" position, named after the Lux-brand metal) as the Type 4, and Maxell UDHL-I (and "normal")—surely a misnomer when use of Type 2 tapes is anything but abnormal) as our Type 1 ferric. Our usual rules are to set the deck, as recordists would, according to the instruction manual. In this case, however, that does not result in a single, repeatable setting for bias. Since the manual suggests that optimum bias should be about half way between the knob setting where the bias LED lights and that at which it extinguishes, we chose the median setting for test purposes.

Since all of the response curves still suggest some underbiasing (note their tendency to peak a bit at the high end), these still are not the ideal settings. DSL might have used its own instruments to get flatter response, but that would be dirty pool because you would not have access to those instruments if you were to buy the deck. Or it might have fine tuned by ear, but that raises a question of repeatability, even with the same ear and test signal as the touchstone. And the Type 2 and Type 1 curves certainly are within the ballpark for a good deck as is. So we decided to use them as our published curves and have added Type 2 curves made with the bias LED just lighting (the lower edge of what we have called the "preferred range") and with it just about to extinguish (the upper edge) to show what happens at its extremes. The curves for Type 4 presented a problem with our modus operandi, however: The more we studied the results, the more we were convinced that careful recordists would not be satisfied with our "standard" bias. With it set, instead, at the top of the preferred range, results were exceptionally flat and distortion (which was high at the bias used for our response curve) was well.
controlled. So we used this higher bias setting for the rest of the bias-dependent metal measurements. (The lab data showed that a similar approach to the other tapes would have led to significant overbiasing.)

All of this underlines our little essay, at the beginning, about perception vs. mechanics in setting bias. For all the 5K50's elegant look and "feel" and its basic capableness, the crucial consideration, in our opinion, is how (or whether) its "concept" of bias adjustment relates to yours. Using our own ears as the fine-tune instrument, we found we could get excellent replication on a wide variety of tapes as long as either we first adjusted for flattest subjective response in a signal source loaded with high-frequency noise (weak FM stations and 78-rpm discs both proved useful) or the program signal contained little ultra-high spectral content. Indeed, for first-rate results, we have at times had to resort to the FM/78 technique for some tapes, even with decks that purported to offer unequivocal electrical aids to bias tuning, and we would recommend such proceuces to anyone who has an adjustable deck and wants maximum understanding of and performance from his equipment. But we doubt that all home recordists will want to spend the time and energy needed for such pursuits, and some may put more trust in meters and LEDs than in their own ears (which is a pity). If you find that your way of using a recorder makes the 5K50 an appropriate choice for you, you should also find that it is an exciting—even challenging—piece of gear to work with. At minimum, its individuality suggests that the Lux tape line is one to keep an eye on.

Circle 132 on Reader-Service Card

**A Dual-World Cassette Deck**

DOLBY N/R (ION/OFF) TAPE SELECTOR
(FF/FE VCR/CR III/FE-CR/METAL)
MEMORY REWIND (ON/OFF) STOP

AC POWER

RECORDING
REWIND
PLAY/RECORD
FAST WIND
PAUSE


Dual's long-standing popularity among American audiophiles is in sharp contrast to the consistent failure of most German brands to find a following here. Part of the explanation, surely, lies in basic product quality, but at least some in Dual's relative internationalism of approach. While Telefunken, Grundig, and similar brands tend to strike American eyes as parochially German, and therefore "foreign," Dual has forged an ecumenicism that neither abandons its European individuality nor ignores broader trends in product design. The 830 (not incidentally, designed in Germany out built in Japan) gives ample evidence that this approach delivers welcome alternatives both to its slavishly DIN-oriented compatriots and to the orthodox internationalism of most decks in its price class.

Take the input and output connections. The back panel contains both the usual pin-jack pairs favored here and two DIN sockets—one for the input/output connections and one for monitor, which can be connected to a separate monitor amplifier or used for direct dubbing to another recorder. On the front panel are two recording level controls, each with separate friction-clutched elements for each channel. One control is exclusively for the mike inputs; the other controls line inputs from the pin jacks or the DIN socket, depending on the position of the
When you turn on the AC power, the clear plastic dust lid over the head assembly automatically swings up out of the way. To insert a cassette, you introduce its upper edge first, then push the "business" edge in over the capstan/guide system; to remove it, you grasp its two ends, which automatically presses the plates beyond them inward—and, since these plates are the stop control, it turns the transport off even if you forgot to do so.

This sort of hedge against user carelessness also finds useful expression in the tape selector switch. Its options (plus the tapes suggested in the manual for each) are: Fe [BASF Super LH] for what we would call Type 2 ferrics, Fe I [Maxell UDXL-I] for our Type 1; Cr [BASF Chrom-Super] for chromium dioxide tapes; Cr II [Maxell UDXL-II] for the very similar, though usually somewhat more sensitive, Type 2 ferricobalts and other current chrome-compatible tapes; FeCr [BASF Ferrochrom] for Type 3, and Met (3M Scotch Metafine) for the metal-particle Type 4 tapes. Each switch position takes care of everything—bias, Dolby tracking, and equalization—with no further switches or adjustments. This means that there is no opportunity to experiment or to fine tune for tapes that are a little different from those used as models for the switch setting, but—much more important for many recordists—it also means little opportunity for confusion and gross misadjustment. And the variety of tapes that the system can handle well is exceptional for a nonadjustable deck.

Diversified Science Laboratories made the measurements with tapes suggested by United Audio: BASF Professional II as the Type 2, TDK MA-R as the Type 4, and TDK OD as the Type 1, used with the Cr II, Met, and Fe I selector positions, respectively. Of these, the Type 4 tape produced the best results (as it did in the listening room), with superbly flat and extended upper response that deteriorated only to the extent of a very slight and ultrahigh-frequency peak when the Dolby circuit was turned on. Dolby tracking is not as good with the Type 2 tape, as shown in the graph. The gradual rolloff in the bass is just discernible in A/B listening tests, where the playback was judged to have a hair less "body" than the source signal. We were particularly pleased to discover what good reproduction we could get with the Fe setting’s lower bias and such tapes as TDK D, which is overbiased by the ferric setting on many decks, just as it is by the Dual’s own Fe I.

In making our recordings, we found the peak-reading signal display quite efficient; though we would have preferred the two lines of LEDs (for the two channels) to be side-by-side for easier simultaneous evaluation of both, the change from green to red when the signal exceeds the 0 dB indication helps. The calibration is quite accurate (with ¾ dB of the LEDs’ threshold values in DSL tests) throughout the critical range and in -1 dB steps from 1 up. The identification of meter 0 dB as 3 dB below DIN’s was made at 333 Hz. The meters are equalized so that sensitivity rises at higher frequencies, following a formula roughly reciprocal to typical tape overload curves: The display reads 0 dB for 3¾ dB less input at 5 kHz, 9¾ dB less at 10 kHz, and 12 dB less at 20 kHz. Again, this is a help to the casual recordist since it "forces" him to lower the recording level when input signals contain enough high-frequency content to threaten overload in that region—a process that would require both experience and aural signal evaluation had the meters been the standard, unequalized variety.

The Model C-830, like several other decks in this price class, uses a single Dolby system, which serves either to encode a signal you are recording or to decode one you are playing back, to keep the price from going yet higher. This
means, of course, that though this is a monitoring deck, with separate recording and playback elements in the central head, you cannot simultaneously listen to the decoded signal from the tape while you are making a Dolby-encoded recording. Some models consequently permit only source monitoring while you are recording; the Dual, atypically, does permit tape monitoring. A Dolby tape will not be correctly reproduced until subsequent playbacks, but you have the advantages of being able to check it during recording to see that nothing is grossly amiss and to monitor non-Dolby tapes exactly as they will sound in playback. Even though we ended by admiring the B-30's switching, at least one staff member was so dismayed by the apparently poor replication when he tried listening to a Dolby recording he was making that he began by considering it a serious defect. The multilingual manual (which is not up to Dual's usual standard, though its English is generally more comprehensible than that of many Japanese-produced recorder manuals) really should make it clear that you are hearing an undecoded signal when you monitor.

The B-30, like other Dual products, is unequivocally intended for the music-loving consumer. Both its convenience features for home-brew recordists and its refreshing want of "professional" pretensions make this clear. Some observers within the audio industry term such a design a "doctor's" deck, meaning that it is intended for someone who can afford good equipment but not the time necessary to become an amateur engineer. Dual's efforts to take the fuss out of taping by preventing incorrect settings of equalization, bias, level, Dolby tracking, and so on are both worthy in themselves and well realized in the C-830.

Circle 117 on Reader-Service Card

An HX First, From HK

Harman Kardon Model hk-705 cassette deck


Every Harman Kardon cassette deck we've tested since its first, at the very dawn of the cassette era, has had features of special interest, and the hk-705 is no exception. Two factors are immediately striking. First, it appears to be the first deck on the market anywhere in the world to incorporate the Dolby HX circuit, which is designed to increase high-frequency headroom with any cassette tape and to be of particular advantage with the less than premium formulations. Second, it is one of HK's new line, whose very attractive styling imposes unusual priorities on a cassette deck. We've had models with cassette wells, then front-loaders with cubbyholes and a few with slots, then open superstructures to hold the tape, and now a cassette drawer. The drawer, which pops out engagingly to accept or eject the cassette, does save front-panel space, but it also makes for relatively complex mechanics. Head cleaning and degaussing must be carried out through a slot, normally covered by a little trapdoor, at the top of the enclosure—a procedure we found more awkward than average. Access space and visibility are relatively cramped; if you stack other components on top of the 705, you must pull your system apart to get at the slot. And since the least impressive of the data, from Diversified Science Laboratories, are those for wow and flutter, we consider the transport mechanism...
the weakest link in a good design, not characteristic of the level of excellence we have come to expect from Harman Kardon.

On the other hand, the inclusion of HX represents the sort of initiative we expect from the company. The circuit behaves essentially as billed—increasing top-end bandwidth for any given recording level in home-brew tapes—though we do have some reservations about overall response. The high-level graphs show how HX extends response by several kilohertz above the limit achieved without HX for each recording level. The increase is particularly dramatic when HX performance (possible only with the Dolby circuit switched on, despite the separate Dolby and HX buttons) is compared to that for Dolby without HX at -20 dB. But note that the extension is paid for, to some extent, by a drop in response in the region just below this added bandwidth. Even though the drop is slight (generally about 1.5 dB), it appears in areas where signal content is more likely to occur than it is higher up. And in fact, the highs most often tend to sound weakened, rather than reinforced, when we turn on the circuit—depending, of course, on the nature of the input signal.

The "meters" are a pair of 12-LED peak-reading displays, calibrated from -20 to +8 and lighting red from 0 dB up and green below. Their vertical orientation seems more logical, if you stop to think about it, than the more common horizontal displays, and the two channels are shown close enough together to allow simultaneous viewing. The level differentiation in the critical range (at and above 0 dB) is on the coarse side, however. Though DSL found a difference of 21/2 dB between the highest midrange headroom among our test tapes (that for the metal) and the lowest (for the chrome-equivalent), all three lit the same LEDs at overload.

You can limit recording response deliberately by turning on the infrasonic filter, which introduces minimum attenuation in the audible band (about 2 dB at 20 Hz), or the multiplex filter, which reduces 15-kHz output by about 21/2 and cuts response sharply above that. We regret the latter's banishment to the back panel. In less capable cassette equipment, a multiplex filter often helps control intermodulation "birdies" even when FM is not the signal source, but the 705 has too little high-frequency intermodulation to mandate its constant use. Since infrasonic filters are fairly commonplace on today's preamps and receivers, we'd rather see that on the 705 replace the multiplex filter at the back of the deck; of course easy accessibility for both would be ideal.

The tapes suggested by HK and used by DSL in measuring the deck were all from Maxell: UD XL-I as the "basic" Type 2 chrome-compatible ferric, MX as the Type 4 metal, and UD XL-I as the Type 1 ferric (or "low-noise") tape, as the 705 escutcheon would have it. Results generally are good, with similar high-frequency headroom properties in Types 1 and 2 (though the Type 1 ferric has a theoretical edge because of its less demanding playback equalization) and a dramatic improvement here with Type 4. This is decidedly not a "me too" metal deck in which most of metal's advantages are thrown away by insufficient engineering for it.

Because of metal's inherent capability in this region, it stands to profit least from HX; in the 705, in fact, it suffers the greatest loss (generally 1 db or more, depending on the test level) at frequencies just below those where HX pays off. We'd suggest you save HX for tapes with more constricted headroom curves. Unfortunately, Harman Kardon has not provided a selector position for such tapes as Maxell LN and TDK D (mechanically excellent cassettes with less magnetic virtuosity than their brand siblings). The ferric response curves with UD XL-I already suggest some overbiasing for that high-performance formulation; greater high-frequency edge could probably be added to modern tape heads without HX switch. Still, the high-level band is not the weakest link in a good design, not characteristic of the level of excellence we have come to expect from Harman Kardon.

On the other hand, the inclusion of HX represents the sort of initiative we expect from the company. The circuit behaves essentially as billed—increasing top-end bandwidth for any given recording level in home-brew tapes—though we do have some reservations about overall response. The high-level graphs show how HX extends response by several kilohertz above the limit achieved without HX for each recording level. The increase is particularly dramatic when HX performance (possible only with the Dolby circuit switched on, despite the separate Dolby and HX buttons) is compared to that for Dolby without HX at -20 dB. But note that the extension is paid for, to some extent, by a drop in response in the region just below this added bandwidth. Even though the drop is slight (generally about 1.5 dB), it appears in areas where signal content is more likely to occur than it is higher up. And in fact, the highs most often tend to sound weakened, rather than reinforced, when we turn on the circuit—depending, of course, on the nature of the input signal.

The "meters" are a pair of 12-LED peak-reading displays, calibrated from -20 to +8 and lighting red from 0 dB up and green below. Their vertical orientation seems more logical, if you stop to think about it, than the more common horizontal displays, and the two channels are shown close enough together to allow simultaneous viewing. The level differentiation in the critical range (at and above 0 dB) is on the coarse side, however. Though DSL found a difference of 21/2 dB between the highest midrange headroom among our test tapes (that for the metal) and the lowest (for the chrome-equivalent), all three lit the same LEDs at overload.

You can limit recording response deliberately by turning on the infrasonic filter, which introduces minimum attenuation in the audible band (about 2 dB at 20 Hz), or the multiplex filter, which reduces 15-kHz output by about 21/2 and cuts response sharply above that. We regret the latter's banishment to the back panel. In less capable cassette equipment, a multiplex filter often helps control intermodulation "birdies" even when FM is not the signal source, but the 705 has too little high-frequency intermodulation to mandate its constant use. Since infrasonic filters are fairly commonplace on today's preamps and receivers, we'd rather see that on the 705 replace the multiplex filter at the back of the deck; of course easy accessibility for both would be ideal.

The tapes suggested by HK and used by DSL in measuring the deck were all from Maxell: UD XL-I as the "basic" Type 2 chrome-compatible ferric, MX as the Type 4 metal, and UD XL-I as the Type 1 ferric (or "low-noise") tape, as the 705 escutcheon would have it. Results generally are good, with similar high-frequency headroom properties in Types 1 and 2 (though the Type 1 ferric has a theoretical edge because of its less demanding playback equalization) and a dramatic improvement here with Type 4. This is decidedly not a "me too" metal deck in which most of metal's advantages are thrown away by insufficient engineering for it.

Because of metal's inherent capability in this region, it stands to profit least from HX; in the 705, in fact, it suffers the greatest loss (generally 1 db or more, depending on the test level) at frequencies just below those where HX pays off. We'd suggest you save HX for tapes with more constricted headroom curves. Unfortunately, Harman Kardon has not provided a selector position for such tapes as Maxell LN and TDK D (mechanically excellent cassettes with less magnetic virtuosity than their brand siblings). The ferric response curves with UD XL-I already suggest some overbiasing for that high-performance formulation; greater high-frequency edge could probably be added to modern tape heads without HX switch. Still, the high-level band is not the weakest link in a good design, not characteristic of the level of excellence we have come to expect from Harman Kardon.

On the other hand, the inclusion of HX represents the sort of initiative we expect from the company. The circuit behaves essentially as billed—increasing top-end bandwidth for any given recording level in home-brew tapes—though we do have some reservations about overall response. The high-level graphs show how HX extends response by several kilohertz above the limit achieved without HX for each recording level. The increase is particularly dramatic when HX performance (possible only with the Dolby circuit switched on, despite the separate Dolby and HX buttons) is compared to that for Dolby without HX at -20 dB. But note that the extension is paid for, to some extent, by a drop in response in the region just below this added bandwidth. Even though the drop is slight (generally about 1.5 dB), it appears in areas where signal content is more likely to occur than it is higher up. And in fact, the highs most often tend to sound weakened, rather than reinforced, when we turn on the circuit—depending, of course, on the nature of the input signal.

The "meters" are a pair of 12-LED peak-reading displays, calibrated from -20 to +8 and lighting red from 0 dB up and green below. Their vertical orientation seems more logical, if you stop to think about it, than the more common horizontal displays, and the two channels are shown close enough together to allow simultaneous viewing. The level differentiation in the critical range (at and above 0 dB) is on the coarse side, however. Though DSL found a difference of 21/2 dB between the highest midrange headroom among our test tapes (that for the metal) and the lowest (for the chrome-equivalent), all three lit the same LEDs at overload.

You can limit recording response deliberately by turning on the infrasonic filter, which introduces minimum attenuation in the audible band (about 2 dB at 20 Hz), or the multiplex filter, which reduces 15-kHz output by about 21/2 and cuts response sharply above that. We regret the latter's banishment to the back panel. In less capable cassette equipment, a multiplex filter often helps control intermodulation "birdies" even when FM is not the signal source, but the 705 has too little high-frequency intermodulation to mandate its constant use. Since infrasonic filters are fairly commonplace on today's preamps and receivers, we'd rather see that on the 705 replace the multiplex filter at the back of the deck; of course easy accessibility for both would be ideal.

The tapes suggested by HK and used by DSL in measuring the deck were all from Maxell: UD XL-I as the "basic" Type 2 chrome-compatible ferric, MX as the Type 4 metal, and UD XL-I as the Type 1 ferric (or "low-noise") tape, as the 705 escutcheon would have it. Results generally are good, with similar high-frequency headroom properties in Types 1 and 2 (though the Type 1 ferric has a theoretical edge because of its less demanding playback equalization) and a dramatic improvement here with Type 4. This is decidedly not a "me too" metal deck in which most of metal's advantages are thrown away by insufficient engineering for it.

Because of metal's inherent capability in this region, it stands to profit least from HX; in the 705, in fact, it suffers the greatest loss (generally 1 db or more, depending on the test level) at frequencies just below those where HX pays off. We'd suggest you save HX for tapes with more constricted headroom curves. Unfortunately, Harman Kardon has not provided a selector position for such tapes as Maxell LN and TDK D (mechanically excellent cassettes with less magnetic virtuosity than their brand siblings). The ferric response curves with UD XL-I already suggest some overbiasing for that high-performance formulation; greater high-frequency edge can be expected with the less-imposing types, undoing the performance that HX presumably could make available to them.

The foregoing reservations must be considered in context: Many would be mentioned only in a review of a deck as ambitious as this one. Note, for example, the basic record/play response, which is exceptionally smooth and extended for a $450 deck; our specific comments on response would make little sense within the context of garden-variety performance. And of course Harman Kardon must be admired for the speed with which it has incorporated the brand-new HX circuit from Dolby Laboratories as well as for the freshness of approach that it has once more demonstrated in its design.

Circle 135 on Reader-Service Card
The only car tape that eliminates the car.

BASF PRO III is the only one for the road.

Today's more sophisticated car tape systems are every bit as good as many home sound systems—until you start your engine. Then, engine noise, wind, tire whine and car vibration all begin to compete with the sound of your stereo. Until now, the listening environment of a moving car was something less than a moving experience. PRO III has changed all that.

There's an "extra" in every cassette.

Since the playback equalization of most car stereo systems is 120-µs, we designed PRO III at 70-µs. This gives you an "extra brightness" during playback, and it gives your high frequencies an added boost that stand out dramatically above ambient car noise.

Two different layers make all the difference.

PRO III has two separate tape layers for peak performance even under the most difficult listening conditions. The top layer is pure chromium dioxide for unsurpassed highs and low background noise. The bottom layer is ferric oxide for superior lows and great middle frequencies. And it also gives you higher recording levels, so you get clearer, louder playback without cranking up your volume control to compensate.

The guarantee of a lifetime.

Like every BASF Professional Tape, PRO III comes with a lifetime guarantee that covers everything. Should any BASF cassette tape ever fail for any reason, we'll replace it at no cost. PRO III also comes with our patented "Jam-Proof" Security Mechanism—a BASF exclusive that provides smooth, exact winding, alleviates wow and flutter, and puts an end to tape jamming.

Two different layers make all the difference.

PRO III has two separate tape layers for peak performance even under the most difficult listening conditions. The top layer is pure chromium dioxide for unsurpassed highs and low background noise. The bottom layer is ferric oxide for superior lows and great middle frequencies. And it also gives you higher recording levels, so you get clearer, louder playback without cranking up your volume control to compensate.

The guarantee of a lifetime.

Like every BASF Professional Tape, PRO III comes with a lifetime guarantee that covers everything. Should any BASF cassette tape ever fail for any reason, we'll replace it at no cost. PRO III also comes with our patented "Jam-Proof" Security Mechanism—a BASF exclusive that provides smooth, exact winding, alleviates wow and flutter, and puts an end to tape jamming.

Use a tape cassette that gets the most out of your car's sound system. Get the new PRO III from BASF—it's the car tape.
It sounds like music.

Interface: C Series II

is the fulfillment of our six-year association with optimally vented speakers based on the theories of A.N. Thiele - speaker design first introduced by Electro-Voice in 1973. The Interface: C offers you a unique combination of high efficiency and high power capacity - the only way to accurately reproduce the 120 + dB peak sound pressure levels found in some types of live music.

The SuperDome™ tweeter, an E-V exclusive, and the VMR™ vented midrange driver, the first to apply optimally vented design to mid frequencies, ensure your music is reproduced without the coloration normally found in other high-efficiency drivers. An honest 30 Hz low end totally eliminates the need for expensive subwoofers assembles.

When you spend $1,000 for a speaker system, get your money's worth. Audition the Interface: C Series II at your nearest Interface dealer. If you want a speaker that sounds like music, the Interface: C Series II is the one you'll buy.

More on the Classical Recording Crises

In response to Daniel Smith's letter [June] concerning Allan Kozinn's "Predictable Crises of the Classical Record Business" [April], I agree that there is a future for classical music. I am a high school junior and in no way afraid to admit that I like classical music. However, I do not enjoy all classical music; am open-minded about what I enjoy, and do not limit my listening to only one kind of music.

For this reason, I take exception to Mr. Smith's letter. I enjoy rock music, a genre that can hold its own musically against classical styles. But I am not one who, according to Mr. Smith, cannot "put more than a few words together coherently," and my goals are much higher than "be cool." I am not your average hairy-knuckled type, but a straight-A student; it is from people such as me that tomorrow's executives will come. If I may assume that the top 5% of my class is typical of the future leaders of society, the majority will listen to rock music.

I do not claim that all rock music is good, but when approached with an open mind it will be seen to be another form of musical art and should be listened to without prejudice.

John L. Swartentruber
Scottsdale, Pa.

Congratulations on Kozinn's "Predictable Crises." Speaking as one who has worked in the classical business for more than twenty years, including some years in the U.S., I have rarely seen an article on the business aspects of the classics so well researched and argued. Mr. Kozinn has put together some acute observations of the current state of the industry, and I am recommending the article to all my colleagues.

In reviewing significant ways in which the business is developing, the article pointed out that much of the world classical record market is outside the U.S. Indeed, even allowing for the fact that it is extremely difficult to obtain accurate figures regarding the size of most classical markets, it is my impression that the U.S. market is nothing like so much as 30-35% of the world, as Mr. Kozinn says. It could be as low as 20%, and this has a considerable bearing on the way in which recording budgets are deployed.

Yet I would not take such a pessimistic view of the U.S. classical scene as the author has done: News from my colleagues at Angel has been quite encouraging. And of course you would not expect me to agree with the final prediction (that Polygram will buy up all the world's remaining classical record companies) except in a spirit of humorous irony.

M. W. Allen, Manager
International Classical Division, EMI
London, England

New Mozart Symphonies?

Enough! I always thought Mozart to be the most documented, researched, and catalogued composer on earth and that his total, complete set of symphonies numbered 41 (or 40½ to be exact). Then it was 46 (or was it 477)? Now Nicholas Kenyon informs us [review, May] that the total is really 51 or 52. So where was he hiding the extra 10 (or 11) all this time? Are we having a repetition of the case of Joseph Haydn, whose 104 symphonies have now grown to 107 (or 113)? And if what Mr. Kenyon says is true, are we then to infer that the Re- quiem has been misnumbered as K. 626 and that we have up to K. 636 (or K. 637?) as Mozart's total number of works?

I think HIGH FIDELITY owes its readers an explanation of these shenanigans, and it had better be good!

Carl Bossio
Dearborn, Mich.

I read with interest the Nicholas Kenyon review of the new project of recording all the Mozart symphonies [May].

Let us acknowledge that a performance tradition for classical and roccoco music does not exist. Aside from brief mentions in prefaces to operas of the period, little has been written on performance tradition for such music. We have some broad knowledge (size of the ensembles, for example) from such secondary sources as The History of Orchestration by Adam von Ahn Carse (1925, now a reprint in paperback in the Dover series). Aside from this we rely on three sources: Leopold Mozart's book on the violin and related practice of performance, Quantz's book on the flute, and C. P. E. Bach's True Art of Playing Keyboard Instruments. Compounding the situation, all three authors write in an opaque style.

We know that most of these symphonies were performed in a chamber idiom, though not to the extent of having only one player to a part. Not all were written for a small orchestra. Mozart got enthu-
Before you couldn't afford us.
Now, you can't afford to ignore us.

For years, Mitsubishi has been making brilliantly engineered, but expensive, separates.
Now, we're making brilliantly engineered, but affordable, receivers. Receivers that offer so much more for the money, they simply cannot be overlooked.

Because our new $390* R10 and $560* R20 (R20 shown) share much of the technology in our highly respected separates, they give you more power and meaningful features than anything else in their price range.

Like a switchable IF bandwidth control that lets you match receiver characteristics to varying signal conditions.

Like 65 watts per channel (R20) and 45 watts per channel (R10) minimum RMS at 8 ohms from 20Hz to 20kHz with no more than 0.02% total harmonic distortion.

Like sensitivity of 9.3dBf (1.6µV). FM signal-to-noise of 84dB mono, 80dB stereo. And phono signal-to-noise of 94dB.

The new R10 and R20.
For people who could never afford Mitsubishi, but always had an ear for it.

Call 800-447-4700 toll-free for the name of your nearest dealer. In Illinois, call 800-322-4400. For information, write Melco Sales, Inc., Dept. 45, 3010 East Victoria St., Compton, CA 90221. In Canada: Melco Sales Canada, Ontario. *Suggested retail prices.
Mr. Kenyon replies: The familiar numberings of Mozart's symphonies reflect the chronological order of the 41 published in the old Complete Works. Additional symphonies and fragments appeared in supplementary volumes, and even though they are early works, they have been numbered 42 through 50. So these extra nine have been around even longer than I have. The Academy of Ancient Music's total is made up of additional works consisting of opera sinfonias that Mozart used as concert symphonies and symphonies that he drew from movements of serenades. Finally, there is the G major Neue Lambach Symphony of 1768 that does not appear in any edition of Köchel. Preliminary investigation suggests that Mr. Bossio should not become too excited about the musical qualities of any of these symphonies.

Mr. Lacy is right to emphasize the variety of size in Mozart's orchestras; not all the symphonies were written for chamber-size groups. This is brought out in Neal Zaslaw's table of orchestral sizes at the end of his Royal Musical Association paper (which is in fact now available in the RMA Proceedings).

Copland Piano Music
Regarding his Copland piano music review [May], David Hamilton's memory is too short. RCA did reissue the "famous" 78s of Bernstein playing the Copland sonata plus his own Seven Anniversaries (if it can still be found—it is out of print) on Camden CAL 214, coupled with his recording of the Ravel Concerto in G.

John L. Erling
Mercer Island, Wash.

Singing: Scott vs. Steane
While I enjoyed Dale Harris' review of EMI's "The Record of Singing, Vol. 2" [May], I strongly disagree with several remarks he made about John Steane's The Grand Tradition. He may prefer Michael Scott's book [enclosed with the record album] on early vocal recordings, but it's going too far to state that Mr. Steane's criticisms are not "genuinely helpful, ... do not arise from a sound theoretical basis, ... [and] provide [no] insight ... into the art of singing." I have found this justly praised book to contain some of the finest and most helpful music criticism I have encountered. No matter what opinion one may have of it, it is not a book to be dismissed contemptuously, as Mr. Harris did.

Also, for every critic like Henderson, Parker, and Aldrich whom Mr. Harris invokes to support his contention that modern singing is in a dangerous state of decline, one could find one like George Bernard Shaw, whose well-known statement that "we sing much better than our fathers" expresses his belief that operatic singing has improved since the early years of the century. Probably not even Mr. Harris would number Shaw among those critics who "must surely be held in large measure responsible for the decline in judgmental standards that has accompanied the decline in vocalism."

Christopher B. Kuner
Springfield, Ill.

Mr. Harris replies: Mr. Kuner distorts my opinions. I did not dismiss The Grand Tradition, let alone contemptuously. In my review I said: "Unlike J. B. Steane, whose striking descriptive powers (as evinced in his oft-quoted book The Grand Tradition) are ultimately too impressionistic to be genuinely helpful and ... do not arise from a sound theoretical basis, Scott provides invaluable insight into specific records and, by extension, into the art of singing."

Steane is a gifted writer but no thinker. Unlike Scott's, his criticisms are based not on a coherent view of the development of singing during the last 250 years, but on a series of ad hoc observations. Steane believes that the phonograph reveals the existence of a golden age at the turn of the century, then an afterglow, followed by a collapse of standards in the 1930s (the age of Flagstad and Melchior, it might be pointed out) and, after World War II, a new golden age. I do not believe the evidence supports so neat or optimistic a formulation.

On the subject of vocal critics, Mr. Kuner again misinterprets me. In my review, I added the names of Henderson, Parker, and Aldrich not because they said their contemporaries sang less well than the singers who preceded them, but because, unlike most present-day reviewers, they wrote so knowledgeably about the human voice.

As for Shaw's squib—"We sing better than our grandparents"—I am confused by Mr. Kuner's reference to it. Is the existence of something written thirty years ago—when Shaw, incidentally, was in his dotage—somehow meant to prove that the singing of today has not declined?
Now you can hear how good a Revox system really is.

