Snap, Crackle, Sizzle, Dazzle—

New Products, Prices, Trends at the Consumer Electronics Show & Beyond

Classical Recording: Is the End in Sight?

Backbeat: The Doobies' "Sail On" Second Decade

Trick Studio Makes the Most
WHAT COMES OUT
OF A SPEAKER IS ONLY
AS IMPRESSIVE
AS WHAT GOES INTO IT.
WHAT COMES OUT
OF A SPEAKER IS ONLY
AS IMPRESSIVE
AS WHAT GOES INTO IT.
MEMOREX HIGH BIAS TEST NO. 5.

WHICH HIGH BIAS TAPE STANDS UP TO A GENRAD REAL-TIME ANALYZER?

The GenRad 1995 Real-Time Analyzer is among today's state-of-the-art devices for accurately measuring and displaying audio signals. That's why we used it to show that MEMOREX HIGH BIAS is today's state-of-the-art high bias cassette tape.

When tested at standard recording levels against other high bias tapes, none had a flatter frequency response than MEMOREX HIGH BIAS.

And, the signal/noise ratio of MEMOREX HIGH BIAS proved to be unsurpassed at the critical high end.

Proof you can't buy a high bias cassette that gives you truer reproduction. And isn't that what you buy a high bias tape for?

Is it live, or is it MEMOREX

The GenRad 1995 Integrating Real-Time Analyzer measured signals from a Nakamichi 582 cassette deck. Input signal source was "pink noise" at 0dB (200 nanowebes—standard record level). If you'd like a copy of the test results, please send a self-addressed, stamped business-size envelope to the address below. Ask for the GenRad Test.

For unbeatable performance in a normal bias tape, look for Memorex with MRX3 Oxide, in the black package.

© 1980 Memorex Corporation
Memorex Audio Development Center, P.O. Box 988 Santa Clara, CA 95052, U.S.A.
6 Too High Fidelity? 
by Leonard Marcus

11 CrossTalk

18 Equipment Reports
Vector Research VRX-9000 receiver
Dynavector 20A Type 2 cartridge
Onkyo TA-2080 cassette deck
ADC Sound Shaper Three equalizer

43 Cautious Entry into the '80s
New equipment consolidates gains 
by Robert Long and Peter Dobbin

Music/Musicians

53 Predictable Crises in Classical Music Recording 
by Allan Kozinn

61 Culshaw at Large
My darlin' Leontyne 
by John Culshaw

62 Behind the Scenes

67 Massenet en Masse 
The boom continues with four opera recordings 
by Peter G. Davis

71 The "New Generation" of Mahler Conductors 
Duplication need not mean redundancy 
by Abram Chipman

75 Classical Records
P.D.Q. Bach and Peter Schickele 
Karajan's Don Carlos 
Shostakovich song cycles

78 Critics' Choice

104 The Tape Deck 
by R. D. Darrell
No matter how good your present stereo system, we can improve it!

Here's proof:

Add effortless clarity and transparency with our new Omnitech™ series Vector-Aligned™ dual magnet cartridge or AT3OE moving coil cartridge with user-replaceable stylus.

Laboratory precision is the hallmark of every A-T tone arm for home, studio, or disco.

LIFESÄVER is the first truly complete record preservative. Stops static and record wear for years.

Create your own "Grammy award-winning" tapes with studio-quality Audio-Technica microphones.

Use our complete line of record and stylus cleaners to keep your collection sounding great years from now.

You might pay $1000 or more for speakers almost as good as these remarkable electret stereophones.

Make it all worthwhile with thrilling direct-to-disc and digitally-mastered performances from around the world.

When you add Audio-Technica, you multiply listening enjoyment. At leading audio stores. Write for catalog and dealer list, today.

audio technica
INNOVATION  PRECISION  INTEGRITY
AUDIO-TECHNICA U.S., INC., Dept. 40H
33 Shiawassee Avenue, Fairlawn, Ohio 44313

SOLUTION TO HIFI-CROSTIC NO. 52

Irving Kolodin: The Opera Omnibus

If you can at least pronounce "Gesamtkunstwerk," a case can be made for opera as the "combined art form." But where is dance in Wagner? The one ballet associated with his name was imposed upon the Paris production of "Tannhaeuser" at the price of having it done at all.
Performance and reliability. That's why 73 of the top 100 radio stations that use turntables use Technics direct drive turntables. In fact, of those stations surveyed by Opinion Research Corporation, Technics was chosen 6 to 1 over the nearest competitor.

Why did station engineers choose Technics direct drive: "Latest state of the art." "Reliability and past experience." "Low rumble, fast start." "Wow and flutter, direct drive and constant speed." To quote just a few. And you'll choose Technics for the same reasons.

The D-Series. Three turntables that start at $125. Each with 0.03% wow and flutter and -75 dB rumble. That's unsurpassed performance for the price.

The Q-Series. Two turntables with speed accuracy of 99.998%, wow and flutter of 0.025% and -73 dB rumble. No wonder so many radio stations choose Technics quartz-locked turntables.

The MK2 Series. Three turntables with a start-up time of 0.7 seconds, or 1/4 of a revolution. And the accuracy of Technics quartz-locked pitch control. That's performance good enough for the most demanding professional.

Then there's the SL-10 ($600). The turntable of the 80's. Not much bigger than a record jacket, it has a quartz-locked direct-drive motor and a servo-controlled linear tracking arm. But what really makes it unique is what it can do. Play with all the accuracy Technics is so famous for, even on its side or upside down.

Technics direct drive. The turntables that top radio stations use. *Technics recommended prices, but actual price will be set by dealers.

You should buy a Technics direct drive turntable for the same reasons 73 of the top 100 radio stations did.
The Evolution of Excellence

In 1976 Pickering launched a new modern high fidelity era by introducing the first of a new generation of phono cartridges, the Pickering XSV/3000, acclaimed a top performer by critics and reviewers worldwide. Now Pickering takes the Stereohedron® Series one step beyond excellence with the new XSV/4000. A lightweight, high energy, samarium cobalt magnet and shaped-for-sound Stereohedron Stylus tip are major innovations that eclipse previous performance standards in four crucial areas. Improved tracking ability. Expanded frequency response range. Wider channel separation. And featherlight treatment of the record groove.

XSV/4000...the next generation of sound.

For further information write to:
Pickering & Co. Inc., Sunnyside Blvd., Plainview, N.Y. 11803

Too High Fidelity?

I don’t know about you, but I’ve become fed up with recordings of gasps, pants, finger-poundings, hand-slidings, and all the other aural paraphernalia that is incident—and incidental—to a performer’s technique for producing music. Music students practice for years to tame these extraneous noises. But if they progress to such virtuoso class that they are asked to make recordings, these days they find that all their practicing has gone for naught and that all the sonic garbage they thought they had disposed of has not only returned, but amplified.

Groans, humming, and other expressive sounds—well, maybe okay, since they result from a musician’s personal, emotional involvement with his music. I still treasure memories of Toscanini singing along with his soloists and orchestra in perhaps the most moving Bohème I ever heard, of Glenn Gould humming to accompany his fingers. These at least were musical expressions.

But why, when I want to hear a world-famous flutist playing Tartini, do I have to put up with the sounds of the keys hitting the flute and with such loud and obvious grasps at air that one can imagine Rich Little mimicking Raymond Burr? Why, to hear a guitar virtuoso I admire playing some Spanish classics, do I also have to tolerate the sounds of his fingers not only hitting, but leaving the strings, his hand sliding up and down the fingerboard, and what sounds like his guitar rubbing arhythmically against his shirt? Or why, if I want to sample a new Russian cellist playing Bach, must I also take the grunts of effort he produces as he tries to negotiate his instrument? These sounds of a musician’s technical procedures and trials are just as irrelevant—and just as intrusive—to the music he is making as his stomach rumble would be.

The problem turned epidemic during the 1970s as more studios switched from four-track to sixteen-track tape recorders. With microphones available for nearly every voice or instrument in an ensemble, a new ideal emerged: “presence,” which soon became for record albums what “natural” became for the decade’s junk foods. And how does one get “presence”? Stick one or more of those microphones as close as possible to the performer, the one place he would never let you listen to him in a concert hall. Record producers also tended to emphasize “highs” in their mix, both to make their records “hotter” and more “brilliant” and to anticipate the loss of highs to be expected in the plating and manufacturing process—not to mention in the reproduction process over second-rate speakers in the average purchaser’s home. Unfortunately, there is a greater proportion of highs in much of these obtrusive noises than in music, so the noise was further emphasized. (To make up for the loss of ambience in their tight miking, they added echo electronically.)

More recently we have seen the proliferation of “audiophile” recordings that have radically cut down the number of microphones. As a consequence, at least when there are large ensembles, the mikes are placed at a distance from the musicians. The result is a greater music-to-noise ratio. Soloists, however, still too often get the down-the-throat treatment. To quote one of them, whose analysis may have been inaccurate but at least was eloquently put: “The trouble with some of today’s recordings is that they are too high fidelity.”
Now there's a two-way speaker with remarkable midrange without a midrange.

The Infinity RS\(a\)

It could only come from Infinity.

A two-way speaker with midrange (as well as tweeter) controls—yet there's no midrange driver!

A new and unique crossover in the RS\(a\) allows adjustment of the midrange. This unprecedented control actually permits you to vary depth as well as projection of the musical image; accommodating the program material, your room acoustics and your personal taste.

This flexibility, clarity and detail of midrange is unachieved by even much more expensive three-ways.

Why is this important? Because the fundamental tones of most instruments lie in the midrange: 350 to 5000 Hz. When this musical information is poorly reproduced, you're not hearing the whole truth.

Listen to a traditional speaker system: characteristically the overall sound is thin, veiled and lifeless. You hear notes, not musicians.

Then listen to the Infinity RS\(a\). It breathes life. It has warmth.

Infinity scientists and musicians were determined to create a modestly-priced speaker in the extravagant Reference Standard family tradition. So we gave it some of the family jewels.

We gave it EMIT™ acclaimed by audio critics world-wide for its delicacy, transparency and smoothness.

We gave it polypropylene, our new speaker cone material with acoustic properties making it superior to paper in every respect; it is ideally light, stiff, stable and acoustically inert. The meticulous amalgamation of these elements has produced the incomparable RS\(a\).

The feast is for your eyes as well. RS\(a\) is crafted with the finest oak veneers available. The tab: about $200.

To learn more about the peculiar Infinity alloy of music and science, please ask any Infinity dealer for our new brochure, "The Creative Technology of Infinity Speakers." It will tell you part of the story.

Then listen to the RS\(a\).

It will tell you the rest.

\(\text{Infinity}\)

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

© 1979 by Infinity Systems, Inc. 7930 Deering Ave., Canoga Park, CA 91304. (213) 883-4800.
The micro processor controlled turntable that automatically selects and plays the tracks you want to hear.

Push the wireless remote control button and select track 1, track 3, track 6 or any other. The micro processor automatically moves the arm to play the selected track. You can repeat the same track, select another or play the entire record over again all by wireless remote control. And there's an LED readout to indicate the track being played.

Since you can select the music you want to record, making tapes from your record collection becomes easier and more convenient than ever before.

The MT6360 Linear Drive turntable is not only great for really enjoying the music you like, but it's a sophisticated audio component with some extraordinary design features.

Fisher's exclusive Linear Drive. With Linear Drive, the only moving part is the platter itself. So, there's
virtually nothing to go wrong. And, no inherent turntable noise. (For you audiophiles, wow and flutter is just 0.035% and rumble is a low 70dB).

There's a lot more. There's a servo circuit that continuously monitors and locks in record speed. Plus a strobe light and fine speed control so you can monitor the accuracy of speed and alter pitch.

The MT6360 has a viscous-damped "floating" tonearm with a specially designed integral stereo magnetic cartridge. And there's even a muting circuit to eliminate that annoying "pop" you hear when the tonearm touches down.

It's what you'd expect from the new Fisher. We invented high fidelity over 40 years ago. And never stopped innovating. So check out the new MT6360 at your Fisher dealer. One demonstration of the automatic track selector will change, forever, the way you listen to records.

Fisher Corporation, 21314 Lassen Street, Chatsworth, CA 91311
© Fisher Corporation, 1980

FISHER
The first name in high fidelity.
tech talk:

45 Watt RMS minimum per channel into 8 ohms.
From 20 to 20,000 Hz. With no more than 0.03%. THD.

explained.

The tech talk you just read is a set of amplifier specifications, or specs. Specs for the remarkable MCS Series Model 3248 45 Watt receiver. Most people think they need an engineering degree to understand specs so they usually don't even try. That's a mistake. Specs are intended to inform and protect you. With that in mind, we'd like to end some of the confusion.

The first sentence above tells you that 45 watts are the least amount of continuous (RMS) power the amplifier portion of the 3248 will deliver to each speaker channel when hooked up to 8 ohm speakers.

The second sentence states that at least 45 watts of power will be delivered over the entire audible range of sound frequencies. From 20 to 20,000 vibrations per second (20 to 20,000 Hz).

The last sentence contains the most important information of all. It tells you that under these conditions the unwanted overtones or harmonics will not exceed three hundredths of one percent of the output signal (0.03% THD or total harmonic distortion).

When you consider that THD of up to 3% is considered virtually inaudible you can understand just how remarkable the MCS Series 45 Watt receiver really is.

So come to your nearest JCPenney and see for yourself. See the LED power meters. The tape monitoring system that lets you compare what you're recording to the program source while you're recording. The tape dubbing control that lets you record from one tape deck to another, and back again, at the flick of a switch. The loudness switch that boosts bass and treble ranges when the volume is low. See all these features and much more. Or just come in and listen to the MCS Series 45 Watt receiver. You won't have to look any further. The MCS Series 45 Watt receiver only $379.95 and only at JCPenney.

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

Prices higher in Alaska, Hawaii and Puerto Rico.
**CrossTalk**

**Q.** I have a Philips 437 turntable with a Stanton 681EEE cartridge that is rated for a minimum tracking force of about ¾ to 1 gram. Unfortunately, I didn’t know when I installed it that I should be compensating for the brush weight of 1 gram. Thus the effective tracking force was only about ¼ gram, and I played my records several times under these conditions. In addition, I had the antiskating set so that it was off by a full gram. How does the mistracking affect a record’s sound? Is it really worth buying brand-new records if my cartridge was mistracking?—Pat Nilson, Philadelphia, Pa.

**A.** There evidently are two points of concern here: what reproduction sounds like if settings are too low, and what the effects on the record, and therefore on future playings, may be. Distortion rises rapidly as tracking force is decreased below an acceptable minimum, which will vary, with a given pickup, from arm to arm and from record to record. (The setting of the antiskating is a less important contributing factor.) In most setups you should hear nothing amiss if you’re a little below the manufacturer’s minimum recommendation. As you continue to decrease vertical tracking force, the peaks will distort, and at progressively lower recorded levels. The effect is quite obvious; if you don’t hear it, the tracking presumably is okay. Since the audible distortion comes from loss of stylus/groove contact, leaving the stylus tip free to bang around in the groove much like a skidding car careening down an icy highway, it does imply groove damage. If you hear it, stop playing the record and find out what’s wrong before you continue, or you may cause permanent damage.

**Q.** I recently purchased a Sansui G-7500 receiver. It is equipped with a mike mixing control, but the operating instructions give no indication whether or not this feature can be used to mix live material with another source (FM, phono) for recording. Is there a way this can be done?—Tom Grimmer, Borger, Tex.

**A.** Since your manual doesn’t address the recording question, we assume the G-7500, like most receivers with “mike mixing,” is designed just for singalongs with accompaniment from any source including tape playback. This scheme puts the mixer after the tape connections and thus prevents recording the mix via the normal tape-output jacks. By far, the easiest and most efficient way to mix live and recorded programs for taping is via an outboard mixer or through the mike mixer built into some cassette decks. If, however, the receiver is equipped with pre-out/main-in jacks, you can use them temporarily for your recording by connecting PRE-OUT to the deck’s recording input. In order to monitor what you are doing, you will have to turn off your speakers (to avoid feedback) and listen on headphones. You can connect the deck’s output to the main-in jacks. With this setup, however, the volume control is ahead of the deck input and now is acting as a master fader in your “mixer.” If your deck has an output level control, it can be used to adjust headphone listening levels; if not, the deck’s jack.

**Q.** My system consists of a Fisher 450-T receiver, a pair of KLH 5 speakers, a B.I.C. 980 turntable with a Shure M-95ED cartridge, and an Akai GX-706D cassette deck. When I play a record, I am disturbed by an annoying sibilance in the left channel. It is not severe enough to be heard all the time, at all program levels. I’ve reversed the speakers, but the sibilance stays in the left channel, and it doesn’t appear at all on FM. Am I correct in assuming that the phono preamp is the culprit? If so, is it time to retire my ten-year-old receiver?—Joe Orlando, Bridgewater, N.J.

**A.** Don’t be so hasty about putting your receiver out to pasture. Chances are the problem lies in the phono cartridge. First, check to make sure that the pickup is properly aligned and that the antiskating bias is set correctly. If the problem persists, remove the stylus assembly and inspect for signs of a bent stylus shank or, with a magnifier, tip wear. Whether you detect the source of the trouble or not, we’d still suggest you begin replacement plans with the cartridge; for one thing, it’s the least expensive element in the system.

**Q.** Did I just lay out 180,000 yen for a metal-ready deck for nothing? According to Robert Angus in “My Own Christmas Shopping List” (“The Audiophile,” November 1979), it appears that one can record metal tape on a nonmetal machine and get good results. He states: “No matter that their car stereo units don’t have sendust heads and metal playback equalization—or, for

**Empire’s EDR.9**

The Phono Cartridge Designed for Today’s Audiophile Recordings

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

In order to capture all the benefits of these recordings, you should have a phono cartridge specifically designed to reproduce every bit of information with utmost precision and clarity and the least amount of record wear.

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

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

For more detailed information and test reports, write to:

Empire Scientific Corporation
1055 Stewart Avenue
Garden City, New York 11530
IN ONE RESPECT, YOUR EXPENSIVE STEREO IS NOT MUCH BETTER THAN A DIME-STORE RECORD PLAYER.

Sure. Your system reproduces the tonal balance of live music, with flat frequency response from 20Hz to 20KHz.
And it gives you good spatial perspective, thanks to stereo and time-delay systems.
But those are only two of the elements that make live music sound live.
There’s a third: Dynamic range.
Dynamic range is the difference in volume, measured in decibels, between the loudest and quietest passages in a piece of music. It’s what gives live music depth, impact and drama.

And the simple fact is, your records don’t provide the dynamic range they should. Due to conventional recording limitations, they fall at least 30dB short.
Buying the latest equipment may get you a little extra dynamic range. But no matter how much you spend, the best you can hope for is what’s on the record.

Now, however, there’s something you can do about the problem. Because at dbx, we’ve developed a new technology that lets you hear the full dynamic range you’ve been missing.
We offer a range of products that you can take home right now. Connect to your system. And improve the sound of your music so dramatically, it’s almost unbelievable.

THE STATE-OF-THE-ART IN DYNAMIC RANGE.
The most realistic sound ever achieved on record comes from our new Digital dbx Discs, which combine dbx technology with the state-of-the-art in studio recording – digital mastering.
The sound of these records will stun you. Because they actually deliver the full dynamic range of a live performance—90dB or more. That’s 50% better than the finest conventional audiophile records you’ve ever heard, whether direct-to-disc or digitally mastered.

And while our dynamic range reaches new highs, our record surface noise reaches new lows. Clear down to an unheard of −85dB (relative to 0dB, 7cm/sec peak velocity at 1KHz). Much quieter than any previous audiophile record.

So for the first time you can hear the full impact of live music. Everything that was on the digital master tape. Played against a background of virtual silence.

You’ll find our first releases of Digital dbx Discs in stores right now. Along with our existing library of dbx Discs, which are stunning in their own right. Because they deliver the full dynamic range of conventional studio master tapes. And virtually no record surface noise.

Best of all, you don’t need expensive new equipment to enjoy the incredible dbx sound. All you need is a dbx Model 21 Decoder, connected to the tape monitor loop of your receiver or amplifier. (You can also play dbx Records if you own a dbx Tape Noise Reduction System Model 122, 124, 128 or 224.)

THE MAXIMUM DYNAMIC RANGE YOU CAN GET ON TAPE.

If you’re into recording, dbx offers the state-of-the-art for you, too: The new dbx Recording Technology Series Model 224.

It hooks right into your present tape system. And it lets you record a new level of dynamic range on tapes. Up to 85dB on open reel and 80dB on cassette. So you can make live recordings that capture virtually all the dynamic range of the original music.

And the 224 is the only system that lets you tape fine audiophile records without losing any of their dynamic range.

The Model 224 also reduces tape noise far better than Dolby® (30dB compared to just 10dB). And it includes the dbx Decoding System, so you can use it to play your dbx Discs as well as your tapes.

NEW REALISM FOR CONVENTIONAL RECORDS AND TAPES.

Of course, once you hear the impact of full dynamic range, you won’t settle for ordinary music again. So dbx offers a line of Dynamic Range Expanders, starting at just $259** that can improve the realism of all the records and tapes you own.

dbx Dynamic Range Expanders work on the same principle as our dbx Recording Technology Series.

The difference is, they restore much of the dynamic range that’s missing from ordinary records and tapes. Just add one of these components to your system, and you’ll get as much as 75dB of sound or more. You can even use it to improve the realism of FM radio.

And not only will it improve dynamic range. But when you’re playing records, it will also dramatically reduce disc surface noise.

dbx can supply the one element of live music missing from your stereo system: Full dynamic range. The Model 21 makes dbx Discs compatible with your present system. The Model 224 lets your home tapes approach the silence and dynamic range of digital recording. And dbx Dynamic Range Expanders enhance the realism of all your conventional records and tapes.

Model 21 Disc Decoder

Recording Technology Series Model 224

3BX Dynamic Range Expander

Rack-mount kit optional.

*“Dolby” is a registered trademark of Dolby® Laboratories, Inc.
**Suggested U.S. retail price; actual price set by dealers.

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

dbx can supply the one element of live music missing from your stereo system: Full dynamic range. The Model 21 makes dbx Discs compatible with your present system. The Model 224 lets your home tapes approach the silence and dynamic range of digital recording. And dbx Dynamic Range Expanders enhance the realism of all your conventional records and tapes.

Model 21 Disc Decoder

Recording Technology Series Model 224

3BX Dynamic Range Expander

Rack-mount kit optional.

*“Dolby” is a registered trademark of Dolby® Laboratories, Inc.
**Suggested U.S. retail price; actual price set by dealers.

dbx, Incorporated, 71 Chapel Street, Newton, MA. 02195. 617/964-3210.
HOW TO GET CONCERT HALL PRESENCE WITHOUT BEING PRESENT IN A CONCERT HALL.

Even the world's finest stereo equipment can't reproduce the realism of a live concert, unless your living room happens to be built like Carnegie Hall. But when you add Pioneer's SR-303 Reverberation Amplifier to your existing hi-fi system, you can bring that same sense of spaciousness back to your music. And you can bring it back without any "echo howling" and other distortions, thanks to our newly developed Bucket Brigade Device. Unlike similar units, the SR-303 won't cost more than your entire system. It'll just sound like it did.

SYSTEM ENHANCERS
©1979 U.S. Pioneer Electronics Corp. 85 Oxford Dr., Moonachie, N.J. 07074

PIONEER®
We bring it back alive.
Circle 40 on Page 99

Free Drivers Manual.

Avid Expert Drivers are designed especially for your car, not adapted from your living room. Get our six-page free Drivers Manual and find out what makes Avid Expert Drivers the best car speakers on the road. Write Avid Corporation, 10 Tripps Lane, East Providence, RI 02914.
Latest sales figures show that Maxell is the fastest-growing brand of recording tape in the country today. It's not surprising.

Every type of Maxell tape, from LN to UD-XL is designed to give you the widest frequency response, the highest possible signal-to-noise ratio and the lowest distortion.

So no matter which tape you play in the group, you're assured of a great solo performance. Pick up a few and put together a group of your own.
The secret of Onkyo.
An incredible sound experience awaits you. An experience that technology alone finds hard to explain. You'll hear music of such stunning purity and sensual richness, that you'll wonder how any audio system could make that much of a difference.

The Onkyo CP-1030F

That's the secret of Onkyo. The unique ability to take you several steps beyond pure technology...to a world of more exciting sound. And we provide it in all our components...beginning with turntables.

The Onkyo CP-1030F Fully-Automatic Turntable is an outstanding example. It takes far greater advantage of today's most sensitive high-compliance cartridges...providing more precise record groove tracking, while silencing out vibrations from record warp, the turntable motors, even sound waves produced by your speakers.

The CP-1030F is rich with important new concepts...a low mass, straight line carbon-fiber tonearm...infrared sensors for smoother automatic tonearm control...Quartz-locked direct-drive accuracy...and a new triple-insulated suspension. All combine to produce purer sound. And the CP-1030F is just one of five advanced new turntables from Onkyo.

In stereo cassette tape decks too, Onkyo achieves more perfect sound. The Onkyo TA-2080, for example, provides a computerized control system called "Accu-Bias"...which automatically assures that every recording you make is superior, including new metal tapes.

Every tape has a different bias setting requirement...even two tapes of the same formulation from the same manufacturer. "Accu-Bias" automatically senses each tape's unique bias needs, then makes the precise system adjustments to provide it. Brighter, cleaner high notes are the reward.

The Onkyo TA-2080 also provides a rich and important array of other high performance features. 3-Heads with a 2-motor/2 capstan drive system...a Dolby* noise reduction system with switchable MPX filter and two channel calibration controls...both VU meters and 10-step LED peak indicators. And the TA-2080 is just one of four Onkyo cassette tape decks.

- Onkyo integrated stereo amplifiers provide an extraordinary...and unique...sound experience. Their special Super-Servo circuitry totally eliminates the sonic "ghost signals" common to DC power amplifiers. As a result, each instrument and voice sounds purer and more individually real...regardless of volume level. You'll experience—perhaps for the first time—stereo with a fully discernible third-dimension.

There are three Onkyo integrated stereo amplifiers to select from...All with Super-Servo, LED peak power indicators, and other advanced Features. A companion series of three Onkyo stereo tuners is also available.

- Of all our components, the most widely known are our stereo receivers. And with good reason. Their FM sections are clearly superior...picking up weak stations noiselessly and strong stations without distortion. And Onkyo was the first to revolutionize receiver design with Quartz-Locked FM tuning and the unique "Human Touch Sensor" control.

In all, there are 6 Onkyo AM/FM stereo receivers...with the incredibly advanced TX-8500 MK-II paramount among them. With 160 Watts per channel*...digital FM frequency display...a memory to preset up to seven FM stations...

The Onkyo TX-8500 MKII

...and a built-in Dolby* FM circuit...the Onkyo TX-8500 MK-II is one of the most advanced receivers ever conceived. And it's just one of 6 Onkyo receivers to pick from.

- In speaker systems, few are as innovative, accurate and impressive as the Onkyo F-5000 3-way, Phase Aligned Array™ Speaker System. The F-5000 delivers more exciting sound...with precise three-dimensional imaging.

Speaker alignment is one of the reasons. Even more significant is the unique Onkyo planar woofer.

The Onkyo F-5000 planar midrange, and Direct Drive Membrane™ Tweeter.

Gone are the sound interference patterns and phase cancellations that cone shaped speakers always provide. Instead is a listening experience with the same true frequency relationships of the performance.

- Experience "the secret of Onkyo" now, at your Onkyo dealer. Hear audio components so advanced, they transcend mere technology.

Vector Research, a new American-based company with manufacturing facilities in Japan, is doing what some foreign-based companies find difficult: providing the U.S. market with sophisticated audio products that have carefully judged features at attractive price points. Its first offerings are three cassette decks and three receivers, of which the VRX-9000 is the flagship.

Though the purchase of separate audio electronics (tuner, preamp, and power amp) can still be justified by specific user needs, increased flexibility, and, sometimes, better performance, the VRX-9000 goes a long way toward blurring the distinctions between separates and receivers. One would have to spend a great deal more for separates with the features in this relatively compact receiver. The array of tiny buttons may give one pause, but a moment or two of examination reveals their neatly logical planning. Frequency-synthesized tuning is accomplished in discrete manual steps (0.1 MHz on FM, 1 kHz on AM) via the separate UP and DOWN buttons. To activate the automatic station scanning function, you simply depress HOLD SCAN and either UP or DOWN. With FM mute engaged, stations with a signal strength of at least 26 dBf in stereo or 19 dBf in mono (for quieting levels of 38½ and 53¼ dB, respectively) lock in and hold for several seconds. This can be a bit tedious in areas where there are many weak stations, because the stereo threshold is not adjustable and the circuit holds stations that, to our ears, are more noise than music. But once you receive a clear broadcast, you can enter it for retrieval by depressing store and any one of the six numbered presets. An LED above store illuminates for a few seconds, indicating the memory’s willingness to cooperate; if you do not press a preset within a few seconds, it quietlyblinks out. The owner’s manual says that the memory circuits will retain presets for up to twenty-four hours even with external power disconnected but advises that two AA cells be loaded into the compartment on the rear of the unit for memory retention of up to one year.

Data from Diversified Science Labs prove the tuner section capable of very good overall performance. Frequency readout is almost dead-on accurate, showing a deviation of just 0.01 MHz at each of our FM test frequencies. Sensitivity is quite high, which leads us to question the usefulness of the five-segment LED signal-strength indicator. Like most of these devices, it is of little help for antenna orientation or for finding extremely weak stations; the most sensitive of the LEDs
Stereo sensitivity (for 50-dB noise suppression) 3.7% dB at 98 MHz; with 0.26% THD+N
(38% dB at 90, 39% dB at 106 MHz)
Mono sensitivity (for 50-dB noise suppression) 1.74% dB at 98 MHz
Muting threshold 19% dB
Stereo threshold 26 dBf
Stereo S/N ratio (at 65 dBf) 68 dB
Mono S/N ratio (at 65 dBf) 70% dB
CAPTURE RATIO 1 dB
ALTERNATE-CHANNEL SELECTIVITY 58% dB
HARMONIC DISTORTION (THD+N)
- stereo
- mono
at 100 Hz 0.18% 0.15%
at 1 kHz 0.11% 0.09%
at 10 kHz 0.21% 0.13%
STEREO PILOT INTERMODULATION 0.20%
IM DISTORTION (mono) 0.078%
AM SUPPRESSION 6.2% dB
PILOT (19 kHz) SUPPRESSION 6.9% dB
SUBCARRIER (59 kHz) SUPPRESSION >85 dB

Amplifier Section
RATED POWER 19 dBW (80 watts)/ch.
OUTPUT AT CLIPPING (both channels driven)
8-ohm load 20% dBW (106 watts)/ch.
4-ohm load 21% dBW (140 watts)/ch.
16-ohm load 18 dBW (63 watts)/ch.
DYNAMIC HEADROOM (8 ohms) 2½ dB
HARMONIC DISTORTION (THD; 20 Hz to 20 kHz)
at 19 dBW (80 watts) ≤0.035% ≤0.02% dB
at 6 dBW (1 watt) ≤0.22% ≤0.02% dB
FREQUENCY RESPONSE -6 dB, -1 dB, 15 Hz to 38 kHz; -3 dB at 74 kHz
RIAA EQUALIZATION +0.5%, -4 dB, 20 Hz to 20 kHz; -8 dB at 5 Hz
INPUT CHARACTERISTICS (re 0 dBW; A-weighting)
sensitivity S/N ratio
phonos 0.31 mV 734% dB
aux 16 mV 77 dB
PHONO OVERLOAD (1-kHz clipping) 225 mV
PHONO IMPEDANCE 51 k ohms at 1 kHz (complex)
DAMPING FACTOR (at 50 Hz) 110
HIGH FILTER -3 dB at 8.1 kHz, 12 dB/octave
INFRASONIC FILTER

A Pickup for Those in Search of Perfection


Dynavector is rapidly distinguishing itself in the cartridge market for its continuing exploration of moving-coil pickup technology. While even rabid
Dynavector DV-20A Type 2 pickup

**FREQUENCY RESPONSE & CHANNEL SEPARATION**

(test records: STR-100 to 40 Hz; STR-170 above)

<table>
<thead>
<tr>
<th>Location</th>
<th>Response (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L ch</td>
<td>+2 dB, -4 dB, 20 Hz to 20 kHz</td>
</tr>
<tr>
<td>R ch</td>
<td>+2 dB, -4 dB, 20 Hz to 20 kHz</td>
</tr>
<tr>
<td>Channel separation</td>
<td>≥ 25 dB, 230 Hz to 6.4 kHz; ≥ 15 dB, 20 Hz to 14.5 kHz</td>
</tr>
</tbody>
</table>

**SENSITIVITY (at 1 kHz)**

1.1 mV/cm/sec.

**CHANNEL BALANCE (at 1 kHz)**

± 0.4 dB

**VERTICAL TRACKING ANGLE**

28°

**LOW-FREQUENCY RESONANCE (in SME 3009)**

vertical 9.6 Hz; 115 dB rel. lateral negligible

**MAXIMUM TRACKING LEVEL (at RIAA 0 VU, 1.6 grams)**

at 300 Hz > +18 dB

at 1 kHz +12 dB

**WEIGHT**

5.1 grams

**TIP DIMENSIONS**

<table>
<thead>
<tr>
<th>Tip radius</th>
<th>Scanning radius</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.3 by 15.7 micrometers</td>
<td>6.3 and 7.3 micrometers</td>
</tr>
</tbody>
</table>

**SQUARE-WAVE RESPONSE (1 kHz)**

perfectionists may balk at a $1,000 pickup equipped with a solid diamond cantilever, Dynavector has one available. The unit reviewed here, the DV-20A Type 2, is more affordable, but under its “tin can” hood lurk several noteworthy technical innovations. This is a high-output design; that is, the output voltage is sufficient to drive a preamp without a head amp stage or stepup transformer. The cartridge has the moving-coil's virtue of being essentially insensitive to reactive properties of the load it must operate into and thus should work equally well with a wide range of preamps, receivers, and integrated amps.

While many moving-coil pickups are rather massive affairs, this one is comparable to the familiar low-mass fixed-coil designs. Dynavector tells us that it was able to reduce mass by fabricating the main frame from polyester-reinforced glass fiber, instead of the usual aluminum, and by using rare-earth magnets for lowest possible weight/flux-density ratio. With the reduction in weight comes higher compliance than is usual for a moving-coil model and greater ability to mate successfully with low-mass tonearms. CBS Technology Center found that resonance with our “standard” SME arm was not only near ideal in frequency, but extremely low in amplitude—vanishingly low in the horizontal plane.

The frequency response curve is one of the flattest we've yet encountered with a moving-coil pickup, with the characteristic high-frequency peak of many such designs very well controlled here. Dynavector says that it uses a disc capacitor to damp out high-frequency peaks due to the mechanical resonance of the tapered aluminum cantilever. The nude-mounted stylus appears much like a multiradial or “line contact” type under the CBS microscope, which also reveals good polish and alignment. The pickup passed the CBS “torture test” at 1.4 grams—on the high side in comparison to fixed-coil models but about average among moving-coil designs. The lab ran the remaining tests at 1.6 grams, the bottom of Dynavector's recommended range, which extends to 2.3 grams. Channel balance is about as accurate as you can get; the output difference was barely measurable in the lab. Distortion measurements are also firmly in the good-to-excellent category.

In terms of the DV-20A’s musical performance, we were simply delighted. The lucidity of tone offered by this pickup is outstanding. Its ability to reproduce nuance and detail leaves us wondering whether we have ever really heard our records before—even familiar ones. A satisfying sweetness replaces the high-end brightness so common to moving-coil pickups and evidenced by an etched string sound. Stereo imaging is precise and stable. Noteworthy too is the ability to track some of our worst record warps; one with a heavy bass-drum modulation was negotiated with nary a bump.

Considering the number of phono cartridges available and their wide divergence in price, recommending pickups is an ungrateful task; each has its own sonic character, and the law of diminishing returns sets in for one listener before another even becomes interested. But here is a cartridge that we can recommend to phonophiles in search of perfection—one that raises the question, “How much better can a $1,000 pickup possibly be?”

### A Speaker from the “New” Dynaco


We who have admired the quality of and creativity inherent in so many Dynaco products over the years bid welcome to the "new" Dynaco. After the company's acquisition last year by the California-based ESS, we wondered what direction it would take. Its first offering is a trio of speakers; of these, we chose to test the A-250—the middle of the line.

Unlike its immediate predecessor, the A-25XL, this speaker is an acoustic-suspension design. The driver complement consists of a 10-inch woofer, 3-inch midrange, and 1-inch soft-dome tweeter. Two continuously variable controls, located just above the spring-loaded connectors in a recess of the rear of the enclosure, provide midrange and high-frequency contouring. The midrange control is calibrated from −4 to +2 dB, values that are unusually close to the response variation measured at CBS Technology Center; the tweeter brilliance control is calibrated from −50 to +3 dB. Here the measurements on our test sample show the indicated boost but a less extreme—and, therefore, more useful—maximum cut. With both controls at their flat (0-dB) settings, CBS found the A-250 capable of flat...
Upgrading is for music lovers who can hear the difference. For them, Radio Shack has made "the difference" affordable . . . for example 30-28,000 Hz (± 3 dB) frequency response, extended dynamic range, low distortion, low noise— you get it all in the easy-to-be-creative open reel format. Tape handling is no problem because the TR-3000 is totally logic controlled. A pushbutton-activated solenoid system controls all tape movement—you can switch functions instantly, without tape spills or snarls. Pause and mute controls even let you edit, electronically, as you record.

The TR-3000 has three motors. A precision servo-controlled capstan motor reduces wow and flutter to less than 0.06% WRMS. And two high-torque reel motors maintain constant tape tension for smooth, fast winding. Separate play, record and erase heads give you "off-the-tape" monitoring. Individual mike and line input controls work like a built-in mixer. High/low bias and EQ switches for an optimum match with any tape. 7 1/2 and 3 3/4 ips speeds. And lots more. Realistically priced at only $499.95.* Check its superb sound and specs at one of our 7000 locations today!
A Successful First Deck Biases Itself

Onkyo TA-2080 cassette deck

PLAYBACK RESPONSE (TDK test tape; -20 dB DIN)

Hf 20 250 500 1K 2K 5K 10K 20K
- 70 80 90 100 110 120 130 140

L ch +1, -¾ dB, 40 Hz to 12.5 kHz
R ch +2, -¾ dB, 40 Hz to 12.5 kHz

RECORD/PLAY RESPONSE, TYPE 2 TAPE (-20 dB)

Hf 20 250 500 1K 2K 5K 10K 20K
- 70 80 90 100 110 120 130 140

L ch +κ, -¾ dB, 33 Hz to 18 kHz
R ch +κ, -¾ dB, 32 Hz to 19 kHz
with Dolby noise reduction

RECORD/PLAY RESPONSE, TYPE 4 TAPE (-20 dB)

Hf 20 250 500 1K 2K 5K 10K 20K
- 70 80 90 100 110 120 130 140

L ch +κ, -¾ dB, 50 Hz to 18.5 kHz
R ch +κ, -¾ dB, 32 Hz to 20 kHz

and extended frequency response, the bottom end reaching down to around 40 Hz. The data further disclose only moderate efficiency, as you would expect from an acoustic-suspension system. Power handling and dynamic range are excellent. The A-250 easily passed the continuous-tone test without exceeding distortion limits, and in pulsed-power tests, it handled almost 2 kilowatts before distortion became excessive. Only minor evidence of reflections or hangover in the pulses appears on the oscilloscope. Impedance values remain at or above the rated 8 ohms over most of the frequency spectrum, with the nominal 7.3 ohms occurring at 100 Hz.

At both moderately loud (89-dB) and loud (100-dB) sound pressure levels, third harmonic distortion remains quite low, averaging less than ½% over most of the audible band and just barely touching 1% at the highest frequencies at the loud level. At moderate levels, the “softer” second harmonics stay well below ½% across the midrange but rise to about 2% above 5 kHz; at the higher output, they average about twice these values.

In listening tests, we were unanimous in judging this a speaker that’s easy to live with. Its tone is distinctly unboxy, with a minimum of midrange coloration. It projects an upfront stereo image that many find a dramatic plus. Bass response is quite good, and even deep organ fundamentals have fair definition. At higher frequencies, and even in very complex orchestral textures, definition is quite good, though our panel noted a certain harshness in occasional wind and bass passages.

Considered in toto, the A-250 is an admirable speaker of the sort traditionally associated with the Dynaco name. As that phrase implies, it cannot be called radical in any way, and it offers good value. Advance information hints that the new Dynaco electronics due to appear later this year will not be quite as tradition-minded, so perhaps this model should not be taken as a blueprint for things to come. It is, however, strong confirmation that Dynaco is not altogether abandoning its past under the new ownership.

Circle 134 on Page 99


A modern cassette deck is a complex device, particularly in terms of the interrelationship of its functional elements, and designing one that really works well presents a challenge that is not always met squarely even at companies with years of practice. When Onkyo announced its first line of decks last summer, we wondered how well a newcomer would do; on the basis of the TA-2080, and despite a couple of minor oddities, the answer is very well indeed.

In basic description it is a three-head deck (recording and playback heads are mounted in a single assembly fitting the main head opening in the cassette) with the virtually obligatory metal-tape capability, an automatic-biasing feature, and solenoid/logic controls for the two-motor transport with phase-locked servo capstan drive. Of these elements, the AccuBias feature is the most unusual. It is activated by a single button and records an alternating series of tones at 400 Hz and 10 kHz, adjusting bias until output level from the two matches precisely. When that is achieved (in only a few seconds), the MEMORY REWIND will return the tape to the starting point. The usual tape switching provides preprogrammed bias settings, but AccuBias is so quick and simple in use that it should be routine for all owners. If you move the main bias switch to a different position and forget to rerun the AccuBias for the new tape, the deck automatically reverts to the preprogrammed values to limit the “wrongness” of the setting. We appreciate this wrinkle after working with decks on which a single knob alters all tape-switch position biases; that when you adjust one you necessarily misadjust all the others with respect to their standard settings.

There also is a sensitivity adjustment for Dolby tracking. The built-in oscillator, atypically, is wired ahead of the line-input level control, which therefore must be adjusted to bring the meters to their Dolby calibration mark in the source monitor position before the Dolby adjustment itself can be made. The fact that this system requires calibration may seem annoying; the fact that it permits calibration actually is a plus, since factory adjustment of the more standard post-control
Auto Sound Just Got Serious

The Voice of the Highway from Altec Lansing

Are you content to use toy loudspeakers with front-end gear that sells for $300 and more? If you are, good luck. If you’re not, read on.

Altec Lansing has been solving the world’s most serious sound problems for 43 years. So when we turned our minds to the problem of putting quality sound on wheels, we meant business.

A quick look around showed us that it hadn’t worked to merely adapt conventional speakers to car interiors or make miniature versions of hi-fi components. So we began with the car—not the components.

We thoroughly explored the car’s uniquely difficult acoustical environment. Then we designed The Voice of the Highway: A group of speakers that work with any car sound system, are adaptable to a wide variety of body styles, and produce quality sound that, until now, was impossible to achieve in a car.

It’s a system of options. Separate high-frequency (TK1), extended range (SK1), and sub-bass (SW1) speaker components that together produce optimum results. And they can be mixed or matched to fit a variety of space needs and sound desires, or enhance a currently installed system. Plus, there’s a 6" x 9" full range Duplex speaker that installs easily in the door.

And they complement virtually all quality automotive stereo systems, either as a complete speaker system or as add-on accessories.

If you’re serious about putting quality sound on your wheels, contact your local Altec Lansing dealer, or Altec Lansing.

The Voice of the Highway from Altec Lansing. Auto sound just got serious.
oscillators is not always precise. When you perform the operation, incidentally, you encounter one minor oddity of the design: The monitor switch is labeled SOURCE SELECTOR, which recordists used to the standard terminology may find momentarily confusing.

Of more moment is the evidence of indecision in the design of the metering system. Though a dual peak-LED display is provided, with one display for each channel, it is not calibrated finely enough for regular signal assessment. The meters are well calibrated—from +5 to -40 VU—but distinctly sluggish since they require pulse durations of ¼ second or so to come within 3 dB of reading full value of the pulse. Consequently the careful recordist must use the two meters for a general idea of signal behavior and, simultaneously, keep a "third eye" on the upper portion of the peak display, watching for transients loud enough to threaten overload and brief enough to slip by the meters. We found no practical use for the lower range of the LED display, which we considered redundant with the meters. We would have preferred a single, more capable display mode.

Onkyo's manual lists Maxell UDXX-II as the reference Type 2 tape (our basic reference in all cassette-deck tests), UDXX-I as the Type I ferric, and—with a little less emphasis—Scotch Metafine for Type 4. (In general, however, the list will only confuse most American owners since it is based strictly on the tapes and brand designations available in Japan.) Diversified Science Laboratories used these brands for the measurements and also checked out TDK D (a Type 0 ferric) in investigating the properties of AccuBias vs. the preset bias. The preset delivered almost identical results with Metafine, though AccuBias arguably improved performance by a tiny margin. With the other tapes AccuBias produced distinctly better results than the presets; in particular, that for ferric tapes is underbiased for UDXX-I and overbiased for D, delivering a peaky high end with the former and a severe rolloff with the latter. AccuBias gets excellent results from both tapes. Again, we would expect owners to make routine use of the AccuBias even if these tests had not proved the wisdom of doing so.

Results range from good to excellent for all the AccuBiased tapes. Distortion is low, but not quite as low as our distortion graphs indicate because appreciable quantities of the second harmonic (in addition to the documented third) are present; generally, however, the THD runs no more than about 0.1% higher than the values in the chart. Response with all the tested tapes is quite flat, and noise figures are down where they should be in a quality deck. Taking these considerations together, you will note that the Type 1 tape gives the others fairly stiff competition, though it is the least expensive. Its midrange headroom is almost as high as the metal, its response almost as extended as the Type 2, its noise not much higher than either, and its distortion curves the lowest of the three. In use we sometimes judged it the cleanest sounding, though the Type 4 metal tape, predictably, did best where high-frequency headroom was required.

Onkyo thus has done more than just avoid pitfalls in its first cassette decks: It has achieved genuine quality in its first try, judging from this flagship model. It contains a number of extras—a fadeout control for erasing the tail end of a recording that has been allowed to run a little too long (say, into the subsequent announcement on FM), both MEMORY STOP and MEMORY PLAY rewind options, a RECORDING MUTE, and so on—but none is particularly radical or arcane. Which is to say that, while the TA-2080 breaks no ground that is altogether new and caters to no special-interest group among recordists, it is a solid deck of well-accepted mold.

Circle 131 on Page 99
The new Sansui G-4700.

A double-digital receiver with all the right numbers.

Digital readouts and digital circuitry. Great specs. And the best price/performance ratio in the business. All the right numbers. That's the new Sansui G-4700. Just look what we offer:

**Double-Digital Design:** The front panel of the G-4700 has a bright electronic digital readout that shows the frequency of the station you've selected; and behind the front panel is one of the most advanced tuning systems in the world.

![Digital Readout and Tuning System](image)

Sansui's patented Digitally Quartz-Locked Circuit uses a precise quartz crystal time base to keep your station locked in, even through many hours of listening or if you turn the receiver off and back on again.

Conventional quartz-controlled receivers use analog phase comparison circuits that can become inaccurate because of harmonic interference. Our system uses a new LSIC (Large Scale Integrated Circuit) digital processor that actually counts the vibrations of the quartz crystal to compare to the tuned frequency. The frequency is perfectly locked in the instant you find the station you want.

With this unique Digitally Quartz-Locked system, the G-4700 delivers high sensitivity (15dBf, mono); a better signal-to-noise ratio (75dB, mono); and a better spurious rejection ratio (70dB).

**DC power amplifier:** Power is ample for almost any speaker made. With 50 watts per channel, min. RMS, both channels driven into 8 ohms from 20 to 20,000Hz with no more than 0.05% THD.

And the wide bandwidth DC power amp circuit responds quickly to transient music signals for the most accurate and pleasing music reproduction. What you hear is clean and sharp, just the way it was recorded.

**Electronic LED power meters:** Don't worry if your present speakers can't handle 50 watts. The array of fast-acting LED's (Light Emitting Diodes) on the Sansui G-4700 lets you monitor and control the output level so you don't damage your speakers.

**Electronic tuning meters:** Two fluorescent readouts help to zero-in on each station with accuracy and ease. Both the signal strength and center-tune indicators operate digitally for precise station selection, and the nearby LED verifies that the quartz circuit has locked in your station.

**Superb human engineering:** A full complement of genuinely useful knobs, switches and jacks gives you complete control over what you hear and how you hear it.

Ask your authorized Sansui dealer to demonstrate the G-4700. Listen to the music. You'll love what you hear. Look at the numbers. You'll love what you see.

SANSUI ELECTRONICS CORP.
Lyndhurst, New Jersey 07071 - Gardena, Ca. 90247
SANSUI ELECTRIC CO., LTD., Tokyo, Japan
SANSUI AUDIO EUROPE S.A., Antwerp, Belgium
In Canada: Electronic Distributors
AIWA AD-M700 3-HEAD METAL TAPE COMPATIBLE CASSETTE DECKS

We'll go head to head with anyone

Aiwa's AD-M700 cassette decks in contemporary-styled silver or in a black rack-mount handle cabinets have a 3-head Double Dolby® NR configuration. So do some high-priced decks. What the high-priced decks don't have is Aiwa's unique V-cut head geometry to cancel out low-frequency contour effect, i.e., get rid of the roughness. While the record and playback heads are placed in single housing, they are completely separate, allowing each head to have the ideal gap width for its specific purpose. This provides low noise recordings with extended frequency response.

To match this supreme head-system performance, we've used a 2-motor tape transport for dependability and smoothness as well as a phenomenal 0.04% Wow and Flutter WRMS.

Finally, to make the most of Aiwa's superb heads and transport system, we've put in a continuous variable bias adjust control for the optimum flat response regardless of what—or whose—tape you use, including metal particle tape.

All of this gives you terrific sound with a frequency response of 20-19,000Hz with metal tape; S/N ratio of 65dB (Dolby® on, FeCr tape). Then we added these fine touches for convenience and versatility...feather-touch logic controls, continuous repeat and memory replay, 5-point multi-color peak reading LEDs, REC/MUTE edit replay and a host of other high-priced features that come with any Aiwa cassette deck. Look for Aiwa's AD-M700U in silver; AD-M700BU in rack-mounting black. We've used our heads. For you.