Studer Revox is known for recorders. The best in the business. But since even the finest recorder is limited by what it is connected to, we recently developed a line of tuners, turntables and amplifiers to optimize the signals going to and coming from our tape machines.

Now the system is complete. We have a new speaker factory. We make our own drivers. And we're introducing three innovative, high performance speaker systems so you can finally have a system that is all Revox. With unmatched sonic quality and a special pride of ownership.

The Revox Triton has the uncommon ability to reproduce undistorted bass frequencies as low as 30 Hz, yet it fits almost unnoticed in rooms of any size or decor.

Triton is a three-piece system. Frequencies from 200 to 25,000 Hz are reproduced by two 3-way compact bookshelf speakers that can be easily placed for maximum stereo effect. And the lowest frequencies, which are essentially non-directional, are reproduced by a pair of subwoofers mounted in a single cabinet that may be placed anywhere in the room. The subwoofers are spring-mounted within the cabinet and their resonance is so low that no vibration is transferred to the cabinet. It can be used as a shelf for other components, even a sensitive turntable.

We are also proud of the new Revox BR530 speaker system. It's a 3-way bass reflex system with the accuracy and musicality customarily expected from much less efficient units. The mid- and high frequency drivers are placed to eliminate interference beats, and ringing is eliminated by a specially damped phase modulator tube. The cabinet on this and all Revox speakers is as beautiful as the sound, with magnificent hand rubbed and oiled walnut veneers.

Our new Revox BX350 makes use of the latest research in phase-coherent wave propagation. The cabinet is precisely stepped, to ensure that all frequencies reach the listener at the same time—even if they are coming from drivers with different depths. The five drivers are specially made with cast aluminum chassis and a new kind of cone treatment, and are arrayed for optimum dispersion and overall transparent sound.

Three superb, but different, new speakers. Hear how good they are at your Revox dealer.
Noise-Reduction Systems and How to Get the Most Out of Them

by Robert Long and Edward J. Foster

Everybody knows how the Dolby B circuit played Prince Charming to Cinderella Cassette; three competitors reviewed in this month's "New Equipment Reports" challenge the crown, so HF here plays remarrriage broker to poor, confused little Cindy.

Elsewhere in this issue you can read our reports on the DBX Model 224, the Sony Super-D (Plus Series Model N-55), and the Nakamichi High-Com II encode/decode noise-reduction systems. All claim superiority to the Dolby system that is built into all quality cassette decks today (save only those from JVC employing the compatible ANRS system), and none are compatible with each other or with the Dolby/ANRS approach. The claimed superiority may address one or both of two extremes: the inherent low-level tape noise that all seek to push even farther downward (preferably to below audibility), and the distortion that comes from recording a tape at too high a level in one or more frequency bands and that some of these systems seek to forestall. Between these extremes lies the total effective dynamic range of the tape; what we are dealing with, therefore, is really dynamic-range extension, rather than noise reduction per se.

Let's review the upper extreme first. Early cassette tapes had very poor high-frequency capability, but that quickly changed. Before Eugene McCarthy and Led Zeppelin achieved national prominence, Du Pont devised something called chromium dioxide, a magnetic particle whose capacity for recording high frequencies at high levels was so astonishing that somebody came up with the bright idea of throwing away part of that ability in favor of lower noise by using a 70-microsecond playback equalization constant. This kept the highs farther above tape hiss than the standard 120-microsecond equalization did but also pushed them back toward the overload "ceiling." Unfortunately, when Led Zeppelin and company did come along, recordists trying to put their music onto cassettes discovered that too much of that high-frequency capability had been traded away; to keep the highs clean, they had to record at a lower level than usual and thus put up with more noise relative to signal levels.

The Dolby B circuit for noise reduction, which began to attract attention for consumer tape equipment at about the time that the chromium dioxide tape did, makes matters somewhat worse. Basically what it does is compress everything above about 200 Hz upward in recording and expand it reciprocally downward during playback. Though, at any frequency, it does nothing to signals above its reference level, which is a few dB below midrange overload level in typical tapes, overload is well below the reference level at very high frequencies. When these highs are compressed upward by the Dolby action, they therefore are pushed closer to—and potentially beyond—overload.

There is one standard solution when the highs run out of headroom and, because they are so abundant in the input signal, recorded quality starts to suffer. Record the entire signal at a level low enough to retain the unsullied highs. More sophisticated solutions have appeared over the years. JVC, the working of whose ANRS circuit is so similar to Dolby B as to be interchangeable with it for practical purposes, added some downward compression of the ultra-highs to the encoder's upward compression of the highs as a whole. This second band, kept as a separate, switchable encode/decode option, was called Super ANRS. Its decoder could be used successfully only on tapes that had been appropriately recorded, of course, since—like the basic compander action—it was intended to undo a signal manipulation that had been performed in the recording process.

In the very recent past, the emphasis has been more on manipulations that need not be undone. The starting point for this approach is a phenomenon known as self-erasure. As signal level increases into the overload range, the tape loses its ability to retain peaks at levels proportional to those at the input, compressing them more and more until outright saturation (beyond which no further increase in output is possible) is reached. If you go beyond saturation in the midrange—where it normally will occur at a few dB above DIN reference level—you just get more distortion; at high frequencies, however, the tape responds to the added signal, and the bias current that accompanies it, much as it would to that in an erase head, and output level actually begins to drop. If tape compression short of saturation compromises the ability of a compander noise-reduction system to recover signals accurately, self-erasure makes it far worse. This is why response curves fall so much more precipitously at the top end with Dolby B than without it.

About two years ago, Tandberg sought to do something about that problem with its Dyneq circuit. It varies high-frequency recording equalization to increase the input level at which highs will go "over the top" and into self-erasure. Its compression is added to that of the tape, so the highs still cannot be recovered exactly when they get into the near-overload zone, but output still remains higher than it would be without Dyneq. The system must evaluate the signal it is recording and reduce high-frequency pre-emphasis only in the presence of signal in the critical zone.

The somewhat similar Dolby HX...
Dynamic Range—How Much Is Enough?

Among the basic tenets of high fidelity is the dictum that noise is bad and should be kept as low as possible. It seems to follow that dynamic range, from peak-level ceiling to noise floor, should be as wide as possible. Certainly the dynamic ranges of transmission media must observe this rule; the medium must have greater dynamic range than the program material if the one is not to compromise the other. But there are limits to how much is useful in the program signal—and, therefore, to how much is really needed in the medium by which it reaches the listening room.

Some years back, a major manufacturer of eight-track cartridges is said to have determined that no more than 18 dB of dynamic range could be tolerated in a moving automobile; programs exceeding this range would be unbearably loud at the climaxes and/or obscured by road noise in the softest passages. While 18 dB seems realistic in a car, the implication that all program material should be compressed to a dynamic range of 18 dB or less certainly is unacceptable in high fidelity terms. A figure of 60 dB—which is 16,000 times greater than 18 dB in power ratio—usually is considered par in home listening and, not incidentally, is just about what good cassette tapes deliver in Dolby decks.

If you look at the chart, you'll see that this literally puts noise at the absolute threshold of hearing (0 dB SPL) when you're playing music at what we have called “loud background music” levels, with climaxes at 60 dB SPL. But, wherever you live, you're always subject to ambient noise (traffic, neighbors, refrigerators, wind—even your own breathing and the rustle of your clothes) that makes the practical threshold of sound recognition much higher. When we characterize 20 dB SPL as the ambient level of an extremely quiet listening room, for example, we're assuming considerable care in sound proofing; relatively few recording studios are so quiet.

If you had such a listening room, program peaks would have to be at 80 dB SPL ("moderate home playback") for a 60-dB dynamic range and at a whopping 110 dB SPL ("loud rock") or above to make full use of the dynamic ranges of 90 dB or more being talked of for the new digital or noise-reduced analog systems. For a more realistic background level of 40 dB SPL, which can easily be achieved in many a suburban living room, a 90-dB dynamic range would require program peaks beyond the threshold of pain. And even with well-spaced single-family homes, sound levels would probably be far above neighbors' annoyance thresholds.

Such social considerations aside, maximum playback levels can be pushed to those of live music (given enough capability in the reproducing system), though most music lovers might consider this "sound-freak" territory. We have pegged "loud home playback" at 90 dB on the ground that this is about the maximum that can be tolerated for normal listening by many of our music-oriented friends. Your peaks may be louder or softer than this, depending on your taste, source materials, equipment, and peer-group pressures.

From the chart, you can pick out the figure that seems most representative of the loudest reproduction you will want and subtract that for the ambient noise of your listening room. The difference is the maximum dynamic range that you presumably will want in your program material. Add another 5-10 dB to keep the softest program sounds above the noise of the transmission medium, and you have the minimum dynamic range you will need in that medium as long as you don't waste too much of it in unused headroom between program peaks and medium overload.

### APPROXIMATE SOUND-PRESSURE LEVELS

<table>
<thead>
<tr>
<th>Maximum Music Levels</th>
<th>DB SPL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely Loud Rock</td>
<td>120</td>
</tr>
<tr>
<td>Loud Rock</td>
<td>110</td>
</tr>
<tr>
<td>Symphony Orchestra</td>
<td>100</td>
</tr>
<tr>
<td>Loud Home Playback</td>
<td>90</td>
</tr>
<tr>
<td>Moderate Home Playback</td>
<td>80</td>
</tr>
<tr>
<td>Soft Home Playback</td>
<td>70</td>
</tr>
<tr>
<td>Loud Background Music</td>
<td>60</td>
</tr>
<tr>
<td>Background Music</td>
<td>50</td>
</tr>
<tr>
<td>Soft Background Music</td>
<td>40</td>
</tr>
</tbody>
</table>

---

**Threshold of Pain**

**Threshold of Hearing**

**Ambient Noise:**

- Extremely Noisy Listening Room
- Noisy Listening Room
- Average Listening Room
- Quiet Listening Room
- Extremely Quiet Listening Room
- Solitary Confinement
Encode, without background tone  
Encode, with background tone  
Encode/decode, without background tone  
Encode/decode, with background tone

DOLBY B (INTEGREX) NOISE REDUCTION TONE-BURST RESPONSE

DBX TYPE II NOISE REDUCTION TONE-BURST RESPONSE

SUPER-D (SANYO) NOISE REDUCTION TONE-BURST RESPONSE

HIGH-COM II (NAKAMICHI) NOISE REDUCTION TONE-BURST RESPONSE

approach (embodied in the Harman Kardon deck reviewed in this issue) takes its signal sensing directly from the main Dolby B circuit and varies both high-frequency recording equalization and bias current. Like Dyneg, it reduces pre-emphasis; unlike it, HX also reduces bias in the presence of lots of highs. At more modest signal levels, reducing bias from optimum would introduce a peak into the high end of the response curve; here it helps prevent self-erasure.

What we are essentially concerned with in this article are the four "full service" encode/decode systems: the three embodied in the DBX, Sanyo, and Nakamichi products plus the basic Dolby B. Let's begin our examination of them with their inherent behavior at these same high levels.

It should be fairly plain from the foregoing what Dolby B does: nothing below 200 Hz and nothing above its reference level, which is about 2 dB below DIN0 dB (defined as 200 and 250 nanowebers per meter, respectively, in recorded level on the tape). As level drops in recording, highs are pushed progressively higher to keep them above the hiss. When they are about 40 dB below Dolby reference at the input to the compressor, they are only 30 dB below it going onto the tape; at still lower levels
With CCIR noise-weighting values, highs are 10 dB farther above hiss levels. Dolby Laboratories claims 10 dB of compression is applied. Thus no further compression is applied. Thus Dolby Laboratories claims 10 dB of noise reduction (since the low-level highs are 10 dB farther above hiss levels than they would be without processing). With CCIR noise-weighting values, which approximate audibility factors, measured improvement with practical tape systems comes very close to 10 dB, with the more common A weighting, measurable improvement of about 9 dB is commonplace.

The DBX approach is utterly different. Its compressor action is limited neither in level nor in frequency range; the 2:1 ratio is applied across the board. If cassette tape headroom curves were flat—that is, if overload remained a little over the DIN 0-dB level at all frequencies—and if the changeover between upward and downward compression were to occur at the deck's meter 0 dB (generally a few dB below DIN 0), more signal could be slipped by the overload limit with DBX compression than without it. But real-world casette overload curves fall rapidly at very high frequencies and often are below the DIN 0-dB level from 1 kHz up. As they descend into the dynamic range in which compression is pushing signal levels upward, overload is hastened by the compressor, and recording levels have to be reduced if highs are to be kept clean. DBX takes all this into account in its recommendations for setting recording levels, though it gives ranges rather than absolute values; to a certain extent, the exact setting is left to the experimentor (or canny guesswork) of the recordist.

Sanyo’s Super-D approach is similar to DBX's, but with two significant differences: Encoder compression stops in the range where both frequency and signal level are extremely high, and a level-referencing system is included. The latter follows from the former, since the decoder must “know” where the changeover from compression to non-compression occurred in encoding if it is to act reciprocally. But the uncompressed frequency level region is so high that few if any signals are likely to reach it with normal alignment and (especially) music programs. Super-D operation is otherwise very much like DBX's.

The frequency response of the encoded signal differs somewhat. (In each, the encoder’s response change is corrected in decoding, of course.) DBX’s has a marked dip through most of the upper range, particularly between 5 and 10 kHz, which helps prevent tape overload in this very important band; above it, where tape overload is closing down most rapidly but high-level signal content is most unlikely, response rises. Super-D also has some encoder response reduction in the upper range but threatens the ultrahighs less. At 10 kHz, the dip amounts to about 3 dB in both systems; without it, recordings theoretically would have to be at a level some 3 dB lower overall for the same effective 10-kHz tape-overload level, and signal-to-noise ratios after the decoders’ 1:2 expansion would therefore be as much as 6 dB poorer.

Though some response manipulation is also employed in the Nakamichi High-Com II system, it occurs as a natural concomitant of the different maximum compression ranges in different frequency bands. In terms of high-level signals alone, it also results in about 3 dB more 10-kHz headroom on the tape (6 dB more S/N ratio in playback). But whereas the response of a DBX-encoded signal rises above 10 kHz and that of a Super-D-encoded signal remains near midrange levels, that of a signal encoded by High-Com II continues to drop somewhat to 20 kHz at high levels.

Carrying this mathematical exercise to the extreme, we calculated the effective playback S/N ratios of the three systems at 20 kHz, each relative to a 2:1:2 compander with no frequency “diddling”; DBX would be about 6 dB poorer, Super-D about 2 dB poorer (as long as levels are not up in the never-never land where compression stops), High-Com II up to 10 dB better. But before you turn thumbs down on the first two systems, remember that unless you record live you may never encounter any input-signal content at 20 kHz, any that may exist is purposely removed in stereo FM and in some proposed digital systems. Since Dolby compander operation is not 2:1:2, direct comparison is not possible.

So far, we have considered only steady-state effects—how the respective systems, including the tape, can be expected to behave in the presence of sustained tones. But transient behavior of the four is very different and very difficult to assess in simple terms. We chose three methods of investigation: tone bursts viewed on an oscilloscope, the same tone bursts auditioned on a loudspeaker, and listening tests with all four systems encoding and decoding the same music simultaneously via a quadriphonic open-reel tape deck. (Incidentally, the first two tests employed an Integrex Dolby encode/decode unit built around one of the integrated circuits that are used universally today for built-in Dolby functions, while the listening tests were made with a discrete-component Advent Dolby unit. As far as we could determine, the results obtained with the...
DOLBY (INTEGREX) THROUGHPUT RESPONSE (for input levels of 0, -10, -20, and -30 dB)

The dash-dot line shows response with the signal fed through the encoder and then directly to and through the decoder and therefore is comparable to the throughput curves shown in the test reports for the other noise-reduction units. The solid line shows what happens when 3 dB of unwanted gain is inserted between encoder and decoder; the dotted line shows 3 dB of loss. Both are recalibrated for this 3 dB of mismatch, which otherwise would raise or lower, respectively, the overall signal levels by 3 dB.

two models showed no material differences.)

With signal sources ranging from digitally mastered and direct-cut discs to conventional LPs chosen for their transient content, we simply could hear no unequivocal difference, though the bench tests had already proved that differences do exist. So alike were the four decoded signals and the original that (syncing problems between tape playback and the disc aside) we had to flip switches to prove to our own satisfaction that each was indeed coming from its intended source. We could not carry out the test with live sound because we would have lost the ability to make an exact comparison between it and its taped counterparts. Nor could we try every one of the thousands of existing recordings at our disposal. So we cannot state that no difference exists under any circumstances—just that detection of any differences is unlikely under typical home recording conditions, even with excellent source material and equipment.

The differences certainly were audible in the tone-burst tests, however, and correlated well with the results shown in the oscilloscope photos. They were made using 20-millisecond bursts of high-level 5-kHz tone. First we fed the bursts through the system encoder and examined them on the scope to see what sort of signal the tape would be asked to cope with. Then we fed them from the output of the encoder to the input of the decoder (what our test reports call a throughput test) and examined the decoder output both visually and aurally to determine how the transient—specifically, the leading edge of the tone burst—would be reproduced by an ideal recorder. (The waveform you might get out of a real recorder would, of course, depend on such things as its phase linearity—a property in which tape systems are notoriously variable.)

In general, the burst itself was kept to the system 0-dB reference; for DBX (which involves no reference level) we set it at the changeover point between upward and downward compression in encoding, which is essentially the same thing; for Dolby (where the reference level is above the transition from compression to no compression and therefore should be less critical than lower levels) we made the scope photos with the burst at -20 dB. You'll note that half were made with just the tone burst itself, the other half with a continuous background tone 20 dB below the level of the burst (that is, at 40 dB below reference level in the Dolby photos). The latter typify what might happen in music, where some sound generally precedes a transient, while the former represents an initial transient that emerges out of silence. To put it another way, that without the background tone represents the first chord of the Eroica Symphony, and that with the background approximates the second, which occurs before the sound from the first has had a chance to die away.

You'll see that all systems present the tape with a sharp spike at the beginning of the burst, much higher in level than the remainder. The higher the spike, the greater the strain it puts on the tape medium—however briefly, because the compressor "discovers" and compensates for the change in level. Some spike amplitudes are very high (10 dB or more above the overall burst level in the DBX and Super-D traces without background tone); were it not for their brevity they would almost certainly entail audible side effects due to tape overload unless recordings were made at preternaturally low levels. But the Super-D and, even more so, High-Com II spikes are virtually instantaneous, while the longest ones—from DBX with the background tone and from the Dolby encoder—amount to only a few dB. (And remember that the Dolby burst has much more tape headroom to work with, since it was made at -20 dB; at 0 dB there still is a spike, but it is much briefer.)

You'll see, too, that the background tone makes a considerable difference in the way all but the Dolby system handle the burst. This is to be expected. With no input signal, all the systems are at maximum upward compression until the burst comes along; then they must adjust to the burst level.

Dolby B and High-Com II have an advantage here in that below a certain level each ceases to add yet more compression, limiting the degree of "adjustment" necessary when a transient appears in the silence. Note that a difference between the very brief attack time (the spike) and decay time (the "tapering" of the tone between bursts) is visible in the High-Com II trace and, to some extent, that for Super-D. This is of essentially academic interest as long as the levels are restored correctly in decoding. Those of the background tone invariably are, but the leading edges of the bursts still exhibit some oddities. Most noticeable is the asymmetrical offset of the burst in the Super-D and Dolby traces. Since the total amplitude of the Super-D burst remains correct, it is not as worrisome as the lopsided Dolby trace, though even it represents only a perturbation of 1 or 2 dB. By contrast, the DBX and Super-D bursts—and, to a minute degree, that from the High-Com II—continue to show some spike unless the burst is preceded by the continuous tone. All these spikes are, however, extremely brief and of relatively small amplitude.

While all of these phenomena are interesting, they must be kept in perspective. Since we can hear them—or at least some change attributable to them—in pure tones and with no intervening recorder but not with recorded music, we appear to be dealing with a "headroom" situation, where all the systems are only a little better than they need be with normal standards of excellence. And if you want the greatest possible headroom of this sort to accommodate possible improvements elsewhere in the signal train, we would recommend High-Com II as the most accurate transient reproducer of the four.

All the so-called throughput...
throughput response with 3 dB of gain or loss between encoder and decoder (for inputs of 0, -10, -20, -30, and -40 dB)

Solid lines represent 3 dB of unwanted gain at the "recorder"; dotted lines show 3 dB of loss. Since the 3-dB change is magnified by the 1:2 expansion of the decoders, overall output level changes by +6 and -6 dB, respectively. This doubling of any level change is responsible for the way such systems magnify the effects of dropout or poor head contact; here we have compensated for the 6-dB change by restoring the curves to the input-level calibration.

measurements, including the tone bursts, investigate noise-reducer behavior in vacuo, so to speak. In the real world, behavior is affected, often profoundly, by the recorder that intervenes between encoder and decoder. Most of the effects are generally well understood, but we did want to investigate real-world tape headroom properties. Using a Nakamichi 582 deck and its EX-ll ferric tape, we made response curves at various levels from +10 to -40 dB (with respect to the deck's own metering).

At the very highest level, where the tape itself generally is creating considerable compression due to overload, depending on the degree of downward compression provided by the encoder, the DBX response is the most accurate in level, flatness of response (except in the extreme bass), and high-frequency "reach." By the time we get down to more practical recording levels, however, High-Com II's reaches farther than any of the others. Then Dolby (with its least extreme upward compression) catches up. Both DBX and Super-D continue to limit bandwidth at the extreme top down to about -30 dB; again, since 20-kHz content is generally extremely low in level or nonexistent in most signals the systems will ever have to handle, this does not necessarily limit their utility.

We often need had cause to talk about "Dolby tracking" and its influence on record/play response in cassette decks, and we also investigated the effects of misalignment in each of the systems. Again we reverted to throughput measurements so that response variations in a real deck would not obscure the phenomena we wanted to observe. First we measured correct throughput response in our Dolby unit; those for the other three units are shown in the respective test reports. Next we deliberately adjusted levels at the link between encoder and decoder for +3 and -3 dB of misalignment in each system. This is about the maximum you might ever get from recording on a very sensitive tape with a deck adjusted for one of very low sensitivity, or vice versa. But, of course, far greater degrees of misalignment are possible if someone alters a knob setting in a carefully aligned system and the recordist unwittingly uses it that way.

The clear winner here is DBX, which (as you might expect) remained totally unperturbed by the level change. Super-D did almost as well; the glitches are, again, at such high frequencies and levels that even a sonata for siren and screech owl might not trigger the oddities. High-Com II has some notable oddities at low levels; those in Dolby B tend to have more influence on overall high-low balance and to alter response to higher playback levels.

And, finally, there is the question of noise itself. Throughput figures for the electronics appear in the test reports, but we are concerned here with what performance each can realize with a tape recorder. Again we used the Nakamichi Model 582, aligning each system according to its manufacturer's instructions. For reference, the deck by itself has a midrange headroom (from meter 0 dB to 3% third harmonic distortion at 333 Hz) of 7 dB and a 5/N ratio (from meter 0 dB to A-weighted noise) on biased tape (the minimum possible noise level in an actual recording) of 50 dB, for a total dynamic range of 57 dB.

When we turned on the Dolby circuit—this time using the one built into the deck—we measured 7 dB of headroom plus 59 dB of S/N ratio for a dynamic range of 66 dB. The DBX system delivered 15% dB of midrange headroom plus 87% dB of S/N ratio for a dynamic range totaling 102% dB. Super-D's figures were 13% dB plus 93 dB, or 106% dB total. High-Com II racked up 13% plus 70 dB, or 83% dB. In terms of raw numbers, Super-D wins, followed closely by DBX.

But in terms of available signal quality, even in live recording, and of practical playback dynamic ranges, anything over 90 dB strikes us as gilding the lily, and even 80 dB may be more potential than most recordists can make use of. (See the dynamic-range chart at the beginning of the article.)

You must also consider the question of practical meter settings, transient spikes, recording habits, and related matters. If you follow your own instincts or the DBX instructions or both, you'll find it impossible to record at more than 7 dB above meter 0 dB (to get the full 15 dB of headroom after decoding) even if it is calibrated that high. So, in practical terms, the question boils down to one of essentially inaudible noise (assuming excellent dynamic ranges in your other components) with all but Dolby B, whose noise is almost inaudible in typical listening situations. If "almost" is not good enough for you, you're willing to spend for the extra cash to buy an add-on, each of these systems will do the job. Of the three, we consider the DBX the most cost-effective and the most fuss-free, the High-Com II the most accurate and best thought-out with the cassette in mind, and the Super-D an adequate compromise between the virtues of the other two.
Buying a Budget-Priced System

The how-tos and wherefores of audio shopping on a shoestring.
by Michael Riggs

Buying a decent component stereo system for between $400 and $600 is no longer as tricky as it used to be; even budget-priced gear is usually pretty good these days. By being clever, however, you can often get much better than average performance for your money or save a few dollars, or both. And your shopping experience might even be fun.

Before setting foot in a store, you should do a little homework. Find out what's available, prices, basic specifications and what they mean, and so forth. You might also want to look up test reports on items that particularly interest you. That done, devote some time to figuring out what you need and what you want your system to do. Do you want to play records? You're a rare bird if you don't. Do you want to listen to the radio? Your answer will depend heavily on where you live; but again, if you're like most people, you do. And you might want tape, either instead of or in addition to records. If the latter, you'll probably need a larger budget. [See "Adding a Cassette Deck."] For now, we'll assume you've settled on buying a system consisting of a turntable, arm and cartridge, an amplifier or receiver, and a pair of loudspeakers. Now to your needs.

How your system sounds will depend in large measure on the room it lives in. You must make sure that what you buy is suitable to the environment in which it must operate. The main considerations are the size and liveliness of the listening room. A large or very dead room will require significantly more amplifier power or loudspeaker efficiency for a given loudness level. Another important concern is where in the room you can put speakers. Every model performs best when placed in a certain relation to room boundaries, such as walls and floors. Increasingly, speakers are being designed to take account of acoustic interactions with the room, and they will perform optimally only when they are positioned according to the manufacturer's instructions. You should know in advance what placements are and are not practical in your home.

**DOWN TO SPECIFICS**

Once you know your limits, both physical and financial, you're ready to get down to the specifics of planning a system. The best way for most people to start is to make a rough approximation of how much of the total budget should be spent on each component. In our projected system, we can talk about three basic component blocks: the record player (consisting of a turntable, arm, and cartridge), the amplifier or receiver, and the loudspeakers. In this price range, we might reasonably consider spending equal amounts on each block. That leaves less for speakers than one would really like, but a larger allotment here would almost certainly come at the expense of the record-playing gear. Remember, it's easy enough to trade up to better speakers or electronics later, but upgrading a tonearm or cartridge won't repair the damage already done to your records by a mistracking pickup or an arm with excessive pivot friction.

Fortunately, there are some reasonable ways to cut costs at the front end. You do want a turntable with reasonably good suspension and a reasonably good tonearm, but state-of-the-art units with speed accuracy guaranteed to three decimal places and aerospace-grade arm pivots are an unnecessary extravagance. You also should avoid top-of-the-line pickups of any type and esoteric moving-coil designs altogether. The moving-coil models tend to be expensive and usually require additional voltage stepup devices. Among the moving-magnet and moving-iron types, you usually will find that manufacturers' second-best cartridges are the best buys, providing almost the same performance as their top models at half to two-thirds the price.

At the other end of the chain, your best bet is to stick with basic two-way loudspeaker systems. A good three-way design should outperform simpler units whose drivers are straining a little to cover the whole audio band; unfortunately, it requires not only an extra driver, but also a substantially more complex crossover network and much more design time. None of that translates into low cost. In our price range, you are unlikely to find a three-way system that performs as well as the better two-way models.

In between, you want enough power to play music at the volume you like without running into gross distortion. This you should be able to afford. Just remember that 3 dB more volume, which is a rather small audible change, requires double the power; it may not be worth the added cost. Remember also that the amplifier has two critical interfaces: the first to the phono cartridge and the second to the loudspeakers. The phono input should present a simple 47,000-ohm resistive load in parallel with a small capacitance—certainly no more than 200 picofarads and preferably no more than 50 to 100 to ensure that you will not be faced with an insurmountable obstacle to proper cartridge matching. Deviations of as much as 20% from the standard resistive load are usually acceptable. RIAA equalization should be within ±½ dB from 30 Hz to 15 kHz.

The power amplifier section must be able to drive the loudspeakers of your choice without difficulty. If the speakers have a rated impedance of lower than 8 ohms, check the amp's 4-ohm wattage rating; it should be at least 30 to 40% higher than the 8-ohm spec. You may want that kind of behavior anyway, as a hedge against tradeup to speakers that happen to have a low impedance.

The remaining area of potential difficulty is the match of cartridge to tonearm. Most good cartridges are high-compliance models that require a fairly
low arm mass for best performance. Otherwise, warps may generate excessive infrasonic output in the pickup (which can waste power in the amp and cause distortion in the preamp) and interfere with its tracking ability.

As you go through this initial process of narrowing down your choices, don’t forget to consider the future. Though you may never again want to buy a piece of audio gear, chances are that you will or that you will want to trade up for better components of the same type. Try not to lock yourself into a component with characteristics that make it suitable for use with only a limited range of associated equipment. (Most all-in-one “compacts” suffer from this flaw.) For example, you may want to plan at the outset to buy less expensive speakers so as to leave money for a quality turntable or cartridge, with the expectation that you will replace the speakers later with better models. This is a perfectly legitimate approach to buying your first system or working toward a finer one over an extended period. Some stores offer trade-in plans that facilitate this style of buying.

If you are building on what you already have, you probably own some equipment that you would do well to keep and some that could be sold or traded in, thus reducing your cash requirements. The governing rule here is that each component should be at least as good as the one that follows it in the chain. It makes no sense to wind up with a system consisting of superb, expensive speakers connected to an underpowered receiver and a dime-store cartridge. Perfectly reproduced mistracking and clipping distortion are not your goals.

Finally, think about features. If you want automatic record-changing, tape-dubbing facilities, sophisticated tone controls, or anything else slightly out of the ordinary, decide in advance so that you can pay special attention to components that provide them.

With all that forethought, you should be ready to hit the streets. If you find that you’ve bent our initial even-
Adding a Cassette Deck

Probably no one was more surprised at the success of the audio cassette as a high fidelity medium than its inventor, Philips. Originally intended for dictation and other low-fi applications, cassettes rely on a narrow strip of tape running at a very low speed in a plastic housing designed to accommodate one erase head and one record/play head. Compared to open-reel tape (even at 3/4 ips), they have high residual noise and restricted high-frequency headroom and bandwidth, and they do not easily lend themselves to use in a three-head configuration that would enable off-tape monitoring during recording.