* Dolby is a trademark of Dolby Laboratories, Inc.
Another Winner from Koss

Koss HV/X stereo headset, with 10-foot coiled cord. Price: $70; also available as the HV/XLC with individual earpiece level controls, $80. Warranty: "limited," one year parts and labor. Manufacturer: Koss Corp., 4129 N. Port Washington Ave., Milwaukee, Wis. 53212.

The Koss HV headphone series is designed around the premise that total isolation from your aural environment is undesirable in some kinds of listening. We agree both with that premise and with its obverse: that isolation (such as that provided by Koss's own classic Pro series) is desirable in other types of listening. Headphones got their start in audio as monitoring devices for recording locales without control rooms and therefore without the option of using loudspeakers to evaluate the sound pickup. High acoustic seal obviously is necessary for this purpose. In home listening, isolation may be needed where ambient noise levels are high or may be preferred just as a means of escape from the here and now through music. But we generally experience less listening fatigue with the so-called open-air designs like the HV, because they do not, in fact, subject the listener to a sense of total isolation. The choice thus is influenced by living conditions, life styles, musical tastes, and program material. And since virtually all commercially available program material is in stereo—that is, specifically intended for reproduction on a pair of speakers—purists will object that any use of headphones with programs not captured binaurally for this purpose is, at best, a compromise. Even so, there are circumstances (late-night listening, for example) under which it is a desirable compromise.

Like the HV-1 (test report, July 1974), the HV/X aims to satisfy the listener who objects to the weight as well as the acoustic isolation of sealed-cup headphones yet misses the deep bass response lacking in some open-air designs. Koss's solution involves the use of variable-density foam ear cushions. Though the ear is surrounded completely by the circumaural cushion, the wearer notices immediately that normal ambient sounds are diminished only slightly. The cushion is made of a very porous foam that remains acoustically transparent at its low-density perimeter but is compressed, and therefore acoustically more opaque, toward the inner side. This variable density provides a pattern of acoustic resistance that controls dissipation of the bass frequency range without inhibiting the passage of mid and high frequencies. Koss also claims that the bass boost afforded by these earcups permitted a major modification to the drivers, lightening them considerably. In fact, at a featherweight 7.8 ounces and with the squishy foam cushions gently resting on (and warming) one's ears, the HV/X is among the most comfortable, least fatiguing headphones we've ever used.

But how does it sound? In a word, exceptional. Auditioning it with bands of pink noise, we could find little if any rolloff of high frequencies up to about 15 kHz, and bass response remains firm into the nether regions around 50 Hz. Reproduction in the lower registers has a sonorous richness usually associated with sealed-cup designs, and midrange presence is raised to an exciting, if slightly surreal, level. Also pleasing in this headset is the kindness with which it treats those ever-present extramusical details: The breathiness of the singer and the slip of the fingers...
down the strings of the guitar are not exaggerated. We could find no evidence of
distortion at any listening level short of our threshold of physical discomfort. (Koss
rates the HV/X for 120 dB SPL, a fearsome figure.)

With a rated impedance of 90 ohms at 1 kHz, the HV/X should suit the
headphone jacks of receivers, amplifiers, and most preamps and tape recorders. (But,
again, the low-seal design is not essentially appropriate for critical monitoring during
live recording, and the headphone output from many tape decks is, in any event,
inadequate for high-level listening with most headphones.) The coiled cord extends
from its 3-foot length to a maximum of around 10 feet, and in overall construction
the set seems fairly rugged for such a lightweight unit. As an all-purpose headphone
to delight and tickle you in your private moments, the HV/X can be heartily
recommended.

Circle 132 on Page 99

ADC Sound Shaper Three Paragraphic equalizer, in metal rack-
mountable case. Dimensions: 19 by 6 1/4 inches (front panel), 12 inches
deep plus clearance for handles, controls, and connections. AC
convenience outlet: one unswitched (200 watts max.). Price: $500;
optional SLM-3 sound-level meter and calibration record, $70. Warranty:
“limited,” two years parts and labor. Manufacturer: made in Taiwan for
Audio Dynamics Corp. Professional Products Group, BSR (U.S.A.), Ltd.,
Route 303, Blauvelt, N.Y. 10913.

The ADC/BSR equalizer line has been growing more or less constantly
ever since BSR acquired Metrotec some years back. In retrospect, that seems like a
humble beginning; the little Metrotec graphic unit was a dandy accessory in its day,
however, and it laid the foundation for the imposing Sound Shaper edifice. Until
recently all models in the line were graphic equalizers, yet the numbers of control
bands and the switching options have grown, producing ever more flexibility of use
and sophistication of behavior. The Three, for example, has full pre/post-tape
switching (a must, in our view, for recordists who want to equalize program
material, though it took a long time for this feature to become commonplace), a
level-matching display and trim controls (to prevent distortion from overdriving any
portion of your system or noise from underdriving it, and to make EQ in/out A/B
comparisons meaningful—and here employed as a reference for speaker
equalization), and separate sliders for each stereo channel (sometimes desirable for
program EQ, even more important for speaker EQ). The most striking innovation is
the bottom rank of switches, which shift the bandpass frequencies of the twenty-
four sliders—twelve for each channel, spaced a little less than an octave apart—
upward or downward by approximately a quarter-octave.

This is what ADC calls its Paragraphic design, a term that needs some
explanation. In its main outlines, the Three is a graphic equalizer: Once set,
frequency band by frequency band, the sliders give you a “graphic” display of the
response curves they create. Parametric equalizers work not with manufacturer-
mandated frequency bands, but with the individual parameters of response shaping:
frequency (band centers), Q (bandwidth and band sharpness), and—like the
graphics—level (cut or boost within the chosen band). ADC’s Paragraphic design
includes no control of Q as such; to create a band broader than those controlled by
its individual sliders, you must “construct” it with the aid of neighboring sliders. The
You're looking at four new machines that have more in common with data recorders than audio recorders. Together they are called the X-Series. And they bring a totally new kind of technology to the open reel format.

Each X-Series transport is an instrumentation mechanism. For 15 years, this TEAC design has stood the grueling test of time in computer installations where dependability is worth millions.

The basic configuration is closed-loop dual capstan. It's extraordinarily quiet, stable and precise. Wow & flutter is very low. Speed accuracy very high.

Three DC motors drive the tape. They're used to keep changes in motor temperature to a minimum under different loads so constant torque is maintained.

Our MagnetoFloat flywheel assembly, a completely new concept, uses magnetics rather than mechanics to eliminate problem-causing springs and pressure plates. Axial variations between the tape and capstans are prevented so proper tracking is assured. The result is highly accurate audio reproduction even after years of hard use.

The X-Series transport maintains ideal tape-to-head contact. Audible drop-outs, level and frequency losses are absolutely minimized. Frequency response is wide and flat. And signal articulation is unusually clear.

The brain behind the transport is our LSI control chip. It eliminates the need for mechanical relays so transport control is faster, more positive and reliable. The LSI also lets us provide full motion-sensing in the X-10 and X-10R.

Within the X-Series, machines have been specifically designed for bidirectional record and playback. Perfectly symmetrical head stacks (6 heads in all) assure top performance in both directions. There's automatic reverse and repeat. And two-way cue monitoring.

New audio electronics accompany this new transport technology. Record and playback amplifiers are quieter and completely free of audible distortion. The sound is cleaner, more faithful to the source. The fidelity is unsurpassed.

An option previously available only on our professional recorders can now be added to any X-Series machine. Called dbx I7, this noise elimination system adds 30dB to the already high S/N and over 10dB of headroom to give you master-quality recordings.

If your audio perception is critical, your listening standards high, audition an X-Series recorder. The performance is flawless. The sound peerless.
ADC Sound Shaper Three equalizer

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output at clipping</td>
<td>9 volts</td>
</tr>
<tr>
<td>Harmonic Distortion (THD, 20 Hz to 20 kHz)</td>
<td>≤0.15%</td>
</tr>
<tr>
<td>0.5 V in, 2.0 V out (HF)</td>
<td>≤0.028%</td>
</tr>
<tr>
<td>1 V in, 1 V out (normal use)</td>
<td>≤0.028%</td>
</tr>
<tr>
<td>Frequency Response</td>
<td>+0, -3 dB, 10 Hz to 260 kHz; +0, -3 dB, &lt; 10 Hz to 160 kHz</td>
</tr>
<tr>
<td>Input Characteristics (HF loading, A-weighting)</td>
<td>79 mV</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>101 dB</td>
</tr>
<tr>
<td>S/N ratio</td>
<td>90 dB</td>
</tr>
</tbody>
</table>

The resulting envelope therefore may not be quite as smooth and regular as you would expect from a parametric model, but with modest degrees of boost or cut, the differences are vanishingly small, and even settings extreme enough to show band-to-band ripple on graphic-equalizer response curves may sound identical to their parametric equivalents. The Three does add the frequency-shift option not normally found on graphic designs—though in discrete positions, rather than the continuous variability of the parametrics. And, most important in practice, the basic layout and behavior of the Three is that of a graphic model. Thus we approach it as a graphic equalizer whose subtlety of control will deliver results comparable to those from a parametric. It is not, in our view, really the functional combination of parametric and graphic designs that the name might suggest.

Since the significance of the last statement goes to the way in which one thinks about and goes about using the device, it also goes to the dual applications to which the Three addresses itself. In the best of all possible worlds, where no regard for price is necessary, we would want to use one easily accessible equalizer to correct any response problems in the program signals and another—preferably hidden away where its “ideal” settings won’t be tampered with—to “fix” speaker response. ADC, like its competitors, realizes that this is a luxury few of us can afford; the Paragraphic design is intended to encompass both applications with as much grace and as little compromise as possible.

ADC also offers the SLM-3 sound-level meter and a calibration record to use in speaker setup, and we suggest that you do so. If you don’t want to lay out $70 for an item that, at least in theory, you’ll never need again as long as you don’t change your speakers or your room, ask your ADC dealer about renting or borrowing one; he may be happy to accommodate you in view of the equalizer sale that will go with it. Without cataloging the always-onerous task, we found the process roughly comparable to that with most top-quality speaker equalizers—all of which make the simpler models look like the inadequate half measures they are.

Conventional theory dictates that response anomalies cannot be heard unless they extend over at least a third of an octave and that third-octave filter bands are therefore ideal for this purpose. The Three’s bands are a little wider, but we’re satisfied that the frequency-tuning switches do, indeed, give you all the control you need. The calibration and adjustment process depends on the front-panel LED display, which runs in 2-dB steps, yielding information with an effective accuracy of ±1 dB; if you want to chase after fractions of dB (and we see no real point in that), you’ll have to use more sophisticated measuring equipment.

As a program equalizer, the Three works very well indeed. It will do most of the things a parametric equalizer will do (the main difference being the even narrower bands usually available on a parametric, though they seldom are needed in home use) and some that it won’t; very complex response curves are simple on the ADC but might require more controls than most parametrics offer. This application is, of course, where the bank of switches at the right end of the front panel plus the level-matching controls at the center are invaluable.

The lab data turn up no disappointments. Bandpass (or bandsuppress) characteristics are quite consistent from slider to slider; the calibrations for frequency and for dB of boost or cut are reasonably accurate—more so, in fact, than usual. Distortion (which always is higher in an equalizer than in, say, a preamp) is well controlled. And, despite the wide latitude afforded by the level-matching controls, so is noise.

For those who want an exceptionally flexible graphic equalizer, the Sound Shaper Three strikes us as excellent in both conception and execution. (If you want something simpler, ADC has models to oblige, of course.) For program equalization, it may not offer quite the frontal attack of parametrics on some sorts of problems, but it’s no less capable when it comes to solutions. And it can be used for speaker equalization, where true parametrics are useless for all but the most rudimentary touchups.

Circle 135 on Page 99
INVEST IN METAL.

AKAI's new metal decks with Super GX™ Heads significantly improve specs with all tape formulations.

Once in a great while, some truly important advancements in tape recording technology are introduced. Metal tape is one of them. AKAI's new Super GX Head is another. Found exclusively on all new AKAI metal-capability cassette decks, Super GX Heads reproduce unsurpassed, crisp sensitive sound.

Guaranteed* for 150,000 hours, Super GX Heads improve frequency response by up to 2,000 Hz, signal-to-noise ratio as much as 6 dB and expand dynamic range, as well. With every tape formulation you use.

With a head this impressive, we had to design a full complement of metal decks to match. The GX-F90 is our top-of-the-line, loaded-with-features edition. With the 3-head performance of our Super GX Combo Head, High Current Erase Head to accommodate metal tape, Instant Program Location System, Dual Process Dolby™ two-color fluorescent bar meters, tape/source monitoring, fine bias adjustment, mic/line mixing, memory rewind and auto-repeat, just to name a few. And take a look at these specs: Frequency Response 25-21,000 Hz (± 3 dB using metal tape), S/N Ratio 72 dB (Dolby on) at metal position, Wow/Flutter less than 0.03% WRMS.

The other three new decks share many of the same outstanding specs and features. But no matter which one you choose, you can feel confident that dollar-for-dollar, spec-for-spec, you've made a sound investment you'll want to live with for a long time.

See for yourself at your AKAI dealer, or write AKAI, P.O. Box 6010, Compton, CA 90224; in Canada, AKAI AUDIO VIDEO CANADA, 2776 East Broadway, Vancouver, B.C., Canada V5M 1Y8.

AKAI

You never heard it so good.
An important achievement in record quality

“PROOF-QUALITY” RECORDS THAT OFFER CLEARER SOUND, TRUE FIDELITY, ANTI-STATIC PERFORMANCE
—AND ARE PRODUCED IN A DUST-FREE “CLEAN ROOM”

Available only from The Franklin Mint Record Society in The 100 Greatest Recordings of All Time. Not sold in any record stores.

For the first time ever, the world’s greatest works of music and the greatest recorded performances of those works have been brought together in one collection of unique proof-quality records. They form a record library unprecedented—and unsurpassed—in the entire history of music: The 100 Greatest Recordings of All Time.

An international panel of renowned music authorities was appointed to participate in the selection of these great recordings, which include immortal masterpieces by Beethoven, Brahms, Mozart, Tchaikovsky, Schubert, Rachmaninoff, Debussy, Verdi. Performed by Vladimir Horowitz, Jascha Heifetz, Enrico Caruso, Van Cliburn, Isaac Stern, Artur Rubinstein, Leontyne Price—with the world’s great orchestras under the direction of Toscanini, Ormandy, Bernstein, Stokowski, von Karajan, among others.

In every sense, this is the ultimate private library of recorded music—a collection that will provide unending enjoyment and cultural enrichment for everyone who appreciates the finest in recorded sound.

Produced to the highest standards
A superior vinyl material, containing its own anti-static element, is used in the production of these records. This exclusive vinyl, together with the careful process by which the pressing is made, results in a record that is more rigid, durable and resistant to dust. A record that has true fidelity, clearer sound quality and a long life.

To further assure their quality, the Franklin Mint records are pressed in a special “clean room,” similar to the facility in which the mint produces its flawless proof-quality records.

(left) Ordinary records (left) may warp, causing “skipping” and distortions in sound. But Franklin Mint records (right) are 36% thicker and heavier than ordinary records and are less likely to warp.

(left) Even when ordinary records are new, they can have dust particles embedded in their grooves—and the types of vinyls used in these records can increase surface noise. But Franklin Mint records (right) are pressed from an exclusive vinyl formula containing pure resins. This effectively resists dust and captures a fuller sound.

(left) Ordinary records being stacked in a typical record plant. (right) In the Franklin Mint “clean room,” a uniformed technician visually inspects a proof-quality record before it is released. Technicians wear vinyl gloves and take every precaution to ensure protection for every record.
Ordinary records (left), have static charges that attract dust, causing surface noise when the record is played. But the special vinyl used in Franklin Mint records (right) has a built-in anti-static element that assures clearer sound. Electrostatic meter tests show that the Franklin Mint record has only one-fifth the static charge of an ordinary record.

The most careful methods of production and control are used throughout to assure the high quality of all Franklin Mint records. (left) Technician sets up his instruments before cutting the master lacquer. (right) Meticulous attention is given to the electroforming of all stampers that will be used to press Franklin Mint records.

Coins. Here, the most meticulous attention is paid to the pressing of the records—to make certain that the full quality of each original recording is faithfully preserved.

Each record in this collection is exceptional for its clarity as well as its tonal quality—capturing the beauty both of today's finest performances and of the historic performances of the past. Indeed, the recordings of legendary greats like Caruso and Ponselle have been remarkably improved by electronically removing imperfections in the earlier recordings, thus enabling you to hear these glorious voices more nearly as they sounded in the actual performances.

Certification of proof quality

All of the important features shown and described on this page enable The Franklin Mint Record Society to create a collection of **proof-quality records**—records that offer greater clarity of sound and are quieter and clearer. To attest to this high standard of proof quality, each record bears the distinctive mintmark of The Franklin Mint.

To house these magnificent proof-quality records, special library cases are provided for all 100 records in the collection. Each hardbound case holds two long-playing 12" records and is attractively designed. Displayed in a bookshelf or cabinet, these library cases make an impressive addition to any home. Also included are specially written commentaries discussing the great masterpieces and providing fascinating background on the conductors and soloists.

Rarely if ever have records of such distinction been produced. Rarely if ever has so much time and attention been devoted to their creation. Yet the price for each proof-quality record is just $9.75 and the records will be sent at the rate of two per month. However, you have the right to cancel your subscription at any time upon 30 days' written notice.

The 100 Greatest Recordings of All Time is being produced exclusively for those who enter subscriptions to the series. It can be acquired **only** by subscription from The Franklin Mint Record Society, Franklin Center, Penn. 19091. To subscribe, please mail the application below before May 31, 1980.

**SUBSCRIPTION APPLICATION**

Please enter my subscription for The 100 Greatest Recordings of All Time, consisting of one hundred proof-quality records in especially designed library cases. I understand that I may discontinue my subscription at any time upon thirty days' written notice.

No payment is required at this time. I will be billed for each record in advance of shipment at $9.75 plus $1.75 for packaging, shipping and handling. My records will be sent to me at the rate of two per month.

*Plus my state sales tax

Signature

All applications are subject to acceptance.

Limit: One collection per subscriber

Please mail by May 31, 1980

Mr.

Mrs.

Ms.

Address

City

State, Zip

GUARANTEED PRICE: In spite of strong inflationary pressures in the record industry, the price of $9.75 per record will be guaranteed to each subscriber by The Franklin Mint Record Society for every record in the collection.
Been misled into thinking that you're limited when it comes to factory-engineered auto sound systems? Well look again! Delco-GM has the sophisticated, high-technology receivers, tape players, speakers and equalizer/boosters that can take you right to your limits in auto sound. The Delco-GM ETR™ electronically tuned receiver—available on selected GM models—features Keyed Automatic Gain Control, Quadrature Detection, Phase Locked-Loop Stereo Decoder, Audio Processing, Impulse Noise Blanking and a Frequency Synthesized Tuner. Delco-GM circuitry handles adjustments on the inside. Automatically. It eliminates the need for things like separate local-distant or stereo-mono switches.

With Delco-GM, you get sound. Not switches. Want to hear more? Try Delco Sound™ dual-cone extended range speakers for improved high-fidelity performance. And the Delco-GM Graphic Equalizer/Booster, which doubles the power output of our receivers.

Delco-GM has more than 40 years' experience in designing sound systems that move. We know there's a lot more to it than putting home hi-fi on wheels.

So if you're ready to take it to the limit, see your Chevrolet, Pontiac, Buick, Oldsmobile, Cadillac or GMC dealer and hear all of the sound Delco-GM has to offer.

Letters

Records and the IRS

It was heartening to see your article "Are Your Old Records Worth $557" [January]. Messrs. Biel and Brooks are quite right in stating that price guides give relative, not absolute, values and that donating records to an institution will often be of more value than trying to sell them, especially if an accredited appraisal is made. I do not agree that the IRS presents undue difficulty in such cases; however, it has accepted substantiated (and substantial) evaluations I have made of private collections.

Julian M. Moses
American Record Collectors' Exchange
New York, N.Y.

Expert Advice

In "A Personal Approach to Choosing Components" [December], Alfred Myers advises that "discounts of 25% or 30% are not at all uncommon." Well, we all know that no dealer can give such discounts and maintain a service facility for the benefit of those who cannot repair their own equipment. Servicing dealers would be eliminated if such discounts were really that common. Every such "expert" as Mr. Myers should have to operate a stereo shop; maybe he would reconsider his ideas about discounts.

Lonnie W. Vickers
Vickers Electronics and Vickers Audio
Durham, N.C.

M r. Myers replies: Within the city limits of White Plains, New York, there are no fewer than six audio dealers. They range from a high-end "salon" that never gives discounts, and also has no in-house servicing, to midpriced stores that provide knowledgeable help, attractive listening rooms, in-house servicing, and discounts. There is also a local dealer who, if his advertising is to be believed, will beat any price—and has a large, prominently displayed sign that states, "We Service What We Sell." All of these stores coexist quite nicely: The arrival of the "throat-cutter" did not drive the older firms into bankruptcy.

Though I certainly do not dispute the fact that a dealer must make up for the increased overhead of having a service department, surely part of those costs is covered by what he charges for service. And with the elimination of strict list pricing and the rising cost of audio gear (especially imported brands), shopping for the largest discount is the only way many can get what they want.

Having read your article, subtitled "Six Experts at Work Within Three Budgets," I wish to object strongly to the use of the word "experts" to describe these audibly handicapped and/or overpaid consultants. Peter E. Surhailm presented a sensible approach to buying a stereo system and, within the limits of the subjective method, chose a good $3,000 system. However, the other five quasi-experts' selections leave much to be desired.

They failed to recognize some critical points in the selection of a good system, notably: 1) extracting as much information from the record as possible and 2) sound. A Denon DP-2500 turntable may have "astonishing" speed accuracy, but how much information does it extract from the record groove? Unfortunately, not as much as a Connoisseur at less than half the cost, and not nearly as much as a Linn Sondek LP-12, which could and should be included in most $5,000 systems.

Your experts failed to mention the majority of fine European and American products available. I suggest that they, and your readers, locate some of these and give them a good listen.

Alan Pratt
Temple Terrace, Fla.

To remind Mr. Pratt of the introduction to the article: "The purpose of this article is to help readers explore the reasoning that goes into the selection process; it is this process rather than the results that we believe to be of importance. It's of no real value to a reader to know what model a particular expert likes if they do not share the same high fidelity objectives and priorities." Naturally, there will always be discussion and argument when it comes down to picking specific pieces of equipment.—Ed.

Ambience, Reverb, Quad

The Aeolian Skinner reverberation system mentioned in "Ambience and Space: Six Experts on the State of the Stereo Art" [November] may have been exciting from a technical point of view in the 1950s, but it had deficiencies as a substitute for the real thing.

It was demonstrated at the 1957 national convention of the American Guild of Organists in Houston. Its artificial rever-
THIS TIME
MAKE THE
RIGHT
CONNECTION

Only the new MMC 20CL can give your turntable the performance levels of our unique single crystal sapphire cantilever and a micro-polished Contact Line diamond stylus. And our new universal connector makes proper installation an effortless task while it eliminates the weight and mass of the common head-shell. If you have a high quality turntable, it probably deserves the MMC 20CL. See your Bang & Olufsen dealer to make the connection.

Bang & Olufsen
For Information Write To: Harold Flemming
Bang & Olufsen of America, Inc., 515 Busse Road, Elk Grove Village, Illinois 60007

Circle 8 on Page 99

Recording engineers are trained... not born.

Complete the Multi-track Recording Technology program in one year, or the B.S. Degree in Music Technology via the joint Institute of Audio Research—New York University program.

Spring ’80 Quarter starts March 31st.
Accelerated Summer ’80 Quarter starts July 7th.

For further information write, call or visit:
Institute of Audio Research
64 University Place, Greenwich Village, New York, N.Y. 10003
(212) 677-7580

Established 1969 Licensed by N.Y. State Dept. of Education

Circle 23 on Page 99

38 HIGH FIDELITY

beration made pipe organ sounds more pleasant than they were in the unaided dry room, but the effect was not natural to my own and to many others' ears. An explanation put forward at the time was that we were hearing a promotional setup rather than a custom installation. Yet a more sophisticated system would not have removed the incongruity of other sounds in the room. I remember feeling ill at ease, and in retrospect I think this was because audience sounds were not reverberant. I not only was isolated from the musical ambience, but was receiving conflicting cues about the room's characteristics.

In situations where ambience is supposed to be perceived as real—as in the kind of space in which classical music is performed—I suspect that artificially generated reverberation will never be entirely satisfactory.

Douglas Johnson
Athens, Ga.

After reading "Ambience and Space," I came to the same conclusion that HF's spokesman apparently did, i.e., that these people are trying to sell quad under a different name. And really, I don't know what is so bad about quad. Since acquiring a Sony SQ decoder, I have used it constantly for all program material.

The problem is lack of software: A few encoded records are still coming out, but no quad tapes are being produced. All that is needed is in the master tapes of the leading companies, and all that has to be done is to remaster them for quad. Why doesn't somebody do that? There must be a few others in the world who are willing to pay for quad.