But succeed it has, by virtue of its convenience, the Dolby B noise-reduction system, improved tapes, and clever engineering. Many current machines even have separate record and playback heads. The cassette medium is still rather fiddly relative to open reel in that all variables—bias, equalization, Dolby tracking, and so forth—have to be set up just so if its full potential is to be realized; but when that is done, its performance is certainly competitive.

If you want to add a cassette deck to your system, either as an additional source or as a substitute for record-playing equipment, be prepared to pay $150 at the very least and probably $200 or more (assuming here a discount of about 30%). This will virtually ensure that you get a unit with adequate specifications for noise, wow and flutter, and frequency response (say, 30 Hz to 15 kHz, all you really need).

Beyond that, your main concern should be to make a proper match of tape to machine. The correct bias, equalization, and Dolby level settings will vary according to the brand of tape. Some of the more costly decks incorporate trim controls and oscillators that enable you to fine tune them to the particular tape you are using. Most, however, simply have switch settings for the basic tape types: standard ferric oxide, low-noise/high-output ferrics, chrome and chrome-equivalents, sometimes ferrichromes, and (on the latest models) pure metal. If the manufacturer doesn't tell you in the instruction manual exactly what tapes to use for each position (it probably won't, unfortunately), you may be in for trouble. The alternatives are to write the manufacturer to find out what tapes are recommended or to go by trial and error until you find ones that sound right with your deck.

Unless you are willing to spring for a premium model, don't be concerned about metal-tape capability. Not only are these cassettes very expensive, but they also strain the limits of current recording technology. Few low- or medium-priced recorders—even those alleged to be "metal-ready"—are capable of exploiting more than a fraction of metal tape's potential. Dolby noise reduction is virtually universal; the new Dolby HX circuit promises to deliver the additional high-frequency headroom of metal tape at modest cost and without any incompatibility with regular Dolby.

Finally, if at all possible, get a deck with peak-reading signal displays. The averaging "VU" meters used with most open-reel decks are too slow to register musical transients accurately. Because of the cassette medium's relatively limited headroom, you need to see those peaks to prevent tape saturation without sacrificing signal-to-noise ratio.

Salons—almost always strictly list price. They mostly carry expensive, high-end lines, so you're not likely to be talking to them anyway.

Audio retailers—your typical, run-of-the-mill dealer, who usually discounts on complete systems (about 15 to 40%) but not on individual components. These outfits carry a broad range of equipment and sometimes have sales.

Department stores—practices vary, but you can find discounts as great as 40%. Returns policies are often quite liberal, providing cash refunds for a limited time after purchase. Many strictly audio stores will only exchange, and mail-order dealers often operate on an all-sales-final basis.

Discount stores—usually discount 20 to 40% on just about anything they carry. In almost every respect, they fall somewhere between regular retailers and mail-order houses. Often they carry more lines than retailers, but they suffer from the fact that American loudspeaker manufacturers (especially the popular ones) seldom give them franchises. On average, discounts are lower than those of mail-order houses, but some of these dealers have trade-in plans, service facilities, and other accouterments of the mainstream retailers. Expect warehouse ambience and limited demonstration facilities.

The main difficulty you will encounter as a shopper is confusion—sales people's or, more often, your own.
even if it would suit your needs best; he will always recommend something he stocks. He may have a large inventory of a particular product that he wants to dispose of, and he will be anxious to sell products for which he is the exclusive dealer (for which, therefore, he has no competition) and products with high margins—those for which a relatively high proportion of the list price goes to him rather than to the manufacturer. For the last two reasons especially, you may find certain brands that practically every store carries but that no one seems eager to sell. And because many people go to full-service stores to audition equipment that they then buy at a lower price from a discount or mail-order house, retailers prefer lines that are not widely available on the cut-rate market.

Another problem is selecting loudspeakers. Reviews can be helpful, but ultimately you must listen. Unfortunately, the acoustics of most showrooms are markedly different from those of a living room. A wall of loudspeakers is a very absorptive surface, especially at high frequencies. That, along with the carpeting, tends to give most showrooms a dead, dull sound that can make flat loudspeakers sound lifeless and overbright ones sound just right. Also bear in mind that a speaker's sound varies according to its placement, especially in the bass. Dealers often position favored models on the floor against a wall to emphasize their bass response, while banishing those they are less interested in selling (or want to sell against) to the middle of the wall, well above the floor, where they will sound relatively thin. Consequently, you may want to buy your loudspeakers from a shop with a liberal return policy or a loaner program that enables you to try out a few likely candidates at home.

Many dealers have special trade-up and warranty programs. In the matter of service, it is undeniably true that local service is a convenience, but for any reputable brand, factory service is available. For some stores, in fact, "local service" amounts to shipping the offending component back to the factory for you.

**DISCONTINUED AND USED EQUIPMENT**

Very good deals sometimes come along in the form of discontinued or used equipment. When a component manufacturer replaces a current line with a new one (usually in February or September, a few months after one of the major trade shows), dealers scurry to unload their old stock, often at prices that are very little above cost. These items come with full warranty and certainly are just as good as they were before their prices dropped. This can make for a happy hunting ground if you're not infatuated with owning the very latest. Be forewarned, however, that resale values also tend to drop on models that pass out of the active catalog.

Used equipment, in the form of dealer demo units, dealer trade-in stock, or gear advertised in the classified sections of newspapers and the like, can also be good. Demo models may be a little scratched up, but they are usually better off making your own component selections. The extra time spent in research will pay off in better value and greater long-term satisfaction.

A dealer's interests will not necessarily coincide with yours; he'll usually recommend only what he stocks.

**Should You Buy a Prepackaged System?**

Newspaper and television ads for hi-fi emporiums invariably contain one or more complete systems that you are urged to buy at what is claimed to be a rock-bottom price. So how much can you believe? Are these really good deals?

Anyone putting together a system will try to serve his own best interests, which means that a dealer-selected system is likely to be good for you only to the extent that his needs are complementary to yours. Unfortunately, a dealer's primary considerations are inventory, cash flow, and profit. Yous are component compatibility and overall value. The correlation is usually low.

For example, if a dealer has overbought a certain item, perhaps because the manufacturer offered a special price to reduce its own inventory, he may throw a system together around that model just to try to move it out of stock. Another possibility is that the manufacturers of one or more of the components in the system are paying part of the cost of ads in exchange for display of their logotypes. Systems assembled on this basis are seldom well balanced, the most common flaw being the inclusion of a turntable and cartridge well below the quality of the other components. Other common faults include coupling inefficient loudspeakers with a very low-power receiver, low-impedance speakers with an amplifier optimized for loads of 8 ohms or higher, or an ultra-compliance pickup with a massive arm.

Another common tactic is to include a house-brand component—usually loudspeakers. These are models manufactured by someone else but sold under the dealer's own label. The dealer can set the price wherever he likes, regardless of what the units cost him. You have little or no way of judging the quality of house brands, and their resale and trade-in value tends to be very low, often even at the store that sells them. Your best bet is to avoid them.

The moral of our story is that unless you can get a dealer to make substitutions to your taste, you're probably better off making your own component selections. The extra time spent in research will pay off in better value and greater long-term satisfaction.
Beecham Recordings: A Fuller Portrait

Last year's centenary reissues have provided a more balanced view of a long and varied career.

by David Hamilton

Although recordings cannot actually tell the story of a musician's life, they can vividly illuminate it, strongly color our perception of it. When it comes to conveying the style and quality of musical performances, the old adage requires only slight correction: A recording is worth a thousand words. Nonetheless, heard without qualification, without context, records can be misleading. In his recent biography of Arturo Toscanini, Harvey Sachs reminded us that the great Italian conductor was over fifty when he first recorded, and was in his ninth decade by the time he made the bulk of his most familiar discs. Our firsthand knowledge of his work is grossly foreshortened, and we dare not assume that the Toscanini who conducted at La Scala and the Metropolitan Opera in his thirties and forties made music just as he did in the final NBC years.

Sir Thomas Beecham (1879-1961), some thirteen years Toscanini's junior, is more broadly represented by his records. Only thirty when he first recorded, Beecham visited the studios regularly from his fortieth year until his eightieth. In recent years, his late stereo recordings have been the most generally available in this country, but that unbalanced representation can now be considerably rectified, thanks to a substantial group of reissues, most of which appeared in Britain last year to commemorate the centenary of his birth. These have taken some time to creep across the Atlantic, but the dimmest of recorded echoes. As conductor, impresario, musical philanthropist, and general public gadfly, he stimulated the country's musical life, raised its standards, and expanded its repertory. At regular intervals, he erupted into the public eye with new plans, new operas, new orchestras, new witticisms. His earliest eruptions have left conductor's records: Beecham: A Centenary Discography (Holmes and Meier, New York, $28), though not error-free, is more accurate and easier to use than any previous effort in the field, providing the essential chronological framework for coordinating Beecham's recordings with his biography and career. EMI/World Records' major reissue package, "Sir Thomas Beecham: A Musical Biography" (SHB 100, eight discs), also includes Alan Jefferson's A Centenary Tribute; though short of the truly comprehensive and objectively critical study that we need, this book at least covers most of the main points.

Juxtaposing the Beecham career and reputation with the records is an enthralling exercise. He was unarguably Britain's most important performing musician during the first half of the twentieth century. As conductor, impresario, musical philanthropist, and general public gadfly, he stimulated the country's musical life, raised its standards, and expanded its repertory. At regular intervals, he erupted into the public eye with new plans, new operas, new orchestras, new witticisms.

His earliest eruptions have left but the dimmest of recorded echoes. With his first London orchestra, the New Symphony, he never recorded at all. Reorganized as the Beecham Symphony Orchestra, it played for the famous operatic orgy of 1910 when, in three different seasons, Beecham and his father, the patent pill magnate, presented thirty-four different operas. The conductor's music, and very probably the worst ever; the playing is a fair shambles. To counterbalance this, one must note that the Beecham Symphony was most cordially received when it gave some concerts in Berlin; these records would hardly seem to constitute the whole truth.

Although the Beecham acoustic recordings have been reissued in a three-disc set, available for $18 from the Sir Thomas Beecham Society, Recordings Executive, P.O. Box 1112, El Cerrito, Calif. 94530. The source material is frequently noisy, the Odeon versions of the Figaro and Oberon overtures have been dubbed a semitone sharp, and the performances are often horrendous, so that
Beecham posed publicly as a curious composite of Sheridan, Wilde, and Colonel Blimp.

After World War I, Beecham’s musical activities were suspended for a while by financial problems; for several years, he spent all his time disentangling his father’s estate and paying off his own debts, returning to concert life in 1923 and to the recording studios in 1925. With electrical recording in the offing, the 1925 masters were scrapped and remade a year later by the new process. What strikes us first about Beecham’s records of the later 1920s is that the orchestras—the London Symphony and the old Royal Philharmonic—are not very good, and that along with the imprecise playing and rough ensemble there is also some stodgy conducting. His 1926 Beethoven Second Symphony and 1927 Messiah were much acclaimed in their day for breathing fresh air into these familiar scores. That Messiah, in particular, now seems heavy of foot, though by comparison with recordings of a decade earlier we can see that it must have been refreshing in its day; the generally anemic solo singing may have been more “stylish” than the plushy portamentos of Clara Butt and Louise Kirkby-Lunn, but today it seems no more musical, and the equally famous 1929 Faust (in English) has dated similarly. In retrospect, this appears to have been a transitional period for Beecham, uncertain where he should direct his energies. He did a good deal of guest-conducting abroad; one souvenir is a 1932 recording of Strauss’s Don Quixote with the New York Philharmonic; Alfred Wallenstein is the impressive cellist, but the orchestral ensemble is less than notable.

The idea of establishing a “permanent” orchestra in London, one that would do away with the pernicious practice of sending substitutes to rehearsals and that would offer enough steady work to attract the best players, was to become the focus of Beecham’s ambitions in the early 1930s. When neither the BBC nor the London Symphony would give him the degree of artistic control he required, he lined up his own backing and engagements, and assembled an altogether new band, the London Philharmonic. From its very first concerts, this was recognized as a better orchestra than London had yet known—a status that comparison with those earlier LSO and RPO recordings today confirms. At the same time, it must be added that, although the LPO winds were exceptional (the early principals included Gerald Jackson, flute; Leon Goossens, oboe; and Reginald Kell, clarinet), the strings were not up to the best modern standards—and that, even so, Beecham drew from them an extraordinary range of vivid articulations.

The idea of establishing a “permanent” orchestra in London, one that would do away with the pernicious practice of sending substitutes to rehearsals and that would offer enough steady work to attract the best players, was to become the focus of Beecham’s ambitions in the early 1930s. When neither the BBC nor the London Symphony would give him the degree of artistic control he required, he lined up his own backing and engagements, and assembled an altogether new band, the London Philharmonic. From its very first concerts, this was recognized as a better orchestra than London had yet known—a status that comparison with those earlier LSO and RPO recordings today confirms. At the same time, it must be added that, although the LPO winds were exceptional (the early principals included Gerald Jackson, flute; Leon Goossens, oboe; and Reginald Kell, clarinet), the strings were not up to the best modern standards—and that, even so, Beecham drew from them an extraordinary range of vivid articulations.

The LPO recordings offer more than simply the best players that money could buy, however. Beecham was always a man of volatile and unpredictable temperament, but in these years he appears to have learned how to harness this, using it to elicit spontaneity and enthusiasm from the players but not letting it run away with perform-
Despite his waggish jesting, his recorded work is unarguably that of the complete professional. Less professional was the work load he imposed on his players.

ances (or, at least, with recordings). Though the actual events of a performance may have been improvisatory, the details were prepared with great care, the orchestral parts edited and marked up to a fare-thee-well to save rehearsal time. These are the methods of a man who knows what he wants, technically and stylistically; from this point on, despite the waggish jesting with which Beecham implicitly derogated his own seriousness of purpose, his recorded work is unarguably that of the complete professional.

Less professional was the work load he imposed on his players, generating fatigue and turnover of personnel; Paul Beard, the original concertmaster, left the LPO in 1936 because “I felt that just one more Wagner day at Covent Garden, ten in the morning until midnight, would be the end of me.” For Beecham had returned to the opera house as musical director of its annual international seasons. Some of those performances were recorded in the theater, and a few excerpts from the 1936 Meistersinger and Götterdammerung were published; along with other live recordings from the 1934 Leeds Festival, they vividly convey Beecham’s ability to generate excitement and continuing rhythmic lift. (A good deal of this material has circulated in the underground, and perhaps someday more of it will be published; I have heard, in particular, an extremely cogent first act of Tristan.)

In the studio, of course, Beecham recorded Mozart’s Die Zauberflöte—but in Berlin rather than London, as EMI executive Walter Legge found it expedient to use up blocked currency this way.

Many of the LPO’s studio recordings remain impressive. Even with his better postwar orchestra, Beecham would not match the directness and spirit of the LPO Mozart recordings; these, and his earlier Haydn, Beethoven, and Schubert performances, are usually less fussy than the remakes. In French music—Berlioz’ Roman Carnival, Chabrier’s España, suites from Bizet operas—the verve and subtlety of the phrasing, the irresistible brio of the tutti, remain unequaled. Concerto accompaniments for Szigeti and Heifetz, Wagner’s Faust Overture, Rossini’s Semiramide Overture, Sibelius’ Fourth Symphony and Lemminkäinen’s Return (a particularly sensational performance), Lord Berners’ The Triumph of Neptune—these are other highlights of the LPO series and suggest the range of Beecham’s sympathies (which he rarely exceeded in the records of this period, although later there would be excursions into the more serious Beethoven, for example, for which he evidently had little affinity).

And there was his beloved Delius, whose music he had espoused since their first meeting in 1907. Although Beecham posed publicly as a curious composite of Sheridan, Wilde, and Colonel Blimp, the private man was certainly more complex, as his comprehensive embrace of this unrelievedly hedonistic, almost exclusively pastoral music indicates. (Surprisingly, he had little interest in the music of the French Impressionists.) After the deaths of Delius and his wife, a trust fund was available to subsidize recordings, and Beecham made regular incursions upon it, before and after World War II. In some cases the earlier recordings are preferable—the first First Cuckoo of 1927 is palpably less arbitrary, less conventional in its shaping, and the prewar version of Sea Drift enjoys John Brownlee’s more eloquent and reliable singing—but even the final stereo versions of the most popular pieces, from 1956–57, are made with great art and care; those who share Beecham’s passion will surely want all of his Delius records.

The LPO recordings have been the principal focus of the EMI centenary reissues, most of them in convincing and natural transfers by Anthony Griffith (to whose skills the “Musical Biography” box is dedicated). Others have been available for some time: the Mozart symphonies (Turnabout THS 65022/6), the Szigeti concertos (Columbia M6X 31513), the Sibelius Fourth and tone poems (Turnabout THS 65059) and his violin concerto with Heifetz (Seraphim...
When the BBC and London Symphony refused his total control, he created the London Philharmonic. When they then refused his total control, he created the Royal Philharmonic.

When Beecham returned to London, his old orchestra, now a self-governing corporation, would not give him the authority he demanded, nor would Walter Legge, once Beecham's aide at Covent Garden, hand over the reins of his new Philharmonia Orchestra. So, as in 1932, Beecham assembled a new orchestra, the Royal Philharmonic, which was to remain the center of his activities for the remainder of his life. The new band, even better than the old one, included both familiar faces (Jackson and Kell were among the initial personnel) and new ones: Dennis Brain led the horns until eventually the Philharmonia took most of his time. In the later 1950s, Beecham also recorded with the French National Radio Orchestra, for Britain's tax laws encouraged him to spend long periods away from home. (On occasion, the RPO was brought to Paris, and EMI's editors must have had a jolly time assembling master tapes from sessions held in two different London halls and the Salle Wagram in Paris.)

The pre-1950 RPO recordings are the least known, for many of them never reached LP, or even American issue as 78s. Among those recently resurrected (in addition to the Delius material), there are richly played versions of such relative novelties as Debussy's Printemps and Dvořák's Golden Spinning Wheel. In the fall of 1947 Beecham staged a big Richard Strauss festival in London, and brought the aged composer over from his Swiss exile; this yielded a splendid Heldenleben, more tautly played and conducted than the later stereo version, and an impressively propulsive yet monumental performance of the final scene of Elektra, with Erna Schlüter, Ljuba Welitsch, and Paul Schoeffler. (A less satisfactory traversal of the final duet of Ariadne—despite Maria Cebottari's lovely singing, it lacks a strong sense of line—remained unissued until last year.) An unexpected Verdian excursion, the sleepwalking scene from Macbeth, is made enthralling by the hauntingly sculpted accompaniment figures, the eerily vivid articulation of the English horn's sighs, and the worn but expressive singing of Margherita Grandi. Several major projects of this period have been unavailable for years: a Faust in French, a second Messiah, and such smaller delights as the overture to Méhul's Les deux Aveugles de Tolédos. On much of this, the next move is apparently up to RCA.

Aside from the Delius recordings already mentioned, the main source for this phase is the "Musical Biography," which includes the Debussy, Dvořák, and Strauss tone poems, the Macbeth scene, and also two less interesting concerto recordings: Beethoven's Fourth, rather superficially played by Rubinstein, and Heifetz' race through the Mendelssohn concerto, familiar from Seraphim 60162 (where it is coupled with a similarly brittle Mozart Fourth Concerto). The Strauss operatic scenes are on British RCA RL 42821; squeezed onto a single side, the Elektra scene lacks the sonic impact it had on RCA Victor LCT 1135, though the Ariadne sounds better than any underground version.

In his final decade, Beecham recorded at least as much as in the previous four. Much of it is still available, especially the stereo material on Angel, Seraphim, or imported EMI (which offers better pressings at higher prices). Odyssey has not followed up its initial substantial reissue of CBS material, but what is available is mostly desirable. Arabelque promises the Haydn Salomon Symphonies, reissued in two boxes, over the next year. The EMI/World Records series is to continue, though at a slower pace. We may even hope for activity from RCA. But the principal lines of Beecham's "musical biography" are already a good deal clearer, thanks to the centenary reissues that have filled out those earlier decades; there can be no doubt about his standing among the great conductors.
Dream up a stereo test and compare our new STR-V55 receiver work of art with any other receiver you care to hear. Or view.

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

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

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

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

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

Manual tuning lets you approach known frequencies at high speed and then obtains the exact frequency in precise, discrete steps.

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

Our beauty is not only designed for easy viewing, it's coordinated to be proudly displayed. Bright electro-fluorescent digits display frequencies. Bright green LEDs in a five-step array show signal strength. And red LEDs pinpoint your favorite stations at a glance.

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

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

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.
A new stylus (needle) can actually save you money. Even a precision crafted diamond stylus eventually wears out, and a worn or broken stylus tip can damage your records in a single play! Protect your records by checking your stylus at least once a year. Your Shure dealer can inspect it, and if necessary, replace your stylus with a Genuine Shure replacement stylus that will bring your cartridge right back to its original specifications.
Behind the Scenes

You can't tell the players without a program. After all the talk of Simon Schmidt, CBS Masterworks suddenly has a new head, Joseph Dash. Schmidt was released after an eventful six-month reign that saw, among other things, the departure of two veteran Masterworks producers, Andrew Kazdin and Thomas Frost. (More recently, Paul Myers, producer and longtime head of CBS Masterworks International, left to join Decca/London in England.) Dash, in his former post as vice president of business development for CBS Records, was instrumental in setting up the new "Mastersound" audiophile line.

Deutsche Grammophon and Philips also have new heads of their U.S. operations. Alison Ames replaces James Frey, longtime DG vice president who was dismissed on the same day as Schmidt. Ames had been a DG publicist under Frey until 1976 and has since been working for Polygram at its home office in Hamburg. And former Philips publicist Nancy Zannini replaces Scott Mampe, who recently resigned as vice president of that label. Along with Richard Rollefson, new head of London's classical division, Ames and Zannini will report to Guenter Hensler, president of what is now called Polygram Classics.

Composers Recordings has initiated a series of signature editions of works by contemporary composers. The first two issues consist of recoupings of previous CRI releases: No. 1 includes Aaron Copland's Dance Symphony (Japan Philharmonic conducted by Akeo Watanabe) and Piano Sonata (Hilde Somer); No. 2, George Crumb's Eleven Echoes of Autumn (Aeolian Quartet) and Black Angels (New York Quartet). Each edition is limited to 150 numbered copies, autographed by the composer. While they last, the recordings are available by mail from CRI, 170 W. 74th St., New York, N.Y. 10023, as a premium for a tax-deductible donation of $100 or more. Plans for the next issue, still in the formative stage, involve works of Virgil Thomson.

Philips will complete its series of Haydn's Estherhaz operas with L'infedeltà delusa (1773). Antal Dorati conducts the Lausanne Chamber Orchestra and a cast that consists of Claes H. Ahnsjö, Edith Mathis, Michael Devlin, Barbara Hendricks, and Ryszard Karczykowski. Karczykowski came to Dorati's attention in a Zurich performance of Lulu. Apparently completely won over, the conductor promptly engaged him for this project and also plans to use him as soloist in a Detroit Symphony recording of Szymanski's Symphony No. 3 (Song of the Night), probably for Decca/London.

And as if Ryszard Karczykowski weren't mouthful enough, Philips will also present Stefania Toczyńska in the role of Azucena in Colin Davis' Il Trovatore, being recorded this summer. (Television viewers may recall Toczyńska's portrayal of Laura in the San Francisco Opera production of La Gioconda broadcast last September.) Joining her in the cast will be José Carreras, Katia Ricciarelli, and Yuri Masurok.

Grenadilla Records recently recorded the work that won the 1978 Pulitzer Prize for music, Michael Colgrass' Déjà vu. Commissioned by the New York Philharmonic, the work is performed here by the percussion section of the St. Louis Symphony, conducted by Leonard Slatkin.

Hungaroton has for several years been promising a Klemperer Archive series based upon Otto Klemperer's Budapest recordings, 1948-51. The first release, scheduled to arrive by year-end, will feature the Hungarian Radio Symphony in two Bach masterpieces: the Magnificat in D and the Fifth Brandenburg Concerto, the latter with pianist Annie Fischer. Also on Hungaroton's docket for this year are recordings of Goldmark's complete opera Die Königin von Saba, with Veronika Kincses, Magda Kalmár, Klára Takács, Siegfried Jerusalem, Sándor Sólyom Nagy, and Adam Fischer conducting the Hungarian State Opera, and the oratorio version of Haydn's Seven Last Words of Christ, with Kincses, Takács, György Korondi, József Gregor, and János Ferencsik conducting the Hungarian State Orchestra.

The last thing vocalists who have just invested in EMI's "Record of Singing" need is another drain on their finances, but here it is: Euroclass Record Distributors (155 Avenue of the Americas, New York, N.Y. 10013), which imports the British Unicorn label, has begun importing Rubini Records, a veritable feast for the singing buff. Among the first items available is a five-disc set containing tenor Fernando de Lucia's complete Gramophone Company recordings, 1902-09, that has been a decade in the making. (Andrew Porter will supply details and critical comment in a future issue.)

Euroclass, not originally an import operation, was the brainchild of Marcos Klorman, head of Desmar Records. In fact, it grew out of Desmar's near disaster with its 1977 International Piano Archives reissue of performances by the wildly eccentric Ervin Nyiregházi. The label's New York distributor went bankrupt just as that recording became a hit and nearly pulled Desmar down with him. It was then that Klorman decided that small American labels needed a reliable distribution system, and he proceeded to provide it. Euroclass is currently the East Coast distributor for several small companies, including the audiophile labels Telarc and Delos.

Delos, incidentally, which has had great success with its digital recordings of trumpeter Gerard Schwarz, has engaged Schwarz's Los Angeles Chamber Orchestra for a digital recording of Vivaldi's Four Seasons. The violinist will be Elmar Oliveira, 1978 Tchaikovsky Competition winner.

Carlos Kleiber is unusual among today's active conductors in that he seems content to dabble—a little Beethoven, a little Schubert—and collect his raves. And now a little Brahms: With no apparent plans for a complete cycle, he recently recorded the Fourth Symphony for DG with the Vienna Philharmonic.

Also for DG, Martha Argerich and Mstislav Rostropovich, who evidently enjoyed their collaboration in a recording of the Chopin Second and Schumann Piano Concertos, have joined forces again—this time in chamber music. They recently recorded Chopin's Op. 65 Sonata for Cello and Piano and Op. 3 Polonaise and Schumann's Op. 70 Adagio and Allegro (originally written for horn and piano).

Among Sine Qua Non's future plans for its Digitech label are two ambitious projects with the Dallas Symphony: a digital recording of Beethoven's Ninth Symphony, with Eduardo Mata conducting, and a live digital recording of a pops concert conducted by Stanley Black.

After twenty years, ASCAP has a new lyricist as president. Replacing Stanley Adams ("Little Old Lady," "What a Difference a Day Made") is Academy Award winner Hal David ("Raindrops Keep Falling on My Head").
THE VIDEO SOURCE BOOK

Gives you the biggest selection anywhere of first-rate pre-recorded programs, including feature films, tele-entertainment, sports, how-to's, instruction, documentaries — programs on every subject for every age level.

You can find programs to rent or buy for your video player. In The Video Source Book you get:

- 700 pages with over 15,000 video title listings.
- Descriptions, procedures, costs, ratings and awards.
- Distributor names and addresses.
- All available tape/disc formats and uses.
- Index by subject and title.

A National Video Clearinghouse publication.

"The Video Source Book is a wealth of information about a lot of video programs. At the moment it stands as the single biggest video reference book of its kind. It is a valuable video information reference tool and clearly the best of the comprehensive directories we have seen to date."

— Video

ABC Leisure Books
1 Wyeth St., Marion, Ohio 43302

Yes, please send ________ copy(ies) of The Video Source Book @ $24.95 each plus $1.25 for shipping. Residents of OH, NY, and MA add applicable sales tax.

☐ I enclose $ __________________

☐ Charge to ☐ MC or ☐ Visa

Account # __________________________
Expires __________ Interbank __________

Signature ____________________________________________

Name ____________________________________________

Address ____________________________________________

City __________________________ State __________ Zip __________

Allow 4-6 weeks for your book to be mailed.
Bartók's Hard-Won Native Idiom

by Paul Henry Lang

Mercury's reissue of the stage works illustrates the evolution of Bartók's musical language, and DG's Bluebeard adds a fillip.

When Bluebeard's Castle was first performed in 1918, the Budapest audience was taken by surprise—not so much by the dissonant harmonies as by the way the text was sung, with words and music inseparable, the rhythms and the slightest inflections completely fused. Hitherto, Hungarian composers, constrained by the tremendous heritage of centuries of West European (notably German) music, had set even their own language with Western inflections. Liszt did not speak the language of his native land and really belonged in the German orbit. And the "Hungarian manner" in the works of Schubert, Brahms, and Liszt turned out to be of urban and gypsy origin, not true folk music.

The young Bartók started out in the Hungarian vein of Liszt, but an instinct drove him to investigate what he divined to be his real heritage. His folkloristic research in remote villages to which urban culture had not yet penetrated revealed a totally different world and an unexampled melodic and rhythmic treasure, free of Western musical elements. He and his friend Zoltán Kodály preserved this treasure just before it was debased by the upheavals of the first great war and the advent of the radio. The people he met in those villages, and whose songs he recorded with infinite care (using early Edison cylinders), were not the idealized parlor peasants of romanticism, but descendants of the Magyars, who before the medieval migration of peoples lived next to the Huns and Finns on the Asian slopes of the Ural Mountains.

The Hungarian (Magyar) language belongs to the Finno-Ugrian family, altogether different from the large Indo-European groups to which the Romance, Germanic, and Slavic languages belong. Hungarian, like its nearest relative, Finnish, is an agglutinative language: The modifiers are attached to the ends of words, with the stress invariably on the first syllable. Thus, the rhythms and inflections characteristic of the Magyar language, as well as its sound patterns, are wholly different from anything we are used to in English, German, French, or Italian.

Bluebeard cannot be successfully sung in translation, because the foreign words' rhythms and accents are constantly at odds with the music. Even the brave attempt by the fine Walter Berry and Christa Ludwig (London OSA 1158) in phonetically learned Hungarian is not quite satisfactory, because the convergence of words and music is not fully achieved.

The ancient peasant music entered Bartók's bloodstream, impelling him toward an autochthonous musical language—not the exotica found in the many all'ongarese pieces of the nineteenth century, but a new mother tongue. By amalgamating it with the highest of Western musical traditions and techniques, he created one of the most original personal styles in musical history, which unites two contrasting elements: It is overflowing and barbaric-eruptive, with a pagan, visionary imagination that goes back to Asian origins; at the same time, it is severely controlled and organized, remote from all sentimentality, yet filled with humanism.

Bluebeard's Castle employs the parlando-rubato of Hungarian folksong without borrowing melodies; the composer is simply "speaking" his newfound musical tongue. In lieu of any real dramatic action, everything in this one-act opera is symbolic/allegorical. The form is that of a ballad opera—a risky term, given its longstanding association with The Beggar's Opera. Actually constructed as a set of ballads, the whole is nevertheless through-composed. That the individual ballads are composed in highly dramatic recitatives poses no contradiction, since the ballad is a tragedy recited in song. Béla Balázs, the librettist, changed the ancient legend considerably, his dark mysticism lifting the tale into the sphere of love poetry and resignation. The tragedy is that of Bluebeard, not Judith, whom he found "in the night" (which is also the night of his life). The blood she sees everywhere—on the weapons, the jewels, the flowers—is the blood of Bluebeard, who cannot realize his dreams and his passion; eternal darkness descends upon him after she cajoles the keys from him, opens the seventh door, and discovers his past in a vision of the women he loved in the morning and noontime of his life.
The Wooden Prince, a pantomime that followed Bluebeard by a few years, represents a temporary departure from the hard-won personal style of the opera's thirty-year-old composer. His acquaintance with Debussy’s music and the ballet-pantomimes of his fellow “barbaric” East European, Stravinsky, had to be absorbed or overcome. In Bluebeard, Bartók had already outgrown his dependence on Liszt, Strauss, and Wagner, but here they sneak back; The Wooden Prince begins unmistakably with Das Rheingold, while elsewhere the music scintillates in impressionistic colors. The brilliant orchestra (a large one with quadruple woodwinds) at times overwhelms the musical substance (as it often does with Strauss and Ravel, the other master orchestrators), yet the fairy tale is never forgotten, and the score is rich in ravishing dance tunes, exquisitely worked out.

In The Miraculous Mandarin, completed in 1919, the conflict is over, and in this, his second pantomime and last stage work, Bartók’s very own language returns, greatly enhanced and extraordinarily concentrated. The Mandarin is a thriller, a shocker that for a long time was misunderstood and shunned in nearly all opera houses. It is not a decadent instigation to prurient imagination, but the expression of primordial human emotions in the setting of the modern urban world with its crimes and passions. A girl decoys passersby to her rooms where three tramps rob and then throw out first an elderly gentleman, next an innocent boy. But the third visitor, a Chinese Mandarin, is not easy prey. He looks hungrily at the girl, who is terrified. The three ruffians emerge from hiding and rob him but cannot dispatch him. They stab him repeatedly, then hang him; every time he revives and takes after the girl. Finally he catches her, and they embrace passionately, whereupon he falls dead. Despite the realism that had reigned ever since Zola, there was a strain in the age’s psyche, represented in literature by Wedekind, Strindberg, and Lengyel (the librettist of Mandarin), that saw in woman a mystic power, and in this work, to the rampant prudery and suppressed eroticism of the preceding era—a rebellion of the spirit. All the horrors are sublimated in that final passionate embrace of the girl and the dying Mandarin. The music, even without staging, is overwhelming. Here it is cynical, there full of desire, but everywhere fearfully intense to the point of being orgiastic and barbarously powerful.

Mercury’s bonus piece is Bartók’s delightful medley of peasant dance tunes, skillfully and beautifully gathered into a suite—really a large rondo. A personal note: At its first performance in 1923, I played in the orchestra.

Antal Dorati’s performances are variable. The protagonists in Bluebeard (both of whose names are misspelled on the cover) are not well cast. Mihály Székely (Bluebeard) sings well, but is not mysterious and ardent enough. More seriously, Olga Szönyi (Judith) is rather unsteady vocally, gets too excited, and has poor diction. Moreover, the close miking makes her sound shrill, while Székely often fades, as if turning away from the microphone; poor monitoring, but otherwise the sound is good. The bard’s introduction, important for setting the tone and the stage, is muffed by Imre Palló; it calls for an actor who knows how to pace and inflect the words. The orchestra plays very commendably, and Dorati obviously has a firm concept of the work, but he is hampered by his singers. Still, he manages some wondrous moments; the entire climactic scene before the opening of the last door, expressing Bluebeard’s inner struggle and then his resignation, is magnificent. In the pantomimes Dorati comes fully into his own and gives masterly accounts. The Mandarin, especially, is tight, exciting, powerful, and virtuosic: a memorable performance. Halsey Stevens’ and Bernard Jacobson’s notes are excellent.

Deutsche Grammophon’s Bluebeard features an eminent cast. Musically the presentation is respectable; the orchestra is good and responsive (except for the solo oboe, which bleats a little), and Wolfgang Sawallisch’s tempos and dynamics are nicely varied. But rhythmically this able conductor falls behind Dorati; the all-important Hungarian emphasis on the first syllable or beat is not in his bones, and at times it almost seems like an upbeat, especially noticeable whenever the “blood” motif appears. Nor is the flow of the music, though orderly, clean, and logical, as compelling as it should be.

Julia Varady is in her element; her fine, rock-solid voice has a magnificent ring, her legato is suave, and since she is Hungarian, her enunciation is not only correct, but a decisive influence in the creation of her role. Dietrich Fischer-Dieskau was well coached by Varady (his wife), though presumably he had to learn the part of Bluebeard phonetically; unfortunately, his vocal equipment is not on a par with hers. His voice lacks the dark timbre the role requires, and he employs it with curious inconsistency. He often falls back on the intimate phraseology of the Lieder singer; at other times he aims to be a Heldenbariton, for which he does not possess the vocal resources, and is therefore forced to push. Surprisingly, for such a highly literate artist, he makes many elisions and slides, and in the fast parlando he huffs quite a bit. The prologue, which should set the stage, is omitted, so that the music starts in medias res, and the notes are less than skimpy. But the sound is absolutely first-class, and there are many fine moments in this recording; Varady’s performance alone would justify its acquisition.

None of the versions of this opera approaches the qualities of its first recording by Bartók’s son, then a young and talented sonic engineer; though an old mono, its sound is very good.
A Fine Leonore in an Uneven Fidelio

For all its impressive sound and aggressive moments, the first digital opera recording is mostly just bland.

by David Hamilton

The first complete opera recording to use digital mastering technology, this Fidelio from London is also the seventeenth commercially available recording of Beethoven’s opera (counting the first version of 1805, known as Leonore). Although obviously for most of us its ultimate value lies in its qualities as a projection of Beethoven’s musico-dramatic ideas, we are also naturally curious about the potential of the digital technology in dealing with operatic materials. (We should, of course, remember that the full potential will only be realized when we have reached the stage of direct digital playback in the home.)

In this intermediate, partially digital form, at least, the sonic increments are not sensational—but then Beethoven’s is not, in any commonplace sonic sense, a “sensational” score: no glittery percussion, massed brass choirs, or booming bass drums. The characteristics of the digital registration grow on the listener slowly, rather than bashing him over the head. The dynamic range turns out to be very wide: The close of the prisoners’ chorus and the end of the first act are wondrously soft, against a silent background (the surfaces of my set spoke up only rarely), and the ensemble of soloists, chorus, and orchestra in full cry is impossibly clean and solid. (Dolby has accustomed us to quiet music without tape hiss, but who can doubt that we will be even better off to have such silence without the interference, however discreet, of that ingenious device?)

By way of general characterization, I would add that the sound of this Fidelio is more open, spacious, and warm than previous London digital discs I have encountered, while still falling short of the warmth and sweetness of orchestral tone that I recall from the best analog discs—and of the airy clarity that I associate with the best “specialty label” digital sound.

Though Beethoven’s scoring furnishes no “special effects,” details do tell. The timpani are admirably focused, tight in sound, and clearly pitched. The contrabassoon’s presence in the gravedigger’s duet is more than usually palpable, and the withdrawals and returns of the string basses doubling the bottom line are felt to good musical effect; in general, the ease and clarity of the low bass is a plus factor. Precisely how much of this can be attributed to the digital process, I believe, is the freedom from distortion of voices in combination, especially sopranos. Duetting in thirds in their first-act trio with Rocco, or ascending separately to the high B flat at the end of the unshackling ensemble, Hildegard Behrens and Sona Ghazarian sound free and clear. In some other ensemble passages—the dungeon quartet, for example—the voices don’t blend well, but I believe that to be a function of these particular voices, whose failure to blend in the first place is being faithfully reproduced.

And so, inevitably, we come around to the performance that is here “encoded” (an antiseptic word, which I use once in this sense purely for vaccinatory purposes—that is, to excite universal repugnance before it sneaks into common usage). No matter how accurately its sound might be reproduced, an inferior performance of Fidelio is not something most of us will want to hear more than once, and there are several fairly distinguished recordings already extant.

Fidelio is a famously difficult opera to bring off, for the central conflict takes a good while to accumulate, to erupt into Beethovenian musical drama. One school of interpretation (Toscanini is its recorded paragon) seeks to minimize the problem by not dawdling over the early numbers in Singspiel style, and Solti certainly starts off this way: The opening duet of Marzelline and Jaquino is taken at a running clip, and doesn’t wait for the indicated Un poco piu allegro of the coda to go still faster. Marzelline’s aria, though it does not race, is still at times too fast for the orchestra to manage the specified dolce quality. Later, the second tempo of Rocco’s aria is about as fast as is physically feasible.

The other approach to these episodes (personified on discs by Furtwängler) is to let the pieces take their time, to bring out their maximum individuality and character; later will be soon enough for the drama to build, and meanwhile there is depth and richness to be gained. The canon quartet seems particularly to call for this, a piece so transcendentally beautiful that, even in pursuit of some ideal of dramatic pacing, it is not to be hurried through. Here, indeed, Solti pauses—but the result is more diluted than expansive, more stretched than shaped.

And for much of the rest of the opera, this dichotomy persists. Some music is aggressively forced onward. Pizarro’s entrance in the first-act finale is a gabble, and so is the passage in the second-act finale after the entrance of Rocco with Leonore and Florestan. Much more music, taken at perfectly reasonable tempos, just lies there. That wonderful cello line in the Leonore/ Florestan duet, under “Du wieder nun in mei-
nen Armen,” doesn't sing, it meanders meekly. The grand arching phrases of “O Gott! Welch' ein Augenblick!” do not swell and vibrate.

There are dutiful emphases at musically significant points. The deceptive cadence when Pizarro surprises Rocco with a new and unwelcome responsibility (“Morden!”) is properly underlined, not thrown away as by Karajan. In the first finale, Leonore’s phrase “Ich bin es nur noch nicht geahmt” is stressed by tempo and articulation, presumably to mark a modulation that is, I think, no more important than several others not so singled out. The sudden modulation, presumably to mark a modulation in its “Abscheulicher!” recitative, for example, she makes us feel the modulation at “Der spiegelt alte Zeiten wieder” by her coloring and inflection of the note. She copes bravely and successfully with the florid writing of the aria, capping it with a firm high B and a proper appoggiatura on the final “Liebe!” (though abjuring all earlier opportunities for this necessary grammatical nicety). Now and then one fears that she may be driving the voice too hard. Taken all together, this is a performance of uncommon conviction and impact, which somehow adds up to more than the sum of its parts; at the end of the recording, Behrens is what we remember most vividly.

The other satisfactory performance is Hans Sotin’s Rocco; he’s much happier in this part than he was as Bernstein’s Pizarro, for he’s really a bass and his upper extension didn’t stand up well under that kind of punishment. Even so, when Solti’s Pizarro enters, we are likely to think back fondly to Sotin’s performance, for Theo Adam is not in good shape—a destructive wobble all through the voice and ugly sound at every dynamic level.

Peter Hofmann, though he has been singing Wagner parts all over, is not an adequate Florestan; his bright tone has little depth or support, and often manifests an incipient beat. The top B flats of the aria are a real struggle, and even his A wears thin before it’s over. Good intentions are compromised by inadequate technique: Characteristically, his opening “Gott!” is attacked from below, and the subsequent diminuendo is made very unevenly.

Sona Ghazarian is a small-scale Marzelline, who doesn’t bind together a firm line to begin the canon quartet; later, singing out in the ensembles, she fares better. Jaquino has few opportunities to make his presence felt after the opening duet, and David Kuebler is not helped by the hurried tempos there; with a small tone, he sings accurately. As the minister, Gwynne Howell makes a respectable if not distinctive effect.

The fabled chorus and orchestra live up to their reputations, within the limitations of this interpretation—that is, the kind of lift and vigor that Solti has in the past elicited from them has not been consistently demanded on this occasion. The Leonore Overture No. 3 is not played, quite correctly; this makes possible a comfortable division of sides. More or less the usual abridgment of the dialogue is offered, with one conspicuous omission: Not a word is spoken between “Abscheulicher!” and the prisoners’ chorus; there is just a summary in the libretto. (Since the side in question is not overlong, one almost suspects an oversight at the sessions.) Perhaps someday a recording will seriously try to present the full original dialogue; in the meantime, it would be thoughtful if the libretto would print it complete, perhaps indicating in italics what has been omitted. There is, by the way, no attempt to suggest a stage performance in this recording (its source was, of course, a concert version): no marching of soldiers or creaking of cell doors, no elaborate directional blocking of the singers.

Since there has been a good deal of recent activity on the Fidelio reissue front, a brief summary may be in order. DG has brought back Ferenc Fricsay’s taut and exciting, though unevenly sung, Munich version in its Privilege series (2726 088, $13.96); its most serious flaw, destructive of dramatic credibility, is a separate cast of speakers for the dialogue whose voices in no way resemble those of their singing partners, but the work of Dietrich Fischer-Dieskau (Pizarro), Gottlob Frick (Rocco), and Ernst Hafliiger (Florestan) is impressive. Late in his life, Hans Knappertsbusch recorded the opera, also in Munich, and this has now returned in the MCA Westminster series (3-14300, $14.94); despite Sena Juričan’s touching Leonore and the conductor’s noble intentions, this set founders on his slow tempos and on frequent lapses of coordination at musically and dramatically crucial points. Finally, EMI’s Dresden set of the 1805 Leonore has been domestically republished by Arabesque (8043-3L, $21.94)—an enthralling peek into Beethoven’s workshop.

The oldest current versions, Toscanini’s (RCA LM 6025) and Furtwängler’s (Seraphim IC 6022) mono sets, lack the dialogue that is indispensable for a coherent projection of the drama, but both have elements of abiding musical interest, and they are, of course, the prototypes of the opposing interpretative approaches cited earlier. (Also in the historic category is the Metropolitan Opera’s publication of a 1941 broadcast led by Bruno Walter, an item primarily notable for the Leonore of Kirsten Flagstad, then near the top of her form; see HF, July 1979.) Most strongly cast of all recordings is Otto Klemperer’s Angel set (SCL 3625), in which the detailed and warmly human performances of Christa Ludwig (Leonore), Jon Vickers (Florestan), Frick (Rocco), and—on a slightly lower level—Walter Berry (Pizarro) emerge with uncommon vividness before the monumental orchestral conception. Alongside this, five other stereo versions (Maazel, London OSA 1259; Böhm, DG 2709 031; Karajan, Angel SCL 3773; Bernstein, DG 2709 082; and the new Solti) are interpretatively limited in various but tangible ways, and much less evenly cast—indeed, pooling all five might have just yielded two really first-class casts.
More recorders ask for Fuji by name than any other brand.

Recorders are very outspoken in their preference of tapes.

Take video recorders. They insist on Fuji VHS and Beta video-cassettes. Put in anything less and they may give you snow. Washed-out or shifted colors. Or all kinds of distortion.

Unhappy audio recorders without Fuji audiocassettes stubbornly give you less music in return. Plus distortion on loud music. Noise during soft passages. And limited frequency response. Problems our premium FX-I, FX-II and our low-noise FL help you overcome.

Then comes new Fuji Metal Tape. Cassette recorders equipped for metal are all in love with it. Not just because it won't clog heads or jam. But because of its inaudible noise. Greatly expanded dynamic-range. And smooth, ultra-wide response. So watch and listen.

If you see or hear your recorder talk, you'll know what it's asking for. Fuji. The tape that makes it look and sound its best.

**FUJI TAPE**

One brand fits all. Better.

Magnetic Tape Division, Fuji Photo Film U.S.A., Inc.
350 Fifth Avenue, New York, New York 10001 (212) 736-3335

B Paul Jacobs, piano. [Marc J. Aubert and Joanna Nickrenz, prod.] Nonesuch H 71375, $4.96.

BACH: Komm, Gott Schöpfer, heiliger Geist, S. 667; Wachet auf, ruft uns die Stimme, S. 645; Nun komm' der Heiden Heiland, S. 659; Nun freut euch, lieben Christen g'mein, S. 734; Ich ruf' zu dir, Herr Jesu Christ, S. 639; Herr Gott, nun schleuss den Himmel auf, S. 617; Durch Adams Fall ist ganz verderbt, S. 637, 705; In dir ist Freude, S. 615; Jesus Christus, unser Heiland, S. 665. BRAHMS: Op. 122. No. 4. Herzlitz tut mich erfreuen; No. 5. Schmücke dich, o liebe Seele; No. 8. Es ist ein Ros' entsprungen; Nos. 9, 10, Herzlitz tut mich verlangen; No. 11. O Welt, ich muss dich lassen.

Busoni's magnificent re-creation for piano of the Chaconne from Bach's Violin Partita in D minor still makes frequent appearances in recital programs. But it is unusual for an approach to Bach, which was generally far more discreet. In "transcribing" the harpsichord works for piano, he touched up a few passages, added octaves, and altered figuration—all essentially practical devices. In making the organ works available for pianists, his methods fell somewhere between transcription and reinterpretation.

This fascinating record, which gatherers together all the Bach chorale preludes for organ that Busoni transcribed, allows us to hear the variety and mastery of his approach. The notes of In dir ist Freude are literally rendered (except for an extra final cadence) with pounding doubled octaves for the repeated pedal theme, but the spreading of the chords (necessitated by the wide stretches in each hand) turns the clear articulation of the organ's counterpart into a washy, rhapsodic piano blockbuster. So too, Ich ruf' zu dir, though faithfully transcribed, has a quite different mood on the piano, perhaps the result of the expressive interval of a tenth between the start of the melody and the flowing accompaniment, and of the thickened bass chords used to intensify the music's dark, penitential colors. These two preludes are transformed; others, like the familiar Wachet auf and Nun komm' der Heiden Heiland, with its highly decorated cantilena, simply sound slightly different.

Just one of these transcriptions was recorded by Busoni himself: the virtuosic tripping Nun freut euch (released on IPA/Desmar 104). Through the crackle, one can hear a performance of riveting clarity and precision. Paul Jacobs matches Busoni's exuberance but not quite his speed or clarity. Jacobs' previous, much-admired recitals on Nonesuch have been criticized for their washy, rhapsodic piano blockbuster. So here, perhaps by way of reaction, the sound is really rather mushy and ill defined. Herr Gott is drowned in a haze of pedal, and throughout the lovely Brahms preludes that complete the disc, he allows warmth and responsiveness to cloud the music. The playing is always deeply musical, but I am not sure it has been well recorded. (There are some other recommendable but unavailabe recordings of a few of these transcriptions, by Alfred Brendel—unfortunately mixed in with "untranscribed" Bach—and, surprisingly, by Alexis Weissenberg.)

This is an outstandingly interesting and stimulating record, among the last to issue, one sadly presumons, from the departed management of Nonesuch. N.K.


Ton Koopman, Trinity organ of the Benedictine Abbey at Ottobeuren, in southern West Germany. Its lush sonorities—the honeyed tones of the eight-foot principals, the massive richness of the sixteen-foot plenum, the reeds very much a la française—are worlds removed from the snap, crackle, and pop with which so many neobaroque organs offend the ear, and Koopman quite rightly eschews the bubble-and-squeak registrations so widely assumed to be "authentic." The instruments Bach knew best, after all, would have had much in common with Riepp's blend of German and French elements, and there is plenty of evidence that Bach preferred Gravital from his organs. Of Gravital—and, indeed, of sheer charm—the Ottobeuren instrument has an abundance, all captured here with commendable naturalness. S.C.
Busoni, 1918—His arrangements of Bach and Brahms make a fascinating album.

**BARTÓK:** Quartet for Strings, No. 3—See Ravel: Quartet for Strings, in F.

**BARTÓK:** Stage Works; Dance Suite. For a review, see page 59.

**BEETHOVEN:** Fidelio. For a review, see page 61.

**BEETHOVEN:** Quartets for Strings (5).

- New Hungarian Quartet. [Joanna Nickrenz, prod.] Vox SVBX 5113, $13.98 (three discs, manual sequence).


- Cleveland Quartet. [Jay David Saks, prod.] RCA Red Seal, ARL 3-3486, $26.94 (three discs, manual sequence).

  Quartets, Op. 18: No. 1, in F; No. 2, in G; No. 3, in D; No. 4, in C minor; No. 5, in A; No. 6, in B flat.

An earlier Vox Beethoven quartet cycle was divided between two performing groups (the Endres in Op. 18 and the Loewenguth in the balance), and it looks as if the same will hold true for this replacement. The New Hungarians parted company last year after leaving their residency at Oberlin Conservatory.

Their package of the middle quartets features a blend of intelligent musicianship, fastidious technical control, generally agreeable tone (far better nourished than the Loewenguth's quavery insecurity)—with perhaps just a whiff of academia. This is a delicate distinction: the difference between fine points of pacing and emphasis that intensify structure and contour and methodical pauses and hesitations that check the soaring line and arrest emotional impact.

But the New Hungarians, with their careful, conventional approach to pacing, phrasing, and ensemble, at times approach the cut-and-dried. Examples: a little holding back at the end of bar 38 in the first movement of Op. 59, No. 2; the slightly staid tempo for the same quartet's Presto finale; the sedate first movement in Op. 74; and the systematic pacification of silences and buildups that ought to sound feverish and pulse-stirring. (To harp some more on Op. 59/2, the silent measures right at the beginning and the syncopations in the development are perfect cases in point: They sound too placid.) The reading of the C major, Op. 59, No. 3, for some reason transcends these strinctures and is as impressive in sum as the other performances are in part. Repeats are kept to a minimum (although the ensemble at least gives us the scherzo repeats in Op. 74 and the de rigueur double trio in Op. 59/2 that the Budapest chronically and cavalierly ignored).

The Vox pressings are admirably quiet. There is a certain acerbity and artificiality to the sound (similar to some of the Szell/Cleveland recordings for CBS), a combination, I suspect, of the quartet's mania for marcato articulation and a proximate style of mixing and microphone placement; otherwise, tone and balance are good. As a budget edition, these middle quartets are a strong contender, though some may still prefer the less disciplined but more inspirational Seraphim set (SIC 6006) by the original Hungarian Quartet (with the same violinist, Dénes Koromzay).

There are interesting similarities between the New Hungarian and Cleveland Quartets: Both are spiritual descendants of the late 1960s, and in a crucial way, both represent the passing of the torch from one generation to another and from one culture (Mitteleuropa) to another (rural Midwestern America). If the New Hungarians got their infusion of tradition from the veteran violinist, the Clevelanders—all youngsters at the time of their formation—worked at Marlboro with the Schneider brothers and the late Boris Kroyt, both from the Budapest Quartet. This heritage is reflected in the tonal characteristics of the two groups, which (even with the acerbity in the Vox set) are decidedly mellow in coloration compared to, say, the mid-'60s Juilliard or the Yale.

The differences, however, are even more revealing. Although Cleveland cellist Paul Katz provides annotations that are
**Critics' Choice**

The most noteworthy releases reviewed recently


BEAVON: Concerti Grossi after Scarlatti (12).


BERNHARD: Symphony No. 5. Munich, 9500 624, June.


HAYDN: Quartets, Opp. 71 and 74. Amadeus. DG 2709 090 (3), May.

HAYDN: Quartets, Opp. 71 and 74. University, Baldner. COMPOSERS RECORDINGS 9421 (3), July.

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


HAYDN: Quartets. Opp. 71 and 74. The Cleveland achieves elegant proportion, whereas in the sublime Adagio of Op. 18/1, the fortissimos at the end—replete with snipping and bow noises—sound like an onslaught rather than a climax. And in the C minor, Op. 18, No. 4, the vibratos of the four instrumentalists, each slightly divergent, never mesh into the luminous, long-lined arcs that one hears in the interpretations of the Budapest (Odyssey 32 36 0023), Bartók (Hungaroton LPX 11423/5), and Végh (Telefunken 36.35042) Quartets. The performances, in short, are a little scappy, and unless a full quota of repeats is demanded, the new RCA set is outclassed by the three editions cited—and by the Hungarians (Seraphim SIC 6005), the best budget stereo edition. RCA's warm, lifelike reproduction could have more clarity. H.G.

Mozart: Symphonies (11). The CBS (analog) release, for all its blazing but gimmicked sonic brilliance, is artistically uneven. Though Mehta has recorded the Mussorgsky-Ravel Pictures before (with the Los Angeles Philharmonic, London CS 6599, June 1968), his current reading is uncomfortably stiff and literal, revealing no sense of real personal involvement. It presents no challenge to the preferred earlier versions—mine is the 1974 Mackerras, since I have the quad reel-tape edition, no longer available.

Mehta's earlier La Valse (also with the Los Angeles Philharmonic, London CS 6698, July 1971) was more successful than his earlier Pictures, and the new one is better still, not only in its sonic incandescence, but also more profound.
but also in its intoxicating sensuality and high-voltage (if sometimes overvehement) dramatic excitement. Except for those who demand a more idiomatically Gallic reading (say, the 1976 Martinon), there is lively competition here for the 1975 Skrowaczewski and the other best recent versions. R.D.D.

**BRAHMS**: Chorale Preludes (6)—See Bach: Chorale Preludes.

**BRAHMS**: Piano Works.

**BR** Walter Gieseking, piano. Seraphim IB 6117, $9.96 (two discs, mono) [from Angel 35027/8*, 1953].


**BR** Leon Fleisher, piano, Odyssey Y 39520, $4.98 (mono) [from Epic LC 3331, 1956].


Rudolf Serkin, piano. [Judith Sherman, prod.] CBS Masterworks M 35177, $8.98. Tape: MT 35177, $8.98 (cassette).

Walter Gieseking is remembered as a classicist par excellence, but his actual concert repertoire took him as far afield as the Petrassi concerto and the Second and Third Concertos of Rachmaninoff. He played quite a bit of Brahms, too. Privately issued discs preserve rather curious interpretations of the F minor Sonata and D minor Concerto; and the three Op. 117 Intermezzi missing from the late piano works on these Seraphim discs were once available on Columbia ML 4540.

To say that Gieseking was an experienced Brahmsian is not to say that he was always a successful one. There are, to be sure, many admirable qualities in these performances: His patrician tone color and Teutonic structural rigor often prove advantageous in luminous, singing accounts of such predominantly lyrical works as Op. 116, No. 4, Op. 118, No. 6, and Op. 119, No. 1; and his celebrated mercurial finesse benefits the fleet, whimsical Capriccio, Op. 76, No. 2 (though, strangely, not the spiritually akin Op. 119, No. 3, an unsurprising and sober performance). The three rhapsodies are treated with powerful angularity—blocked out with incontestable, granitic logic.

But there are problems, too. Gieseking seems willfully flippant and insensitive to some of Brahms's rhetorical gestures and melodic crossings. In Op. 118, No. 1, for instance, he seems curiously unaware that the melodic line of the opening phrase shifts from right to left hand on its final note, which, consequently, fails to cut through the morass of accompanimental detail. And in the same intermezzo, his unwillingness to yield even slightly has a constraining effect on the music's sweep. Moreover, there are times when he appears to be trying too hard to negate his reputation as a pretty miniaturist: The brusque accents are all to the good, but the occasional technical slovenliness and the figurations rattled off without sufficient accentuation make the whole seem perfunctory and hastily considered (Schnabelian sloppiness without Schnabelian humanity).

This may be a minority report, for many listeners—both then and now—have admired these performances. But I prefer Kempff's accounts and await their reissue on DG's Privilege label, long overdue. EMI's mono sound, which has always seemed a trifle bass-heavy, sounds more impressive on today's wide-range equipment; the boom can be adjusted for, though the tone thins out and loses color in the highest reaches. Seraphim's crackly, swishy surfaces unfortunately do not reflect the improvement noted recently on full-priced Angel releases.

I have been pleading for reissue of some of Leon Fleisher's more representative readings for a long time, and this Brahms coupling was high on my list. Alas, the sound of the Odyssey reprint has considerably dampened my enthusiasm. Comparison with my original Epic pressing (which has remained in pretty fair condition despite years of use) is revealing. Its style of production is typical of American piano recording during the mid-Fifties "hi-fi" craze, presumably with treble-emphasizing microphones placed close to the instrument in a fairly dead studio. The original recording was undeniably harsh and unalluring, but it did have an impressive degree of truthful impact that has been curtailed in this attempt at refinement. The remedy is far worse than the malady, making Fleisher's unusual architecture seem almost trite and ordinary. The erstwhile force of Variation No. 4's octaves has been reduced to a tepid tempest, and the "music box" No. 22 ("Alla Musette") has never sounded more like a celesta. The performances themselves are wonderful, of course, but the reissue is a classic, and dismal, demonstration of how to vitiate and emasculate a sublime musical experience through misguided equalization.

Credit Odyssey for correcting the double repeat in the first half of No. 3 (though this may have been done in some later Epic pressings). Alvin Bauman's excellent annotations have been replaced by a nonsensical acrostic.

Fleisher and Rudolf Serkin have always seemed Brahmsians of similar temperament: Both favor a taut, kinetic line over comfortable mass; both stress the classical rather than the Romantic side of this composer; both employ a vibrant but austere palette. Yet since Fleisher recorded the *Handel Variations* in his twenties and Serkin is now in his seventies, the results embody the philosophies of different generations. Serkin is more genial and reflective—not merely in comparison with Fleisher's brisker, more tightly coiled and...
Schubert's Unfinished Symphonies in Finished Performances

by Harris Goldsmith

Each of these releases deserves an honored position in the Schubert symphony discography, but pride of place goes to a long overdue re-recording of the E major in Felix Weingartner's completion. With some license, one might quip that Schubert's first six symphonies (composed between 1813 and 1818) are products of his boy-soprano days and that this uncompleted essay of 1821 (a year before The Unfinished, D. 759) coincides with his compositional change of voice. Stylistically, it is the crucial evolutionary link between the frolicsome "little" C major and the sublime B minor and "great" C major (of 1825-26).

Schubert, having fully scored the magnificent first-movement introduction and exposition of the principal subject, left the symphony in draft form, its progress completely mapped out but its instrumentation and countersubjects only hinted at. There have been at least three attempts to complete the score, the earliest (in 1883) by John Francis Barnett, the most recent by Brian Newbould (last year). As heard in Weingartner's 1934 version, the music vacillates between Rossinian brio (particularly in the last movement) and typically "mature" Schubert. (Is there anything more characteristic of its composer than the heavenly melody of the slow movement?) In the old Vanguard recording of 1952, the bright, reedy orchestral sound uncomfortably suggested Berlioz' timbres; the new Spectrum/VEB Deutscher Schallplatten production is inordinately Schubertian. Heinz Rögner, cond. SPECTRUM SR 116, $4.98 (cassette).