Paul A. Elias
Greenwich, Conn.

Czech-mate

I can endorse everything Harris Goldsmith said about the Harold in Italy recording by Josef Suk on the viola with the Czech Philharmonic under Dietrich Fischer-Dieskau [November]. This is one of my favorite works, and I have never heard a better version—though, curiously enough, another of my favorites stems from the same source. This is the mono version featuring the great Czech violinist Ladislav Cerný with the Czech Philharmonic under Václav Jirácek. Cerný, founder of the pre-war Prague Quartet, was a contemporary of Adolf Busch and Joseph Szigeti but, being a violist, was not as celebrated as they. In his role as a teacher, he was responsible for encouraging most of today's fine Czech chamber ensembles.

Though I usually distrust violinists
Why Yamaha speakers sound better than all the others. Even before you hear them.

To make a speaker that produces accurate sound is not simple. It requires painstaking attention to detail, precise craftsmanship, and advanced technology.

And that's where Yamaha comes in. We build all our speakers with the utmost precision in every detail. As the premier examples of Yamaha loudspeaker craftsmanship, read what goes into the two speakers shown, the NS-690II and the NS-1000M. Then you'll understand why Yamaha loudspeakers sound better. Even before you hear them.

Precision Yamaha crafted cabinetry — (1) The walls on these, and all Yamaha speaker cabinets, are sturdily braced and crossbraced at every possible stress point. (2) The corner seam craftsmanship is so fine that it looks like the cabinet is made from one continuous piece of wood.

The back panels on these speakers are flush-mounted for maximum air volume within the cabinet. (3) Inside, a 1/4" felt lining "decouples" the cabinet from the drivers to achieve acoustic isolation of the woofer from the cabinet. (4) Thick glass-wool also aids in damping the woofer for maximum performance.

Lift one of these Yamaha speakers. It's uncommonly heavy and sturdy. (5) We even glue and screw the woofer cutout from the baffle to the inside rear panel for greater cabinet rigidity.

Now knock on the cabinet. It will sound as solid and substantial as it is.

Precision Yamaha Drivers — (6) The drivers are mounted on computer-cut baffle boards with exacting, critical tolerances to insure precision fit. All Yamaha speakers are acoustic suspension design, and this precise fit is critical for an airtight seal and optimum woofer recovery.

The drivers on these, and all Yamaha speakers, are flush-mounted on the baffle board to avoid unwanted diffusion of the sound waves. (7) This is especially important because all our tweeters and mid-high range drivers are the maximum-
dispersion dome type for the most natural reproduction of voice and instruments.

(8) We use chrome-plated machine screws (rather than wood screws) with two washers (regular and lock) to insure an unyielding mounting.

(9) The speaker frames shown are die cast rather than stamped. That's so they won't twist and alter the voice coil alignment during assembly and use.

Other Precision extras — All terminals are quick connect, screw-mounted assemblies.

(10) The wire leads are carefully soldered, not clipped.

All our speakers use full LRC crossover networks. These crossover networks are among the most advanced available.

Precision that stands alone — There's more. Much more. But, there is another fact of Yamaha loudspeaker construction that simply stands alone in the industry. Each component used in the two Yamaha speakers shown is manufactured by Yamaha. From the hefty die-cast speaker frames to the unique, ultralow mass beryllium dome diaphragm.

That's a statement no other manufacturer can make.

And therein lies Yamaha's story. If we put this much care and craftsmanship into the making of our components and cabinet structures, then imagine the care, precision and craftsmanship that go into the quality of the final sound. A sound built upon Yamaha's unique 98-year heritage as the world's largest and most meticulous manufacturer of musical instruments. From our most economical loudspeaker to our top-of-the-line models shown here, Yamaha retains the same attention to detail and craftsmanship.

Look before you listen. You'll be convinced that Yamaha loudspeakers sound better than the rest. Even before you turn them on. Then ask for a personal demonstration of these and other Yamaha loudspeakers at your Yamaha Audio Specialty Dealer, listed in the Yellow Pages. Or write us: Yamaha, Audio Div, P.O. Box 6600, Buena Park, CA 90622.
It whistles while it works
Listen to the Robins WhistleStop electronic head demagnetizer whistle as it eliminates performance-robbing residual magnetic build-up from your tape head. Hear the difference in sound quality and reduced distortion. Simply insert like any cassette. Complete with batteries. At your hi-fi dealer.

Robins Industries Corp.
Commack, New York 11725

Compare Prices!

Pioneer
Electronic Tuning Am/Fm Cassette
KE-2000
$157

Sharp
Computerized Cassette Deck
RT-3388
$212

Remote Control Turntable
Accutrac 4000
$129

We carry the full line of Pioneer, Craig, Clarion, Marantz, and more.

Toll Free 800-356-9514
Weekdays 9-9
Saturdays 9-5

Over 100 Brands like:

Technics  Maxell  Sony  Cerwin  Nikon
Pioneer  Empire  Teac  Vega  Canon
Marantz  Akai  JBL  Minolta
Kenwood  Sharp  Dual  Audio  Pentax
Sansui  Philips  Koss  Technica  Vivitar
Jensen  Shure  TDK  Clarion  Yashica

WDS
Wisconsin Discount Stereo
2517 Whalen In Madison, WI 53713

Wide World High Fidelity
who take up the viola, I make an exception for Suk, who plays the lower instrument so well. He has made three superb recordings with the Smetana Quartet playing the first viola part: Dvořák’s quintet (Supraphon) and Mozart’s C major and G minor Quintets (Denon).

Fischer-Dieskau, incidentally, goes from strength to strength as a conductor. I also have his fine Brahms Fourth Symphony on Supraphon and Schumann’s Second and Third, both with the Bamberg Symphony on the German Acanta label.

But “the Viennese Bruno Walter”? Good gracious, Mr. Goldsmith, Bruno Walter was not only born and bred in Berlin, but was even trained at the Stern Conservatory there. Though I must admit that he found his true artistic home in Vienna, it was his rejection by his hometown in 1933 that almost broke his heart.

Tully Potter
Billericay, Essex, England

Korjus and Brunnhilde
In “Behind the Scenes” [December], HF mentioned that Miliza Korjus “is currently learning the role of Brunnhilde—not bad for a former light coloratura in her seventies.” This is really not so surprising. During her concert career, Korjus often programmed the Wagner Liedestadt with full symphony orchestra. She had the breadth of tone to do so. I remember one Chicago concert in which her singing of “Elsa’s Dream” and the Liszt “Oh, quand je dors” were singled out by critics for special praise.

Not very many years ago she made a number of records on the Venus label, and the voice was remarkably fresh.

The Rev. Clifford Brier
Oswego, Ill.

Warp Woes
For my birthday, my wife bought me the Warner Bros. “Superman” album. The record was so badly warped that my Shure M95ED cartridge would not track it. We returned it to the store, which had no more copies, and bought another elsewhere. Same song, second verse; another trip to return the second album. Can you imagine the hassle if we had ordered it from a mail-order service?

I think it is a shame that music composed by John Williams and played by the London Symphony Orchestra ends up on a paper-thin record that is so badly warped that you cannot play it. What good does it do to acquire a good stereo system when the record companies are turning out junk?

D. Dickman
Los Alamos, N.M.
Is it possible to love a fatter tonearm?

Most sleek, graceful tonearms, including Sony's, are lovingly crafted precision instruments.

But even the most expensive beauties have a beast of a problem. Tonearm resonance.

At low frequencies, feedback in the form of noise and wayward harmonics is added to your music. Bach with a tiny tuba in the background.

It's called the last big turntable problem.

Poof. Sony banished tonearm resonance at any frequency by putting a linear motor in the tonearm. And a linear motor under the tonearm.

That's why it's radically fatter and radically better. It's totally electronic.

We call our new tonearm the Biotracer and our new turntable the PS-B80. It's the highest-fi you can buy for professional applications or critical home listening.

You select the stylus force by dialing an LED readout on the front panel and the microcomputer automatically makes the adjustment. Tracking force can be changed during record play.

Antiskating force is automatically and continuously applied by the horizontal linear motor. A sensor relays the tonearm's lateral position to the microcomputer and the selected tracking force is stored in its memory.

The linear torque BSL (Brushless & Slotless) turntable motor delivers an extremely high signal-to-noise ratio and virtually eliminates wow and flutter. The BSL motor in a major design breakthrough has no slots to cause uneven torque distribution.

A highly stable quartz-crystal oscillator and a magne disc servo-controlled system lock turntable speed for precise platter rotation.

Consider the electronic automation.

Record play is automatic. Record size selection is automatic. Repeat and partial repeat are automatic. Even stylus cleaning is automatic.

The new all-electronic Sony PS-B80 redefines the limits of turntable technology.

Listen closely. You're going to love it.

PS-B80

A microcomputer orchestrates every tonearm move. There are no counterweights, tracking force mechanisms or antiskating devices.

When the PS-B80 is first turned on, or when a new cartridge is installed, the microcomputer automatically adjusts the arm for zero balance. A standby lamp on the arm base illuminates during this brief operation.
TDK's new improvement has nothing to do with the sound. It's the package.

Each TDK package is now designed to catch your eye as never before. Clean, modern lines. Bright new colors. Bolder designations in front. Full tape description in back, including sound characteristics, formulation, bias and a frequency response chart to let you know precisely what you're buying without having to hunt for a salesman.

And don't expect the improvements to stop there. Inside there are complete recording and cassette care tips. Invaluable for preserving the life of each cassette, even though each TDK cassette is protected by a full lifetime warranty.*

There's also a convenient, tear-out index card to help you build a perfect reference system.

Once inside, TDK couldn't stop improving. There's now a wider cassette window.

Through it all, you'll be able to watch two red double hub clamps registering tape direction as they turn. Just when the improvements seem to end, TDK tape technology begins. TDK SA's cobalt adsorbed gamma ferric formulation continues to set the high bias standard around the world. TDK AD, the tape with the hot high end, is now Acoustic Dynamic. You'll see it in brand new blue and silver colors. °D° D, another member of TDK's dynamic series, makes many premium normal bias cassettes sound ordinary and overpriced.

That's all we have to report for now. But there will be more to come. Part of TDK's philosophy is: When every improvement has been made, improve again.

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

Consolidation of past gains overshadows the bold new thrusts in the products announced so far this year.

by Robert Long and Peter Dobbin

If home-entertainment product entries in recent years have sometimes suggested technology run amok, the first round of the new decade shares little of that tendency. The pace may pick up again at midyear—traditionally the time to sound out the market with new ideas—but in the meantime there is much evidence that the international economic climate is inhibiting high-risk projects among the major manufacturers. Many are displaying prototypes of some very advanced gear (and some of the smaller domestic manufacturers are going full tilt along roads that are anything but well trodden). The international companies, however, generally are very circumspect in stating their plans for production, pricing, and marketing of the more outré designs. Instead they tend to be concentrating on “sure sellers” until the outlook becomes more settled. That means, for example, that some well-made, relatively inexpensive receivers with all the current “good stuff” will be showing up this year. Unfortunately, it also means a good deal of tinsel whose glitter is anything but sterling: Expect an overuse of LEDs, particularly for functions that might better be handled by meters (LEDs cost less and wink more seductively in the salesroom) or omitted altogether. If you try tuning your FM antenna for maximum signal strength or minimum multipath using a receiver whose signal-strength meter has been replaced by a few LEDs, you should see the folly of this trend.

Automatic, remote-control, and microprocessor-controlled features seem to be retaining their appeal for manufacturers of midpriced equipment in search of premium models. In some cases, the extra features—like the fabulous prototypes of indefinite introduction date—may represent an attempt to sell the sizzle, rather than the steak, to quote from a favorite aphorism of advertising folk. In this view, the glitter creates “brand awareness” that then can be converted into sales of plainer fare. A related phenomenon is taking place in video tape decks, where the models on display compete in programmability. The elaboration of these autorecording microprocessors has pushed list prices up from the original $1,000 base toward the $1,500 mark over the last year or so, yet manufacturers are talking of the need for broader appeal via simpler decks and lower prices. By summer, we may well find that many of the razzle-dazzle trends have run their course and have been replaced by a thrust toward simplicity and value.

Not that all expensive products betray a fast-tarnishing glitter, by any means. Indeed, the pursuit of sonic perfection at any price—a pursuit that, in some cases, implies simplicity through the elimination of what are believed to be the fidelity-inhibiting elements of standard designs (active tone controls, or any tone controls at all, for example)—remains untouched, as far as we can see, by the economic jitters that infect the mass-market companies. Amps, preamps, and loudspeakers are the most obviously active product categories in this respect, though turntables and phono cartridges also are under perfectionist scrutiny. Cassette deck designers, after setting a blistering pace of innovation in recent years, appear to be catching their breath.

They may be keeping a wary eye...
on what promises to be the major audio thrust of the Eighties: digital techniques. That this technology will be used more and more in professional applications is a foregone conclusion; domestication is another matter. Radical opinion may be summarized this way: "We all know that digital audio is taking over, so why are the producers of home equipment so slow to deliver?" A number of reasons are given in rebuttal: once again, the sluggish economy, in which the high entry prices for present digital gear severely limit its market; public satisfaction with the recordings and equipment it can buy now; the assumption that many consumers would see digital technology (as they saw quadrophonics) as an arbitrary attempt to generate sales; the lack of standardization in proposed consumer products; and, occasionally, questions about the quality of digital sound and whether it may not substitute new "infidelities" (as yet inadequately defined) for those of the analog systems it would replace. The long-term course of digital audio is thus anything but clear, though the short term should see still more digital studio recordings for playback on conventional phonographs and tape decks.

**Electronics**

Digital audio recording adapters for home use, first introduced by Sony two years ago with its PCM-1, sample an incoming analog audio signal and translate that information into digital (binary) bits to be recorded on a video cassette recorder. They are still extremely expensive (in the $3,000-$4,000 range) and still are most appropriate for live recording where they can make use of the increased dynamic range and high-frequency headroom of the digital medium. Sanyo, however, stresses the eventual use of digital adapters as the ultimate audiophile component: Packaged in with its Plus 10 adapter ($4,000) is a digitally encoded tape of Ry Cooder's album "Bop Till You Drop." Released on disc late in 1979 by Warner Bros. and billed as rock's first digitally mastered record, the album as supplied by Sanyo is a digital transcription of the original digital master tape onto a Beta-format video cassette; thus, there is no analog step in its reproduction. Sanyo promises to make this Beta version available separately at selected audio stores for about $25; of course, you'll need a digital decoder to play it. Also showing digital adapters are Toshiba, which claims that its Mk. II will be in dealers' hands sometime in 1981, and Sharp and Kenwood, both of which state that their units are still prototypes.

Ambience enhancers, those black boxes that attempt to re-create a sense of concert hall realism in the home setting, are being offered by Bose and KM Laboratories. The highly publicized Bose time-delay system is an add-on, bucket-brigade-type unit. Dubbed the Spatial Expander ($450), it needs no external amplification when matched with a Bose Spatial Receiver, since it can make use of the receiver's built-in extra channels of amplification. It can, however, be used with other receivers and/or separates. The KM Laboratories system is described in language reminiscent of Carver Corporation's Sonic Holography preamp. This Belgian company claims that its A.I.R. model (for acoustic intermodulation reduction), operating with just two basic stereo speakers, can restore the acoustic environment in which the original recording was made. Like the Carver system, it needs no extra channels of amplification. It is priced at around $350.

Though still in prototype, a device designed by Joel Cohen of Sound Concepts tackles the Sonic Holography preamp more directly, reportedly achieving a similar effect with the bonus of no-fuss setup. While the Carver unit assumes a single best listening position, that from Sound Concepts, tentatively labeled a stereo image enhancement system, will allow the user to dial in the correct speaker/listener angle in a range from less than 20 degrees to more than 90 degrees. Though work remains to be done on the cosmetics, Cohen says that the unit will cost less than $200 and will operate with any existing stereo system.

Noise-reduction systems are also news this spring with DBX's introduction of the Model 224 Type II. This compander provides a claimed 40-dB increase in usable dynamic range when used with tape recorders and doubles as a decoder for DBX-encoded discs. Logical Systems has the Model 8801 ($290) dynamic noise filter, a playback-only unit. The 8801 is a variable bandpass filter that lops a claimed 15 dB of hiss from tapes, disc, or radio. A mono bass circuit is also said to maintain low-frequency signal phasing while eliminating up to 20 dB of rumble and hum. Finally, SAE has announced a second generation of its impulse noise reducer, the Model 5000A ($225). It is said to contain improved logic circuits for more accurate, less noticeable action while it removes clicks and pops from program material.

Frequency spectrum analyzers are also represented. Rotel offers the RY-1010 ($430), a 10-band display device with built-in pink-noise generator. Logical Systems' Model 1081, also a 10-band display unit, can be purchased in kit form at a considerable saving ($295). Of course, when used without a companion equalizer, a spectrum analyzer is of only limited use. Not to worry, though, for the crop of frequency equalizers at a variety of price points is ever increasing. Symmetric Sound Systems Model EQ-2 in kit form is the lowest-priced 12-band, two-channel equalizer we've yet seen ($165). Marantz EQ-10 is a highly styled single-channel, 10-band unit and comes in at around $200. Others include Tannoy's EB-100 ($250), Rotel's RE-1010 ($250), and Lux's G-120A, all two-channel, 10-band models.

Once again, preamps are the object of much technical refinement and innovation. For several years, Harman Kardon has been promising that its association with Finnish audio engineer Matti Otala would result in some important new products. Its first Otala-in-
spired design is the Model 725 preamp ($270), in which it claims to have cut negative feedback (one factor associated with dynamic intermodulation phenomena, originally identified by Otala) by some 30 dB. Harman Kardon has opted not to use integrated circuits in its construction, claiming that they were made unacceptable by discrete components' higher resistance to thermal distortion. Lux, too, addresses the issue of negative feedback in its two new preamps, the C-500A and the C-120A. Priced at $1,400 and $445, respectively, they employ Lux's Duo-β circuitry, which limits the negative feedback over most of the band and employs separate DC/infrasonic feedback.

Maintaining correct RIAA equalization without compromising cartridge loading is one of the claims for Hegeman Audio Products' Model Hapi 2 preamp ($900), which relies on passive equalization. So does the $325 Sirius preamp from Dennesen Electrostatic, which now has a full line of electronics. A company that we reported on back in September 1979, JSH Laboratories, has been re-formed under the name MTI, Inc. Its Model 500 is an all-Class A design said to provide enough output to allow use of the line amp section as a separate power amp independent of the preamp functions; it will supply up to 50 watts per channel into an 8-ohm load. Also shipping their first preamps are Tandberg, with the $1,000 Model TCA-3002, and ADC, whose tube model was demonstrated in prototype last year.

Audionics of Oregon incorporates a unique device into its RS-1 Class A preamp ($1,200): an axial tilt knob makes electronic corrections for up to seven degrees of vertical misalignment of the phono pickup to improve stereo imaging. One of the most flexible preamps offered comes from Soundcraftsmen in the SP-4001, which com-

bines a 10-band dual-channel graphic equalizer with full preamp circuitry ($550).

Finally, kit builders will appreciate the appearance of Audible Illusions. A spokesman told us that the new West Coast company plans to fill the void left when Dynaco stopped manufacturing high-quality tube amplifier kits. First offerings from Audible Illusions include a low-priced three-tube preamp, the Mini Mite I, the more sophisticated Dual Mono, and a solid-state model, the M-1.

In amplifiers, integrated and otherwise, the emphasis appears to be on moderate power output combined with subtle circuit refinements. Akai's three integrated amps range in output from 37 watts (15% dBW) to 68 watts (18½ dBW) per channel. The top-of-the-line Model AM-U06 ($350) features a pulsed power supply, three-step loudness contouring, and an independent recording-output defeat to prevent interference from unused decks. ReVox' integrated amp, the B-750 Mk. II ($1,000), has a rated output of 75 watts (18½ dBW) per channel with 1 dB of dynamic headroom. Lux has incorporated its Duo-β low-negative-feedback circuitry into its three integrateds, the L-580, L-480, and L-450.

Kenwood has put a lot of thought and engineering expertise into its L-01A integrated amplifier ($1,500). Having determined that conventional amplifiers built on chassis formed of magnetic materials exhibit magnetically generated harmonic distortion, the company constructed this 100-watt model of nonmagnetic materials and separate from its power-supply module. Somewhat more conventional in construction is the Kenwood KA-500 integrated amp, rated at 43 watts (16½ dBW). With the KT-500 tuner and RC-500 remote control, it constitutes a full remote-controlled system.

Marantz' three new integrated amps range in power output from 38 watts (15¼ dBW) to 87 watts (19½ dBW). The top-of-the-line PM-700 is packed with features, including a dual-channel, 5-band graphic equalizer and a Freon cooling system. Prices for the Marantz amps range from $225 to $420. Toshiba's entry is the SB-445 ($260), an integrated amp with a 45-watt (16½ dBW) output. And Qysonic, now a division of—guess what!—Motown, has entered the electronics market with its M-1 integrated model. Rated at 85 watts per channel (19¼ dBW), the Qysonic is a high-speed, Class A design.

Gone are the days of power amps with enough output to run a washing machine, it would seem, though some pretty hefty models continue to appear. An English company, Esoteric Audio Research, has a 500-watt (27 dBW) mono tube amp for $2,650. It also has one with an output of 100 watts (20 dBW) and a price tag of (just) $1,000. Another unusual entry is from Spectron Electronics in California, whose Class D switching amp is said to pump out 500 watts (27 dBW) per channel from its 18-pound chassis. And Infinity, which was the first to introduce a Class D amp some years back, is now offering a hybrid Class A power amp. The Model HCA ($4,000) employs tubes in the input stage and high-speed transistors in the output stage for a rated power output of 150 watts (21¼ dBW) per channel.

SAE's three power amps range in output from 100 watts (20 dBW) to 250 watts (24 dBW) and in price from $550 to $1,000. Dubbed the SAE 01 Series, each of these amps combines two amplifiers per channel—one to handle the positive slope of a musical waveform and the other the negative slope. SAE claims that this design handles complex speaker loads—even 2-ohm loads—more easily than conventional amps. Harman Kardon's approach to low negative feedback is reflected in its Model 770 amp ($400). Though its output is a moderate 65 watts (18 dBW), the 770 employs separate toroidal power supplies for each channel. Two new Ampzilla amps sport refined faceplates and a toned-down logo but hefty outputs; the top-of-the-line Ampzilla Model 500L ($1,600) is rated at 256 watts per channel.

Optonica's SX-9305 power amp ($850), with an output of 100 watts (20 dBW) per channel, includes a unique three-color audio spectrum analyzer that displays the relative energy content of...
the music being reproduced in ten frequency bands. The Freon-based heat pump method of cooling output transistors (first shown last year in amps from Sony and Sanyo) is put to use here and in Eumig's M-1000 100-watt amp ($800). MTI, Inc., has rated its Model 245 ($600) at a modest 40 watts (16 dBW) output but claims transient handling to the equivalent of 250 watts—for a dynamic headroom of some 8 dB. Technics' SE-A808 power amp joins integrated circuits and transistors in a hybrid configuration for an output of 40 watts (16 dBW) per channel. Also coming in at 40 watts per channel is the Model 335 Mk. II power amp, part of Toshiba's designer series of separates. And finally, we return to tube amps, which obviously have many admirers. Audible Illusions has its Mini Mite II, rated at 45 watts (16 1/2 dBW) per channel and available in kit form or prewired. Conrad-Johnson Design has a 75-watt (18 dBW) tube amp for $1,000. And Dennesen Electrostatic has two models: the DM-4 mono 50-watt (17 dBW) unit and the DM-73S at 35 watts (15 1/2 dBW) per channel, priced at $700 and $1,000, respectively.

Digital quartz-referenced circuitry and digital displays are still the bywords in tuners, with price breakthroughs in this formerly high-end area. Kenwood, however, is demonstrating a prototype tuner called the L-X3 (on our cover) that promises much in the creative application of computer technology. It really is two tuners in one, plus a fully functioning computer (not just a microprocessor) and CRT display. While you're listening to one station, a press of a button can summon a CRT readout of the signal strengths of all FM stations in your area, expressed as a bar graph; another button summons up the IF range, percentage of multipath, and signal strength of the station you are listening to; still another command brings an alphanumeric readout of ten preset FM stations with their call letters, frequencies, IF bands, and signal strengths.

But for today, Kenwood has applied its nonmagnetic concept for cleaner FM signals and emerged with the L-01T ($1,000), incorporating a pulse-count FM detector and digital IF conversion circuitry for better signal-to-noise ratios. Optonica's bid in the super-fi tuner area is the ST-9405 ($1,000), a digitally synthesized tuner with digital display plus an analog scale with forty-four LEDs in place of a tuning needle. Sony's $900 ST-J88B is a quartz-lock, frequency-synthesizer unit with nonvolatile MNOS memory circuits that will store seven FM stations indefinitely without external power.