Each of these releases deserves an honored position in the Schubert symphony discography, but pride of place goes to a long overdue re-recording of the E major in Felix Weingartner's completion. With some license, one might quip that Schubert's first six symphonies (composed between 1813 and 1818) are products of his boy-soprano days and that this uncompleted essay of 1821 (a year before The Unfinished, D. 759) coincides with his compositional change of voice. Stylistically, it is the crucial evolutionary link between the frolicsome "little" C major and the sublime B minor and "great" C major (of 1825-26).

Schubert, having fully scored the magnificent first-movement introduction and exposition of the principal subject, left the symphony in draft form, its progress completely mapped out but its instrumentation and countersubjects only hinted at. There have been at least three attempts to complete the score, the earliest (in 1883) by John Francis Barnett, the most recent by Brian Newbould (last year). As heard in Weingartner's 1934 version, the music vacillates between Rossinian brio (particularly in the last movement) and typically "mature" Schubert. (Is there anything more characteristic of its composer than the heavenly melody of the slow movement?) In the old Vanguard recording of 1952, the bright, reedy orchestral sound uncomfortably suggested Berlioz' timbres; the new Spectrum/VEB Deutscher Schallplatten production is incomparably more polished and sophisticated. The pressing is absolutely first-class, and at its budget price, this release is simply not to be missed.

Carlos Kleiber brings a vernal freshness to the Third and Unfinished Symphonies. This D major has greater repose than did his recent Chicago Symphony broadcast performance. The Allegretto is surprisingly fast (though, incidentally, an old Erich Kleiber performance with the NBC Symphony offered similarly unorthodox tempos), and some may find the detached phrasing in the first-movement subsidiary theme and third-movement trio annoyingly willful. The taut propulsion and delicacy are quite wonderful, however, and the motifive detail of the sprinting finale makes me want to hear this conductor in the "great" C major. His Unfinished is full of enlivening energy; he seems to have rethought every detail and phrase without sacrificing power or momentum. Some of his controlled shaping verges on the finicky, and I continue to question the B natural—which also appears in the Szell and Haitink performances—in the second bassoon part at bars 109 (exposition) and 327 (recapitulation) of the first movement. But on the whole, this is rarefied music-making. The first-movement repeat is observed.

A rehearing of Carlo Maria Giulini's 1961 Philharmonia Unfinished confirms its interpretive superiority to his later Chicago account (DG 2531 047). It has greater litheness, vigor, and urgency. In its silken sonority, comfortably consistent tempos, and searching lyricism, the reading comes remarkably close to the beautiful Benjamin Britten performance on London CS 6741 (although Britten—like Giulini on DG—includes the first-movement repeat, omitted here). The overside Brahms is equally memorable. Giulini gives a violinist's-eye view of the wonderful variations, stressing the mellow aspects of the instrumentation in a reflectively autumnal, beautifully paced reading. Seraphim's mastering, though less luminous than the British pressing on HMV Concert Classics 5XL 30278, is better than its norm, and surfaces are reasonably quiet. This is vintage Giulini.

B Berlin Radio Symphony Orchestra, Heinz Rögner, cond. SPECTRUM SR 116, $4.50. Tape: SC 216, $4.50 (cassette). (Add $1.50 for shipping; Spectrum, Harriman, N.Y. 10926.)

SCHUBERT: Symphonies: No. 3, in D, D. 200; No. 8, in B minor, D. 759 (Unfinished).


B Philharmonia Orchestra, Carlo Maria Giulini, cond. [Walter Legge, prod.] SERAPHIM S 60335, $4.98. Tape: 4XG 60335, $4.98 (cassette).
ANNOUNCING . . .
THE COMPLETE INDEX TO
HIGH FIDELITY'S
TEST REPORTS, 1952-1979

- Lists every one of the more than 1,800 audio components — receivers, speakers, amplifiers, turntables, cartridges, cassette and open reel decks, headphones, microphones, accessories — reported upon in depth in High Fidelity magazine over the past three decades.
- Arranged alphabetically by component type and manufacturer both. The entries cite model number and the specific issue in which the report appeared.
- In addition, the index contains instructions on how to get the complete text of any test report that ever appeared in the pages of High Fidelity, where to order back issues or reprints of test reports.

WAYS YOU CAN USE THIS INDEX:

- For new equipment shoppers; how to find out if High Fidelity has tested that item you are interested in and, if so, how to obtain a copy of this report to learn how the model stacks up in High Fidelity's expert judgment.
- For second-hand equipment shoppers, as a guide to learning more about specific models of used equipment you are considering.
- For obtaining information on the equipment you already own: High Fidelity's editors point to ways you can improve performance, make the most of switching possibilities, avoid damage to equipment etc.
- For access to the widest possible range of information on high fidelity equipment past and present ever assembled.

Order now—a limited supply will be printed!

High Fidelity's Music Listener's Book Service 1 Wyeth Street, Marion, Ohio 43302

Please send ___ copy(ies) of The Complete Index to High Fidelity's Test Reports, 1952-1979 @ $4.95 each plus $1.00 for shipping and handling. Residents of OH, NY and MA, add applicable sales tax.

___ I enclose $ ___ Charge to: ___ Visa ___ Master Charge. 1021

Account # _____________________________ Card expires _____________________________

Interbank _____________________________

Signature _____________________________

Name _____________________________

Address _____________________________

City _____________________________ State _____________________________ Zip

Please allow 4 to 6 weeks for your order to be mailed.
impersonal reading, but also, if memory serves, in relation to the tauter, less yielding account he himself gave some fifteen years ago. On the other hand, when Fleisher played the variations in 1963 (some eight years after his recorded performance), this version was more expansive and subjective—already more than halfway down the path leading to the new Serkin recording.

While Serkin's reading may lack some of Fleisher's fearless technical bravura and sureness of attack, he nevertheless provides ample virtuosity. (This is pleasant to report in light of his Carnegie Hall performance last year, where many left-hand details were compromised or simply missing.) And the new recording abounds in felicitous refinements expounded with patient, loving care. The octaves of Variation No. 4 sound as vigorous as in Fleisher's original pressing, and the buildup from variation to variation is gauged with masterly insight and judgment. No. 4 sound as vigorous as in Fleisher’s original pressing, and the buildup from variation to variation is gauged with masterly insight and judgment. The culminating fugal passage is wonder-fully imposing, with an almost orchestral discipline. The F minor Intermezzo grips the ear with a sense of the piece's form and range.

Serkin's Op. 119 is equally persuasive. The B minor Intermezzo, though a trifle severe at first, ultimately delights with its gigantic ruminations. The color is all there but subordinate to structure and discipline. The E minor Intermezzo grips the listener in this arching performance. (Its maggiore middle section is particularly valedictory.) Serkin's benignly serious approach to the whimsical C major Intermezzo is, of course, utterly different from Dame Myra Hess's celebrated version but no less unique. (He certainly makes more sense of the piece than did Gieseking!) And the flat E Rhapsody rivals any for stark power, surpassing even the Gieseking for its subtly varied rhythmic impulse. This is a disc to cherish.

The sound, like that of Serkin's recent Schubert D. 935 Impromptus (M 35178, July), has a mellowness and solidity that make it quite special. The pressing, however, is mediocre. H.G.


Comparison—same coupling:
Pears, Tuckwell, Britten Lon. OS 26161

So much of Benjamin Britten's vocal music was specifically tailored to the voice and technique of Peter Pears that doubts have now and then been raised about its survival when Pears is no longer available to perform it. Such fears are surely groundless, for the soundness of the musical fabric and the vividness of Britten's response to words guarantee continuing interest, not only on the part of listeners but also from performers in search of rewarding challenges. Consider a similar case, Kurt Weill's songs composed for Lotte Lenya: In recent years, singers as various as Martha Schlamme, Meryl Streep, and Teresa Stratas have come forth with convincing interpretations that are yet quite independent of Lenya's.

Only one such nonimitative Britten interpretation has so far become widely known, Jon Vickers' portrayal of Peter Grimes: To this category Robert Tear's performances do not belong, for both vocally and interpretively they are obviously directly modeled on those of Pears. In the context of a concert, this might well not trouble us; lacking the original, we would probably feel fortunate to hear such a competent and sincere carbon copy.

On records, however, a carbon copy is precisely what we do not need, for in that medium Pears himself continues, now and forever, to sing these pieces. Of the Serenade, in fact, he made three different recordings: The first, conducted by the composer in 1944–45, was recently reissued in Great Britain (Decca Eclipse ECM 814, coupled with a contemporaneous recording of Vaughan Williams' On Wenlock Edge), while the second, conducted by Eugene Goossens in 1953, used to be available on London. Dennis Brain, the horn soloist in both, was succeeded by Barry Tuckwell in the third, still current stereo version of 1963. This trio of performances, each impressive in its own way, constitutes moving evidence of Pears's ability to grow and change as an artist; as the youthful sweetness of the first version fades from the voice, the resourceful, inventive, and subtle use of phrasing, diction, attack, and articulation increases.

Although Brain's playing, like Pears's singing, seems unique and incomparable, the third of these recordings does show us a different and independent perfection. Tuckwell's darker, fatter tone colors the piece quite differently; one might find Brain's slimmer sound more appropriate in the nimble "Hymn," but Tuckwell's thrilling forced attack on the climactic notes of the "Elegy" is a powerful and creative contribution. It is the absence of this kind of imagination that makes Tear's recording redundant.

In Les Illuminations his singing is still more problematic, for much of the writing lies at the top of the staff, around the break, where he is particularly uncomfortable, and the climaxes are achieved at the cost of much strangulated tone. (Even Pears finds this piece, originally conceived for soprano, vocally awkward, but in his final recording he produced brilliant and expressively valid solutions to its problems.) The playing of the two orchestras is proficient if bland—there's little of the requisite bite in the Serenade's "Dirge"—and Dale Clevenger, a shade stiff in the "Prologue," plays quite handsomely; though Giulini has evidently rehearsed these performances well, I have little sense of his presence in the recording.

DG has contributed translucent sound, clean surfaces, texts and translations (including Tennyson in French and German), and an interesting historical note by John Evans. D.H.

DEBUSSY: Images for Orchestra; Prelude à l'après-midi d'un faune—See Raven: Daphnis et Chloé.


Pour le piano; Estampes; L'Isle joyeuse; Preludes, Book I: No. 10, La Cathédrale engloutie.

CAROL ROSENBERGER: Piano Recital.

Carol Rosenberger, piano. [Amelia S. Haygood, prod.] Delos DMS 3006, $17.98 (Soundstream digital recording; distributed by Supersounds Ltd., 2210 Wilshire Blvd., Suite 315, Santa Monica, Calif. 90403).

DEBUSSY: Preludes, Book I: No. 10,
La Cathédrale engloutie, Book II: No. 8; Ondine. Estampes: No. 3; Jardins sous la pluie. Images. Book I: No. 1; Reflets dans l’eau; Book II: No. 3; Poissons d’or. RAVEL: Jeux d’eau; Gaspard de la nuit; Ondine. LISZT: Années de pêlerinage, Third Year: Les Jeux d’eaux à la Villa d’Este. GRIFFES: Four Roman Sketches: No. 3; The Fountain of Acqua Paolo.

DEBUSSY: Preludes, Books I-II.
Ernest Ulmer, piano. [Jane Courtland Welton, prod.] Proton Records PR 151/2, $15.96 (two discs, manual sequence) (Proton Records, 970 Bel Air Rd., Los Angeles, Calif. 90024).

DEBUSSY: Preludes, Book II.
Livia Rev, piano. [Ted Perry and Martin Compton, prod.] SAGA 5442, $8.98 (distributed by Centaur Records, Inc., P.O. Box 23764, Baton Rouge, La. 70893).

DEBUSSY: Piano Works, Vol. 3.
Livia Rev, piano. [Martin Compton, prod.] SAGA 5463, $17.96 (two discs).

Suite bergamasque; Masques; L’Isle joyeuse; Images (1894); Images, Books I-II; Réverie; Pour le piano; Page d’album; La plus que lente; Elegie; Estampes.

RAVEL: Piano Works.
Paul Badura-Skoda, piano. MUSICAL HERITAGE SOCIETY MHS 4148, $6.95 ($4.45 to members). (Add $1.25 for shipping; Musical Heritage Society, 14 Park Rd., Tinton Falls, N.J. 07724.)

Jeux d’eau; Sonatine; Menuet sur le nom “Haydn”; Prélude; Gaspard de la nuit.

All of this music is unusually reliant upon attractive sound (though structure and emotional range are important too, of course), and all of these releases are well served by the engineers.

The plump bass and opulent resonance are particularly beneficial to Carol Rosenberger’s honestly played anthology of “Water Music.” Her Bösendorfer Imperial grand could easily sound soggy and amorphous, as in Paul Jacobs’ recent edition of the Debussy preludes on a similar instrument, more closely miked (Nonesuch H 73031). But here the weight and sheen add a halo that elevates Rosenberger’s tasteful, albeit conventional, pianism.

Her interpretations are unexceptionable; she lets the music speak for itself, with a welcome absence of “personality.” The Ravel Jeux d’eau and “Ondine” from Gaspard de la nuit are admirable for their brisk pacing and cohesive line, and the Debussy Cathédrale engloutie unfolds with needed breadth. More attention to spacing and articulation would have added a degree of authority to these attractively facile, petuous readings. (The toccatalike figurations of Jardins sous la pluie are a bit swamped—overpedalled perhaps?) But on the whole, Rosenberger is far more impres-
tion work on Beveridge Webster’s complete recording of Debussy piano music. (7111/5).

Ernest Ulmer’s preludes are likewise enhanced by the clearly etched timbre of his recorded sound. The cameolike clarity is immediately evident in the Dansesuses de Delphes, where a taut line keeps the chords from sounding podgy. Ulmer has musicianly ideas about all of these preludes, but he is particularly impressive in such works as La Danse de Puck (Book 1) and Les Fées sont d’exquisites dansesuses, Bruyères, and Ondine (Book II), where his cultivated, delicately understated rubato brings out the whimsy superbly. On the other hand, a few of the more tempestuous pieces—Le Vent dans la plaine and, even more so, Ce qu’a vu le vent d’ouest (both from Book I)—are a mite too deliberate in tempo and reticent in mood to convey the necessary ferocity. But Ulmer conjures a fine glitter for the culminating passage.

Livia Rev’s volume of preludes complements her earlier Book 1 (Saga 5391, February). Her version shares several features with Ulmer’s—notably, the impressively rhetorical treatment of the habanera-like La puerta del vino and the satirical General Lavine—eucenic and Hommage à S. Pickwick, Esq., P.P.M.P.C. Saga’s piano tone is more massive and diffuse than the compact (though amply resonant) sound Ulmer receives, and this lends an expansive, Central European weight to Rev’s readings, without in any way robbing them of poetic delicacy.

Her two-disc anthology is, if anything, even more desirable. She is masterly at evoking the tonal magic of such early works as the Suite bergamasque Prelude and that turn-of-the-century quasi-music-hall delight, La plus que lente. Both of these—and the very similar but less familiar Page d’album—are utterly seductive, set forth with limpid elasticity. The climax of L’Île joyeuse is a trifle comfortable—one wants to say “Brahmsian”—in Rev’s sane, classically ordered account, but that is the sole disappointment in a roster of imposing performances. The second of the 1894 Images is omitted, since it is an earlier version of the Pour le piano Sarabande (which appears on the same side); the juxtaposition might have been more interesting than redundant, but one cannot fault Saga’s generosity. (The timings of the four sides are 29:05, 27:27, 22:59, and 29:15.) I eagerly await completion of what is obviously destined to be a superlative integral edition of Debussy’s piano music.

The seemingly unlikely combination of Paul Badura-Skoda and Ravel prodded me into recalling an excellent concert performance of Gaspard by this pianist some twenty-five years ago. J’eux d’eau is a shade prosaic and sober, but the Sonatine and the two short pieces thrive in his sedate, slightly severe approach. As for Gaspard, the memory of that ancient account is enhanced by the reading at hand: Articulation is crystal-clear, and tempo relationships are admirably drawn. There is also plenty of sonorous color, even if the ultimate bravura of Argerich (DG 2530 540) and De Larrocha (Columbia M 30115) is never suggested. In its scrupulously lyrical, detailed manner, Badura-Skoda’s Ravel is not unlike that of Emanuel Ax (RCA ARL 1-2530). H.G.

DUKE: Songs.
Carole Bogard, soprano; John Duke, piano. CAMBRIDGE CRS 2776, $6.98.
Five Songs; Stopping by Woods on a Snowy Evening; Six Poems by Emily Dickinson; Four Poems by Emily Dickinson; Four Chinese Love Lyrics; Four Poems by e. e. cummings.

The art song is pretty much out of fashion these days. Even Ned Rorem is concentrating more and more on purely instrumental music, and Samuel Barber hasn’t enchanted us with a song cycle for a long time. But a few excellent composers still find the genre congenial, and among the best of them is John Duke, who last year celebrated his eightieth birthday.

Duke has been composing steadily since 1920, and he has turned out well over two hundred songs. Not surprisingly, he uses a very conservative harmonic palette, little more advanced than that of Brahms. But he has a fine ear for the nuances of English poetry, and his songs are always tasteful and singable, and occasionally quite eloquent and touching.

The twenty-four songs here, sung with exquisite sensibility by Carole Bogard, were composed between 1949 and 1975 and are characteristically attractive. Even when listened to seriatim (as the composer never intended), they are sufficiently varied in mood so as not to pall. Bogard’s excellent diction makes the lack of printed texts acceptable, and Duke’s accompaniments—he is a pianist by profession—show that age has not yet affected his technique.

Altogether, the record is an excellent introduction to the music of a neglected composer. If tonality continues to remain stylish, his time should come. I.L.

HANDEL: Ariodante.
CAST: Ginevra Edith Mathis (s)
Dalinda: Norma Burrows (s)
Ariodante: Janet Baker (ms)
Polinesso: James Bowman (ct)
Lurcanio: David Rendall (t)
Odoardo: Alexander Oliver (t)
King of Scotland: Samuel Ramey (bs)


The problem of the "correct" and "historically authentic" performance of so-called old music agitates musicians, scholars, and critics. It is reasonably clear that the performance practice of such music as it has existed since the Romantic era is on the way out, but the alternative is unclear, because there is not—and cannot be—consensus on what should be the norm. Yet though the range of opinions is considerable and acrimonious confrontations are rife, the relationship even between the two extremes is really complementary rather than adversary. Our traditional way of dealing with music anadating the mid-nineteenth century needs a corrective, but the revisionists also require revision; their rigid historicism becomes increasingly incongruent with acoustical, technical, and aesthetic developments that cannot be ignored without paying a high price in enjoyment.

This recording of one of Handel's greatest operas achieves a remarkable reconciliation. Raymond Leppard, though at times guilty of meddling with the scores of long-departed composers, does not here go beyond an acceptable degree of editing—some of it unavoidable in baroque opera. Since he is a first-class musician and conductor, presiding over an excellent chamber orchestra and an exceptional cast, the felicitous results should still antiquarian objections. His orchestra uses modern instruments thoroughly familiar to the players, and most of the mannerisms of both old and new performance styles are avoided; everything is expressive, as is obviously required by this deeply felt music; the singers, well trained in the style, are given their head, while the orchestra is handled with the utmost care and delicacy. Leppard does not accompany in the pusillanimous way of the understaffed "historical" ensembles playing on "original" instruments; the orchestra, neither servile nor overbearing, always maintains the proper relationship with the voices, enabling us to perceive not only its supporting function, but also its intimate role in the unfolding drama.

Further to the good, Leppard does not use the concerto grosso arrangement, necessary in Handel's day because the infrequent ripieno players could not be entrusted with the more delicate and technically difficult aria accompaniments. The change from the cautiously thin concertino to the solid sound of the ritornels is always a bit unsettling, even in recordings where the sound can be doctored. Leppard has sufficient control over his excellent players to use the entire string body throughout, the result being a rounded tone with depth even in the pianissimos. Despite the known fact that before the time of Spohr, Spontini, and Weber there was no baton-wielding conductor (a practice the historicists follow religiously), it becomes increasingly evident that a performance led by a competent conductor is infinitely preferable to the maestro al cembalo system.

The use of modern instruments instead of old or reconstructed ones is admittedly open to debate. Period instruments can be very attractive in certain intimate genres in auditoriums of modest size and on recordings; but in large works, especially dramatic ones, such performances leave one with a feeling of insufficiency—if not of being downright cheated, as in a recent performance at a Danish festival of Mozart's Don Giovanni, with the dull pewter sound of a feeble "original" orchestra. Leppard's orchestra certainly does not sound like Handel's, but neither does the outstanding mezzo who sings the title role, sound like the castrato she replaces. To duplicate that orchestra's sound, it is not enough to reconstruct baroque violins or oboes; it would also be necessary to reproduce the manner in which they were played, meaning that our instrumentalists would have to unlearn their own technique and acquire one that is in any case conjectural. Many numbers in Ariodante could not be played acceptably on old instruments by our musicians and certainly were not executed entirely satisfactorily in Handel's time either. (The great composers are always ahead of their time.) But here they have a beguiling beauty and expressiveness.

On the other hand, this account eschews the decorous tone that until recently prevailed in performances of baroque opera—notably of Handel's, because of the ever present shadow of the oratorios. Everything is alive and straightforward, there are no suffocating allargados, and tempos are invigorating. Leppard, though also a musicologist, shuns the silly embellishments that Bonyng and his coreligionists force upon the singers; he does (as he should) embellish the da capos, but with taste and restraint, so that the melodic line is never compromised. The continuo is excellent—fully audible and always there when needed yet always aware of its true function as an accompaniment, never compromised. The adagios are invigorating, the tempos are never too slow or too fast, the whole achievement is a thing of beauty and expressiveness.

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

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

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

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

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

Watts products are distributed exclusively in the U.S. by: Empire Scientific Corp., Garden City, NY 11530

Circle 10 on Reader-Service Card
evaluate personalities. Handel responded with plots, a believable story, and well-defined characters. Composed in 1735, Ariodante was a departure from the older style, no doubt reflecting the change he sensed while in Italy recruiting singers.

Besides the neo-Neapolitan influence, there is also a French hue, owing partly to the participation of a real chorus as in the tragédie lyrique, partly to the charming dances composed for the French troupe of dancers at Covent Garden. Indeed, Ariodante and Alcina, a sister work, are often called Handel's "dance operas." The change in style is apparent in the absence of concertante bravura arias (there is only a brief number with violin solo); instead, Handel uses more duets, accompanied recitatives, and a chorus that has a dramatic role. The introductory ritornels are elaborate, and some, like the wonderful one that opens the second act, are real genre pieces. Throughout the opera the music cascades like a fountain, ravishing melody after melody, and the recitatives are genuinely dramatic.

To present this magnificent work, a bevy of outstanding singers must be employed. Handel, like Racine, was partial to bevy of outstanding singers must be employed. Handel, like Racine, was partial to those splendidly powerful women who dominate plot and action. In this performance, besides Handel's two female roles, we encounter a third, unscheduled woman: Janet Baker takes over the male part of Ariodante, composed for an alto castrato, and gives a performance of such strength and dramatic verisimilitude that we forget the switch. She is a most accomplished vocal artist, with an infinite range of expressive nuances and vocal color; her forensic savoir faire could be envied by any of the prima donnas now in favor. She is a master of subtle echoing and blending of line and color, exuding a medley of musical fragrances, but her great voice can also cut deep into our sensibilities. Some of her arias ("O, felice mio core," for one) are triumphs of sensitive artistry, with sentences as light as kisses, minutely coordinated with the accompaniment. (Incidentally, these triumphs could not have been achieved without a good operatic conductor officiating; the orchestra's part is so refined and sophisticated that one slip would destroy the mood.) Then again, in "Numi! Lasciate mi vivere," one of Handel's somber, weighty pieces, she darkens her voice to the color of chocolate, only to burst out with heroic and ample force.

Edith Mathis (Ginevra) has a powerful voice, which she uses tellingly. She is a passionate woman, a dramatic soprano who can also sing lyrically. Occasionally her fervor makes the voice a little unstable, but most of the time it soars imperiously, and her recitatives are true dramatic narration, not perfunctory rhetoric; only her trills leave something to be desired. Norma Burrowes (Dalinda) is simply delightful with her fresh, absolutely secure, seemingly light soubrette voice, yet she can match anyone in dramatic intensity and power, and her sensitive accentuation of single notes or words in the recitatives is exemplary. All three women take the coloratura in stride.

Tenor David Rendall (Ariodante's brother) does not have a sensuous voice and he pines a little, but he sings well, articulates tastefully, and complements the ensemble satisfactorily. Samuel Ramey (the King) is admirable and gloriously on pitch (not always the case with basses); his legato is worthy of the King's dignity, his recitatives are spontaneous yet judiciously paced, and he can vocalize like a soprano. Alexander Oliver, in the small role of Odoardo, is quite satisfactory.

Which brings us to Polinesso, the archvillain and intriguer, sung by counter-tenor James Bowman. Among these fine singers with warm, ringing, and flexible voices, he offers such a startling contrast that after a while I had to skip his part as constituting what lawyers call "cruel and unusual punishment." He is a good technician and an earnest artist, but he suffers to a pronounced degree from the typical shortcomings of countertenors. He does not produce a musical sound; the hooting and the bland off-white color of the voice represent a caricature of bel canto singing. Nor can he sing the recitatives properly, for he cannot summon those delicate inflections that give life to the "enhanced speech." A good mezzo would have been much preferable for the part; not only is Bowman's nondescript and unformorable voice pitted against the other, natural, voices, but the part involves duets, where the joining of two mutually incompatible voices is really grotesque. An extraordinarily beautiful performance is thus severely flawed by this surrender to historical fad.

The orchestral playing is superb, airy, and pointed. In the aria accompaniments the basses use bow strokes of a mere half-inch; the two horns and the solo
The inspiration for *Gilgamesh* is both curious and worthy. The work is dedicated to Maja Sacher, wife of the Swiss conductor Bohuslav Martinů, who prided himself on being "in essence . . . a naive, simpleton," no slave to rationality, was immediately taken with the mythic saga of love, friendship, and death. He fashioned a three-part abstraction of the original tale out of R. Campbell Thompson's English translation, then set Ferdinand Pujman's loose Czech adaptation of this abridgment to music. Through all this shortening and translation, *Gilgamesh* naturally strayed from his prehistoric roots and lost depth, so that what remains is a very slight sketch practically devoid of personality. The blunt presentation of ideas in human forms and voices could have worked, perhaps, under better circumstances, but one senses that Martinů himself was intimidated by the gigantic proportions of his task.

So the most convincing music comes in the seduction scene, in which Gilgamesh's naive friend Enkidu discovers that by looking upon woman (actually, doing a good deal more than just looking), he causes his herd to flee. Yes, it sounds ridiculous in synopsis, but it doesn't take on much more meaning in Martinů's version than it does in mine. At least the unveiling of the female body is accompanied by music with harmonic and rhythmic verve. Elsewhere, in the less sexy, loftier scenes, the music is a watery reminder of Janáček, Off, and especially Stravinsky in *The Wedding*. (The last comes to mind not just for the heavy use of piano and percussion, but also for the vocal lines, though Martinů had nowhere near the understanding of the human voice that Stravinsky did.)

The Epic of *Gilgamesh*, finished in February 1955 and recorded here for the first time, trails off into a vision of the Great Beyond: "I saw, I saw, I saw . . . " I suspect, though, that the music could be more effective if it were given a less transcendent, ear-lier reading. Conductor Jiří Bělohlávek, the Prague Symphony Orchestra, the Czech Philharmonic Chorus, the four soloists and the speaker all approach the score with precision and reverence. The results are technically impressive but far from exciting. A few chorall scearns and soloists' solos are needed to add some life.

K.M.

**MONTEVERDI: A Sacred Concert.**

Concerto Vocale (Judith Nelson, soprano); René Jacobs, countertenor; Wil-\_\_am Christie, harpsichord; Mihoko Kimura, violin; Jaap Ter Linden, cello; Konrad Junghänel, theorbo). HARMONIA MUNDI FRANCA, HM 1032/3, $19.96 (two discs) (distributed by Brilly Imports, 155 N. San Vicente Blvd., Beverly Hills, Calif. 90211).

Sacred Monodies and Motets: Duo Seraphim*"* (with Birgit Grenat, soprano); O quam pulchra!; O beatae vitae!; Salve o Regina; Confiterbo tibi Domine; O bone Jesu!*"*; Pulchra ess*"*; Pianto della Madonna sopra il "Lamento d'arianna"*"*; Fuge, fugue anima mea*"*; Ego flos campi*"*; Nigra sum*"*; Laudate Dominum*"*; Jubilet*"*; Salve Regina*"*; Exsulta filia Sion*"*; Ecce sacrum paratum*"*; Cantate Domino*"*
Imagine this: authoritative test reports by the editors of High Fidelity for less than 2 cents each!

234 fact-packed test reports of major stereo components. $3.95.

346-page buying guide: High Fidelity’s Test Reports.

ROSSI, L.: Cantatas.

Gelosia; Quando spiega la notte; Lamento della Regina di Svezia; Mentre sorge dal mar; Sopra conca d’argento; Erminia sventurata; Lamento di Zaida mora.

Cesti: Cantatas.
Concerto Vocale (Judith Nelson, soprano; René Jacobs, countertenor; William Christie, harpsichord; Jaap Ter Linden, cello; Konrad Junghänel, theorbo). Harmonia Mundi France HM 1018, $9.98.

Pria ch’adori; Amanti, io vi disfido; Lactime mie; Mia Tiranna.

Three exceptionally interesting, complementary collections. Each is devoted to chamber solos or duets from the first half of the seventeenth century in Italy, a fertile period in which the new art of monody—melody written over a continuo bass line—swept the country and was used in both sacred and secular music. These floral motets and extravagant songs explored a whole new range of melodic and harmonic resources—and required new vocal techniques to perform them. The Concerto Vocale musicians have made a special attempt to follow as closely as possible the performing practice of the time (which, because the techniques were new, was copiously explained in prefaces and forewords to publications of the music); the results are extraordinary.

The Monteverdi collection contains the best music and some of the weirdest performances. Everything comes from the published books of his sacred music, from the “Nigra sum,” “Duò Seraphim,” and “Pulchra es” of the 1610 Vespers to the “Confitebor tibi” of the 1650 collection. But there is no resonant church acoustic; the works are all reinterpreted as “chapel” motets and recorded very closely.

Judith Nelson, a quiet, undemonstrative, but extremely agile soprano, manages to surmount all the flourishes and ornaments and still maintain an expressive sense of direction. She contributes a lovely “Salve o Regina” and a bouncy “Laudent Dominum,” in which the repeated-note ornaments are deliciously done. René Jacobs, a countertenor, I have very much admired both on record and in concert, contributes an extensive note to the insert booklet explaining how the theorists said the music should be performed. But time and again he seems to me to demonstrate in his singing how not to do it. There should indeed be portamento between notes, flexible rhythms, crescendos on single notes, and so on. Jacobs, however, cruely exaggerates all these effects (and more) and sings with uncontrolled hootiness that I would not recognize this as the same voice I heard five years ago. Perhaps I am simply not attuned to “authenticity” in this idiom. But I cannot believe that “Jubiliet tots civitas” was meant to be distorted into a baroque free-for-all or that “O quam pulchra es” was meant to start with the distorted syllable “Ah.” Nelson seems to do everything Jacobs does but more tastefully. In duet, they occasionally succeed. (The imitations of “O beatus viae” are neatly done.) But in “Duò Seraphim,” with Jacobs for some reason taking the top line and Nelson and Birgit Grenat the lower parts, the effect is unpleasant. In one number, Jacobs is allowed to echo himself from afar, which is frankly absurd.

The composers represented on the companion discs are less well known. Pietro Cesti, born in Arezzo in 1623, worked in Venice (where he became famous for his opera Orontea), Innsbruck, Rome, and Vienna (where he wrote Il Pomo d’oro), and died in 1669. Luigi Rossi, born in Torremaggiore in 1597, worked in Rome and helped to originate the chamber cantata; with Cesti and Carissimi, he was the most popular composer in the form. He worked for the Borgheses and for Cardinal Barberini and died in 1683. I much prefer the Rossi disc, which Nelson does alone, to the Cesti—though both contain fascinating music. Perversely, I think Nelson is too cool for the extrovert passions of Rossi’s Gelosia che poco a poco (a piece Nigel Rogers does brilliantly), but she is moving in the long Lamento della Regina di Svezia; the Lamento di Zaida mora seems a less distinguished piece. The Cesti disc contains just four works (a pity it could not include the hilarious buffo cantata Aspettate), two short and pretty songs and two important cantatas: Pria ch’adori, a lament of Arianna that opens and closes with sublime duets, and Mia Tiranna, an extended ABA aria. Once again, though, Jacobs manages to turn what should have been a beautifully matched performance into a contest between a vocal David and Goliath.

In all three collections, the continuo work is expertly done by William Christie at the harpsichord with Jaap Ter Linden (Wieland Kuijken in the Rossi) on the bass line. These are flexible, light continuo realizations, and it is good to have some pieces accompanied on the theorbo by Konrad Junghänel. Documentation varies wildly: for Monteverdi, multilingual notes, texts, no translations; for Cesti, an odd little chronology of his life and text paraphrases; for Rossi, an excellent note by Thomas Walker, texts, and no translations. Every inflection of the words matters in this music; every word ought to be translated. N.K.


A Dallas Symphony Orchestra and Chorus, Eduardo Mata, cond. [Peter Dellheim, prod.] RCA RED SEAL ARC 1-3458*/9', $9.98 each (PCM digital recordings).

COMPARISON—Firebird Suite:

Shaw/Atlanta Sym. Telarc 10039

DEBUSSY: Images for Orchestra; Prélude à l’après-midi d’un faune.

A London Symphony Orchestra, André Previn, cond. [Suvi Raj Grubb, prod.] ANGEL DS 37674, $10.98 (EMI digital recording).

COMPARISON—Firebird Suite:

Boulez/Cleveland, New Phil. Col. D3M 32988

There are six digital recording systems in use here and in Britain, and although they have common qualities (for example, the ability to deal with wide dynamic ranges), there are audible differences. I am thoroughly impressed by the Sony hardware RCA used for its Dallas sessions. The spaciousness it imparts to the Ravel score is a welcome contrast to the somewhat dry acoustical quality of earlier digital products, and the overall effect is so impressive that I recently named this in a survey of all-time great recordings. With this technology at its disposal, RCA now has an advantage similar to that it enjoyed when it introduced multichannel tape in the mid-1950s. In any case, the point is made that American record producers can come up with a product that easily holds its own with the best work of their European colleagues. 

Greatly respected in the Southwest, Eduardo Mata has sometimes been compared to Sir Georg Solti. Indeed, there are similarities. Both can generate a high level of intensity and project the collective virtuosity of a large orchestra with maximum force. This happens repeatedly in Daphnis (where a wordless choir augments the instrumentation), a performance that explores both the classicism and the sensuality of Ravel’s dance-drama. The final sections, well known from the Second Suite, contain some of the finest orchestral writing of this century; one of Mata’s successes is that he builds firmly to that climax. The opening scenes are strongly shaped and well paced, so that the work becomes (like Boléro) a long ascending line. With RCA’s dazzling sound, the performance affords a thrilling rediscovery of the unity of this score.

In some ways Mata is even finer in Stravinsky’s Symphony in Three Movements, which can well use a new recording as immediately attractive as this. Stravinsky’s later works are unreasonably neglected, considering its importance and the frequent performances given his earlier works. This symphony is a tightly knit, powerful essay that grew out of World War II. The liner notes insist the second movement began as film music for The Song of Bernadette, a project never completed; I insist it is a parody on themes from Oklahoma!, the great Broadway hit of 1943. In this performance, with this kind of recording, the work has an impact no previous disc has provided. Listen to the bold, striding
Ravel is particularly strong, preserving both the work's carefully structured argument and its curiously bittersweet expressive tone. Only the loud pizzicato passages of the second movement are a bit raucous. The Bartók is also fine though somewhat tentative in spots, and there is a tendency to smooth over the music's hard edges. But the Sequoia does project a distinctly personal conception that grew on me over successive hearings. Delos' crystal-clear digital recording and handsome packaging are admirable. R.P.M.


ROSSI, L.: Cantatas (7)—See Monteverdi: A Sacred Concert.


Michael Murray, organ; Philadelphia Orchestra, Eugene Ormandy, cond. [Robert Woods, prod.] TELARC 10051, $17.98 (Soundstream digital recording; distributed by Audio-Technica).

COMPARISONS:
Zamkochian, Munch/Boston Sym. RCA LSC 2341.

It's quite fitting and proper that Ormandy and the Philadelphia Orchestra should be the first (in this country at least) to bring digital recording technology to one of their favorite showpieces. They weren't the first to record the Organ Symphony (Piero Coppola did that in 1931 for French HMV/RCA Victor), but their 1958 Columbia version with organist E. Power Biggs, recorded in Boston's Symphony Hall, was a best-selling mono sonic spectacular. The first quad disc for RCA (HF, September 1974), that never caught on and was somewhat less successful. And although Ormandy and the Philadelphia's (and Virgil Fox) again pioneered technologically with the first quad disc for RCA (HF, September 1974), that never caught on and was allowed to go out of print in the fall of 1979.

The latest version, despite its high price, is certain to please audiophiles but less likely to satisfy Saint-Saëns connoisseurs. The recorded sonics are just about ideal. Telarc wisely chose to record in an acoustically fine locale (St. Francis de Sales Church, Philadelphia) with an admirably suited organ (a Haskell Company instrument rebuilt by Bruce Shultz) and a first-rate organist (Michael Murray, a onetime student of Marcel Dupré). The result is a model of lucidity, controlled power, and vivid yet wholly natural presence. Moreover, the balance between orchestral and concertante organ (or piano four-hands) parts is the best I've encountered on or off records.

So sonically this latest account easily surpasses the most recent "spectaculars," the 1978 Raver/Bernstein release (Columbia M 34573) and the 1976 Laitze/Barenboim version (DG 2530 619), both of which feature dubbed-in organ parts. Interpretatively, however, the otherwise admirable Ormandy performance is only too literal. It re-creates nearly perfectly every detail of the score but barely suggests the full poetry and passion, Gallic elegance and nobility, of a work that is too often credited with rhetorical grandiloquence. To hear this music at its best, one must still turn to the incomparably dramatic 1975 Gavoty/Martinon account or go all the way back to the long dominant and scarcely faded 1960 Zamkochian/Munch version. R.D.D.

SCHUBERT: Symphonies (3). For a review, see page 68.


STRAVINSKY: Le Sacre du printemps. Philadelphia Orchestra, Riccardo Muti, cond. [Christopher Bishop, prod.] Angel SZ 37646, $8.98.


Minnesota Orchestra, Stanislaw Skrowaczewski, cond. [Tom Voegeli* and Dennis D. Rooney*, prod.] Candid QCE 31108, $4.98 (SQ-encoded disc).

COMPARISONS—Stravinsky: Gavoty/Columbia Sym. Col. MS 6349, Abbado/London Sym. DG 2530 635.

Le Sacre du printemps has become something of a conductor's rite of passage; something of a conductor's rite of passage; an important and particularly legitimate exciting versions on record in the symphony orchestra at the height of its development.

Riccardo Muti's is one of the more legitimately exciting versions on record in its sonics, orchestral playing, and its response to Stravinsky's rhythmic complexity. Muti does not seek the almost overwhelmingly aggressive projection of both Boulez recordings (Nonesuch H 71093, Columbia M 7299) or the lurid effect of Mehta's more recent New York Philharmonic account (Columbia M 34557). His straightforward approach allows the Philadelphia Orchestra to achieve the kind of
Mr. Retailer:
You’re holding a
great profit-maker
right in your hand.

Just display High
Fidelity and you’ll
find it—sells itself.

For details, call
collect: 413-528-1300.
Ask for Terry Atwood.

(She’ll tell you
about our profit-
making annuals, too!)

HIGH FIDELITY

blockbuster impact Stravinsky’s score
implies without meretricious resort to shallow
effect.

Every recording of Sacre must inevitably
be tested against the composer’s own,
of course, particularly his last, in stereo. To
be sure, Stravinsky was no great conductor.
But he was very explicit; if one knows his
weakesses, one can easily infer his intentions.
Although he could seldom balance the
temporal textures of Sacre with the skill of
a Monteux (London Treasury STS 15318),
his major dynamic and textural
aims are unmistakable. Similarly, such
basic matters as tempo, transitions, and
rhythmic emphases are clearly set forth.

At least as recorded here, Muti fails
to project the full dynamic range of this
music with precise attention to the subtlety
of Stravinsky’s markings. From mf to ff,
he is generally sensitive both to overall
volume and to differing dynamics for various
instruments. But from mf down to pp,
he is less careful: mf is often indistinguishable
from mp or p, and a true pp is rare indeed.
Nor do I necessarily blame the recording
engineers; there is a difference in texture
between ppp, however much amplified,
and pp, however much the gain may be
reduced.

Muti is weakest in the beginning of
the second part—especially in the introduc-
tion and the Cercles mystérieux des adolescentes,
where Stravinsky was very explicit both in
scoring and in performance. (Incidentally,
these were passages that Mehta handled
very well in his earlier Los Angeles Philhar-
monic recording, London CS 6664.) For all
its excitement, Muti’s performance lacks
moments of delicacy and relaxation. Sacre is
not all blockbuster music; Stravinsky cer-
tainly did not perform it that way, nor did
such a master as Monteux. The contrasts
are vitiated in Muti’s monolithic approach.
Ultimately, a performance like Abbado’s is
much more satisfying musically—less vis-
erally exciting, perhaps, but more likely to
hold up over the long run.

Stanislaw Skrowaczewski’s is a
straightforward and completely musical
reading. He knows the score thoroughly
and projects it tellingly, if a bit coldly. Yet,
for all his skill and musicianship, he just
misses being interesting. Moreover, the Min-
nesota Orchestra, fine as it is here, falls a bit
short of the highest quality represented by
the Philadelphia Orchestra or the LSO.
Even so, the Candide disc, superbly re-
corded—almost too clearly for a rather
brittle performance—has appropriate sonic
impact, and given the current inflationary
spiral, it rates as a “best buy.” It not only
carries the entire Sacre on one side (32:53)
without appreciable degradation of sound,
but also offers thirty-two minutes of

stunningly performed music from Proko-
iev’s Romeo and Juliet. The selections are
those assembled by Prokofiev himself as
Suite No. 2, better choices than some made
by others. Skrowaczewski’s readings are
the best I have ever heard of this music; he
should record the entire score.

Skrowaczewski’s Sacre is also avail-
able on a Vox cassette (CT 2212), coupled
with a Petrushka I have not heard—an imagi-
native and very useful presentation without
sidebreaks in either piece. (But buyer be-
ware. A cassette I found in a bargain bin
turned out to be Chopin piano music
played by Abbey Simon.) P.H.

TCHAIKOVSKY: Symphonies:
No. 4, in F minor, Op. 36*; No. 5, in E minor,
Op. 64*.

Philharmonia Orchestra, Riccardo
Muti, cond. [John Mordler, prod.] ANGEL
SZ 37624*/5', $8.98 each (SQ-encoded
discs).

COMPARISON—Fourth:
Abbado/ Vienna Phil. DG 2530 651
COMPARISON—Fifth:
Markevitch/London Sym.

It’s hard to believe this Tchaikovsky
Fourth comes from the same Philharmonia
Orchestra that just gave us Vladimir Ashke-
nazy’s version (London CS 7144, July). Un-
der its music director, Riccardo Muti, its
enhanced concentration and intensity yield
cleaner, surer attacks, tighter ensemble
(e.g., in the Scherzo’s pizzicato), and articu-
lation that remains precisely defined even
in the highest-powered sections of the
breathlessly paced finale.

Acoustical differences can often fos-
ter such impressions, but while the London
disc revealed some of the boom and haze of
recent Kingsway Hall sound, the Angel is
no less typical of that label’s muddy high
end. More to the point is Mahler’s state-
ment that there are no great orchestras,
only great conductors—though with reserva-
tions, to be sure. Muti falls short of great-
ness here, lacking the ultimate capacity to
take pains (such as really phrasing bass
lines in heavily scored passages). Yet he is a
real conductor (in contrast to Ashkenazy)
and as such is able to offer a Fourth of
bracing energy, momentum, and virtuosity.
It reminds me in many ways of Claudio ABB-
ado’s recording and joins my group of
recommended editions.

Muti’s Fifth, on the other hand, calls
to mind Toscanini’s description of “tradi-
tion” as “the last bad performance.” There
is nothing technically bad or sloppy about
this rendition. (It’s even more brilliant soni-
cally than the Fourth, some fluctuating lev-
els of tape hiss aside.) But hackneyed ges-
tures abound: a lugubrious tempo for the
Andante introduction; disentanglements and swellings in the second subject of the Allegro proper; overly dreamy pacing of the slow movement’s middle section, and the fastest possible tempo for the Allegro vivace finale. All these touches, familiar from countless live and recorded performances, are dead wrong. Tchaikovsky put fairly exact instructions throughout this score, including metronome markings and rubato specifications obviously meant for use “only as directed.”

Among available Fifths, Igor Markevitch’s most closely adheres to the composer’s wishes and thus wipes away the encrusted corruptions of “tradition.” I return to it often for a sort of spiritual cleansing; heard Tchaikovsky’s way, the work emerges as a masterpiece, with little hysteria and pomposity but plenty of crisp power, dignity, and restless tension. The Markevitch belongs in every collection as a model of exact instructions throughout this score, in-keeping with the composer’s wishes and thus wipes away the encrusted corruptions of “tradition.”

TOLL FREE 800-356-9514

Over 100 Brands like:

- Technics
- Maxell
- Sony
- Cerwin
- Acutex
- Pioneer
- Empire
- Teac
- Vega
- Craig
- Marantz
- Alett
- Akai
- JBL
- Scotch
- Kenwood
- Sharp
- Dual
- Audio
- B.I.C.
- Sansui
- Phillips
- Koss
- Technica
- Stanton
- Jensen
- Shure
- TDK
- Clarion

Moving?

Be sure and send us your new address 8 weeks before you move so you won’t miss any copies of HIGH FIDELITY.

Write to:

HIGH FIDELITY
1 Sound Avenue, Marion, Ohio 43302

- Change of address
- Enter new subscription 1 yr. $13.95
- payment enclosed
- bill me
grates completely; "Wohl kenn' ich Euren Stand" is langsam but not breit (Wolf asks for both qualities); and each phrase of "Gesegnet sei das Grün" turns soggy as it proceeds.

The issue of transposition in these songs is not the same as in, say, the Schubert and Schumann cycles: The *Italiamisches Liederbuch* is a collection, not a cycle, and there is no internal sequence of key relationships such as arguably governs Winterreise and *Dichterliebe*—in fact, Wolf surely did not even intend the songs to be sung in a complete sequence at one time. So random transposition of individual songs encounters no musical objections. Still, a high proportion of downward transpositions does affect the overall tone, making the piano parts heavier, the vocal color less bright, the expressive range of the songs narrower. In this new set, only twenty-four of the forty-six songs are in the original keys, as against thirty-three in the Angel set, and some of the transpositions are deeper. Along with the heavier quality of Ludwig's voice (now not free of a slight but palpable tremor), this makes for the least lighthearted version of the songs.

And what of Fischer-Dieskau? Not surprisingly, he offers no radically different approach or major interpretive revelation on his fourth encounter with many of these songs, although in many hundreds of details he has clearly reconsidered his decisions. Out of curiosity about the extent of such changes over some three decades, I made a microscopic examination of one song, "Selig ihr Blinden," comparing also the recordings of Prey, Souzay, and Schreier. On the surface, its phrase structure is utter simplicity: four ironic beatitudes ("Blessed are the blind, for they cannot see the intoxicating charms of women," etc.), each conferred in an eight-bar phrase, similarly constructed in the main although variously modified in detail and progressively intensified harmonically. Only the fourth of these phrases has a distinct articulation in the middle.

The catch is that at anything like the tempo Wolf recommends—and taking into account such matters as the amount of melodic motion and dynamic flexibility required—additional breaths in midphrase will be necessary. In his very first recording (with Hertha Klust at the piano), Fischer-Dieskau went markedly slower than Wolf's metronome mark, and needed rather a lot of extra breaths, also adding what seem to be (in this miniature context) elephantine ritards at the end of each phrase—a sentimentality that strikes me as a direct contradiction of the song's aphoristic, ironic character.

The next version (with Jörg Demus) constituted a complete change of approach,
somely by the packaging: intelligent essays, full texts and translations, and, as a bonus for *Italienisches Liederbuch* maven's, the original Italian lyrics from which Heyse's poems were translated—not especially germane to the appreciation of Wolf's settings, they are nonetheless interesting to examine. D.H.

**Recitals and Miscellany**

MONTSERRAT CABALLE: Italian Opera Arias.
Montserrat Caballé, soprano; Orchestra of the Royal Opera House, Covent Garden, Colin Davis cond. *; New Philharmonia Orchestra, Gianfranco Masini, cond.**. Philips 9500 358, $9.98. Tape: 7300 740, $9.98 (casette). [From various Philips originals.]

MOZART: Così fan tutte, K. 588: Come scoglio.* VERDI: I Masnadieri: Venereabile, o padre. . Lo sguardo; Oh! ma la pace ... Tu del mio Carlo (with John McEwan, tenor; Rosanne Creffield, mezzo-soprano; José Carreras and Neil Jenkins, tenors).”

Neil Jenkins, tenors).”

The secret of Montserrat Caballé's enormous worldwide success, it hardly needs saying anymore, is the sensuous beauty of her voice—not brilliance of technique, vibrancy of temperament, or individuality and certainly not dramatic expressiveness. Of all contemporary operatic stars, she is surely the least communicative of specific emotional meanings. In her throat all music tends to be converted to reverie, undifferentiated, serene, and impersonal. Her many fans willingly forgo insight into the human heart and content themselves with dulcet murmurings and arcs of mellifluous sound.

Murmuration is an important feature of Caballé's vocal personality. Only comparatively rarely does she unleash the full power of her awesomely large voice. (No one who has heard her sing Turandot in the opera house will question its size.) When she does, the sound is apt to be somewhat blowy. But most of the time, she wisely confines herself to what she does best, scaling the voice down and projecting it as high into the head as possible, thus producing the thread of exquisite silvery sound that—especially in the form of a long-breathed pianissimo—is primarily responsible for her fame. At its best, this tactful art is hard to resist, at least for short stretches.

A case in point is the excerpt from Rossini's Elisaletta, regina d'Inghilterra (familiar to balletomanes in John Lanchbery's arrangement for the Act II pas de deux of Ashton's *Fille mal gardée*), which reveals Caballé at the peak of her considerable powers. But beautifully shaped and meltingly euphonious as her performance unabashedly is, it in no way attempts to illuminate the dramatic situation or (more crucially, perhaps) the musical statement by means of the words.

For the many Caballé admirers who do not weary of so abstract an approach to vocal music—and who do not already have the complete recordings from which all of Philips' material derives—the passages from Verdi's Il Corsaro and I Masnadieri and the curiously inconclusive excerpt from *Lucia di Lammermoor* will doubtless provide unsullied pleasure. For others the lack of a firm, metronome especially in the caballietto to the *Masnadieri* aria, might prove a drawback.
So might the lack of dramatic tension in "Vissi d'arte" and the miniaturized and coarse-grained bravura of "Come scoglio."

Also likely to please the soprano's fans is "Arie antiche," in which she is in full control of the gifts she has chosen to cultivate. Yet the recital soon begins to outstay its welcome. For despite the information contained in the liner notes, most of the material consists of operatic arias anonymously rearranged as piano-accompanied songs. This, combined with Caballé's disinclination to characterize what she sings, tends to homogenize the music, notwithstanding the pianistic skill of Miguel Zanetti. There are other shortcomings—among them, a lack of facility in fioritura, which is far too backward in sound and which, in the case of the trill in particular, gives an impression of discreet gargling. Thus, the ornamentation that decorates all the repeats does not successfully perform its function of enlivening the basic melody. On the whole, the simpler pieces, like the ravishing Cara mio ben and Pur dicesti, come off best, though here too, Caballé's inelegance in handling even the simplest ornamentation is a handicap.

In Turina and Montsalvatge, she is on safer stylistic ground, though to listen to the Teresa Berganza/Felix Lavilla performance of Montsalvatge's fascinating Cinco Canciones negras (DG, deleted) is to appreciate how lacking in vivacity and color are these performances by both Caballé and pianist Alexis Weissenberg.

Far below the level of all these performances are her Strauss Lieder, to be avoided at all costs. She is in exceptionally poor voice, and she demonstrates only the merest glimmering of what such music requires in the way of style and linguistic facility.

All records are accompanied by texts and translations. The sound provided by London and Philips is excellent; Angel's is less immediate. Philips' pressings are superb—unlike either Angel's or London's. D.S.H.

CAROL ROSENBERGER: Piano Recital—See Debussy: Piano Works.

Theater and Film

KING'S ROW: Original film score by Erich Wolfgang Korngold.


Here is an exhilarating item: the first record ever devoted to an entire Korngold score, and with digital sound to boot.

The 1942 film King's Row—a kind of bowdlerized turn-of-the-century Peyton Place—may not have elicited the full play of Korngold's theatricality and color as effectively as the costume dramas he had theretofore been identified with, but this celebrated, elaborate score is fraught with the usual luscious themes (including a couple of an atypically folklike character), bold dramatic thrusts, and affecting moments. His always suave and fluent knack for just the right musical parallel or commentary manages, astonishingly, to clarify and elevate the involved, preposterous, and abysmally kitschy plot.

This is not truly a "suite," but more of a symphonic chronicle or "opera for orchestra" (based largely on the composer's plans for a concert work), with an irresistible narrative drive and a seamless continuity that make it easy for the listener to follow the convolutions of the plot as outlined on an insert. And what glorious, seemingly spontaneous music it is—with its stupendous, masterfully manipulated Straussian orchestral machinery, its enthralling Puccinian leitmotivs, and its idiosyncratic Korngoldian èlan, razzle-dazzle, and telling instrumental detail. The only portion of the score recorded previously is the heroic main title music, which, when one stops to think about it, is hardly compatible with the commonplace happenings of a small midwestern town; but somehow it all works because Korngold's sensitivity and assurance perfectly match Hollywood's naively histrionic, larger-than-life approach to banal, populist raw material. He brought real class and sophistication to the basic functional Hollywood idiom, which pioneers like Max Steiner, Alfred Newman, and Victor Young had begun to formulate out of a vast range of practical needs and a mélange of stylistic influences.

The recording, splendidly lifelike, encompasses an enormous and finely nuanced dynamic range without the slightest hint of distortion or artificiality. And as we know from the wonderful Classic Film Scores series on RCA, the National Philharmonic and Charles Gerhardt are ideal interpreters of "golden age" film music. Lovers of the genre should be forever grateful that a conductor of Gerhardt's inherent gifts and illustrious schooling (Toscanini, Hornerstien, and Kempe were among his mentors) brings to this kind of music the same vitality, reverence, and conviction usually bestowed on the masterpieces of the classical repertory. P.A.S.
The Tape Deck

by R. D. Darrell

New (Orion II) Super-cassettes

Following the spectacular success of the first super-chromium music cassettes from Connoisseur Society/In Sync Laboratories just over a year ago comes the debut of a Classical Cassette/Orion II series. Again Julius Konins' Cassette Productions, Inc., does the duplicating, now with improved technology originally designed for metal-particle tape processing but claimed to be even better, technically and economically, for use with Crolyn II tape than with either Metafine or TDK metal.

Two of the first Orion II releases ($14.95 each) are well suited sonically to demonstrate this state-of-the-art technology: Alden Ashforth's 1975 Byzantia (OC 829S) and Roy Travis' 1973 Passion of Oedipus excerpts, now complemented by his 1976 Symphonie Allegro and five Sappho song settings (OC 830S). Usually a skeptic where electronic music is concerned, I have never encountered a more imaginatively evocative artistic exploitation of synthesizers (combined with both taped natural sounds and conventional performance) than in Byzantia. In its original disc edition, the work was justly acclaimed as "a masterpiece of its kind—of any kind, in fact" (HF, October 1975).

The two scenes from the powerful Travis opera are done with great dramatic conviction by soloists with the Royal Philharmonic Chorus and Orchestra under Jan Popper. Less striking are the prizewinning Symphonie Allegro (previously recorded in 1952 by Mitropoulos)—despite virile choral playing—and the songs, mostly introspective, performed by bass-baritone Harold Enns. (The brief notes include song texts; the libretto is obtainable by mail.)

John Kneubuhl's "American Guitar" program (OC 828S) features the able guitarist in works by Theodore Norman, Albert Harris, Ernst Bacon, and émigrés Soulima Stravinsky and Ernst Krenek. In a recording with vivid presence, these are all adroitly effective, but none is as immediately engaging as Kneubuhl's own Pretty Bird Variations. The program of widest potential appeal, Susan Starr's bravura Schumann Op. 22 Sonata and eight Fantasietücke (OC 825S), is handicapped—first by its overemphatic readings, but still more by the piano's shallow, even brittle, tonal qualities, most unusual for a Bösendorfer but candidly exposed by the brilliant recording.

Operations: successful . . .

In bad as well as good economic climates, opera recordings continue to flourish. Just about all the current boxed music-cassette editions, complete with notes and texts, are notable for recording qualities generally superior to those of the past—and often preferable to their disc editions for their minimized noise and more convenient side sequencing.

Unfortunately, many of the new performances can't match the best earlier ones. But there are at least two admirable exceptions. The most stimulating, at least to anyone who shares my affinity for Czech music, is the first satisfactory complete recording of Janáček's Makropoulos Affair (London OSAS 12116, two cassettes, $17.90). Sir Charles Mackerras authoritatively leads Viennese choral and orchestral forces with a Czech cast—except for Swedish soprano Elisabeth Söderström, whose scintillating performance makes the most of the lead role dramatically. Not an easy task for non-Czech listeners, it richly repays the effort involved in a close following of the English translation. Vivid and solid, the well-nigh ideal recording does full justice to the imaginative scoring.

There should be a still wider audience for the first satisfactory complete recording of one of Massenet's last and perhaps finest operas, Don Quichotte (London OSAS 13134, two cassettes, $26.94). Nicolai Ghiaurov bravely competes with memories of Chailapin and Vanni-Marcoux in the title role, Gabriel Bacquier's Sancho and Regine Crespin's Dulcineé are dramatically superb, the Suisse Romande Orchestra plays to near perfection, and the recording is excellent. Another neglected French opera, Saint-Saëns's Samson et Dalila, comes off more unevenly in Daniel Barenboim's 1978 French Orange Festival production (Deutsche Grammophon 3371 050, three cassettes, $29.94). Choral and orchestral sonics are fine, and no Placido Domingo fan will want to miss his Samson. But Elena Obraztsova's dramatic abilities are less effective here than they are on stage; only her ardent fans will find them sufficient compensation for her vocal deficiencies.

. . . and with mixed results

Massenet, Domingo, and Obraztsova all crop up again—less adventurously—in a lamentably non-French Werther (DG 3371 048, three cassettes, $29.94), Of the multinational cast, the Spanish tenor fares best, the Russian soprano worst. Massenet's music lacks stylistic authenticity in Italian conductor Riccardo Chailly's performance, though the recording is luscious.

Three great Mozart operas, also magnificently recorded for the most part, never achieve true Mozartian magic. There are many fine things in Karl Böhm's Clemenza di Tito (DG 3371 049, three cassettes, $29.94), which stars Teresa Berganza and Iulia Varady. But the Leipzig chorus and Dresden orchestra are just too stolidly German; far preferable is Colin Davis' lighter, more vital Philips version (7699 038).

Herbert von Karajan's Viennese Nozze di Figaro (London OSAS 1443, two double-play cassettes, $35.92), with bravoura orchestral playing, glittering if extremely resonant recording, arbitrary tempos, and uneven singing and acting, provides no competition for the classic 1954-55 Erich Kleiber version (now in cassette box London OSAS 1402).

Sir Georg Solti's Don Giovanni (London OSAS 1444, two double-play cassettes, $35.92), starring Bernd Weikl and Margaret Price, does have sumptuously recorded sonic realism—but also a mysterious lack of essential dramatic conviction. By comparison, the reissued 1959 Ferenc Fricsay version with Dietrich Fischer-Dieskau (DG Privilege 3373 003, three cassettes, $20.94), while far less "grand," is quite irresistible.

Everest's, exasperating, but . . .

Probably no standard-label cassettes are produced with less information and technical care than Everest's (made in Mexico from American materials). Their nearer mid-range bargain-price of $5.98 each can't excuse their all too frequent distortions, surface bubbles (despite Dolby), etc. Yet the program choices for reissue or cassette-first release often are so welcome that I tend to regress to the double standards of early cassette days. Anyway, it may or may not be worth your taking chances with Manuel Rosenthal's fascinatingly varied 1969 Satie program (3234); the 1965 Rampal/Fierlot recordings of Haydn's concertos for flute and oboe (originally hurdy-gurdy), all five together, for the first time in the U.S. (3465); and the first (I think) American appearance of the 1954 Boul/ London Philharmonic recording of Holst's Planets (3443), originally a Pye mono production, now in rough but robust electronic stereo. HF
Only $2.95 brings you authoritative test reports on 150 major components...