Harman Kardon continues its slimline separates approach with two new tuners: the digitally synthesized Model 715 ($370) and a more conventional design, the Model 710 ($230). Qysonic's push into electronics includes the $400 MT-4 FM/AM model. Lux's T-450 tuner ($400) takes a different tack in helping assure positive center tuning. As the user rotates the tuning wheel to a desired station, a mechanical interlock prevents rotation of the wheel beyond the exact center-frequency point. Marantz' top-of-the-line ST-500 ($375) foresees possible action by the FCC in tightening up FM spacing: Its frequency-synthesized circuitry is adjusted to allow tuning in steps of 50 and 100 kHz, rather than the conventional 200-kHz increments. The step selector switch also provides compatibility with any future change in AM spacing from 9 to 10 kHz. Rounding out the Marantz line are the $280 ST-400, with analog tuning scale and digital readout, and the ST-300 for $225.

Tandberg's high-end separates line is joined by the TPT-3001, a $1,500 programmable device offering three-position IF bandwidth and adjustable muting. Akai has also entered the digitally synthesized tuner market with the AT-V04 ($280) and the AT-K03 ($230). Toshiba has expanded its roster of digitally synthesized tuners with the ST-445 ($260), capable of storing six AM and six FM stations. And Technics has introduced a combination tuner/preamp, the ST-K808, as part of a total remote-controllable system. (The full Technics ensemble consists of the tuner, the SE-A808 power amp, the SL-D33 direct-drive turntable, and the RS-M45 cassette deck.)

 Receivers, being the broadest segment of the high fidelity component market, tend to respond the quickest to prevailing economic conditions, and in this tight-money year manufacturers are concentrating on price points keyed to attract the greatest number of buyers. Sony packs lots of sophistication and good looks into its four new receivers—with the top model priced at just $500. All are direct coupled, with power outputs of 28 watts (14 1/2 dBW), 35 watts (15 1/2 dBW), 40 watts (16 dBW), and 55 watts (17 1/2 dBW). The top-of-the-line STR-V55 boasts low negative feedback circuitry, a pulse power supply, and frequency synthesized tuning. Pioneer has also introduced four receivers, each with Fluoroscan power meters and, in the two top units, nonswitching DC amplifiers. Prices range from $800 for the 120-watt (20%-dBW) SC-3900 down to $275 for the 30-watt SX-360. Unique to each of the Pioneer receivers is an input that will accept an adapter for reception of AM stereo broadcasts when the FCC finally decides on one of the competing systems. The appropriate adapter will, of course, be available from Pioneer.

Toshiba's slimline-styled receivers include models rated at 25, 35, and 50 watts. As in its separate high-end tuner, Marantz' top-of-the-line SR-8000 receiver provides frequency synthesized tuning with a choice of 50 and 100 kHz tuning increments. This $700 unit is rated for the same 88 watts (19 1/2 dBW) per channel as the SR-6000, at $550, which lacks the 8000's frequency-synthesized tuning. Three other receivers round out the Marantz line, with power ratings between 25 and 63 watts (14-18 dBW) and prices of $275 to $415. Technics' receiver line contains
the lowest-priced unit we’ve seen this year, the SA-101 with an output of 18 watts (12½ dBW) for $180. Other new Technics receivers range from the 30-watt (14½ dBW) SA-202 at $220 to the 63-watt (18 dBW) SA-505 at $420. Sansui’s three new receivers, called the Super Compo Series, are marketed either separately or as part of total systems. At the top of the line is the 64-watt R-70 ($400); for $230 you can get the 25-watt R-30. If this bevy of moderate-priced receivers leaves you thirsting for something, well, a bit less modest, there’s always the ReVox B-780. With all sorts of goodies like frequency synthesized tuning, room for 18 preset stations in its electronic memory, and a power output of 75 watts (18¼ dBW) per channel, the B-780 is billed as “the world’s most expensive receiver,” and at $2,700 we’d be hard pressed to disagree.

Speakers and Headphones

Designers are once again devoting their talents (and computers) to perfecting the driver. If the Sony APM-8 (shown on this month’s cover) looks a bit surprising, the square shape and flatness of the drivers are anything but cosmetic conceits. The flat, honeycomb-sandwiched diaphragms are said to move with unerring pistonic accuracy to produce coherent sound waves unmatched by conventional cones, with their inherent breakup patterns and phase cancellations. Each of these flat diaphragms is driven by standard voice coils, though the woofer’s large surface area requires four voice coils—each at a specific node of vibration, as determined by laser holography. Sorry, but you won’t find these speakers in your local stereo store. They are being marketed only in Japan and Germany, and when they reach the U.S. they will be sold—for $14,000 a pair—only through professional audio dealers.

Onkyo, too, is concerned with maintaining accurate, pistonic diaphragm motion. The F-3000, its $350 three-way system, makes use of a flat woofer and midrange driver, accompanied by a thin-membrane tweeter. Technics’ exploration into driver design has led to a similar solution in its SB-10 and SB-7 systems. Currently marketed as professional products in its Recording and Broadcast Division, these speakers have flat woofers plus midrange diaphragms constructed of an aluminum honeycomb material.

Phase Linear enters the speaker market with three bass-reflex, three-way models. The top-of-the-line P-580 ($1,200) mates a 15-inch woofer with concentric ribs for added stiffness with a 2-inch beryllium dome midrange and a ribbon tweeter. Joining the JVC series of ribbon-tweeter speakers is the Zero-3, a bookshelf-sized version of the Zero-5 and -9.

Accuracy in high-frequency and midrange reproduction has made the electrostatic driver an audiophile favorite for years, and Dennesen Electrostatic makes good on its name with the ESL-110. A hybrid system, it consists of three electrostatic elements and a dynamic woofer. Configured as a vertical line

Some of the mood in speaker design this year is reflected in models such as (from left to right) Onkyo’s phase-aligned F-3000 with flat woofer and midrange diaphragms and thin-membrane tweeter, Infinity’s Reference Studio Monitor with low-coloration polypropylene diaphragms, and Wharfedale’s TSR-18, whose high efficiency breaks with English tradition.
source with phasing adjusted by in-depth placement of drivers, the ESL-110 is priced at $250. Dayton-Wright, the Canadian company that (uniquely) seals its electrostatic drivers in a plastic bag filled with inert gas for minimum arcing with its very high biasing voltages, has produced the impressive XG-10. Not only is it intended to improve on the sound of the former model (XG-8), but big strides are claimed in reliability. If you have to ask about the $3,500 -per-pair price, perhaps you should be looking elsewhere.

You have to ask about the $3,500 -per-pair price, perhaps you should be looking elsewhere.

Yamaha has introduced five speakers, ranging in price from $190 to $480. Each of these acoustic-suspension systems employs a newly designed soft-dome tweeter fabricated of a resin-imregnated fabric to provide rigidity for reproduction of sharp transients without harsh resonances. B&W, the English speaker manufacturer, has modified its well-known DM-7, which now carries the Mk. 2 suffix, with a redesigned crossover and electronic protection circuitry. Another English company, Rank, has introduced the Total Sound Recall series of three systems that combine "English" tonal accuracy with "American" efficiency and power. To that end, materials such as polypropylene and mineral-filled homopolymer were used in the woofer and midrange drivers and computer-optimized techniques have been employed to wring as much sensitivity as possible from the mating of drivers, crossover, and enclosures. Still another British-based company, Celestion, is appealing to the first-time audio buyer with a line of four moderately priced speakers ($100-$330).

Infinity, too, has opted for polypropylene diaphragms in its new speakers: The three-way Reference Studio Monitor ($300), the smaller three-way R5b ($240), and two-way R5a ($190) all use Infinity's Emit tweeter. Following the success of its floor-standing System B, Jensen has come up with a bookshelf version dubbed the System C. A three-way, four-driver system with a rear-firing tweeter, the System C carries a price tag of $400. And JBL has announced that all the speakers in its Standard line—from the two-way L-19 bookshelf system to the three-piece L-212—feature symmetrical-field-geometry magnet structures for extremely low second harmonic distortion levels.

The trend toward "mini" speakers, especially appropriate for the crowded apartment dweller, continues this year. Design Acoustics' shoe-box-sized Model LDM ($175) features a beveled baffle board for minimum high-frequency diffraction. Essex Speaker Systems (a division of United Technologies), a new name in the field, is offering three minispeakers ranging in price from $72 to $114. Sansui's entry in the mini market is the SP-M1 ($250 a pair), consisting of a 4-inch woofer and 1-inch soft-dome tweeter in an acoustic-suspension enclosure. Technics continues its linear-phase concept with three small systems housed in heavy die-cast aluminum enclosures. Prices for the Technics SB series range from $220 to $340 a pair. Audiosource has expanded its LS line of compact, full-range speakers with three models priced at $90, $130, and $160 each.

Separate subwoofers (low-radiating extenders) and subwoofer/satellite systems are still increasing in popularity because of their flexibility and range. Sound Labs, Inc., has the Model R-2 with two 12-inch woofers loaded in their own sealed chambers. At $450, the R-2 is said to complement Sound Lab's R-1 electrostatic array ($1,100). A New Hampshire manufacturer, 3D Acoustics, has introduced the Model 3D610B, a complete three-piece approach consisting of a 10-inch woofer in its own cabinet crossed over at 100 Hz to two bookshelf-sized satellites ($400 complete). SEAS, a Danish manufacturer, is marketing the DD Tower system. A stackable modular system, the DD Tower comprises two subwoofers and two three-way satellites.

ReVox rounds out its products with the Triton system, consisting of a subwoofer/compact speaker system with two 10-inch drivers and two small bookshelf satellites ($1,600 complete). DCM, whose Time Window speaker has developed a cultlike following, now has a companion model called the Time Bass that connects to the Time Window via a built-in phase-correcting passive crossover. Fried Products' Model D is a dual subwoofer system employing a 10-inch driver, passive crossover, and ported enclosure. Cizek Audio Systems carries its lovely handcrafted construction methods into subwoofers with the KA-20. Complete with its own 250-watt amp, built-in electronic crossover, gain control, and subsonic selector, the $2,000 KA-20 is intended to complement the highly regarded KA-1 compact speaker system. And finally, Audio Pro of Sweden has a self-powered "baby subwoofer" system called the B2-14. A smaller version of the B2-30, it is priced at $550.

Headphone introductions are few in number this spring. Sony claims that its MDR-3 headset ($50) is the lightest ever made—only 1.8 ounces. A newly developed driver with samarium cobalt magnets and a high-compliance diaphragm is said to have made the weight reduction possible. Audio-Technica's ATH-2 headphone promises high performance at under $50 and employs a light polyester diaphragm, photo-etched aluminum "voice coil," and two perforated circular magnets. GC Electronics has a whole new line of open-air and sealed-cup headsets, ranging in price from $35 to $100. And JVC has come up with three lightweight models with dual-band construction for minimum wearer fatigue.

Record-Playing Equipment

What used to be considered the workhorse of audio reproduction, the turntable, is now more properly regarded as a thoroughbred—beautiful in form and utterly graceful in function. With direct-drive motors and quartz-referenced speed controls already firmly entrenched in turntable design, some manufacturers are taking this opportunity to fill in their lines with units that add to or subtract from features of successful existing models.

There is some trend toward straight-line (tangential) tracking in premium turntables. Yamaha is showing a
Shure has put technology from its top models into the more modest Era IV line of four pickups.

tangential prototype with direct drive and microprocessor control, the PY-2. ReVox B-795, similar to the highly regarded B-790, has the same tangential-tracking tonearm and quartz lock for its direct-drive motor. But by omitting the digital speed readout and pitch adjust and by building its own motors, ReVox held the price of the B-795 to $600. Other tangential models have been shown in Japan but not yet announced here.

Optonica, a company that never ceases to reveal to us the possibilities of automation in audio gear, has the $950 RP-9705. This quartz-lock, direct-drive unit is capable of automatic track selection and stores up to ten separate commands in its electronic memory. Onkyo's newest, the CP-1280F, is a fully automatic single-play model with a separate motor to operate the tonearm's start and return mechanism. What used to be considered an audiophile extra, the carbon-fiber tonearm, is standard with the Onkyo. Fisher built its own motors, ReVox a tangential prototype with direct drive and microprocessor control, the PY-2.

Among several sophisticated separate tonearms, Sumiko's premium model is called simply The Arm.

Group with five models: three with coreless, slotless, brushless direct-drive motors to prevent cogging and two with belt-drive mechanisms. Prices for these range from $100 to $250.

A low-mass, straight-line tonearm is incorporated in Scott's PS-18 belt-drive model ($130) and in Lux's Model 264 direct-drive turntable ($225). By far the greatest number of introductions comes from Toshiba, with five direct driven and four belt driven. Prices range from $300 for the SR-Q300, a quartz-lock direct-drive with carbon-fiber arm, down to $115 for the belt-driven SR-A100. Technics has added the SL-D33 to its extensive line of turntables. A direct-drive model, the $260 SL-D33 features a newly developed double-layered base construction to minimize feedback.

Marantz' entries include the TT-4000, a fully automatic single-play with quartz-referenced speed control ($250), and the TT-2000, a direct-drive unit without quartz lock ($200). And finally, Hitachi has introduced two direct-drive turntables with photo-sensor arm return systems, the HT-466 with quartz lock for $240 and the HT-464 without quartz for $200.

Moving-coil phonograph pickups are gaining ever more popularity, and manufacturers have responded with several models that compete in price with fixed-coil designs. Sony's XL-44 ($200) builds one into its own headshell. Sumiko has two moving-coil cartridges designed to be compatible with moderate-priced turntables or changers and priced according to $110 and $150. The high output of Adcom's XC-LT ($240) obviates a stepup transformer or head amp. Technics' high-output EPC-305MC, being marketed through its Recording and Broadcast Division, comes mounted in its own headshell and is constructed with a boron pipe cantilever and a coreless twin ring coil. Osawa offers a new low in moving-coil prices—the $100 Satin M-117Z, a high-output design with a user-replaceable stylus.

In fixed-coil designs, Shure leads off with a new line of moderately priced pickups based on the V-15 Type IV's damping/brush design. The M-97 Era IV Series consists of four models ranging in price from $68 to $113, each with the viscous-damped dynamic stabilizer and a telescoping stylus shank to minimize the possibility of damage from lateral shocks. Ortofon has three low-mass models, the LM-10, LM-15, and Concorde 10. The LMs, designed for mounting in conventional headshells, weigh just 2.6 grams; the Concorde 10 (the LM-10 in its own headshell) comes in at 6.5 grams. Signet, marketed by Audio-Technica, has added the attractively priced TK-1E...-$40 unmounted or $45 in its own headshell. Among budget-priced pickups are the Nagatronics 244DE for $64 and the Osawa MP-10 at $40.

Dennesen Electrostatic has a tangential air-bearing tonearm ensemble, constructed from such elements as a brass tube with small perforations, a lightweight arm (which rides across the brass tube on a cushion of air), an air pump, and lots of bionic-looking plastic tubing. At $1,000 we thought that was the most expensive arm we had yet seen until we ran across what Sumiko calls simply The Arm, at $1,250. It is a medium-mass dynamic type with non-detachable headshell and three separate counterweights to accommodate any pickup. Somewhat more affordable, perhaps, is the Lustre 801 for $500, also from Sumiko, which applies vertical tracking force and antiskating bias through magnetic force rather than springs or counterweights. Its magnesium headshell allows for precise azimuth adjustment. Osawa claims that its AC-30 arm comes in at "just the right price"—$300. For that you get an oiled-damped unit with single needle-point support. Finally, Technics is introducing—once again through its Recording and Broadcast Division—its EPA-100 tonearm, which rotates on ruby ball bearings and offers variable dynamic damping so that the user can tune it for any cartridge available.

Tape and Tape Equipment

Last February we wondered in print whether the cassette's improv...
were its worst enemies; the growing incompatibility or only semicompatibility of the products in the field seemed, at best, to threaten confusion to prospective purchasers. Judging by the decks introduced so far, however, chaos will not reign in 1980 because one consideration has moved into the foreground and forced the others to assume subordinate roles: high-frequency headroom improvement—the virtue that distinguishes metal tapes above all others. From what we see, only superbudget models or portables will be appearing without the metal capability. Dolby Laboratories’ HX headroom-extension option for its familiar noise-reduction circuit also is making headway, with several announced models already incorporating it. And none of these developments contributes to the incompatibility problems, of course. Metal tapes and/or HX recordings need nothing special for playback; HX will extend the high-frequency overload ceiling in metal tapes as well as ferric ones.

By contrast, the dynamic-range extenders that depend on special playback equipment—noise reducers that outstrip Dolby B in this respect and the high (3½ ips) transport speed—are experiencing no comparably rapid growth in adherents. Machines with the double-speed option and such noise-reduction units as DBX’s, Nakamichi’s High-Com II, and Sanyo’s Super-D generally are considered of interest primarily to recordists who want extra performance for live recording and are not really interested in whether their tapes will play well—or at all—on anyone else’s equipment. Of these capabilities, only Super D has been incorporated into a new deck (not counting models that, like Marantz’ extensive two-speed line, had already been announced last year for future delivery); Dolby B (with or without HX) plus 1½ ips remain essentially unchallenged standards. But in the long run, HX, metal tape, and even the more esoteric (and generally more expensive) noise-reduction systems may help one other cassette mutant: half speed. While no new cassette decks with 15/16 ips have appeared, we note with interest that Fisher has a prototype microcassette deck with Dolby HX.

Only a few years ago, $1,000 was considered an outrageous price for a cassette deck and anything in that range fit only for professional use or the lunatic fringe. “Better” decks seldom cost much over $350; anything below $200 was a make-do stripdown that might not qualify as high fidelity in some important respects. That bottom price category remains, but the equipment in it today has a degree of sophistication and a level of performance heretofore impossible. The middle ground stretches to approximately $750, accumulating special features and performance refinements as it rises. This continues to be the most active range. The ultraperformance and luxury-featured decks at higher price points (reaching to about $3,000) remain much as they were last year.

One obvious exception is the automatic azimuth-adjustment system developed by Nakamichi for its 600 Series decks. The two-speed model (still the only premium deck with the 15/16-ips option) announced last year will remain available without the new feature as the 680; with it, and called the 680ZX, it will cost $1,550. Two single-speed models complete the series: the $1,150 670ZX with full Dolby monitoring and the $995 660ZX with all the same features except the simultaneous monitoring. All include Nakamichi’s R.AMM random-access feature. There also are new “music-lover” models that emphasize ease of use: the 482 ($775) and 481 ($655), again with and without simultaneous off-the-tape monitoring.

Tandberg’s TCD-3004, which is expected to sell for about $2,800, is the first break with the company’s traditional cassette-deck styling and intended as the summation of all the technology that can be mustered on behalf of the cassette medium. Delivery date for the TCD-3004 will not be announced for some months. For only $1,200(!) you can buy Sony’s TC-K88B, its most sophisticated model but one so small that it looks almost like a microcomponent. The cassette “well” plus the tape adjustments and other technical controls are hidden in a drawer that slides open like that on a cash register when you push the eject button. We were much taken with the prototype when it was shown last year before Sony had made firm decisions about marketing it. Harman Kardon uses a similar drawer in its superbly styled HK705 ($450). The 705 is, not incidentally, the first deck we encountered incorporating Dolby HX circuitry.

The Super D noise reduction is incorporated into the flagship Plus D64 in Sanyo’s recently introduced Plus Series. So is Dolby B; the switching allows use of either system or neither, but not both simultaneously. Aside from the probable inadvisability of employing “cascaded” noise reduction, since any two systems tend to compromise each other, we understand that the Dolby license prohibits switching that would make the practice possible (just as the Philips cassette license prohibits noise reduction without a defeat switch).

Technics continues its low-profile rack-mount Professional Series (which are conventional front-loaders) with the $700 direct-drive, metal-ready Mk. II version of its RS-M65; and it has a new micro—the $500 RS-M02, also with direct drive. The Hitachi line, which also features direct drive in its top models, has metal-ready decks. At the top is the D-5500M, a reworking of the original auto-tape-matching D-5500 but selling for the same $1,200 price. The ATRS tape-matching has been incorporated into the $750 D-3300 as well. Teac has added the metal capability, at no increase in price, to its A-500 and A-510 decks and two new budget models, the $230 CX-350 and $250 CX-370.
Metal-tape handling plus such goodies as IC logic characterize Rotel's RD-1000M, at $440. Kenwood has two more metal models—the KX-500, whose sophistication of features, controls, and styling belies its $225 price tag, and the feature-laden KX-2060 at $600. JVC has three, ranging from the three-head KD-A77 down to the inexpensive (and, like a budget-model predecessor, Dolby-equipped) KD-A2. Fisher has the $350 direct-drive DD-300; Toshiba's several entries contrast the low price and full-size format of the $170 PC-X10 with the $550 D-15 micro, which is available anodized in black for $10 extra. Akai's three range from $180 to $300. Technics' models cover an even wider price range—from a mere $150 for the RS-M6 to the aforementioned $700 model. Sansui's moderate-price metal-ready deck is the $200 D-100, and Lux has its K-1 metal-ready model for $230. H. H. Scott's is the impressively styled 67 IDM, whose specs and DC drive make the $250 price very attractive. For even tighter budgets, $200 is the cost of the similar 610D, one of the few new decks to dispense with the metal feature; while industry executives are openly pooh-poohing the metal capability in inexpensive decks on the ground that "if you can't afford a better deck, you can't afford the expensive tape," only Scott seems to be heeding that concept. But the lowest priced deck we know of from any component house this spring is the $130 Sharp RT-10, which will record on metal tape.

And the scarcity of metal tape to use on such machines would appear to be a thing of the past. By year's end, Fuji claimed to be the first to be delivering C-90s to dealers, while TDK was readying a second shell type—conventional MA cassettes, as opposed to the MA-R metal-spined shells in which its metal-particle tape originally was housed. At the beginning of this year, Ampex and Memorex announced their metal formulations. The Ampex product will be styled MPT; initially, it will come in the C-60 length for about $10. Maxell was said to be ready for shipment in C-46s and C-60s immediately, with C-90s to follow this month; selling prices for C-60s, again, are expected to be in the $10 bracket. Hitachi also has announced metal tape, though its formulations generally are assumed to be interchangeable with those of its subsidiary, Maxell, and we have encountered no spokesman willing to deny the relationship. In Hitachi's terminology, the metal is called MR, the premium ferric (UDXL-I) UDER, and the chrome-compatible ferric (UDXL-II) UDEX; both brands also offer "low-noise" ferric tapes.

In addition to MA, TDK has announced an improved formulation for its AD (Acoustic Dynamic) premium-ferric tape plus an even better (premium?) one of the same general description: OD (for Optimum Dynamic). AD remains available in all standard lengths from C-46 to C-120; OD will be available in C-60 and C-90 lengths only and at prices about $1.00 higher than those for AD. EMI's Superchrome II, which costs about the same as OD, has been introduced here by Empire. A little lower in price is RK0's Ultrachrome (based on Du Pont's improved chromium dioxide formulation), which will be made in C-60 and C-90 lengths. A second new RK0 formulation is the budget-priced ferric XD. (Its premium ferric Broadcast I was announced last summer.) Meanwhile, what is billed as a superperformance ferric otherwise unavailable on the U.S. consumer market can be purchased by mail order only from Tape 5.

For the video recordist there are a number of new cassette tapes. Maxell has a line for Beta decks in L-250 and L-500 lengths; VHS-deck owners can buy Maxell's new HG formulation in T-30, T-60, T-90, and T-120 lengths. The 2M Company has brought the shortest of these lengths into its Scotch VHS cassette line, while Memorex has added T-90s to its T-60s and T-120s. Ampex's new line covers both formats and is available in a choice of packagings: conventional sleeve or (at slightly higher prices) plastic boxes.

Open-reel recordists will find a new Scotch 1-mil tape this spring: Master X5, which replaces the Master of last year and is said to have exceptionally high sensitivity and resistance to printthrough but remains compatible with decks biased for Scotch 20e or the original Master. New here from BASF (though not new in Europe) is Ferro LH DP 2e, a low-noise open-reel tape selling for moderate prices in plastic library boxes and featuring sensing foil.

As usual in recent years, there are few new open-reel decks to record these tapes on, but there are some. Sony has three. The $500 TC-399 is moderately priced by today's standards, but it includes such refinements as separate three-position switches for bias and recording EQ—the latter with a special position for ferrichrome tape, which Sony has made available in open-reel form. These options also are included in two semipro decks handling NAB reels. The $1,200 TC-765 is a quarter-track stereo deck with 7½ and 3½ ips; the $1,500 TC-766-2 is a half-track deck in which 1.5 ips replaces the slow speed, but it has an extra playback head for quarter-track tapes. Neal-Ferrograph's SP-7 offers so broad a range of options that the company talks of custom-building models for specific applications. You can have any three contiguous standard speeds in the range from 15 to 15/16 ips; you can have NAB or CCIR/IEC playback equalization; Dolby B circuitry and rack-mounting kits are available, as are NAB-reel adapters; 10-watt amps and speakers can be built in; power supply options include the U.S. standard (110 VAC/60 Hz) plus two common in other countries, 50 Hz and either 220 or 240 VAC.

On the Video Front(s)

As we said earlier, the expected turn toward basics and lower prices in video cassette gear still was beyond the horizon as the year began. A dramatic harbinger came from Sanyo, however, with a reduction of $200 on its VTC-9100 Beta deck. In the meantime, we continue to be regaled by luxury decks—modular portable home combinations, ultraprogrammables, models with nonreal-time playback options, and the like. The $1,350 Mitsubishi HS-300U, for example, uses five direct-drive servo motors to achieve betless operation in multiple real-time modes plus two slow-motion modes, freeze-frame, and single...