- Amplifiers and preamplifiers
- Tuners
- Receivers
- Turntables
- Tonearms
- Phono cartridges
- Speaker systems
- Tape decks
- Signal processors
- Equalizers
- Headphones
- Tapes
- Audiophile discs
- Accessories...

And car stereo systems.

Plus: special articles to help you make sure the components you buy are the components you really want.

It's the 1981 Stereo Test Reports! All the components covered in this new annual have been tested and measured for the editors of Stereo by Diversified Science Laboratories. Each report has been specially written to provide you with all the information you need to make knowledgeable buying decisions. You'll find each report clear, comprehensive and meaningful.

Write today for the 1981 Stereo Test Reports. It's only $2.95. And it's your next important step in selecting your next component or your first component system.

Please allow 30 days for shipment.
A giant cement mixer blocks the road, halfway up the snaking cul-de-sac that ends at Emmylou Harris' rented ranch house. Nestled in a leveled-out fold between two of Coldwater Canyon's sloping hills, the house will soon be bulldozed, having been a victim of L.A.'s devastating floods last winter. Though almost everything succumbed to the two-foot wall of moving hillside—furniture, books, personal possessions, stereo equipment, records—comparatively speaking the country singer and her producer/husband Brian Ahern were lucky. The Enactron truck (their mobile recording studio) and stacks of master tapes had already been moved to the lowlands of North Hollywood.

Having retrieved some remaining boxes of reels from the house, the three of us drive to Northern Sound, a former signmaker's factory in the San Fernando Valley that Brian and Emmylou purchased and are in the process of converting to a 24-track facility. On the way, Harris talks about living in Southern California: "For the foreseeable future, we've resigned ourselves to living in Los Angeles. We've got plans to buy land and move to Nova Scotia—which is where Brian is from—but right now that isn't really feasible. Especially for Brian, because he'd constantly be away in L.A. or New York doing work."

Indeed. Under the aegis of his Happy Sack Productions, Ahern has produced not only his wife's entire Warner Bros. catalog, but also ten Anne Murray LPs and records by Jonathan Edwards, Mary Kay Place, Rodney Crowell, Johnny Cash, and many others. One wonders whether the working relationship of producer and artist infringes on the personal relationship of husband and wife with three daughters. Harris insists otherwise: "Brian has allowed me to grow as an artist in a way that I never thought I could. He thinks I'm a great rhythm guitar player—he uses me on sessions! He knows there's a lot more to making records than just hitting every note at the right time.

"I trust his judgment implicitly. At the same time, Brian really listens to what I have to say and trusts certain of my instincts. We enjoy the time we spend together in the studio. Maybe it's an oversimplification, but I believe it all comes down to trust. Not only as a producer and artist, but as husband and wife."

Looking at them—Emmylou in cowboy boots, blue jeans, and a denim shirt, her bearded, mild-mannered husband in rustic rain gear—it's hard to believe that they live in Los Angeles, much less in the upper middle-class suburban sanctity of Studio City. The Alabama-born singer and her husband are surrounded by an equally low-key circle of friends and associates: her manager Eddie Tickner, mem-
“Sometimes I have a lot of problems about recording songs written by men. I don’t think you can just go in and change the words around to any song.”

bers of her Hot Band—Ronnie Tutt, James Burton, Glen D. Hardin, Emory Gordy, Rodney Crowell, Albert Lee, Hank DeVito, Ricky Skaggs, and John Ware—recording engineer, studio staff, and road crew. It’s a warm, self-sufficient family of Texans, Canadians, New Yorkers, and Californians that may as well be living on the plains of Saskatchewan considering its members’ un-urban affability and down-home charm.

“I do feel a little out of it sometimes,” Emmylou admits, sitting behind a desk in Northern Sound’s offices. “Rodney and some of the others went to see the Pretenders the other night, but I can’t seem to get myself out to see some of these bands. I like staying at home. I only listen to country music—I feel a bit like an old fogy. And yet I really feel I took a risk—that the new album (“Roses in the Snow”) is an adventure, obviously not something you hear on the radio, not even on the country stations.”

“Roses in the Snow” is Emmylou’s ninth LP, if you include her folk debut on Jubilee (“Gliding Bird”), a Warners “best of” package (“Profile”), and a European Christmas disc (“Light of the Stable”). Whereas last year’s Grammy-winning “Blue Kentucky Girl” was a pure country excursion, “Roses” is an (almost) entirely acoustic effort that harks back to the classic bluegrass strains of the Carter Family, Ralph Stanley, and Earl Scruggs, with such traditional tunes as Darkest Hour Is Just Before Dawn, Gold Watch and Chain, and I’ll Go Stepping Too. In May, with the record just shipping out of Warner Bros.’ Burbank headquarters, Harris is still anxious about the album and its reception.

“It was a risky thing to do, not just from the standpoint of my own constituency, but from the standpoint of real bluegrass people who might resent me doing it. I basically tried to get a few good bluegrass pickers together who would act as a catalyst for the music. I really do feel that it’s coming from the right place. It doesn’t pull any punches.”

Thus far, Emmylou’s apprehensions seem unwarranted. The album has bounded up the country charts. As of late May, she had three singles on the country Top 100: Beneath Still Waters from “Blue Kentucky Girl,” a duet with Roy Orbison from the Roadie soundtrack. That Lovin’ You Feeling Again, and Wayfaring Stranger from “Roses.” The players on that album—Tony Rice from the David Grisman Quintet, autoharpist Bryan Bowers, plus Hot Band mainstays Skaggs, Lee, and Gordy—infuse the songs with so much energy that it’s easy to forget you’re listening to an acoustic album.

One question, though, is why she included Paul Simon’s epic of urban angst, The Boxer, in an otherwise undiluted bluegrass collection. “Well, it’s been doing that song since I first heard it over ten years ago. I felt very strongly about it, having lived in New York City, but there was something about changing the gender that I couldn’t bring myself to do. The song only worked from a man’s point of view, so I resisted recording it. Then it came to me to deal with it like an old traditional—singing a story song in the Carter Family tradition. By doing that, it doesn’t matter if I’m singing ‘I am just a poor boy,’ especially if it’s done in three-part harmony with an autoharp. It’s a way to take a modern classic and adapt it to an old form.

“Sometimes I have a lot of problems about recording songs written by men. I don’t think you can just go in and change the words around to any song. There are certain subtleties—masculine things and feminine things. I mean, I love Delbert McClinton’s songs, but most of them have a definite macho-ness and male sense of humor. There’s no way I could sing them if I changed the lyrics around. They’d just come across as ludicrous.”

Emmylou’s stature in country music has afforded her the freedom to take chances, to steer away from the ever-increasing commercialization of the genre and return to its roots. “I guess I’m lucky. I’m able to do exactly what I want. I have an audience that will buy everything that I put out and seems to appreciate what I’m doing. I have very strong country airplay. If I didn’t have all that—I wouldn’t be where I am today,” she laughs. “It’s that visibility the country market gives me. And I do consider myself a country artist. But I’m a bit of an eccentric country artist.”

Does she have frustrations about not being a big pop star like her pals Linda Ronstadt and Dolly Parton? “I have mixed
feelings about it. I’m not sure if my kind of music would have that broad an appeal. In other words, if I were to ‘cross over,’ it would have to be with something that I wanted to do, not something where I would say, ‘Well, I’m going to make this kind of record now and see what happens.’ Because I have fears that that would bring me things I wouldn’t want to deal with—an audience that expected me to do only one kind of song. My audience right now expects me to do anything.

“But it’s something I’ve wondered about. The larger an audience you have, the more money you make, which means you don’t have to worry about keeping your band together. That has wonderful advantages, in the sense that creatively you have a lot of choices open to you. At the same time, I think it might close as many doors as it opens.”

How about following her colleagues onto the Hollywood movie lots? Parton will be costarring in Nine to Five with Jane Fonda and Lily Tomlin. Willie Nelson stars in Honeysuckle Rose. Levon Helm will probably get an Oscar nod for his portrayal of Loretta Lynn’s father in Coal Miner’s Daughter. Hoyt Axton was in The Black Stallion.

“I’m not sure about movies,” Harris says. “If somebody offered me a small part, a really good small part, then I would probably go ahead and do it for the experience. At one time I was an aspiring actress—I went to the University of North Carolina on a drama scholarship. I have such a long way to go in music, however, to be thinking about something else. At the same time, sometimes you go off and do something completely different and you return to what you were doing with a new perspective. I am in Honeysuckle Rose, by the way, but I play myself. I sing ‘Gain Control Again’ and ‘So You Think You’re a Cowboy’—two duets with Willie.”

Like “Willie” (who plays gut-string guitar on several cuts on “Rose”), Harris is one of country music’s best-selling recording artists. Not only do all her albums go to the top of the charts in the U.S. and Canada, but they sell extremely well in Europe.

Says her proud husband: “Emmylou’s really a bigger star over there than she is here. Her concerts always sell out, fans run up to her in the street. In Holland, Belgium, England, Ireland, France—even Germany! She’s got gold records all over Europe.”

“Well, my records are gold there because you don’t have to sell as many,” she chimes in, smiling. “‘Quarter Moon in a Ten-Cent Town’ went gold in Monaco. That’s about six thousand copies, I think. I’m hoping the gold record comes with an autographed picture of Prince Rainier and Grace Kelly.” Even with gold record sales being less than the U.S.’s 500,000 units sold, her accumulated European sales at least match the half million or so she sells in this country.

Self-assured appearance aside, Harris’s ascent to country music’s hierarchy has not been an easy, overnight jaunt. Born thirty-four years ago in Birmingham, Alabama, and raised in Woodbridge, Virginia, Emmylou stopped her college drama studies short and headed for the Big Apple. There, she performed in Greenwich Village coffeehouses and folk clubs like Gerdes. It was the end of the ’60s, the waning days of folkdom, and she was in the company of people like Jerry Jeff Walker, Paul Seibel, and David Bromberg. “In Manhattan,” she recalls, “I lived in about twelve places in the span of two years. My first daughter was born there. I remember it all—unfortunately. Actually, it wasn’t all that terrible. I look back on my New York days as a real education. I was young and strong.”

While in New York she recorded “Gliding Bird,” an LP she has criticized so much (even trying to halt its rerelease a few years ago) that it has become a curiosity of sorts. But it’s a simple folksinger/songwriter effort that really isn’t worth the to-do she has made about it.

Eventually, I listen to everything. I remember getting a demo of Last Chance Texaco from Rickie Lee Jones.”
him,” she remembers. “Each time he said he was almost ready. About a year later I got a ticket to L.A. in the mail. I went, and we recorded the ‘GP’ album.” She then accompanied him on a spring tour in 1973 and worked on his last record.

“Grievous Angel.

Harris credits Parsons with introducing her to country’s venerable heritage — Carl and Pearl Butler, the Louvin Brothers, and a host of others — the vast wealth of which she is still mining — Carl and Pearl Butler.

Following Parsons’ death in the fall of ’73, Harris returned to Washington and formed her own Angelband. Impressed by her singing on the two Parsons projects, Warner Bros. signed her in 1974 and she has remained with the label (and the same producer, manager, and much of the same band) ever since. Her Warner albums — “Pieces of the Sky,” “Elite Hotel,” “Luxury Liner,” “Quarter Moon in a Ten Cent Town,” “Blue Kentucky Girl,” and now “Roses in the Snow” — have consistently garnered rave reviews and amassed hefty sales figures.

Oddly enough, her personal favorite is “Luxury Liner.” “I don’t really know why,” she says. “There’s just something about that album — it’s funny, because it has sold less than any of my others. But whenever I plan a live set there are always more songs from that album. I always do “Luxury Liner,” and I can’t imagine doing a show without Poncho and Lefty.”

Apart from dusting off old gems like Gold Watch and Chain, Blue Kentucky Girl, and If I Could Only Win Your Love, Harris has doggedly uncovered and recorded songs by some of today’s best, and often least known, country writers. Poncho and Lefty, for instance, was written by Texas eccentric Townes Van Zandt. Other names on the long and distinctly furnished list include Guy Clark, Crowell (who has gone on from his Hot Band in Washington to forge his own successful solo career), Keith Sykes, British balladeer Richard Thompson, and pedal steel player Hank DeVito. She is also the recipient of unsolicited song demos from aspiring unknowns. Her office has as many reels, cassettes, and homemade records strewn around it as a major label a&r executive’s. “Eventually, eventually, I listen to everything. I remember getting a demo of Last Chance Texaco from Rickie Lee Jones. I was so blown away by it, even though I knew it wasn’t right for me, that I called her and told her how great and how weird — in a positive way — her song was. Her demo is really better than the version on her album.”

Last year, during the early months of her pregnancy, Emmylou’s voice was in particularly good form and she and the Hot Band recorded over twenty new tracks. From those sessions will most likely come her next Warner LP (and perhaps her next tour). Other current projects include two songs she recorded with country artist Don Williams — Van Zandt’s “If I Needed You” and Williams’ “Crying Eyes” — that will probably appear on Williams’ next MCA disc.

The much ballyhooed “trio project” between Harris, Parton, and Ronstadt is still on the back burner. “Its status,” she says, “is, ‘Boy, wouldn’t it be nice if we could get together and do this thing.’ We’re all so busy. I’ve seen Linda once this past year. She and Dolly came over to sing background on “Roses,” — both at separate times because of their schedules. They crossed between sessions, and I think we were all together for about half an hour. When we three retire we might have a chance at it.”

Harris and Ahern get up to check the progress on their studio. It will house two 24 track consoles, one giant recording room, two smaller sound booths, a second story office for Ahern, a rehearsal room, an equipment room, a lounge, a jacuzzi, and a game area. Walking across the unfinished, dusty mahogany floors of the main studio room, Harris stops up at the arched, beamed ceiling. “It’s like a church in here,” she mumbles. “I always loved the sound you get singing in a church.”

Even in its unfinished form, with carpenters sawing and builders hammering, the Northern Sound studio is a far cry from the water soaked, mud-splattered rooms of their Coldwater Canyon digs, where, with the adjacent Enactron truck lined in, they used to record.

Ducking back in the office out of a sudden late spring shower. Harris goes back to talking about bluegrass: “Last year we were in Germany at a country music festival, and Ricky Skaggs and I were sitting backstage with Sonny Osborne. Osborne was lamenting the passing of an era — not only bluegrass music, but the way of life bluegrass embodies. He was trying to explain to me how, before Earl Scruggs started playing with Bill Monroe, bluegrass had things like accordion in it. Scruggs took the banjo — this hard, incredibly driving instrument — and brought the music another step forward, and away from its roots.

“I’m speaking as a real lover of bluegrass and as a person who has dabbled in it to the point of daring to do a bluegrass album. But my ignorance and my coming from left field has allowed me to do something different. My adherence to the tradition without being so tied down to it is an advantage in a way — being able to blend the new and the old.

“I do feel strongly that the things I put on record are musically right. I’m working from purely a gut feeling.”
“Urban Cowboy”: Country Music Stretches Its Legs

by Sam Sutherland

While the rock-crit establishment continues to ponder the future of new wave and the death of disco, U.S. music fans are quietly gravitating toward some "new" trends that are really old staples: classic R&B, heavy metal from bands once dismissed as dinosaurs, and country & western.

It's the move toward the last of these that most strongly reflects the popular climate of American music today and signals broader changes likely to affect every entertainment medium. "Country-politan," the performer who dresses country roots with pop and rock finery, has steadily increased its marketplace throughout the past decade or so, but a more dramatic swing toward country themes in other mass art forms— principally movies and TV—is raising the ante even higher.

Since early spring, much of the entertainment industry's attention has been focused not so much on the phenomenon of hit crossover records like those of Kenny Rogers and Willie Nelson, but on the blending of rural styles with urban themes, a popular motif among writers, directors, and producers. Middle- and low-brow exploitation films aimed at southern and western consumers have become box-office sleepers, fueled first by the CB-craze and more recently by Hollywood's canny emphasis on country & western soundtracks. Burt Reynolds and Clint Eastwood, already show-ins at the box of fire, have seen their reach extended even further with the addition of contemporary country music to their films' scores. Their success has, in turn, prompted television to follow suit with its own lurid grab-bag of new southern stereotypes.

Currently, both the film and record industries are closely watching Urban Cowboy, the new starring vehicle for John Travolta, to see whether this slice of modern Texas will usher in a new national preoccupation with the cultural surroundings of its title character. Like Saturday Night Fever, which brought the bass-drum pulse of disco to pop dominance, Urban Cowboy was designed from its inception to use a contemporary musical genre as an integral dramatic element.

The film follows the expansion of public interest in latter-day cowboys. Wall Street brokers are wearing $300 cowboy boots with their three-piece suits, while garment-district moguls have decided to switch, rather than fight, consumers' unshakeable attraction to blue jeans. As The New York Times has observed, America's rekindled love affair with one of its oldest heroes, the cowboy, can be traced to the country's current gamut of economic and political woes. Embattled abroad, embittered at home. Americans are fitfully seeking new solidarity, and there are signs of a new patriotic fervor in the heartlands. The cowboy is suddenly hip, precisely because he evokes a conservative and emphatically individualistic code of behavior.

What does this mean for country music? Hard-core fans may wince at the notion of assimilation, yet as the city slicker soundtrack to Urban Cowboy demonstrates, country, unlike disco, began its synthesis with other mainstream pop genres long before the movie was even a glimmer in the eyes of producers Bob Evans and Irv Azoff. "Urban Cowboy," isn't a country record, per se: Its entire first side is devoted to pop and rock performers like Joe Walsh and Bob Seger, both of whom are now pseudo-country Singers in their lyrics while playing uptempo modern rock. The remaining three sides mix "country" performers who have crossover credentials with rock stylists, and both reach not for contrast, but for a middle ground. Mickey Gilley is cast with a classic Ben E. King song closer to black gospel than white country, while Bonnie Raitt restrains her blues-oriented instincts to turn in strikingly effective country performances.

If the album is clearly calculated to sell well, its balancing act between pop mainstream and country isn't necessarily artificial. Like the movie, the Full Moon/Asylum anthology mirrors the emergence of a new culture shaped as much by Nashville, Memphis, and Atlanta as by New York and Los Angeles. Texas, buoyed by rapid population growth and a comparatively bullish economy, is already seen by some as a new purveyor of cultural styles; Dallas and Houston, like Los Angeles before them, are now creating their own hybrid sense of style, rather than trying to match that set by eastern cities. Would-be sophisticates are no longer compelled to keep up with their New York peers, since the cowboy's reincarnation promises to make them trend-setters, rather than followers.

Will this new country sensibility come to dominate pop culture as disco did? Probably not, owing both to its more gradual rise to prominence and the very lesson taught by Saturday Night Fever itself—the potential for overkill via mass-media exposure. At the same time, though, both the national mood and that steady assimilation of southern styles, issues, and archetypes argue that country music is becoming less of a distinct regional style and more a tributary of mainstream, one-size-fits-all pop.
Pete Townshend Tries Harder
by Nick Beaumont

Pete Townshend: Empty Glass
Chris Thomas, producer
Atco SD 32-100

Until now, Pete Townshend has been the most eloquent opponent of any efforts to cast him as the rock auteur behind the majestic, turbulent vision of the Who. Songwriter, lead guitarist, and thematic architect for that seminal British band, he insisted it was the volatile chemistry among its four members that explained its power, not his grand designs. As if to prove his point, his outside ventures were infrequently mounted and modestly framed. In contrast to the vaulting narrative and focused symbolic ambitions he brought to the Who, Townshend’s offhand solo debut, “Who Came First,” and his 1977 collaboration with Ronnie Lane, “Rough Mix,” were informal samplers of his varied musical sources and topical concerns.

“Empty Glass” finally brings him back to the rock heartlands that are the Who’s natural element. Unlike its predecessors, Townshend’s new solo work is musically and thematically unified, its language the same synthesis of street verbiage and power-chorded rock as the band’s. The spirituality central to both “Who Came First” and “Rough Mix” is now way masked, but the music rocks with a diamond-hard vengeance or soars with a luminous melodic richness closer to ’71’s “Who’s Next” than to much of the Who’s output since then or to the Townshend solo forerunners.

Rough Boys, the first single, signals the reconciliation between Townshend’s two artistic vehicles with furious, double-time rhythm guitar accents that suggest his groundbreaking arrangements for the Who. Its subject makes that connection all the more apparent, for he attempts a meeting of minds with rock’s new wave of songwriterists and musicians. Rather than ape the herky-jerky rhythms and winking cybernetic aesthetic of that genre, Townshend pays it homage with an up-tempo rocker celebrating his own roots. He chronicles his initial ambivalence as well as his sense of kinship with a new generation of rock rebels: Hailing the title character, he admits, “I nearly missed you,” and confesses his mixture of admiration and saddler-wiser distance by concluding, “I want to bite and kiss you.”

That sensitivity to rock’s changing face yet unchanged motives surfaces as well in Empty Glass and Jools and Jim, a review of rock criticism’s intellectual conceits that is both scathing and thoughtful. The title song measures Townshend’s journeyman wisdom about pop notoriety against Everyday’s perception of that myth. After acknowledging the lure of fame, he reduces the rewards of pop celebrity to survival and temporary rapture.

The contemplative songs are at least as effective, from straightforward celebrations of romantic love to mystical probings of the pitfalls and the promise of new relationships. Let My Love Open the Door and A Little Is Enough are stirring, openhearted love songs that pointedly allow religious as well as romantic interpretations, while And I Moved stresses spiritual motives and reinforces the double vision of those other works.

“Empty Glass” isn’t a perfect record. Its more formal sense of substance and style make Townshend’s fits of bombast or glibness far more apparent than they seemed in either “Who Came First” or “Rough Mix.” Yet it still has greater power than those LPs, aided considerably by Chris Thomas’ crisp production. Despite a virtual round robin of rhythm sections, he and Townshend have achieved a polished work that is as personal as its most confessional predecessors and as energetic as anything the Who has recorded in the past decade. “Empty Glass” is filled with potent ideas, and the wise will drink up.

The Robert Cray Band:
Who’s Been Talkin’
Bruce Bromberg & Dennis Walker, producers. Tomato TOM 7041 by Sam Sutherland

The past few years have witnessed a heartening resurgence of contemporary blues, even as some observers were ready to administer final rites over its corpse. Satisfying new albums by underexposed stylists like Albert Collins and Lonnie Brooks, as well as stirring records by younger white blues aficionados like the Nighthawks and the Fabulous Thunderbirds, have attested to the hardiness of this prime source point. But the best news yet may be this striking debut album for twenty-six-year-old Robert Cray, a guitarist, writer, and singer who proves he’s more than ready to perpetuate the genre.

“Who’s Been Talkin’” is neither an exercise in rote scholarship nor a cross-over minded dilution. What Cray’s quartet and its studio allies have achieved is that proverbial ideal, a living blues tradition that fixes its gaze on the present as much as the past. Lurking beneath the spare lines of Cray’s classic guitar style are flashes of rock modernity, underscored by his band’s flexibility in handling Latin-inflected syncopations reminiscent of Fleetwood Mac’s early rock-blues synthesis.

That underlying contemporaneity never obscures Cray’s grasp of the central blues idiom. Whether interpreting standards like Willie Dixon’s Too Many Cooks or the Howlin’ Wolf title song, or playing Cray’s own sharp-eyed originals, the band captures the coiled energy and slice-of-life realism essential to the genre. Cray’s
The Robert Cray Band: Salgado, Cousins, Cray (seated), Olson

supple, powerful singing and crisp guitar are matched in both style and substance by the feisty harmonica work and soaring harmony vocals of Curtis Salgado, clearly a major new blues talent in his own right.

Bruce Bromberg and Dennis Walker achieve a lucid production finish, augmenting the basic ensemble with slight shifts in the rhythm section lineup and some romping horn charts (especially on O. V. Wright’s “I’m Gonna Forget About You”, one of the set’s high points). But never do they undercut the grit of Cray’s singing and writing. In the latter department, “I’d Rather Be a Wino” explicates its title sentiment with sufficient zest to make one think this is a rediscovered classic, not the work of a newcomer. And “Nice As a Fool Can Be” likewise verifies Cray’s skill at capturing the laconic humor and survivor’s spirit of the best blues.

The only fault to be found here is both minor and subjective: Cray’s technique as a guitarist can’t be knocked, but his typically rounded electric tone might have been sharpened to a more cutting edge for greater contrast. Only obsessive blues guitarists are likely to quibble, and even they will greet the Cray Band’s collection with enthusiasm.

Levon Helm: American Son
Fred Carter Jr., producer
MCA 5120
by Crispin Cioe

Levon Helm’s past solo efforts using New York session musicians (billed as the RCO All Stars) were musically tight affairs that made up in chops and big-band funkiness for what they lacked in direction. A new label and producer and a burgeoning acting career (he played Loretta Lynn’s father in “Coal Miner’s Daughter”) seem to have made all the difference.

“American Son” is an unassuming, undeniable classic that merges country with swamp funk and Nashville twang with southern r&b. It is Levon to the bone. His soulful drumming and laidback Arkansas drawl have found their most comfortable setting since the Band broke up in 1976.
The material plays a big part in the album's success, with Helm resurrecting a couple of '60s country classics by Harlan Howard (Howard penned the immortal I Fall to Pieces for Patsy Cline.) His approach is a bluesy swagger that gets right down to the common roots country and R&B always have shared. Watermelon Time in Georgia begins with Levon voicing vibrato-heavy blues ninth chords on harmonica, and his reading of the Detroit factory worker's tale has just the right humorous edge, especially on lines like, "It makes a country boy get down in the mouth, when his body's up north but his heart's down south." The other Howard song, Nashville Wimmin, is a very low-down blues. Helm's voice sounds as close to a snarl as it ever has, pitched against a moaning steel guitar and his own patented, deadpan backbeat on the drums. Blue House of Broken Hearts reveals some strong southern gospel roots, cloaked in a plaintive ballad about a near-mythological "house" for fools who have lost in love.

Fred Carter Jr.'s production and guitar playing never overshadow Levon's delightful personality, and Nashville regulars like Buddy Emmons on steel guitar and drummer Kenny Buttrey play like this ain't just another session. Believe me, it ain't.

Gladys Knight and the Pips: About Love
Ashford & Simpson, producers
Columbia JC 36387
by Christopher Petkanas

Contrary to popular belief, "About Love" does not represent a regrouping for Gladys Knight and the Pips. Though complex label ensnarlments have kept them from recording together for three years, and though each has released two albums without the other, Knight and the Pips have continued to perform together in Las Vegas and abroad.

The album was written and produced by Nickolas Ashford and Valerie Simpson, with whom this consummate soul group worked in Motown's Detroit days. One has come to expect clean, crisp craftsmanship in an Ashford and Simpson project, and indeed the earmarks are all here: the virile handclaps, the shimmering horns, the sophisticated effects. After Knight's dim m.o.r. solo turns with Gary Klein (see Streisand) and Jack Gold (see Marlena Shaw and Johnny Mathis), "About Love" finds her singing alternately realistic and romantic love ideas with mature, relaxed authority. She praises fidelity, a subject favored by the husband-and-wife production team, in both the single Landlord and in the centerpiece ballad, Still Such a Thing, Bourgie'. Bourgie'—which developed from a posh instrumental on the producers' 1977 "Send It" album—gives the Pips an opportunity to show off their gloriously gutsy, yet smooth soulful voices and harmonies.

But none of the material showcases Knight's storytelling genius or inspires her to bite off phrases with clenched emotion the way Neither One of Us and Midnight Train to Georgia did. Still, the album is not as disco-heavy as Ashford and Simpson's own recent effort, "Stay Free," and it should be of significance to anyone interested in the evolution of superior quality, gospel-rooted Sixties soul and one of our finest popular singers.

The Long Riders: Original Soundtrack
Ry Cooder, producer/composer/arranger. Warner Bros. HS 3448
by Sam Sutherland

The best film soundtrack so far this year is neither a symphonic screen-sweeper nor a platinum crossover contender dotted with familiar superstars. Ry Cooder's music for The Long Riders is something far rarer, a score as precise in its vision as that of the film's makers, and one equally, if not more, evocative.

The movie retells a central myth of the Old West, the rise and fall of the James-Younger gang. Director Walter Hill maintains the sharper edges of historical authenticity while respecting his subject's power as myth, even as he underscores its link to mortal reality with bloody spatters of violent realism. Cooder attempts no less with his collection of traditional and original material, and succeeds with an eloquent summation of the film's themes that works as a separate musical statement.

Guitarist, mandolinist, and student of music both ethnic and in-between, Cooder has previously animated various American folk traditions, not through precise emulation but spirited synthesis. That approach continues here, if more subtly. Much as he previously interlaced diverse musical motifs and instrumental techniques into coherent hybrids, he here draws from a sophisticated arsenal of traditions to support the outlaw legend.

Musically, though, Cooder focuses more narrowly on the time and place at hand—the West during the bruised decades after the Civil War. He does so by
blending literal source music of that day (I'm a Good Old Rebel, sung by veteran folk singer Mitch Greenhill, and Rally 'Round the Flag), with traditional post-mortem celebrations of the story's outlaw heroes (Jesse James). At least as compelling are the original compositions and arrangements by Cooder, pianist Jim Dickinson, and David Lindley. A multi-instrumental wizard, Lindley's musical and geographical background make him as perfect a partner here as on Cooder's "Bop 'Till You Drop" album last year.

With spare pairings of acoustic stringed instruments and by reaching back to European and African roots for both sound and style, Cooder conjures a timeless backdrop. Banjo, guitar, mandolin, harmonium, and chord zither represent the literal past, while Cooder, Lindley, and their partners tap lap steel, bajo sexto, samisen, saz, tamboura, and even electric guitars for aural spice.

As the title theme triumphantly proves, that fusion of different root cultures works. None of the seams show, nor does the care of the ensemble arranging overpower the rustic finish devised for the film. Cooder has fashioned his own subtly mythic precis of the American West, and regardless of the film's box-office future, his score for The Long Riders looms as a new benchmark in translating film into music.

Mary Martin: On Broadway
Encore / CBS P. 14282
Goddard Lieberson, producer
by John S. Wilson

"On Broadway" is a collection of songs by the Gershwins, Rodgers and Hart, Howard Dietz and Arthur Schwartz, and Vincent Youmans and Irving Berlin. With the exception of Berlin's It's a Lovely Day Tomorrow, all are from the light-hearted musicals of the '20s and '30s that preceded Mary Martin's career. (In fact her introduction to the Broadway theater didn't come until 1938 as an astonishing strip tease/vocal performance of Cole Porter's My Heart Belongs to Daddy.)

Martin made these recordings between 1949 and 1951, in her South Pacific period (before she was apotheosized in The Sound of Music). Unfortunately, she is apt to fall into a formal, grand dame manner of singing that is at odds with the light casual tone of the material.

Fact:
There are now more than 1000 car stereo products.

Question:
Do you know which ones you need?

Answer:

Why guess - and make expensive mistakes - when you can have the audio industry's top experts show you the way to go?

You'll know exactly what you need to spend for your car stereo system - the components you need, the best place to buy them and who should install them. And much more, like cost-no-object dream installations.

Order now -- just $2.95 for your Buying Guide to Car Stereo Systems -- Supply is limited!
In N.Y. Hawaii, Alaska, Puerto Rico

Audio-Technica AT15-SA

Sennheiser HD430

Koss Pro 4/4449 $99

Pickering XSV3000

Stanton 681F EES56.99

Shure M96 -HE

Audiophile C-90 AD

C60 SA (CRL)

Audio-Technica ATR-110..

IN INTERNATIONAL}

DEALING WITH

Audio-Technica AT12 SA

Audio-Technica AT14-SA

Audio-Technica AT15-SS

Shure M97 -HE

C-90 U0X111 or I

Empire 2000ES

Empire 70000

SANYO la BLAUPUNKT Car Stereos.

SANYO

BLAUPUNKT

FREE CATALOG UPON REQUEST!!

We carry a full line of PIONEER TECHNICS AKAI, J E & Tele
Home Stereo Equipment as well as PIONEER JENSEN CLARION
SANYO & BLAUPUNKT Car Stereos.

ORDERING INSTRUCTIONS

International orders invited. Call us Toll Free Mon - Fri. 9 AM-7 PM, Sat. 9 AM-5 PM.

No C.O.D. orders accepted. Payment by credit card, check or money order only.

No Telephone orders accepted. Record orders by mail. Statement accompanies each order.

Willie and Ray—another good move

She gets away from this most successfully on Dietz and Schwartz's Confession. A vo-
ral strip tease much like the one that
launched her career. Actually, the most at-
ttractive aspect of "On Broadway" is Ben
Judlow's arranging of nine of the twelve
songs. He makes a stulte use of a quintet
that is centered on a variety of woodwinds
(played by Thomas Parshley) and con-
ducted by Lehman Engel.

Willie Nelson & Ray Price:
San Antonio Rose
Willie Nelson, producer
Columbia JC 36476

by Steven X Rea

Willie Nelson may have abandoned
songwriting for a movie career, but he cer-
tainly hasn't given up making great al-
bums. On "San Antonio Rose," he teams
up with "Cherokee Cowboy" Ray Price.
who had a slew of country and pop hits in
the late '50s and early '60s—among them
"Crazy Arms and Release Me," both given
the late '50s and early '60s among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them
who had a slew of country and pop hits in
the late '50s and early '60s—among them

"The Up Escalator" lacks the raw bite
of Graham Parker's last L.P. "Squeezing
Out Sparks." Nor does it match the
funk and flash of his mid-'70s master
piece, "Heat Treatment." No, this album
has charms all its own. Parker has taken
some real chances this time, with Jimmy
lovin's spacious production giving him all
the aural room he needs to stretch out
and extend himself beyond the standard
short-pop-tune form.

Parker's brand of psychodrama
rock has always combined intense personal experience with churning arrangements from his band, the Rumour, and memorable guitar riffs from his lead guitarist, Brinsley Schwarz. The songs here divide pretty evenly between impressionistic horror stories of modern life (Delilah's Side Walk deals in pure New York terror and out over naming the city) and romantic paens (Love Without Greed or The Beat of Another Heart). Of the first batch, Empty Lives is the most viscerally affecting, picking up where Bob Seger's Feel like a Number left off. First the singer casts himself in all the trappings of consumerism, "I'm just a check on a box in a questionnaire, a name on a pill that gets you there."

But as the song progresses and the jerking rhythms solidify the same voice warns, "I can't hear your cries, so don't get me to fill up your empty lives." Sometimes Parker can be a little too slick in his enunciation. Stupefaction rambles on like a stock catalog of everyday woes, after which the singer vows that like a latter-day Eric Burdon, "We're gonna get clear out of this someday."

But more often than not, he and the Rumour hit the mark, with brilliantly edgy music that catches the tempo of these times as cleverly as any act performing in rock today. One line—sung as a chorus with Bruce Springsteen—perhaps sums up the ironies and insights of "The Up Escalator": "If I could only find a switch that turns on the endless night."

Shandi
Commander Chapman producer
Dreamland DL 1 5001
by Steven X. Rea

Mike Chapman was last year's hot shot producer, reaping platinum the world over for his work with the Knack, Blondie, Suzi Quatro, Exile, and Pat Benatar. Well, unfortunately, the man who could do no wrong—who has taken to calling himself "The Commander"—has let it all go to his head. He wangled a very lucrative deal with RSO to distribute his Dreamland label, and he has now taken to writing in furiously obnoxious liner notes such as those that blemish the back cover of Shandi's self-named debut. Get this: "I have found the solution to the problem at hand. The problem is, what is rock & roll music in its ultimate female form. The solution is Shandi. Her contribution to all of our lives will be enormous—The Commander."

Ha! The greatest contribution Shandi could make to our lives would be to never set foot in a recording studio again. Once known as Shandi Cinnamon and signed to Elektra, Asylum's country division, the songstress used to dress in typical Nashville style with tight white jumpsuits and cowgirl fringe—a real southern blonde bombshell. Well, now she has lost her Cinnamon, dyed her hair three shades of purple, and dressed herself in pinky Spandex and fake leopard.
As for her singing, Shandi possesses one of those reckless, wailing voices that can wander a three-octave span and often goes off on screechy wavers into the ozone. Her songs all center around boys and girls and sex. The lyrics are reproduced on the sleeve (in script, mind you). Here's a sampling: "But hey-remember what I told u? If some 1's gonna hold you, Boy they better love u..."

The production on "Shandi" is top notch. Drummer Pat "the Walk" Maselotta couldn't ask for a better sound. The mix is clean, the guitar is crisp with a crisp sound. But for what do they ring? Shandi's songs (all ten of them published by her Som Dame Music — is there an ego problem here?) are flaccid and embarrassingly adolescent. The first single, "Nobody Loves U Better," ach's with emptiness. Boy Crazy mimics everything that's bad about rock & roll. Now watch "Shandi" will be a huge hit.

The Art Ensemble of Chicago:

Full Force
Manfred Eicher, producer
ECM 11167
by Don Heckman

The second installment in Commodore's current series of reissues features the basic new Commodore repertory company (the Condon gang) and such notable visitors as Lester Young, Chu Berry, Roy El,
be found, not a misstep or a bad calculation. We are clearly listening to a composer who knows exactly what he wants. But one’s response is mostly intellectual, based on respect for Corea’s chops, his knowledge of synthesizers, his arranging skills, and his precise recording techniques. Heart, somehow, does not enter into the equation.

Samba La. begins with the loose, free-spirited, group-sing joy of a stroll through Rio on Mardi Gras, but once the mood is established, it simply repeats itself: even the presence of Flora Purim and Airo Moreira does little more than lend authenticity to the mix. Tap Step, with its happy, bouncing blues melody, is reminiscent of Ornette Coleman’s Ramblin’ (despite its curious dedication to Charlie Parker) until Corea shifts unexpectedly into a repetitious pedal bass figure. Almost the identical figure emerges on Magic Carpet, dulling the colors of that piece as well. The Slide is far less interesting with its stereotypical fusion melody, but it glows with the heat of Corea’s super keyboard improvising. Grandpa Blues, with its humorous dialogue between Corea’s vocorder and Stanley Clarke’s Talk Box, is an amusing bit of icing; the following piece, Flamenco is noisy and overdone.

“Tap Step” simply isn’t in a class with what Corea has done, from time to time, either with Return to Forever or on his own. Yet his creative powers are such that even his turkeys sometimes gain the magical powers of flight. If only he could invest them with the flower of the spirit as well as the energy of the mind.

Chick Corea: Tap Step
Chick Corea, producer
Warners Bros. BSK 3425
by Don Heckman

Chick Corea is so very good at what he does, and his recordings are so adept in their manipulation of the myriad sound sources of the new jazz, that it’s difficult to explain why his music is so easy to tune out. “Tap Step” can be described as an almost encyclopedic survey of how to integrate acoustic with electronic instruments, of how to mix pop elements with jazz lines, and of how to exploit to the utmost the double timbre, ostinato-styled rhythms of fusion jazz. There’s not a technical flaw to...
Jazz

by Don Heckman & John S. Wilson

Nick Brignola:
Burn Brigade
Susan & Jim Neumann, producers. Beehive BH 7010

The potential of a three-baritone saxophone ensemble is excitingly evident on the first cut of “Burn Brigade.” But it soon becomes apparent that Nick Brignola, with his full, rich, rugged sound and driving intensity, leads the group and provides the disc’s most vitalizing solos. By comparison, the other two saxists, Ronnie Cuber and Cecil Payne, seem pale and unimaginative. Pianist Walter Davis Jr. contributes some enlivening solos, but Brignola’s color and force dominate throughout. I’d like to hear him in a context with Gerry Mulligan, possibly his only current peer among baritone players. J.S.W.

Alberta Hunter:
Amtrak Blues
John Hammond, producer Columbia JC 36430

Alberta Hunter’s second album since her 1977 comeback at New York’s Cookery (at the age of eighty-two) is more representative than her first—the soundtrack of Remember My Name. It also provides a better setting than the mere piano and bass support she gets at the Cookery. With a full rhythm section plus the rich comments of trombonist Vic Dickenson, trumpeter Doc Cheatham, and reed players Norris Turney and Frank Wess, she doesn’t have to generate all of her own steam and can work in an easier groove. The result is a bright, clean recording that brings out the warm, vivid colors in her incredibly lively voice. J.S.W.

Bill Evans: We Will Meet Again
Helen Keane, producer Warner Bros. HS 3411

Bill Evans’ current group won’t delight fusion freaks, but it is a boon and a blessing to those who have been disturbed by the increasingly introvertevive tone of his recent recordings. Here he is backed by a boppish group of young players who counter his sometimes too-piquant keyboard improvisations and urge him into a more aggressive, up-front style. The results are excellent. D.H.

Keith Jarrett: Nude Ants
Manfred Eicher, producer ECM 2-1171 (two discs)

“Nude Ants”—presumably a pun on New Dance, a piece on the album—provides a rare opportunity to hear Keith Jarrett in the unusual (for him) context of a “live” nightclub recording. Saxophonist Jan Garbarek works well with Jarrett, but the European rhythm team of Palle Danielsson and Jon Christensen does little to urge him out of his self-congratulatory, pop/jazz mysticism. Only the straight-ahead jazz-jam pieces remind us of what a fine, gutsy, rhythmic improviser lurks beneath the kitschy exterior. D.H.

Steve Kuhn / Sheila Jordan Band: Playground
Robert Hurwitz, producer ECM 1-1159

Pianist Steve Kuhn and singer Sheila Jordan are among the underappreciated talents of contemporary jazz, and the debut recording of their new group underlines the difficulty many people have getting into their music. Kuhn has overextended himself, writing both words and music to floating, obscure-sounding songs that never really provide Jordan with anything substantial to go on. The best moments are those in which the improvisation is pure and free, but they come far too rarely. J.S.W.

The New Black Eagle Jazz Band: Classic Jazz
Philips 9198 784

After hearing the recent releases of Black Eagle on its own label, my immediate impression of “Classic Jazz,” recorded by Philips of Holland, was that this excellent traditional jazz band is continuing to grow and improve. As it turns out, Side 1 was made in 1976 and Side 2 in 1978, which indicates a consistently high level of performance over a fairly long period. What makes this record particularly interesting—aside from a superb treatment of Sidney Bechet’s Spreading Joy—is the obscure gems Black Eagle has dug up. Among them are Bombay, Funny Fumble, Roamin’, and Sam Morgan’s Short Dress Gal. J.S.W.

Bob Szajner Triad:
Jazz Opus 20/40
Bob Szajner & Laura Holiday, producers Seeds and Stems SSH 7802

This album is a pleasant surprise: It is made up of original material written and played by a completely unknown pianist, and it is neither tediously pretentious nor tediously simplistic. Bob Szajner is a relaxed, swinging pianist with a straightforward attack (no flourishes, no “clever” borrowings), and his compositions follow suit—simple, melodic, catchy. It’s positive background music that may not always make you listen but is consistently affecting. J.S.W.

Jessica Williams:
Rivers of Memory
Scott Johnson, producer Clean Cuts (Adelphi Jazz) CC 701

San Francisco-based pianist Jessica Williams has the technique, the imagination, and the panache to be a major jazz star. But first she’s going to have to get past an over-abiding affection for technique for its own sake and a tendency to fall into the most banal kind of fusion-crossover platitudes. At her best, however (Memory of Tomorrow), she is something very special indeed. Watch out for her in the future. D.H.
HIGH FIDELITY
CLASSIFIED

MAIL TO: 825 7th Ave., 6th Floor, New York, N.Y. 10019. Phone: 212-265-8360

GENERAL: All copy subject to publisher approval. First call for all names of P.O. Box MUST supply permanent address and telephone number before ad can run.

CLOSING DATE: 1st of second month preceding cover date.

CLASSIFIED RATES: Regular type, per word: 1x—$1.80, 3x—$1.75, 6x—$1.65, 12x—$1.60.

IMPERIAL type, per word: 1x—$2.40; 3x—$2.35; 6x—$2.20; 12x—$1.25. Minimum 15 words. Words in caps—10 extra each. Box numbers: $2.00 additional per insertion to cover cost of handling and postage. Display, per inch: 1x—$290; 3x—$280, 6x—$275, 12x—$235.

PAYMENT WITH ORDER: Send check, M.O., MASTERCHARGE or VISA No. and expiration date to: Classified Dept., HIGH FIDELITY, 825 7th Ave., 6th Floor, New York, N.Y. 10019.

TOP-NAME AUDIO AT LOW LOW PRICES!! Advert, AIWA, AR, Bose, dbx, Denon, Dual, ESS, Haiter, Harman Kar- don, Infinity, JBL, Mitsubishi, NAD, Nikko, Onkyo, Phase Linear, SAE, Soundcraftsmen, Tandberg, Thorens, and many many more we don't dare mention by name—all at best possible pricing. All factory-fresh with full warranty. Compare prices, selection and service and we're the best in the business. Our representatives are available for phone quotes or additional information Monday-Saturday from 10AM to 7PM (EST) at 212-254-3125. Or send $2.00 for our informative brochure to DIRECT DISCOUNTS LTD., P.O. Box 841, Cooper Station, N.Y. 10276. We accept M/C, VISA over the phone and DON'T charge sales tax to out-of-state customers.

SALE!! Slighty used cello 14/41 case, Anvil, $325.00. Call 914-478-

CLASSIFIED ADVERTISEMENTS: For classification, information, and application please write: ABCO, Dept. CR, 1201 East Main Street, Meriden, Conn. 06450.

TOP -NAME AUDIO AT LOW LOW PRICES!! Advert, AIWA, AR, Bose, dbx, Denon, Dual, ESS, Haiter, Harman Kar- don, Infinity, JBL, Mitsubishi, NAD, Nikko, Onkyo, Phase Linear, SAE, Soundcraftsmen, Tandberg, Thorens, and many many more we don't dare mention by name—all at best possible pricing. All factory-fresh with full warranty. Compare prices, selection and service and we're the best in the business. Our representatives are available for phone quotes or additional information Monday-Saturday from 10AM to 7PM (EST) at 212-254-3125. Or send $2.00 for our informative brochure to DIRECT DISCOUNTS LTD., P.O. Box 841, Cooper Station, N.Y. 10276. We accept M/C, VISA over the phone and DON'T charge sales tax to out-of-state customers.

SALE!! Slighty used cello 14/41 case, Anvil, $325.00. Call 914-478-

SAXITONE TAPE SALES

ATTENTION: "FOREIGN" AUDIOPHILES AND DEALERS! Western World Audio Exporters can supply virtually ALL brands of hi-fi components, speakers, cartridges, etc. (including esoteric lines) at very attractive prices. Quotes, terms and availability furnished upon request. Write to WESTERN WORLD AUDIO, 373 Fifth Avenue, suite 1556, New York, N.Y. 10016. TELEX-230176 SAKI UR.

SAVE 50% BUILD YOUR OWN SPEAKER SYSTEM. Write McGee Radio Electronics, 1701 McGee Street, Kansas City, Missouri 64108.

CERTIFIED AUDIO CONSULTANT HOME STUDY HI-FI Course available. Send $5.00 for information. Includes AUDIO TECHNICAL YEAR BOOK with 29 sample lessons and application for membership in the Society of Audio Consultants. Write SAC, P.O. Box 552, Dept. HF, Beverly Hills, CA 90213.

RECORDS IN REVIEW: 1980 EDITION. Available April 1, the 25th annual edition of the record-buyer's "bible." Contains the complete text of all past and semi-classical record and tape reviews as they appeared in HIGH FIDELITY magazine in 1979 issues. Deluxe clothbound edition, yours for $11.95 plus S1.25 for postage and handling. Send your order to: Wyeth Press, 1 Wyeth Street, Manot, Ohio 44302.

SAVE 50% BUILD YOUR OWN SPEAKER SYSTEM. Write McGee Radio Electronics, 1701 McGee Street, Kansas City, Missouri 64108.

HORN- WOOFERS- MID- TWEETERS at tremendous COM savings. Atlas, Electro-Voice, Philips, Peerless, Polydax, and many others. Dozens of hard to find items used in major manufacturers most expensive systems. Huge selection of crossover network components, automobile systems, and musical instruments loudspeakers. Send $2.00 for CATALOG. REFUNDABLE WITH PURCHASE. SRC AUDIO Dept. HF1, 3238 Towerwood Dr., Dallas, TX 75234.

ATTENTION: "FOREIGN" AUDIOPHILES AND DEALERS! Western World Audio Exporters can supply virtually ALL brands of hi-fi components, speakers, cartridges, etc. (including esoteric lines) at very attractive prices. Quotes, terms and availability furnished upon request. Write to WESTERN WORLD AUDIO, 373 Fifth Avenue, suite 1556, New York, N.Y. 10016. TELEX-230176 SAKI UR.

HAIFER IN STOCK TRADES ACCEPTED. Morel Electronics, 57 Park Place, New York, N.Y. 10007 212-964-4570.

SAXITONE TAPE SALES

DON`T PAY THE HIGH PRICE FOR SPEAKERS BUILD your own. Send S3.00 for the same basic cabinet design used by many companies. TREK Audio, 24 Altun Place, Jamestown, N.Y. 14701.

LOWEST PRICES! HIGHEST RELIABILITY! SOUND SHED HIFI has—AIWA, AR, Bose, Cerwin Vega, DBX, Denon, ESS, JVC, Kenwood, Lux, NAD, Nakamichi, Onkyo, Phase Linear, Pioneer, SAE, Sony, Tandberg, Technics, Thorens, Yamaha, and many more. For quotes and orders call (914) 258-4342—9am-6pm Monday-Friday. For catalog, send S1.00 to: SOUND SHED HIFI, Merrits Island Road, Pine Island, New York 10969.

AUDIO, VIDEO, ELECTRONIC PRODUCTS: Best Pricing! Prompt Delivery! AB DBX, TEAC, TASCAM, ONKYO, SOUND WORKSHOP, MAXELL, MOBILE FIDELITY REC- GRS, Others. SOUND IDEAS, Dept. HF, P.O. Box 340, Cary, NC 27511. 1-800-334-2483 INC 919-467-8462.

MISCELLANEOUS

DIAMOND NEEDLES and Stereo Cartridges at Discount prices for Shure, Pickering, Stanton, Empire, Grado, Audio Technica and ADC. Send for free catalog. LYLE CAR- TRIDGES, Dept. H, P.O. Box 69, Kensington Station, Brooklyn, New York 11218. For Fast Service, call TOLL FREE 800-221-0906.
Trumpeter Freddie Hubbard walks a fine and difficult line on "Skagly." He haps the best of the surviving post bebop trumpeters and surely one of the only ones who has tried to find a viable mix of personal creativity and commercial success. He tries to do too much this time around, and the results are peculiarly schizophrenic.

The pieces run a tremendous gamut. Happiness Is Now is predictable disco jazz. Theme from Summer of '42 is a pure jazz ballad improvisation. Cuts 52.49 Free catalog: Musical Concepts, Box 5832, Chicago, Ill., 60680.

Even if the Hot Three never records again, it has made a niche for itself in the jazz annals with this delightful and very revealing album.

Freddie Hubbard: Skagly
Freddie Hubbard, producer
Columbia FC 36418

by Don Heckman

Kenny Davern

Continued from page 101
by which time it had already developed an ensemble personality. As Dan Morgenstern's notes indicate, the group is descended from a line of notable clarinet players: Jelly Roll Morton and the Dodds brothers; Pee Wee Russell, Joe Sullivan, and Zutty Singleton; Benny Goodman, Teddy Wilson, and Gene Krupa. But though all three of these musicians are steeped in the jazz tradition, there is nothing traditional about their playing. Their program is drawn from familiar material—"Fidgety Feet," "Chimes Blues," "Ballin' the Jack," "See See Rider"—but their approach avoids whatever stereotypes may be attached to the tunes.

The result is some unusually fresh, provocative playing. Davern is constantly probing, with imaginative twists and turns, sensitive dynamics, and an often surprisingly strong projection that never breaks into shallowness. Hodes's solos scampers one moment, rumble the next, and sometimes weave into fascinating chordal angles. As an accompanist—his most essential contribution—his flls are little cameos in themselves. DeMicheal is, on this occasion, a gem of a drummer. Like Singleton or Sid Catlett, he is a listener and supporter who colors the performances with accents and fills that complement but never crowd, providing a rich, soft carpet on which Hodes and Davern can dance. Even if the Hot Three never records again, it has made a niche for itself in the jazz annals with this delightful and very revealing album.
### ADVERTISING INDEX

<table>
<thead>
<tr>
<th>Key No.</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC Leisure Books</td>
<td>58</td>
</tr>
<tr>
<td>Akai America Ltd.</td>
<td>10</td>
</tr>
<tr>
<td>Audio-Matic Electronics</td>
<td>98</td>
</tr>
<tr>
<td>Audio-Pro</td>
<td>95</td>
</tr>
<tr>
<td>Audio Supermart</td>
<td>100</td>
</tr>
<tr>
<td>Audio Technica U.S. Inc.</td>
<td>4</td>
</tr>
<tr>
<td>Bang &amp; Olufsen</td>
<td>17</td>
</tr>
<tr>
<td>BASF</td>
<td>35</td>
</tr>
<tr>
<td>Bose Corp.</td>
<td>Cover III</td>
</tr>
<tr>
<td>BSR (USA) Ltd.</td>
<td>13</td>
</tr>
<tr>
<td>Buying Guide to Car Stereo Systems</td>
<td>97</td>
</tr>
<tr>
<td>Caedmon Records</td>
<td>77</td>
</tr>
<tr>
<td>Classified Ads</td>
<td>103-105</td>
</tr>
<tr>
<td>Discount Music Club</td>
<td>86</td>
</tr>
<tr>
<td>Discount Stores</td>
<td>Cover IV</td>
</tr>
<tr>
<td>Electro-Voice, Inc.</td>
<td>36</td>
</tr>
<tr>
<td>Empire Scientific Corp.</td>
<td>38</td>
</tr>
<tr>
<td>Empire Scientific Corp.</td>
<td>75</td>
</tr>
<tr>
<td>47th Street Photo</td>
<td>83</td>
</tr>
<tr>
<td>Fuji Tape</td>
<td>63</td>
</tr>
<tr>
<td>High Fidelity's Test Reports</td>
<td>78</td>
</tr>
<tr>
<td>Illinois Audio</td>
<td>81</td>
</tr>
<tr>
<td>International Hi Fi</td>
<td>98</td>
</tr>
<tr>
<td>Jensen Sound Laboratories</td>
<td>21</td>
</tr>
<tr>
<td>J &amp; R Music World</td>
<td>99</td>
</tr>
<tr>
<td>JVC America Inc.</td>
<td>8, 9</td>
</tr>
<tr>
<td>Kenwood</td>
<td>16</td>
</tr>
<tr>
<td>Maxell Corp.</td>
<td>19</td>
</tr>
<tr>
<td>McIntosh Laboratory</td>
<td>14</td>
</tr>
<tr>
<td>Mitsubishi Audio Systems</td>
<td>37</td>
</tr>
<tr>
<td>Mobile Fidelity Records</td>
<td>71</td>
</tr>
<tr>
<td>Music Listener's Book Service</td>
<td>69, 76, 80</td>
</tr>
<tr>
<td>MXR Innovations</td>
<td>79</td>
</tr>
<tr>
<td>Park Row Electronics</td>
<td>85</td>
</tr>
<tr>
<td>Pickerings &amp; Co., Inc.</td>
<td>89</td>
</tr>
<tr>
<td>Pioneer High Fidelity</td>
<td>Cover II, 1</td>
</tr>
<tr>
<td>Revox</td>
<td>39</td>
</tr>
<tr>
<td>Robins Industries, Inc.</td>
<td>17</td>
</tr>
<tr>
<td>Sansui Electronics</td>
<td>7</td>
</tr>
<tr>
<td>Scott, H. H., Inc.</td>
<td>4</td>
</tr>
<tr>
<td>Shure Brothers, Inc.</td>
<td>56</td>
</tr>
<tr>
<td>Sony Corp.</td>
<td>55</td>
</tr>
<tr>
<td>Sony Industries, Inc.</td>
<td>2</td>
</tr>
<tr>
<td>Sound Reproduction</td>
<td>100</td>
</tr>
<tr>
<td>Stereo Corp. of America</td>
<td>101</td>
</tr>
<tr>
<td>Stereo Test Reports</td>
<td>88</td>
</tr>
<tr>
<td>Studer Revox America, Inc.</td>
<td>39</td>
</tr>
<tr>
<td>TDK Electronics</td>
<td>15</td>
</tr>
<tr>
<td>Teac Corp. of America</td>
<td>22</td>
</tr>
<tr>
<td>Technics by Panasonic</td>
<td>5</td>
</tr>
<tr>
<td>3M Company</td>
<td>86</td>
</tr>
<tr>
<td>Top Discount Audio</td>
<td>101</td>
</tr>
<tr>
<td>Watts</td>
<td>75</td>
</tr>
<tr>
<td>Wisconsin Discount Stereo</td>
<td>83</td>
</tr>
</tbody>
</table>

**Rustic Celebration** and *Cascais* are both too busy as compositions to properly spring Hubbard into significant improvisations. But he tries, exceedingly so on *Cascais*, where he wings through an off-the-wall melody and herky-jerky chord patterns with the kind of playful ease that only the great improvisers can generate. 

But it's too little and too late. I won't speculate on how much freedom (real or otherwise) Hubbard was given to decide what to include or what not to include on the recording. Regardless, "Skagly" parcels out his immense gifts into too many small pieces. Sadly, the whole doesn't quite match the sum of the parts.

**Freddie Keppard: The Legendary New Orleans Cornet**

*Bill Bennet, production coordinator*

**The Smithsonian Collection P 15141**

*(Smithsonian Customer Service, P.O. Box 10230, Des Moines, Iowa 50336)*

*by John S. Wilson*

Freddie Keppard is one of the least documented of jazz's legendary figures. Unlike fellow cornetist Buddy Bolden, who never made any records (save the "Golden Cylinder," which no one, apparently, has ever heard), Keppard recorded a total of five sessions (eighteen tunes) between 1924 and 1927. But he played as leader on only one. 

"The Legendary New Orleans Cornet" was put together by Martin Williams of the Smithsonian and Larry Gushee. In his very detailed liner notes, Gushee states that two of the fourteen selections here are of questionable authenticity. Furthermore, on seven of the cuts Keppard is buried in a big band, Doc Cook's Dreamland Orchestra. The material, designed to please the dancers at the Dreamland Ballroom in Chicago, ranges from a parallel to Paul Whiteman's 1923 arrangement of *So This Is Venice* to a pop adaptation of *The Carnival of Venice* to the novelty tune *Here Comes the Hot Tamale Man*. Most of the performances are more notable for Jimmy Noone's clarinet work than for Keppard's playing.

It is in the two quintets—Cookie's Gingersnaps, an equivalent of Louis Armstrong's Hot Five or Seven, and Keppard's Jazz Cardinals—that one gets a provocative taste of Keppard's cracking flair. He always enlivens his lines with little growls, flutters, shadings, and lifts, and his lead playing has an awesome, swaggering power. These are only morsels, but bringing Keppard's sides together on one disc and backing them with Gushee's unusually enlightening and probing notes is both a service to jazz scholarship and a revealing experience for even the casual listener.

**The Jeff Lorber Fusion:**

**Wizard Island**

Jeff Lorber, producer. Arista AL 9516

*by Crispin Cioe*

Much of what is called "fusion" today—and charitably dubbed "jazz" by some—is sappy, easy-listening, funk-tinged groove music designed to be harmlessly programmable. What sets Jeff Lorber and his brashly named quartet apart from the rather faceless crowd is that they know how to cook and be formulaic at the same time. "Wizard Island" adds no new ingredients to their mix, but the players have tightened up considerably over the course of three albums, and to these ears it's their best effort to date.

Lorber brings a classical sense of form and thematic development to his fusion, even during solos, that is comparable to the advanced melodicism of bebop. On *Sweet*, his synthesizer and Kenny Gorelick's soprano sax state a simple, gospelish funk theme in perfect unison that really is, well, sweet. Underneath, Lorber's electric piano (Yamaha grand) chords shift colors just enough to goose the number slightly at each harmonic turn. Bassist Danny Wilson and drummer Dennis Bradford comprise a virtuosic but no-frills rhythm section that literally cements the grooves to the floor. On *Wizard Island*, their rhythmic counterpart to the melody and between one another is so precise that the group manages to swing on even the most treacherously syncopated passages. Add to this Gorelick's very soulful reed work—somewhat in the manner of Grover Washington but energetically original nonetheless—and Lorber's own assured, Wytong Kelly-meets-Herbie Hancock soloing style, and you get a fusion recipe that works as well on vinyl as it does on paper.
No other speaker has ever looked like this, no other speaker has ever been built like this. And we believe no other speaker, regardless of size or price, can recreate the impact and feel of live music like the Bose® 901®.
A NEW STANDARD
OF RECORD CARE

NEW D4 FLUID
Inherently more active against record contamination. Inherently safe for record vinyl. Preferentially absorptive formula carries all contamination off the record.

NEW D4 FABRIC
Unique directional fibers preferentially remove fluid and contamination. D4 fabric results in clearly better cleaning, better drying and ultimately residue-free surfaces.

UNMATCHED VALUE
The Discwasher D4 System is enhanced by the durability and aesthetics of the hand-finished walnut handle. Included in the D4 System are the DC-1 Pad Cleaner and new instructions.