Among compact video decks, Quasar VH-5300 offers add-ons—here, "special-effects"/programmer.
shown here in prototype deck. Video tape systems include Toshiba's, undergone some refinement—in particular, to increase recording capacity—and is expected to sell for about $500 in a basic deck when it appears this summer. There may be another longitudinal system from Funai in the offing, but no formal announcement or details have been forthcoming.

Impetus for the push to lower prices (whether via crash diets in the helical-scan cassette camps or via intrinsically simpler longitudinal-scan systems) is partly attributable to recent developments in video discs. Pioneer is, if anything, pursuing more avidly than ever its plans to provide home players for the Philips/MCA system this year, Kenwood (or, rather, its Japanese parent company, Trio) recently signed a license to make Philips-system players. Such events, plus IBM’s entry into the Philips deck when it appears this summer. As though to emphasize the home recording capability that tape does not share with the disc media, manufacturers have presented a host of new products specifically for the recordist. There are many inexpensive switching gadgets. The Superex VTRS-4 ($60), for example, allows dubbing among four decks. Others switch RF inputs, and some are intended to edit out commercials automatically during taping by activating the deck’s pause whenever a cue signal is broadcast.

Akai has a minimonitor called the Peek-A-View ($170) so that you can keep track of the program you’re recording while you watch another on your main set. The alternative approach—multiple images on a single receiver screen—has spawned a Sharp unit that can handle nine images simultaneously, each from a different channel, if that’s what you program it for. Toshiba, whose lineup includes several impressive innovations, has a model that will hold up to four 10-inch pictures on its 25-inch screen. It has a remote control and, like the Sharp, can freeze the motion on any one of the images.

Toshiba also is one of the companies offering new projection systems. Its one-piece unit with 45-inch screen is priced at $3,500 including electronics and can be bought without tuner as a monitor for recorded video. Among the add-on lens systems that use a conventional receiver as an image source for projection, Futurevision (from F&F Sales Company) comes in screen sizes from 4 to 7 feet, selling for between $500 and $1,000 plus the cost of the receiver ($425 for a Sony Trinitron 1206 modified to accept the lens system).

And one last twist, again from Toshiba: a prototype TV receiver that not only will respond to voice commands, but will reply “okay” when a command has been accepted by its microprocessor logic system. (A similarly controlled microwave oven has been shown by Quasar.) The idea logically follows the “talking calculators” that were last year’s showpieces. Perhaps your stereo system eventually will be able to improvise harmony to whatever tune you whistle for it.
Passages for the Eighties: Predictable Crises of the Classical Record Business
by Allan Kozinn

Toward the end of last summer, it dawned on the executives at most of this country's major record labels that their third-quarter earnings reports were going to be even more dismal than the first two and that the end of the proverbial tunnel was not getting any closer. Everything was going wrong. The polystyrene used to make discs was growing more expensive, artists were demanding higher and higher fees, foreign recording projects were becoming unconscionably costly as the dollar sank in value abroad, and with retail prices climbing steadily, it seemed that nobody was buying records anymore.

One particularly bleak day in August, a public relations spokesman for one of the large classical labels stared blankly out his office window and told me, "You know, we haven't had a year this bad since the Depression. I'm not sure we can afford to keep making records." This was several weeks before the press, tipped off by rounds of firings, began to report that all was not well with Columbia, for instance, it was claimed early in the fall, even Marvin Saines, vice president of U.S. Masterworks, was shown the door. About this step Columbia's new chief of staff, Simon Schmidt, would say only that "he was a good, knowledgeable man. There was nothing wrong with him. It was just a question of building what I felt the organization required." Everyone else at Masterworks sat tight, unable to discuss plans for anything ranging from Mengelberg reissues on Odyssey to the release dates of the first CBS digital discs, originally set for January.

Probably most distressing for veteran industry-watchers was the dismissal at year's end of Teresa Sterne, for a decade and a half the driving force behind the adventurous Nonesuch label. Even as executives of Elektra/Asylum, the parent company and itself part of the Warner Communications conglomerate, handed "Lady Nonesuch" her walking papers and abruptly canceled all her recording plans, they assured the press that they envisioned a bright future for the label.

Those in the business who managed to keep their jobs found that everything from the ordering of promotional LPs to the budgeting of major projects was being more closely scrutinized. At RCA Red Seal, the severest blow was the cancellation of the scheduled recording of Ponchielli's La Gioconda on the eve of the sessions, sacrificing an opportunity to take promotional advantage of the San Francisco Opera's worldwide telecast of the work last September—just the sort of free potential sales boost record companies look for in planning such ventures.

Originally, RCA estimated that recording La Gioconda in London would cost $195,000, and the producers knew they could come up with another $25,000 to cover emergencies. Well, the emergencies were more than RCA had banked on. In the weeks before the sessions were to begin, the British musicians' union voted itself a 25% rate hike. Chorus prices went up, too. Negotiations with principal singers moved slowly because RCA was intent on casting every leading role with a major name (Scotto, Domingo, Troyanos, Milnes), and these performers wanted healthy fees. Some of them were involved in European festival performances, which meant that RCA would be obliged to pay multiple transportation expenses (including, of course, limousines to and from the airports) to shuttle them between their stage dates and the fourteen scheduled recording sessions. And with all these expenses to be paid in British pounds but billed to the American company in dollars, every time the dollar dropped a point on the international exchange market, the production became several thousand dollars more expensive. By the time RCA balked, the cost of recording alone—that is, without pressing, artwork, libretto, packaging, and marketing—was estimated at $300,000, more than 50% above the first estimate. And, as the prospective producer put it, "If I were going to spend that much of RCA's money, it would have to be for a hell of a lot better work than La Gioconda."

Meanwhile, Columbia had issued a list of 1979-80 releases [see HF, September 1979] that made it look as if the halls at Masterworks were paved with gold. But cynics pointed out that much of the material on the list was already in the can, some of it several years old. And others wondered if the cancellation of what could have been the prestige project of the year, the Boulez/Paris Opera Lulu, the first truly complete performance of Berg's opera, was related directly to financial setbacks. After all, Columbia's explanation that Lulu had to be dropped because Universal, the publisher of the score, would not guarantee the label could release the recording looked pretty silly when Deutsche Grammophon stepped in and saved the...
The mix of increasing expenses, changing sales patterns, mergers, and new technologies suggests several possible scenarios for the Eighties.

The vagaries of trends or to the pinch of inflation. First, they pointed out, pop and classical buyers were entirely different animals: The classical buyer was, statistically, older and more affluent, with more mature (meaning less radically changeable) musical tastes and with the cash (or credit) available to cater to those tastes. He was also depicted as less impulsive, one who planned purchases to fill gaps in his permanent library—an assertion borne out by the steady sales of fifteen- and twenty-year-old catalog items, particularly in opera.

Furthermore, company spokesmen insisted, the growth of digital recording was pumping new life into the business by piquing the curiosity of regular customers and bringing into stores audiophiles contemplating their first classical purchases because of the promise of state-of-the-art sonics. As an example, companies point to the Robert Shaw/Atlanta Symphony Firebird on Telarc, reported to have sold 75,000 copies in only a few months, without benefit of a superstar conductor, a top-five orchestra, or a major-label marketing push.

A trump card is what the companies call crossover albums. Crossovers are recordings of varying seriousness that appeal not only to a reasonably large segment of the established classical market, but to people marginally interested in classics. These projects are regarded as attractive because they are usually produced at little cost and sell quickly and in large quantities, generating income that can be used to cover the deficits left by opera and symphony recordings, which often take several years to pay for themselves.

An example is the Claude Bolling/Rampal Suite for Flute and Jazz Piano. A Columbia Records computer printout of early October 1979 lists thirty-five current Masterworks LPs that had sold, altogether, 820,563 units since their release. Of that total, the Rampal/Bolling disc accounted for more than 50%, with 419,957 copies since 1975.
for DG and London. Cleveland, exclusively in the CBS camp during the Szell years, has been doing most of its work for London since Maazel became music director in 1972. And London will be doing some recording with the New York Philharmonic now that Mehta is on the podium.

To the consumer, all of this label shuffling may seem to mean only that the best tradition of American orchestral playing will continue to be available on disc, and in superior, if slightly more expensive, European pressings. But what will become of our domestic companies' catalogs? Instead of giving us recordings of our best orchestras led by their principal conductors, the American labels are giving us documents of their pet artists' catalogs? Instead of giving us recordings that to survive it is necessary to keep the catalogs fresh with performances that have a distinctive quality that will make people want to buy them five or ten years hence? Have they forgotten that the source of this quality is a special communicative bond between a conductor and the orchestra with which he works regularly?

No, they haven't forgotten. But in reconciling their artistic philosophies with the financial strictures placed on them by the unions and by their own corporate accounting departments, they have arrived—through conviction or convenience—at the position that buyers are no longer interested in orchestras, only in conductors and works. In other words, forget all that stuff about the Chicago and Philadelphia sound—this is the age of jet-set personalities. After all, some company spokesmen have been heard to argue, the world median level of performance is pretty high these days, so if you take a great conductor and stick him in front of an orchestra that he conducts two, three, maybe half a dozen times a year, you can make a very good, possibly even an exciting, recording. Where the will of the conductor is strong and the orchestra flexible and perceptive, the results of such collaborations can be of lasting value. Everyone's list of favorite recordings includes examples. Think of Bernstein, Giulini, Colin Davis, and Abbado. Then will the tight finances of the early Eighties finally put an end to the domestic recording of conductors with their own orchestras? No. The orchestras themselves have come up with a way around the cost problem—by paying for their own recordings.

Many of the conductors American labels are most interested in stand on relatively minor podiums. Take Eduardo Mata, for example. RCA is interested enough to send him to London to record and to pair him there with its prime seller, Galway. But RCA will record Mata's own orchestra, the Dallas Symphony, only on a subsidy basis—and with some justification. Another of the union-enforced hindrances to recording here is the Federation's insistence that all orchestra personnel, whether it be a major or a minor ensemble, be paid the same rates. If it is almost prohibitively expensive to record the Philadelphia Orchestra, why would RCA be willing to spend as much to record Dallas—unsubsidized?

Lesser-known orchestras, though, are more than happy to pay the major labels to come and record them, and they can look forward to being recorded, however infrequently, so long as they retain the services of a major conductor (or, in some cases, persuade major soloists to insist on recording with them). They hope, of course, that, through exposure on major labels, they can build a wider following and eventually become major orchestras: the Academy of St. Martin-in-the-Fields syndrome. And who's to say it's not possible? Perhaps some of these orchestras—Toronto, National Arts Centre (Ottawa), Dallas—will blossom into important symphonic entities and the Eighties will see the emergence of a "middle five." The possibility brings to mind a passage in Anthony Burgess' futuristic novel, A Clockwork Orange, in which the protagonist, a London roughneck, unwinds after an evening of ultraviolence by playing his favorite recording of the Macon (Georgia) Philharmonic.

Which raises another question. The Macon Philharmonic may have a London following in Burgess' fiction, but will a provincial American orchestra ever sell enough in the real world to leave subsidization behind? The U.S. accounts for only 30 to 35% of the world classical record market, and spokesmen for all the labels agree that it is difficult, if not impossible, to make any money by selling expensively recorded discs to the U.S. market alone. A case in point: Columbia's Complete Works of Weben, Vol. I, conducted by Boulez, was released last June and, despite rave reviews, had sold only 4,012 copies here by October. In Europe, however, the set sold another 10,000 copies—enough, Columbia says, to cover the cost of its production. But can RCA ever count on selling Dallas to the French and Germans?

According to a rule of thumb used around the offices of some large classical companies, a project pays for itself when three discs are sold for every dollar spent on it—from recording sessions and artists' fees to pressing and packaging, promotion and advertising, distribution and overhead. An American-made symphonic disc, therefore, may have to sell more than 180,000 to break even. Obviously a world market is needed, and the performance must be something that will capture the imagination of an international audience.

Some international companies are better than others at providing for a classical disc's success. Deutsche Grammophon assumes that 90% of the discs it releases can be sold anywhere (the other 10% are aimed at specific national markets) and so sees to it that each national "territory" accepts nine out of ten releases. And DG counts on waiting five or more years for each release to reach its break-even point. Masterworks operates in somewhat the same way (but with a shorter break-even period—the target is one year), producing very few records that all Columbia affiliates are not committed to in advance. At EMI, while the major productions are funded by the International Classical Division and accepted by most or all affiliates, each national label (HMV, Electrola, Pathé Marconi, Odeon, Toshiba, Angel, etc.) pursues projects of its own. Of about eighty EMI discs released around the world each month, Angel can absorb only one-twenty, and the projects Angel funds itself are generally of the solo variety (Ransom Wilson, Angel Romero, Igor Kipnis, etc.), requiring a relatively
small cash outlay and little help from the foreign markets.

Of all the major labels, RCA seems faced with the toughest set of circumstances. Like Angel, Red Seal is part of a loosely organized international corporate amalgamation. But unlike Angel, it not only is responsible for funding major projects, but has virtually no guarantee that RCA's foreign affiliates will pick them up. So while the label's Levine-conducts-Mahler series and the occasional Chicago or Philadelphia disc will have broad international appeal, Red Seal now finds itself able to afford fewer symphonic projects, and those are of lesser worldwide sales potential!

No examination of the symphonic field is complete without a word about the dozens of smaller labels that have traditionally helped fill holes in the catalog and that apparently will continue to do so. Many get along by licensing European recordings, reissuing historical discs, and recording—with subsidy—smaller American orchestras (with their permanent conductors), all practices that allow them to avoid taking on the full cost burden. Perhaps the greatest service they provide is their continual chipping away at the iceberg of contemporary music; labels like CRI, New World, Opus One, and Finnadar explore musical ground the majors seldom tread.

On the contemporary music scene, though, it should be noted that the closing years of the Seventies have shown a decidedly conservative swing. Composers such as George Rochberg, David Del Tredici, John Corigliano, and Jacob Druckman have opted out (early or late) of the avant-garde, creating music that, if audience reaction at concerts is any indication, is communicative, exciting, and attractive to listeners normally outside the new-music fold. Major labels are aware of this: RCA has brought out works by Corigliano (for whom it has further plans) and has some Rochberg and Toru Takemitsu waiting in the wings. Last year Columbia released the Penderecki and Rochberg violin concertos (it should be noted that these were Isaac Stern's recording choices, however) and, on the heels of the increasing popularity of Steve Reich and Philip Glass, is planning to release a new Terry Riley disc. It would be nice to be able to predict that this populist shift in the composing world—should it gather steam—will bring about an involvement of one or more of the major labels in contemporary music, on the order of that of, say, Columbia in the days of Goddard Lieberson's Stravinsky and Schoenberg recordings. Unfortunately, that would be only wishful thinking. There may be some flirtation with new music now and then. But ultimately, these companies will continue to live by their timeless maxim, "The only profitable composer is a dead composer."

Might the digital and/or video disc brighten up the symphonic recording scene? At the moment, the hybrid digital-recorded/analog-playback discs are causing excitement both in the studios and at the cash register, although as they become more commonplace sales will sink back toward normal levels. Major orchestras and conductors—Mehta, Solti, Bernstein, Ormandy, Maazel—are beginning to get into the act. If companies ever needed a justification for simply remaking all the old warhorses instead of exploring new ground, digital recording is it.

It has been suggested that the digital process may be the right thing at the wrong time—that its capabilities and its promise are exciting in theory, but that the economy may not be able to bear the major catalog-equipment overhaul required. Yet the people at Philips are predicting that its home digital player, to be introduced in 1983, will coexist with conventional analog players for about ten years, superseding them entirely early in the Nineties.

The video capabilities of these new systems are not likely to mean much to the symphony buyer, and I suspect that not much effort will be made in that direction. It is true that there are plenty of symphonic video tapes floating about. But are they interesting enough to attract buyers willing to pay a premium for them and to watch them over and over? Besides, if labels get into making symphonic video discs, there will have to be compromises somewhere. Either the performances will have to be filmed and recorded in concert, where the sonic advantages of the studio will be compromised for the sake of a good show and theatrically minded conductors tempted to put showmanship above musicianship, or they will have to be recorded in the studio, as usual, and the video "faked." The latter technique has been used by Unitel in its many films of Karajan, et al., shown here on PBS. That kind of thing may be passable on television once, but who would want to own a copy?

There is a much better chance that the video disc will make its impact on opera, where the video presentation obviously would greatly enhance the listening experience and, if properly done, could bear repeated viewing. It can even be assumed that if labels institute a vigorous opera video disc program, marginal opera listeners will find the action of unfamiliar works easier to grasp when so graphically presented. The success of the ever more frequent "Live from..." (the Met, City Opera, San Francisco, Wolf Trap, and Spoleto U.S.A.) series and the already burgeoning underground market in pirated video tapes of these broadcasts indicate that an audience for video opera exists; and you can bet that where an audience is perceived, someone will sell it what it wants.

We have seen in recent years an increasing number of operas filmed for television (Unitel) or for theatrical showing (The Magic Flute a few years ago, the recent Joseph Losey Don Giovanni), and apparently this is only the beginning. By the time the video disc is ready for the market, our major singers will have had a taste of the film experience that may become a requisite of operatic careers in the Eighties.

But the problems presented are staggering: complex rights and contractual questions, the artistic pressures of producing performances of lasting value, both sonically and visually, and cost. Actually, record companies might find making video opera less expensive than conventional opera recording, depending on how the film company/record company cost accounting is done: Film companies might underwrite some of the recording costs in return for the right to use the "likenesses" of opera singers under contract to the record labels. In fact, one company spokesman points to such a coproduction as the Columbia/Losey Don Giovanni, reportedly already making money for both, as a

---

While American labels are shifting their gaze to London orchestras, the European labels have approached the American big five.

---

Circle 1 on Page 99
We don't like to brag. But with the new ADC Integra Series: Integra XLM-III, Integra XLM-II and Integra XLM-I, it's hard to resist.

Let's start with basic design. That's what our engineers did. Though what they finished up with is far from basic.

The new ADC Integra is the first all carbon-fibre integrated headshell/cartridge designed to minimize tracking angle distortion two ways.

**OVERHANG DIMENSION ADJUSTMENT**

As your tonearm "sweeps" a record, the angle the stylus makes with the record groove constantly changes. The result is offset angle error.

Is it serious? An error as little as 2° can more than double cartridge distortion! That's serious! And that's why the new ADC Integra was designed so you can set the optimum offset angle simply by adjusting the overhang dimension. It's easy. We've even included a Tracking Angle Gauge.

**VERTICAL TRACKING ANGLE ADJUSTMENT**

Nearly all records are cut with a vertical tracking angle of 20°. That's the way they're made. That's the way they're meant to be played. Sounds simple. But when you see how tonearm heights vary, from turntable to turntable, getting the exact vertical tracking angle suddenly isn't simple anymore. Unless of course you chose a new ADC Integra. Its vertical tracking angle is adjustable. In calibrated degree increments from −8° to +8°. Enough to compensate for all bayonet-type tonearm heights. Including changers.

If all that sounds impressive, wait until you hear how the new ADC Integra Series actually sounds. By minimizing what you don't want to hear, we've obviously maximized what you do want to hear. Music. The new ADC Integra's response is clean, effortless and often astonishing. But why listen to a description? Audition a new ADC Integra for yourself at your nearest ADC dealer.

After you've heard us, we'd like to hear from you. Write or call the Customer Service Dept., Audio Dynamics Corporation, Pickett District Road, New Milford, Connecticut 06776. 800-243-9544.

A LOT OF PEOPLE TALK ABOUT TRACKING ANGLE DISTORTION. THE NEW INTEGRA DOES SOMETHING ABOUT IT.
way of life for the future.

Even now opera is horrendously expensive to record, and using the three-discs-to-one-dollar-spent formula, lots of sets must be sold to break even. (Often, however, operas prove to have a much longer shelf life than orchestral works.) Because opera requires many more sessions than symphonic works, labels don’t even *consider* recording it in the States (except for the odd concert performance). Most say they can record an opera in London for about $150,000—which, assuming we’re talking about a three-record set, still means it must sell more than 150,000 albums, when you throw in costs for manufacturing, advertising, and so forth.

Although other companies are sanguine about the future of opera recording, the *Gioconda* experience was bitter for RCA, one that left its staff wondering if it had a future in that end of the business. Red Seal has for some time been interested in recording the Metropolitan Opera but has not been able to work out the details of cost and logistics—the Met being a repertory company, scheduling studio sessions has proved impossible. The prospective solution? Live Met LPs. According to a new ruling by the Federation designed to encourage at least some opera recording in North America, record companies will be allowed to *tape* as many live performances of an *opera* as they want, paying the *performers* a one-hour studio fee for every ten minutes of the finished product. It’s still pretty expensive; it can mean more than $100,000 in orchestral fees alone. Compared with the old rates, though, it’s a bargain, and RCA is seriously considering taping several performances from a Met run of a work and splicing the best parts together to make quasi-documentary recordings.

But this approach is rife with commercial and artistic problems. To begin with, whom does RCA expect to *buy* these sets? Anyone interested in live Met performances can tape them off the air Saturday afternoons. RCA must also be wondering whether the Met chorus and orchestra, generally agreed to be below average, can be made to sound good enough for these sets to be competitive. And there are casting problems. Fortunately, the era of exclusive contracts for singers is coming to an end, but some major names still maintain strong ties to labels other than RCA, and the Met is not about to cast its operas with an eye to RCA’s needs. Furthermore, though it can be argued that recording technology, especially with digital looming on the horizon, is capable of capturing the sound and some of the excitement of opera “on location” and that there is value in the documentation of actual performances, a stronger argument can be made for the near-perfection that can be achieved in the studio.

Columbia has put out several live opera discs in the last few years (the Eve Queler concert performance series), and the recent Federation rule change may lead other companies to set up their equipment right in the opera house, too. But it’s not likely that this will be the predominant mode of opera recording of the Eighties. While there may be some short-term economic benefit to the documentary approach, it’s likely that producers will continue to insist that studio opera recording is an art that should not be slighted, and record buyers (not to mention critics) will make the labels aware that they consider any large-scale move from studio to stage a leap in the wrong direction. The best solution would appear to be a compromise, with the labels still devoting most of their operatic energies to studio projects, recording the occasional live performance when the cast is right, and offering the live sets to the public on midpriced lines.

A word about prices. Since 1977, retail list prices have risen from $6.98/$7.98 to $8.98/$9.98. Considering the dramatic rise in the cost of raw materials—talent, petroleum, paper—this increase is not surprising, and we can probably count on prices jumping at least a dollar every twelve to eighteen months. Theoretically, the introduction of the digital playback disc can arrest this trend, for Philips says that the manufacturing process for the 4 1/2-inch disc will not be any more expensive than that for today’s standard disc. As one record company executive put it, “By 1983 I’m going to have to charge $20 for an analog record. Digital playback is the only hope for the business. You can put the digital signal on anything.”

On the surface, it seems that most of the problems facing the classical record business are short-term financial ones. But they go deeper than that. In spite of widely publicized recent financial disappointments, pop labels will surely continue to wield infinitely more clout among company finance men than classical labels do. So, in the course of my research, I decided to stop at the offices of one of the larger pop labels for a chat with an old college friend who has been working in the rock recording business for the last few years. After he confirmed that even unknown pop groups are selling in the hundreds of thousands and that, by comparison, the classical affiliates are a drag on the corporation, I asked him why the companies bother maintaining them.

“Well, prestige is a nice way of putting it,” he said. “Everybody knows that the big companies are whores; but with a classical line we look a bit less like whores than we might otherwise. After all, this is big business, and we’re in it for the bucks, not for art. Right now the people sitting on the board of directors happen to think it’s important to keep the classical lines going. They like classical music, and they like to be able to take advantage of some of the benefits that accrue from running classical record companies—good seats at the opera, good seats at symphony concerts, a certain social aura.

“But times are changing. When people our age are sitting on the board of directors, we’re not going to care much about good seats at the opera. We’re going to be more interested in good seats at the ballgame or in seeing whatever the big rock group is in 2000. Don’t get me wrong—I don’t want to see classical music disappear. But when the generation that grew up on rock and roll grows into those positions of power, things are really going to change.”

By that time, of course, Polygram will have bought up the rest of the world’s classical labels, and classical recording will continue happily ever after. **MF**
JBL'S NEW L150: ITS BOTTOM PUTS IT ON TOP.

JBL's new L150 takes you deeper into the low frequencies of music without taking you deeper into your budget.

This short-tower, floor-standing loudspeaker system produces bass with depth, power and transparency that comes incredibly close to a live performance.

A completely new 12" driver was created for the L150. It has an innovative magnetic assembly, the result of years of research at JBL. It uses a stiff, heavy cone that's been coated with an exclusive damping formulation for optimum mass and density.

And it has an unusually large 3" voice coil, which aids the L150's efficiency and its ability to respond to transients (peaks, climaxes and sudden spurts) in music.

There's even more to the L150's bottom—a 12" passive radiator. It looks like a driver but it's not. We use it to replace a large volume of air and contribute to the production of true, deep bass. Bass without boom.

If you're impressed with the L150's lows, you'll be equally impressed with its highs and mids. Its powerful 1" high-frequency dome radiator provides wide dispersion throughout its range. And a 5" midrange transducer handles high volume levels without distorting. The maximum power recommended is 300 watts per channel.

The L150's other attributes include typical JBL accuracy—the kind that recording professionals rely on. Maximum power/flat frequency response. High efficiency. And extraordinary time/phase accuracy.

Before you believe that you can't afford a floor system, listen to an L150. While its bottom is tops, its price isn't.


FIRST WITH THE PROS.
With the graphic equalizer, you have a limited number of chances to correct an infinite number of potential problems in a recording or listening environment. You're dealing with fixed bandwidths and fixed frequencies. You can only increase or decrease the level. When boosting or cutting frequencies, you have to settle for the nearest one or two octaves. It's a compromise. With the parametric, you're provided an infinite number of solutions. Bandwidth, frequency, and level are each determined by you. Any musical problem can be isolated and corrected. And that's what all the excitement's about.

The graphic reason to buy our parametric.

At SAE, the battle has always been for complete musical control. Control that would allow you to correct for any inadequacy in any recording or listening environment.

Now the battle is over. You won.

SAE introduces the 1800 and 2800 Parametric Equalizers.

Actually, if you work for a recording studio, "introducing" would hardly be appropriate. You'd be working with parametrics already. Very simply, it's a matter of flexibility and precision. And very simply, with the SAE 1800 and 2800 the flexibility and precision of your sound control are absolutely limitless.

We should let the parametrics speak for themselves.

Problem: The lead singer is overpowered by the back-up group.

Solution: Set Level control to +10dB. Sweep Frequency control until the voice is brought forward. Adjust Bandwidth control to encompass the full voice range. Tailor Level control to exact voice presence desired.

How much does a machine like this cost? How can I afford a component that can acoustically correct a system? How can I buy an electronic box that can fix a listening room and a recording at the same time?

The SAE parametrics cost less than some turntables. That's how.

What we have is a small miracle that is also an attainable reality. Imagine: Compete, precise, musical control for the price of a common graphic.

Remember that word: Parametric. Remember those numbers: 1800 and 2800. Remember that name: SAE.
My Darlin’
Leontyne
by John Culshaw

NEW YORK—I am in a rare mood for celebration. Rare, because few singers as people arouse generous or even charitably responsive in my heart. Many of them I would gladly see immersed in oil up to or slightly above the neck and then simmered until not even a trace of a flat top remains. Of course, I accept that singers are as necessary to the balance of music as are sharks, crocodiles, and other disagreeable beasties necessary to the balance of nature, but that doesn’t mean that I have to love them. (I once knew an Italian record executive who went by the name Quadri for something like fourteen years, although his sense of humor was irrepresible. I once asked her what she was going to wear for her first major concert appearance in Moscow. “Black on black, darlin’!” she came back, quick as a flash. But she was not inclined to tolerate self-indulgence by colleagues who had come up in a relatively easy way.)

She knew all about Giuseppe di Stefano’s compulsive gambling before we started Tosca, so she took his daily allowance and any other money he might have into safekeeping until the opera was finished. He would never have let another man do such a thing, but he couldn’t refuse Leontyne, although I remember he looked wistful at the time.

Though it seemed like the day before yesterday.

I first heard her when, as an unknown, she had sung in Porgy and Bess at London’s Stoll Theater in the early 1950s. I came into her orbit later in the decade, when Decca/London and RCA were sharing some of their exclusive artists. At that time, London had Karajan and RCA had Price, and the two of them shared an intense mutual admiration, which made working with them a special kind of joy. Karajan is the greatest operatic accompanist (in the highest sense of that word) in the world, and for the very good reason that he understands fine singers. (He likewise has no patience with bad ones: No simmerer he.) If you have any doubt about that, listen to the care he gives to the tone, weight, and intensity of the strings in the card aria in Act III of Carmen. That kind of attention to detail brings out the best in an artist as perceptive as Leontyne Price.

At around the same time as Carmen we made a Christmas record with Leontyne and Karajan, which was a piece of outright commercialism to which we devoted as much attention as to an opera. (“Anyway,” the conductor said, “I love schmaltz!”) The arrangement of Schubert’s Ave Maria began with the whole tune played by the violins in unison, after which the voice came in. No stretch of my imagination, at least, could improve on the first take, but Karajan wanted to try again. “When she sings like that,” he said, “then we simply have to play better.” I did not think it possible, but it was. On the second attempt, which is the published version, the Vienna Philharmonic violinists played as one man; and if it sounds easy, it isn’t. Beecham with his “lolipops” used to make magic out of music that sounded like trash in other hands; Karajan did the same with the verse of Ave Maria, but with the additional motif that he was setting the stage for Leontyne.

It would be false to give the impression that Price was just a pussy in the studio, although her sense of humor was irrepressible. I once asked her what she was going to wear for her first major concert appearance in Moscow. “Black on black, darlin’!” she came back, quick as a flash. But she was not inclined to tolerate self-indulgence by colleagues who had come up in a relatively easy way.

She knew all about Giuseppe di Stefano’s compulsive gambling before we started Tosca, so she took his daily allowance and any other money he might have into safekeeping until the opera was finished. He would never have let another man do such a thing, but he couldn’t refuse Leontyne, although I remember he looked wistful at the time.

Tougher moments lay ahead with Franco Corelli in Carmen, and the scorn that Price pours out in the passage that starts “Au quartier! pour l’appel!” in Act II is not merely a piece of precisely calculated vocal acting. Only a moment or so before we began, Leontyne had thrown a heavy chair at Corelli and missed him by an inch. She had reached a point of exasperation because he was not concerned with her or with Corelli or with correcting his abominable French, for which a tutor was at hand—or, indeed, with Bizet. All he wanted was to be louder than anybody or anything in sight. (In fairness, I should add that he gave a marvelous performance, bad French or no bad French.)

Yet not even Corelli was insensitive to Leontyne’s beliefs and loyalties. On the evening of November 22, 1963, in the middle of the Carmen project in Vienna, my colleagues and I heard the first garbled reports on the radio about John F. Kennedy in Dallas. It was not at that stage clear that he was dead, nor how he had come by what the radio called “grievous injuries,” but with the knowledge of Leontyne’s feelings about what Kennedy stood for it was imperative to get to her quickly lest she hear the news with some shred Viennese distorion. We made for the State Opera, where we guessed she might be; there, at the stage entrance, we collided with an ash-faced Corelli, who had rushed out of some ceremonial dinner or other on exactly the same mission. When eventually we found her she had already heard the news, and I offered the only decent gesture I could think of, which was to postpone Carmen for a day or two, or even for a week. Recording schedules have frequently been postponed for far less important reasons, but she would not hear of it. The show was going on.

Almost thirty years had passed since I heard her first, and now here we were again working together in 1979. Although inevitably the contact between an artist and a television director in what is virtually a live show is much more remote than that between an artist and a recording producer, she was still essentially the same person. After a touch of nerves in the first few measures, she sang the Strauss Four Last Songs to perfection. She said she’d like to record them again, and I hope that she does. She also said that whenever she felt low she played “our” Carmen; since then, I have played it again and know what she means.

All I hope is that it won’t be another fourteen years before we work together again. Leontyne Price is not just a glorious singer, but a life-enhancing lady, and there are not many who fit both categories. She is a call, not an excuse, for celebration.
Behind the Scenes

Though slow to climb aboard the digital bandwagon, Polygram will apparently not be tentative about it. Deutsche Grammophon recently made a digital recording of Wagner's Parsifal, no less, with Herbert von Karajan and the Berlin Philharmonic. As with previous Karajan Wagner recordings, the sessions were held in conjunction with preparation for a stage production, in the present case, for this month's Salzburg Easter Festival. The cast includes Peter Hofmann (Parsifal), José van Dam (Amfortas), Kurt Moll (Gurnemanz), Sigmund Nimsgern (Klingsor), and Dunja Vejzovic (Kundry). Even the minor roles are cast from strength, with Barbara Hendricks as the First Flower Maiden and Hanna Schwarz as the Voice from Heaven.

Elsewhere on the opera front, DG recently recorded Verdi's Un Ballo in maschera, with Claudio Abbado leading the La Scala Chorus and Orchestra and a cast that includes Plácido Domingo (Riccardo), Renato Bruson (Renato), Katia Ricciarelli (Amelia), and Elena Obraztsova (Ulrica). Among other DG projects are two with Lorin Maazel: the Tchaikovsky violin concerto, with the Berlin Philharmonic and soloist Gidon Kremer, and a live recording of a New Year's Day Concert in Vienna with the Vienna Philharmonic.

In London, Antal Dorati has recorded another in his Haydn oratorio series for Decca/London, Il Ritorno di Tobia, with the Brighton Festival Chorus and the Royal Philharmonic Orchestra. The work, with a libretto by Giovanni Boccherini based on the story of Tobias and the Angel from the Apocalypse, does not follow the Handelian form, but the Italian form—very long and rather like a religious opera seria, punctuated by five brilliant and contrasted choruses. The recording sessions followed the first complete British performance at Royal Festival Hall with the same cast: Hendricks (the Angel), Philip Langridge (Tobias), Linda Zogby, Della Jones, and Benjamin Luxon.

The Library of Congress recently announced the acquisition of Jim Walsh's library, "one of the most significant private collections of early recordings ever assembled." Walsh, a retired Variety reporter and columnist on early recordings for Hobbies magazine, had amassed some 40,000 discs and 500 cylinders dating back to an 1894 rendition of "God Save the Queen." Since most of the material predates 1926, it ideally complements the Library of Congress' own collection, begun in 1925. His collection is particularly strong in the area of popular entertainment, with virtually complete representations of Harry Lauder, Al Jolson, Peter Dawson, and Vernon Dalhart. According to a spokesman for the Library of Congress, Walsh's gift comes at a time when gifts to all libraries have declined markedly, due to the more restrictive provisions of the Tax Reform Act of 1969—restrictions that do not apply to this type of commercially acquired property. The material, now in storage, should be available to researchers in early 1981.

The Russian state-owned label Melodiya recently announced plans to release the complete works of Tchaikovsky, Prokofiev, Shostakovich, and Khachaturian on a record-club subscription basis—apparently the first time this method of distribution has been attempted in Russia. Though there is no word as to the number of discs any of those sets will contain, Melodiya also announced that it will release another "set," surveying the work of conductors, instrumentalists, and singers, comprising 175 albums. Start saving your rubles.

By coincidence, three of the country's major orchestra "marathons," in which local commercial FM stations devote a weekend to raising funds for their cities' symphonies, are occurring on the same three days this month. From Friday, April 18, through Sunday, April 20, WCLV will be holding its marathon for the Cleveland Orchestra. WCRB will conduct its for the Boston Symphony Orchestra, and WFMT will have one for the Chicago Symphony Orchestra. Expectation is that a total of nearly $1 million will be generated for the three ensembles that weekend. The following weekend will find WQXR providing the same benefit for the New York Philharmonic.

Readers of Andrew Porter's Don Carlos review in this issue will want to mark their calendars: On April 12, PBS will broadcast a Metropolitan Opera production of the work taped on February 21. The performance, the third of this season, features a relative newcomer in the title role,
All your records will sound better with Dual's new ULM tonearm and cartridge system.

Even if they look like this.

Although none of your records may be in such bad shape, many are probably warped enough to present serious problems to conventional turntables.

The high inertia of a typical tonearm and cartridge combination, with approximately 18 grams total effective mass, causes the stylus to dig in riding up the warp and to take off on the way down. Tracking angle and tracking force vary widely—as much as 30 percent. And a warp as small as 1.5mm (which is barely discernible) can generate harmonic distortion of 2.7 percent. That's audible!

These problems have now been solved by Dual's new Ultra Low Mass tonearm and cartridge system. The potential for this solution has existed ever since the development of Dual's dynamically-balanced tonearm with its gyroscopic gimbal suspension and straight-line tubular design.

Dual's research into the effects of mass on record playback led to a collaboration with Ortofon. A cartridge was developed with substantially less mass than any in existence. It weighs just 2.5 grams, including mounting bracket and hardware.

At the same time, the mass of the Dual tonearm was further reduced so that a perfectly matched tonearm and cartridge system emerged. Its total effective mass is just 8 grams. That's less than half the mass of conventional tonearm and cartridge combinations.

Tracking a record with the same 1.5 mm warp, the ULM system reduces harmonic distortion to only 0.01 percent. That's 270 times less than that produced by the conventional tonearm and cartridge.

Not only is the overall sound audibly improved, but stylus and record life are significantly extended.

To experience the demonstrable advantages of ULM, bring a badly warped record to your Dual dealer. Listen to it played with the ULM tonearm and cartridge. (All nine new Dual turntables feature this system.)

You will hear the difference that ULM can make on all your records.

For the complete ULM story, please write to United Audio directly.

ULM.

A major breakthrough in record playback technology.

United Audio
120 So. Columbus Avenue
Mt. Vernon, New York 10553
Stereo Discounters' new 84 page Home Entertainment catalog is now available—FREE!

- WIDEST SELECTION—$7MILLION INVENTORY
- NAME BRANDS—PIONEER, TECHNICS, KENWOOD, HITACHI, JENSEN, SONY—OVER 100 OTHERS
- HI-FI, VIDEO, CAR STEREO, MOVIES!

WRITE OR CALL TOLL FREE FOR YOUR COPY.
1-800-638-3920

STEREO DISCOUNTERS
6730 SANTA BARBARA COURT, BALTIMORE, MD. 21227

WAREHOUSE SOUND COMPANY
The Nation's only critically acclaimed distributor of Hi-Fi and Video products.

- 10 years old and goin' strong
- Tremendous selection of the best equipment
- The country's most knowledgeable salespeople
- Famous direct mail prices

Call toll free (209) 344-7310

In California (800) 742-1820

Send for the FREE catalog

Nimbus Records, a small British company with big plans to enter the American audiophile market, is wasting little time in doing so. Even before having settled upon an exclusive American distributor, Nimbus announced its first release: Vol. 1 in Bernard Roberts' complete series of Beethoven piano sonatas, a four-disc album of the first seven sonatas ($60; distributed by Audio Source, 1185 Chess Drive, Foster City, Calif. 94404). The series was recorded direct-to-disc, with a single exception: Roberts' taped run-through of the Hammerklavier, a complete, uninterrupted performance like the others, was considered simply too good to pass up.

The label has also ventured into the quality 45-rpm LP market. The first British release featured Bulgarian pianist Marta Deyanova playing the four Chopin scherzos, with sides of about eighteen and twenty minutes. Future releases will include one with sides running more than thirty minutes. The higher speed reportedly results in great sonic improvement.

Nimbus purports to be the only record company with its entire operation—from recording studio through processing to finished product—in a single building. This allows for stricter quality control and greater economy, helping to keep the price down, at least on the British market. Americans will have to appreciate that fact from a distance.

A recent item in the trade publication Billboard lamented Pickwick's plight: Wanting to reissue Leopold Stokowski's Beethoven Seventh Symphony with the Symphony of the Air, the company was unable to locate the stereo master tapes and had resigned itself to a mono release. But reader Tom Null, whose own affiliation is with Varése Sarabande, offered the use of his stereo copy of the United Artists 1958 pressing, still in mint condition, and Pickwick gratefully accepted. HF
For those who appreciate simple virtuosity

The 480 Series

With the 480 Series, Nakamichi again offers a more affordable cassette recorder—a deck that is simpler to operate, but that sacrifices neither Nakamichi sound nor Nakamichi excellence. The secret is simple. The Asymmetrical, Diffused-Resonance Transport—shared by all three models and closely akin to that of the highly acclaimed 582—is a 3-motor, dual-capstan drive so unique in simplicity and elegance that it can be manufactured with virtually zero defects. Each 480-Series deck is factory calibrated to yield optimum performance with three types of tape—ferric, chrome-equivalent, and metal. Use products of equivalent quality, and you can experience Nakamichi sound and Nakamichi specifications—response to 20 kHz—in your home.

Nakamichi

480
The 2-Head Model 480—fully metal-compatible thanks to our special, narrow-gap, Sendust R/P head and exclusive Direct-Flux erase head. Wide-range, peak-responding meters, professional sliding record-level controls, Dolby, and defeatable MPX filter, of course! Even an optional remote control.

481
Step up to the 481, a 3-Head deck utilizing Nakamichi's exclusive "Crystalloy" cores and "Discrete-Head" technology. All the features of the 480 plus the greater dynamic range of a discrete 3-Head format.

482
For those who demand "off-tape monitoring," the 482—a 3-Head deck similar to the 481 but with two complete sets of electronics and Double-Dolby so you can hear exactly what has been recorded as it is being recorded.

The 480-Series starts at under $500. For more information, write to Nakamichi U.S.A. Ccrp., 1101 Colorado Avenue, Santa Monica, CA 90401.
Ohm’s Law 9:
It is possible to make a loudspeaker that gets loud and still sounds good.

Ohm introduces another new loudspeaker that defies the traditional laws of loudspeaker design. The new Ohm I.

It used to be, if you liked listening to music as loud as life in your home, you had a tough choice to make. You could buy high efficiency "monster" systems, and put up with the boom and shriek. If you wanted something smoother (with really deep bass), you could buy low efficiency systems, but then you'd need an amplifier big enough to power Toledo.

The Ohm I solves the problem. It can achieve concert hall levels in your home effortlessly, with no sacrifice in bandwidth, linearity, or imaging abilities. While the Ohm I gets amazingly loud with as little as 10 watts input, it can handle 1000 watts comfortably.

It's the world's first good and loud loudspeaker.

Inside the Ohm I, you'll find everything we've learned about multi-driver dynamic loudspeaker design. It uses a total of five drivers, including a 12-inch, optimally-vented subwoofer with an incredible 72 ounce magnet. Voice coils are cooled by magnetic fluid to increase power handling. The Ohm I's beautifully-finished, floor-standing enclosure is compact enough to fit gracefully into any home.

The new Ohm I's are already earning rave reviews from stereo critics. After listening to them, The Complete Buyer's Guide to Stereo/Hifi Equipment says, "The volume level was approaching the threshold of pain, but the speakers were showing no sign of strain. The response, regardless of level, was smooth and free from annoying colorations...Too often a loud loudspeaker is deficient in many other areas. Fortunately, this is not the case with the Ohm I...."

According to Hifi Stereo Buyer's Guide (8/79), the new Ohm I has "...a combination of efficiency and power handling that, as far as we know, is unmatched." They continue: "(The Ohm I) is one of the finest speakers we've ever heard. There is nothing it couldn't do and do it superbly...it thundered out the lowest pipe-organ pedal notes in a way that made us feel we were in a great cathedral...When appropriate, the bass was discreet. It was all there, without saying 'Here I am'...

The treble filled the room with a spacious sweetness that seemed...downright seductive...(The Ohm I) will bring out the best from any program material and will also do justice to the coming glories of digital recording...this is a speaker with a future – for the future."

For a listening experience you've never enjoyed before except at a live performance, visit your local Ohm dealer. Ask to hear the world's first good and loud loudspeaker: the new Ohm I.

For 16 complete reviews, and full specifications, please write us at: Ohm Acoustics Corp., 241 Taaffe Place, Brooklyn, N.Y. 11205.

Ohm
We make loudspeakers correctly.
Record Reviews

Massenet en Masse

As the boom grows, the remarkable versatility of a composer long known for a single opera becomes ever more apparent.

by Peter G. Davis

Two new recordings of Werther, the first really adequate Don Quichotte on disc, and Sapho, an opera never recorded before—the Massenet revival shows no sign of losing momentum. Philips has just taped the recent Covent Garden Werther with Frederica von Stade and José Carreras, while London’s Sutherland/Bonyege performance of Le Roi de Lahore, awaiting release, will bring the total number of Massenet operas in Schwann to twelve. Who knows? From the remaining dozen works as yet unrecorded, we may one day hear Hérodiade, Grisélidis, Ariane, or Chérubin, all well worth reviving, at least for the phonograph.

Perhaps the most significant fact to emerge from the Massenet boom—and this latest batch of recordings only confirms it—is the composer’s extraordinary versatility, as evidenced by his sympathetic response to a wide range of subjects and his ability to individualize each opera. His seemingly endless fund of ingratiating melody, his sophisticated application of orchestral color to create atmosphere, and his elegant craftsmanship were never in doubt, even when Manon was the only work performed with any regularity a generation ago. But to say that “to have heard Manon is to have heard the whole of him,” as Grove’s would have it, is arrant nonsense.

In fact, Werther has now become Massenet’s most popular work—every opera house in the world seemed to be staging the piece last season—and this domestic tragedy, with Werther’s single-minded obsession mirrored in a score of remarkable economy and unity, is worlds removed from the delicately perfumed sensuality of Manon’s seventeenth-century France. How artfully and subtly Massenet eases us into the cozy bourgeois home of the Bailiff—his “petit royaume,” as he tells Werther—and the tragedy to come. The light opening scene, cast in a flowing melodic conversational style, leads into the hero’s first appearance and the gradual intensification of mood that continues to mount throughout the opera as Werther’s hopeless love for the married Charlotte becomes more and more desperate. In a sense, this is Massenet’s most Wagnerian opera, with its interlocking web of leitmotifs used both to paint the psychology of the characters and to give the score a shapely unity of almost symphonic proportions. All this is done without depriving the voice of its primary function in the texture, and Massenet inflects the vocal line with special care to reflect precisely the interior passions of his two protagonists.

The title role has always been an irresistible lure for lyric tenors, and the proliferation of such voices today no doubt accounts for Werther’s present popularity. Actually, this has always been Massenet’s most frequently recorded work—the two new versions bring the total number made over the years to eight, as opposed to four for Manon. The overall quality level in all the previous Werthers is also impressive, beginning with the first recording, made for Pathé in the 1930s, featuring the superbly stylish Charlotte and Werther of Ninon Vallin and Georges Thill. The only performance to survive in the domestic catalog is an Angel album (SCL 3736), starring Victoria de los Angeles and Nicolai Gedda, that has served admirably for the past dozen years.

A choice between the newcomers is relatively simple, for the new Angel recording scores over its DG rival in almost every respect. Much of the performance’s distinction stems from Michel Plasson’s conducting of the London Philharmonic. He shapes the music with a lapidary concern for orchestral detail, especially in the conversa-

MASSENET: Werther.

CAST:
Sophie Christiane Barbaux (s)
Charlotte Tatiana Troyanos (ms)
Kätchen Lynda Richardson (ms)
Werther Alfredo Kraus (t)
Schmidt Philip Langridge (t)
Albert Matteo Manuguerra (b)
Brühlmann Michael Lewis (b)
Johann Jean-Philippe Lafont (b)
Le Bailli Jules Bastin (bs)

Covent Garden Singers, London Philharmonic Orchestra, Michel Plasson, cond. [Eric Macleod, prod.] Ascot. SZCX 3894, $27.94 (three discs, automatic sequence). Tape: 4Z3X 3894, $29.94 (three cassettes).

MASSENET: Don Quichotte.

CAST:
Dulcineé Régine Crespin (s)
Pedro Michéle Command (s)
Garcia Annick Dutertre (s)
Rodriguez Peyo Garazzi (t)
Juan Jean-Marie Fremeau (t)
Sancho Panza Gabriel Bacquier (b)
Don Quichotte Nicholai Ghiaurov (bs)

Chorus of the Radio Suisse Romande, Orchestre de la Suisse Romande, Kazimierz Kord, cond. [Christopher Ravn, prod.], London OSA 13134, $26.94 (three discs, automatic sequence).

MASSENET: Sapho.

CAST:
Fanny Legrand Renée Doria (s)
Irène Elya Waisman (s)
Divonne Gisèle Ory (ms)
Jean Gaussin Ginès Sirera (t)
La Borderie Christian Baudéan (t)
Caoudal René Gamboa (b)
Césaire Adrien Legros (bs)
Le Patron Jean-Jacques Douméne (bs)

Chorale Stéphane Caillat, Orchestre Symphonique de la Garde Républicaine, Roger Bouty, cond. [Gréco Casadesus, prod.], Peters International PLE 129/31, $23.94 (three discs, automatic sequence).
tional bridge passages, where the interplay of solo winds becomes particularly ravishing. It is a leisurely performance, yet the music is never loved to death or allowed to drag. To the contrary, the love scenes pulsate vibrantly, the attacks are bitingly precise, the rhythmic pulse is always alive and forward-moving, the melodies are exquisitely savored and phrased.

As in most French opera recordings these days, the cast is international, but Werther, more than most Massenet operas, has responded to foreign singers ever since its Viennese premiere in 1892. Here the Spanish tenor Alfredo Kraus re-creates his interpretation of the title role, one he has sung in almost every major operatic center. Now in his fifties, Kraus has lost little vocal quality, and he sings with his customary taste, refinement, and care for integrating musical and dramatic values. His timbre may strike some as a bit too dry and his approach a trifle overrestrained, but his grasp of the style, the focused poise of his singing, and the dignity of his overall conception combine to make him today's preferred Werther.

Tatiana Troyanos' burnished mezzo-soprano is a gorgeous natural instrument, and she is a sympathetic Charlotte. While doing nothing especially out of the ordinary with the role, she still captures attention simply through the innate quality of her voice. Matteo Manuguerra makes a more positive figure out of Albert than most, while Christiane Barbaux as Sophie and Jules Bastin as the Bailiff leave little room for improvement. Angel's wide-ranging reproduction and luxuriously cushioned sonics suit the score perfectly.

DG's performance need not detain us long—here is a case where ecumenical musical forces fail to convince. The young Italian conductor Riccardo Chailly makes his recording debut with a brisk, sensible reading that has many solid virtues. He gets expressive, committed, and alert playing out of the Cologne Radio Orchestra, although there is little of the felicitous attention to detail that distinguishes Plasson's conducting for Angel. Placido Domingo is in fine voice, and his extrovert Werther scores points for broad tenor abandon if not for delicacy or finesse. Elena Obraztsova, on the other hand, is all wrong as Charlotte; her vibrato-laden mezzo, coarse phrasing, and weird French pronunciation turn the character into something quite repulsive. Arleen Auger's overly mature Sophie and the German singers in the cast sound distinctly out of their element.

Moving on to pleasanter things, London's Don Quichotte can be warmly recommended as a more than serviceable performance of an instantly lovable opera. Laid out in five compact acts, this treatment of Cervantes' novel depicts most of the familiar high points: the Don's wooing of Dulcinee, his battle with the windmills and confrontation with the bandits in an effort to retrieve his beloved lady's necklace, his gentle rejection by Dulcinee and lonely death with only the faithful Sancho Panza to mourn his passing.

This is late Massenet, composed in 1910 for the great Russian bass Feodor Chaliapin, and the composer's last unequivocal success. Perhaps he projected something of himself into the character of the aging Don Quichotte—certainly both men pined for beautiful young creatures and were destined to see their passions unrequited. Massenet's affection for the Don is everywhere apparent, in the limpidly accompanied serenade to Dulcinee, his valor in the face of danger, his courtly dignity, the pathos of the death scene. The Don is the final great figure in the composer's gallery of singing/acting roles, a mellow portrait painted in delicate tints and with a depth of human perception unusual for Massenet.

Nor is Dulcinee neglected, a more complex figure than in Cervantes and a fun-loving, high-spirited girl capable of tenderness and passion. Sancho, too, is sharply delineated within a conventional but effective buffo tradition, and the colorful atmosphere of the Spanish setting is suggested by infectious dance rhythms and ornamental flicks, proving that Massenet's gift for piquant musical pastiche had lost none of its power to charm even at the end of his composing career.

If Nicolai Ghiaurov's interpretation of the title role does not overwhelm with any special insights, let alone efface memories of the recordings of Chaliapin or Vanni-Marcoux, the Bulgarian limns a sympathetic character, and for the most part, he sings splendidly. Régine Crespin
may be a bit past the point where she can toss off Dulcinee's more florid passages with complete ease and security, but how consummately she can turn a lyrical phrase and find meaning in the simplest line of text—here is a great artist at work, vocal flaws and all. Gabriel Bacquier is his own capital self, portraying a humorous yet warmly touching Sancho Panza, and Kazimierz Kord conducts the Suisse Romande with panache and sensibility. London's plush engineering is very much to the point, although spreading this short opera over six sides seems rather uneconomical. No matter. This is an infinitely superior account of the score as compared to the spotty, long-deleted Everest version from Belgrade.

Like Werther and Don Quichotte, Sapho is based on a novel, Alphonse Daudet's description of Bohemian artist life in Paris at the turn of the century. The plot ingredients are familiar enough: A slightly passe artist's model, Fanny Legrand, falls in love with an innocent young country swain named Jean, who is ignorant of her sordid past. When the facts eventually come out, there are quarrels and reconciliations until Fanny realizes that a shared life for people of such disparate backgrounds is impossible, and she leaves Jean for good. Echoes of Verdi's La Traviata and presentations of Puccini's La Rondine are obvious in this oft-used material, but Massenet has a way of making it all sound fresh.

Sapho is unique in the Massenet canon in that it depicts contemporary society, a verismo type of opera very fashionable in 1897. (Charpentier's Louise, which came three years later, is the most notable example of the "musical novel" genre.) He makes a virtue of this and takes care to provide a musical background redundant of the period. The brief opening act, for example, shows Fanny and Jean meeting at a party in the studio of the sculptor Caoudal, who had used Fanny as, among other things, a model for his statue of the Greek poetess Sapho. An on-stage gypsy salon orchestra sets the tone perfectly—its brittle, hectic, there's-no-tomorrow lilt sounds an ironic dramatic counterpoint to Jean's homesick reverie for the Provençal countryside and the future lovers' first glimpse of each other.

Massenet shows us every twist and turn in the affair, its delicate blossoming to idyllic bliss, raging fights, desperate attempts to make up, and the final collapse of a tortured relationship. Each of these scenes is an object lesson in dramatic pacing and musical craft, shot through with a beguiling lyricism that never deserted the composer even when he was describing the most mundane activities of everyday life. Possibly one comes away feeling that Jean is something of a prig—and his simple, God-fearing parents, Divonne and Césaire, are a bit much—but Fanny's is a magnificent role, and a great singing actress can hardly fail to cause a sensation with it.

Unfortunately, the Peters recording fails in almost every department. The remnants of Renée Doria's voice can scarcely do justice to Fanny. Her intentions are sound, and she has the style well in hand, but her soprano is thin, pinched, and perilously unsteady. Gines Sirera has a serviceable tenor, typically French in its attractively buzzing nasal timbre, but he is musically crude and has an annoying habit of anticipating the beat. The rest of the cast barely passes muster, and Roger Boutry conducts with a limp hand. Sapho deserves better than this, and with luck, the Massenet revival will provide something more worthy.
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.
The "New Generation" of Mahler Conductors

by Abram Chipman

A wealth of releases proves that duplication need not mean redundancy.

By the mid-Seventies, Maurice Abravanel, Leonard Bernstein, Bernard Haitink, Rafael Kubelik, and Georg Solti had all recorded the canonical nine symphonies of Mahler. By the mid-Eighties, these five—some of whom may offer remakes of their own—will probably be joined by at least as many others. Perhaps none of the current releases will form part of an "integral" edition in the most ambitious sense, including the completed Tenth and the "song symphony" Das Lied von der Erde, and in the strictest sense, featuring a single orchestra and a single label. Yet the recent windfall allows for a progress report on most of the probable contenders.

André Previn may appear to be an outsider in this company of Mahlerites. But Václav Neumann recorded the later instrumental symphonies in his Leipzig days—most of the recordings are rare items these days—so the new Czech Philharmonic Fifth and Seventh (and an earlier Adagio from the Tenth) may well herald a cycle from Supraphon.

Zubin Mehta is definitely a candidate, though he has yet to garner strong endorsement from this corner. London has used both analog and digital techniques to record him with the Israel, Vienna, and Los Angeles Philharmonics. The new Third and the Lieder program with Marilyn Horne are fairly typical of the strengths and weaknesses of Mehta's Mahler.

DG is looking for a Mahlerite for the Eighties, and—to stretch the political analogy—has been conducting some suspensive primaries in recent years. Seiji Ozawa seems to have bowed out of the race, as has Carlo Maria Giulini. While Claudio Abbado momentarily rests on impressive laurels with his Second and Fourth, Herbert von Karajan adds a Fourth to his variably received Fifth, Sixth, and Das Lied.

A powerful party supports Wyn Morris as a favorite son. His platform includes a stately, rounded lyrical style, consistent stereo separation of first and second violins, and advocacy of the five-movement Tenth (in Deryck Cooke's final realization) and the five-movement First (the only phonographic version of the 1893 edition). These appeared on the Philips and Pye labels with the New Philharmonia, though Morris' subsequent Mahler recordings have featured his handpicked Symphonica of London. RCA recently deleted the Eighth, while Peters' issue of the Second is now joined by the Ninth and a belated domestic issue of the Fifth.

As I read the polls, the front-running candidates are Klaus Tennstedt and James Levine. Clearly, Mahler's time has come, when a relatively obscure conductor can launch a major recording contract with a Mahler First, as Tennstedt did. EMI has promised a Tennstedt cycle with the London Philharmonic and herewith offers the Fifth, with the now standard filler, the Adagio of the Tenth. Levine, one tires of saying, belies his youth with each fresh proof that he has absorbed the staggering complexities of Mahler's demands possibly better than anyone. His cycle, now roughly at midpoint, uses the broadest definition of the symphonies and includes the London and Chicago Symphonies, as well as the Philadelphia Orchestra.

So much for the rival candidates. Now on to the music, starting with the vocal works and moving on to the symphonies, in order.

The songs Neumann adds to the Fifth satisfy no repertory needs, and bass Karel Berman shows no discernible sympathy for the idiom. He is out of his depth vocally in these oddly selected excerpts from two larger collections. "Revelge," from Des Knaben Wunderhorn, is cautious and reticent. As for the Rückert-Lieder, "Blicke mir nicht in die Lieder" suffers from Neumann's indifferent rhythm, while the other two offered here patently require the special poignancy of the mezzo timbre.

Which brings us to Horne's Rückert-Lieder. Her rich, vibrant vocalism is fine in itself, but she pays insufficient attention to word meanings. Mehta, aided by a clear and powerful recording, reveal Mahler's space but inspired scoring (e.g., the low winds and brass in "Um Mitternacht") and
whips up a swaggering insolence in "Blicke mir nicht." Moreover, the sequence chosen for the songs is the most convincing I have yet encountered on discs. (Since this isn't a cycle, anything goes, presumably.) But in the intense privacy of these songs, the theatrical extroversion of Home and Mehta is a deficit; for more profound involvement, I turn to Christa Ludwig and Karajan (DG 2707 082) or Janet Baker and John Barbirolli (Angel S 36796).

On the other hand, the exuberant rhetoric of Horne and Mehta well suits the oversize Songs of a Wayfarer—that product of Mahler's youthful passion. What a contrast to the broadly spaced, static, and restrained Songs of a Wayfarer—that product of Mahler's opposite end, the final Adagio. Mehta uses the initial, very slow, "restful and expressively singing" instruction as a primary guide to which the music returns after numerous departures. In failing to consistently return to this (as James Levine does so impressively), Mehta deprives us of the sense of rootedness and destination through this unwieldy section. The ending of the second movement should likewise be carefully balanced between holding back and moving steadily, another distinction over which this interpretation rides roughshod. At least the scherzo has more pep than usual.

Mehta's control of the orchestra is little better than his slapdash self-control. The Angelenos play competently, but that isn't enough (at least on a record that one will presumably live with for a time) for a symphony scored with such shimmering nuance and dazzling pyrotechnics. An overly loud pianissimo here, some tonal crudeness there, slightly sour woodwind intonation in this place, and scraping strings in that—the effect accumulates, becoming more than the sum of its parts. Ensemble verges on confusion from time to time (e.g., between cues 12 and 13 of the second movement), and the trumpets fail to sound over the whole orchestra in the concluding pages. Maureen Forrester is ruthlessly overmiked in her solo movement, her every sign of strain painfully exposed. (Her voice was in better estate in the Haitink recording.) The only minor compensations for all this are a good, clearly recorded fifth (choral) movement and the use of what could well be a real posthorn in the scherzo.

In short, Mehta is a woefully inadequate guide through the wondrous universe of Mahler's Third. The breathtaking beauty of the work is slighted by all concerned, and the conductor's self-indulgence—elsewhere hyped as some sort of romantic identification with the soul of Mahler—amounts to incomprehension, if not downright disrespect. For the rest of its Mahler recordings with Mehta, I hope London will stay away from Los Angeles and Israel and stick with the Vienna Philharmonic, which at least can play the music and exert some taming influence on the conductor.

Meanwhile, if you need a Third, take your pick of Haitink (Philips 802 711/2), Horenstein (Nonesuch HB 73023), Bernstein (Columbia M2S 675), or Levine (RCA ARL 2-1757; reviewed with extensive comparisons of the other three, March 1977).

At an earlier stage of Mahler performance, Previn's Fourth would have been perfectly acceptable. It is reasonably straightforward, taut, and dependably well played. But by the standards we take for granted today, it lacks meltingly beautiful violin tone, piercingly brilliant oboe and trumpet work, and range and power of recorded sound (e.g., the dampened climax at cue 11 in the Adagio). The many moods of the finale are weakly characterized by Previn's rigidly unsmiling approach, and, as with Forrester in the Mehta Third, Elly Ameling's vocal wear is mercilessly exposed by the miking; she, too, was heard to better advantage in a Haitink version of the Sixties (Philips 802 888).
Karajan, with each successive outing, seems to be turning into a real Mahler conductor. Granted, this Fourth shares some minor shortcomings with Previn’s: inconsistent observance of string glissandos (sometimes omitted when marked, sometimes played when unmarked); failure to accelerate in the middle of the horn solo near the end of the first movement (thus minimizing the allusion to Beethoven’s G major Piano Concerto); clarinets that are too timid in the grotesque “resounding” outburst near cue 4 in the scherzo. But what deeply committed playing by the Berliners! Horns are magnificent and powerful; strings glow passionately; rubato is instinctively felt. Edith Mathis provides ample tonal range, secure pitch, and a deep and fanciful shading of the text. DG’s recording is beautifully detailed and focused, with spacious, heaven-storming climaxes in the slow movement.

There are two puzzling peculiarities, however: At both cues 21 and 22 in the opening movement, Karajan ignores the caesuras, shifting seamlessly into the new tempo before the string sound has died. (Perhaps he is overreacting to the exaggeration of this discontinuity by many other conductors.) And near the end of the Adagio, I don’t hear the final mf timpani strokes over the pizzicato double basses. Nevertheless, Karajan’s takes its place among the very finest recorded performances of this music, fully the equal of the Von Stade/Abbado version (DG 2530 966, January 1979). My preference for that earlier edition is purely subjective: Abbado seems to re-create the piece afresh with unblushing, childlike wonderment. Karajan’s is basically a sophisticated adult view.

Mahler’s Fifth is heavy going in its formidable challenges to a conductor’s powers of observation, concentration, and organization. Levine (RCA ARL 2-2905, February 1979) has negotiated those demands most successfully of anyone on disc. None of the three versions at hand adheres completely to the 1964 Critical Edition, which, for example, excludes percussion around cue 17 of the first movement (as does Levine). Neumann and Morris include timpani parts, and I faintly detect a snare drum from Tennstedt.

Neumann’s older Gewandhaus Fifth (Vanguard C 10011/2), though never one of my favorites, was more vigorous than the remake in the scherzo and much of the finale. Predictably, the Czech Philharmonic plays better than the Leipzig aggregation. The opening trumpet solo, for instance, carefully heeds the dynamic markings, so the funeral procession seems to be moving toward the listener. Supraphon’s sound surpasses Vanguard’s primarily in woodwind clarity. But alas, Neumann offers few insights to compensate for his two disastrous miscalculations: When the funeral music recurs in the second movement with a return to original tempo indicated, he is absurdly fast; and in the finale, he jams on the brakes at cue 32, when he should maintain stride and build up to the work’s real climax at the slightly later recurrence of the triumphal tune. As in his earlier version, there is an unwanted break between the Adagietto and the finale.

Morris’ Fifth is longer than any I know of; this grandly valedictory, warmly flowing interpretation should appeal to admirers of the similarly expansive but more thickly textured Barbierioli (Angel, deleted). Also praiseworthy is the solid, enveloping richness of the Peters pressing, with quieter surfaces than the Supraphon and Angel review copies. There are controversial touches in the reading: At both the piu mosso subito in the second movement (following cue 16) and the molto moderato in the scherzo (following cue 14), Morris’ tempos are so slow and sedate as to approach parody. Yet there is a rapidly flowing and detailed Adagietto to balance the prevalent solemnity. The orchestral playing is fair.

Tennstedt’s Fifth (unlike his earlier First) evokes a sense of déjà entendu at re-encountering the Bruno Walter style of Mahler conducting so many of us grew up with. (Walter’s classic Fifth is still available on Odyssey 32 26 0016, rechanneled.) If not deliberately slighted, virtuosity, textual exactitude, and linear transparency seem not so much obsessive ends in themselves as means to, or incidental by-products of, a native immersion in the singing, breathing, pulsating language of Mahler’s cultural roots. The result is a performance of organic integrity and spirituality. Note the palpable “give” of the second pulse of the first movement (“etwas gehalten”), so Walter-like in its cradling, consoling lil; the starkly desolate shudder at the “klagende” climax of that movement; the bucolic gaiety of the winds’ ornamental turns in the finale. The Adagietto flows lightly, never overbearing, with utterly melting cello tone. Walter again comes to mind in the scherzo, with its completely natural feel for rubato and the bittersweet regretfulness of the string playing.

Yes, Tennstedt does anticipate rigors prematurely throughout the scherzo, and he creates a dizzy stretto in its final pages. Purists will also question the rhythmic liberty of the work’s opening trumpet call. But these objections ultimately pall, for this is an interpretation of deep beauty and cultivation, even though somewhat flawed in realization. At times, either ensemble or recording balance is slightly askew. Moreover, the loudest climaxes tend to overload, the bass drum’s whispers
at the end of the first movement are scarcely audible, and Tennstedt's conscientious attack into the finale is compromised (like audible, and Tennstedt's conscientious at-the-end-of-the-first-movement are scarcely companions and because it can verge on (less "chamber-music-like") than that of its nut to crack, because its scoring is thicker cyclists (and not all of those). It is a tough current SCHWANN lists only the originalrella among Mahler's symphonies. The Morris') by pre-echo.

For all of these reasons, the new release is difficult to recommend. Neumann has a spectacular orchestra in the Czech Philharmonic, very nearly as responsive, on-target, and characterful as Haitink's Concertgebouw (Philips 6700 036). Supraphon has obliged with a recording of somewhat greater vividness than its Fifth. Neumann directs the flow of instrumental traffic with alertness and precision. (I have never heard, incidentally, his earlier Seventh with the Gewandhaus on German Eterna.)

But I miss everywhere a cutting edge of rhythmic tension, of sprightly articulation, of tauntness in attacks and in hairpin dynamics. And there is too little rapt and mysterious soft playing. In the first movement, the buildup and release of the climactic tension should be positively teeth-grinding at the grandioso marking (cue 50) and again at the change from 3/2 to 4/4 after cue 65. Neumann understates the associated tempo changes. In the first Nachtmusik movement, the spectral march episode is so fast as to seem brightly and blandly cheerful, while the deadpan treatment of the seductive dance music suggests Neumann has never been to a Jewish wedding. The second Nachtmusik movement (Andante amoroso) is taken like a corpulent Adagio, thus slighting the anxiously tentative, frail, ambivalent love song. In the finale, Neumann is more attuned to the heady swagger than to the complacent, mincing moments of burgherlike deliberation.

True, Bernstein's and Solti's renditions had some of these problems, but that does not lessen my disappointment in the symphony's first recording in a decade. Until the new cyclists swell the ranks, Haitink's remains the preferred version, with plenty of bite and urbanity, though it too could be more phantasmagorical.

Morris' and Levine's Ninthds have only two points in common: They both opt for the slowest sustainable tempo in the final Adagio and for lateral division of first and second violins. The latter is no surprise from Morris, but is innovative from Levine. I only wish he had seated his strings that way from the start. RCA's recording also deploys the brass unconventionally (and, to my mind, ideally): Horns across the rear are flanked by trumpets on the right, trombones and tubas on the left.

In addition to its optimal stereo effectiveness, Levine's surpasses almost every other Ninth in fidelity to the printed page. Virtually every nuance of tempo, dynamics, articulation, and expression is scrupulously realized, right down to the closing pages, with their near-impossible demands for gradations of softness to the very threshold of inaudibility. The dazzling permutations of choir blending are all meticulously balanced so that everything "sounds" with vivid cogency and daring. The virtuosic Philadelphians take nothing for granted. In the middle movements particularly, each shrieking, wailing, flatulent, or maliciously snarling outburst from the winds and brass sounds as if the players were possessed.

One can argue, of course, that the whole of a performance is more than the sum of its parts, and there is much to a work like this that is written between the lines. Jascha Horenstein's great—if frequently ragged—1966 performance with the London Symphony (commercially unavailable) comes to mind, with its hesitant upbeat in the Landler and its ineffable weariness. But Levine's analytic scrutiny extracts most of the work's inherent eloquence and is absolutely compelling; this performance will not soon be duplicated.

Morris barely leaves off where Levine begins. Warmth, gentleness, and sincere effort are all there. In the attempt to capture the lyrical sweep of the first movement, however, essential details of tempo are passed over. In the second movement, the third of the alternating dance pulses is far too hasty. In the ensuing Rondo-Burleske, the main tempo is much slower at its "return" after the central lyrical section (which is played too loudly). Execution is too often slipshod: Horns fail to manage trills and grace notes, the solo violin gets ahead of the winds, triplets are wrongly phrased, etc.

Our earlier political analogy is particularly apt in discussing the Tenth. One cyclist, Solti, holds fast to the conservative position, refusing to touch an unfinished work. The radical Morris holds that a conjectural completion of all five movements is a legitimate—nay, essential—part of Mahler's symphonic output. One conservative, Bernstein, has lately shifted to the centrist position that the opening Adagio alone is performable as legitimate Mahler. Most of the past and future cyclists take this stand, though Levine, a onetime centrist who recorded the Adagio alone, is now moving to the radical camp and intends to record the realization of Cooke, whose resorings he already accepted in the Adagio.

Tennstedt is one of the centrist, and, like most of his colleagues, he employs the Critical Edition of the Adagio, with none of Schalk's, Krenek's, or Zemlinsky's earlier additions to the manuscript or Cooke's later ones. Those wanting this movement alone will find fiercer attacks and weightier sonorities in the recordings of Bernstein (Columbia M 33532), Levine (RCA ARL 2-2905, with the Fifth), or Neumann (Quintessence 2700). By contrast, Tennstedt's reading is songful and leisurely, more a prelude than a climax. Except for some pre-echo before the dissonant fortissimo outburst, the sound is fine.

Some conclusions may be drawn. It is the prerogative of geniuses like Gustav Mahler to have their works looked at from so many vantage points, and competition for a nonexistent "chief executive" office serves to raise the general standards of performance and the range of our appreciation. The individual profiles of these conductors are beginning to emerge from the samplings described above. They are a varied lot indeed, and the one thing we need not fear from this abundance of duplication is artistic redundancy. Hf

Wilhelm Wiedl (in Nos. 84-86, 93-97), Marcus Klein (Nos. 88, 89), Detlef Bratschke (Nos. 91, 92), and Claus Lengert (No. 98), boy sopranos; Paul Esswood, countertenor (Nos. 83-94, 96-98); Kurt Equiluz, tenor (Nos. 85-88, 90-98); Ruud van der Meer (Nos. 85-87, 93, 97), Max van Egmond (Nos. 88-92, 98), and Philippe Hutenlocher (Nos. 94-97), basses; Tölz Boy's Choir, Vienna Concentus Musicus, Nikolaus Harnoncourt, cond. (Nos. 84-87, 93-97); Hannover Boys Choir, Ghent Collegium Vocale, Leonhardt Consort, Gustav Leonhardt, cond. (Nos. 88-92, 98). Telefunken 26.35364/35441/35442, $19.96 each (two discs).

Vol. 22: No. 84, Ich bin vergnügt mit meinem Glücks; No. 85, Ich bin ein guter Ritter; No. 86, Wahrlich, wahrlich, ich sage euch; No. 87, Bisher habt ihr nichts gebeten in meinem Namen; No. 88, Siehe, ich will viel Fischer aussenden; No. 89, Was soll ich aus dir machen, Ephraim?; No. 90, Es reisset euch ein schrecklich Ende.

Vol. 23: No. 91, Gelobet seist du, Jesu Christ; No. 92, Ich hab in Gottes Herz und Sinn; No. 93, Wer nur den lieben Gott lässt walten; No. 94, Was frag ich nach der Welt.

Vol. 24: No. 95,Christus, der ist mein Leben; No. 96, Herr Christ, der einge Gottessohn; No. 97, In allen meinen Taten; No. 98, Was Gott tut, das ist wohlgetan.

Telefunken's series of the complete Bach cantatas, directed jointly by Nikolaus Harnoncourt and Gustav Leonhardt, is one of the most important recording projects under way. The revival of the rich and rewarding music, so little known except for a few oft-repeated popular cantatas and extracted arias, is one feature of the achievement. The other is the revelatory quality of the performances. Here are the world's foremost practitioners in the art of singing and playing baroque music with the original forces, showing that Bach's cantatas do not have to sound muddy, gloomy, druggy, or otherwise religiose: that they have lightness, grace, a dance-inspired bounce, and life-giving serenity. These performances clarify the immense complexities of the big choral movements (with baroque instruments and clear young male voices, every strand in the music can be distinguished separately) and give life and breath to the long solo arias by resolutely avoiding plodding bass lines and heavily sustained legato melodies. I can rarely restrain my enthusiasm when a new set comes along; when there are three, as here, enthusiasm amounts to obsession.

There have been recent criticisms of some aspects of the performances: of Harnoncourt's eccentricities of interpretation and of the less than ideal quality of the choral singing. Little of that is evident here. Harnoncourt now uses the superb Tölz Boy's Choir in place of the Vienna Boys, and Wilhelm Wiedl sings the treble arias with an effortful warmth that is deeply natural singing. Little of that is evident here.

Telefunken now uses the superb Tölz Boy's Choir in place of the Vienna Boys, and Wilhelm Wiedl sings the treble arias with an effortful warmth that is deeply natural singing. Little of that is evident here.
Recalling my early involvement in P.D.Q. Bach research, I approached this assignment with a feeling of mild paranoia. My working relationship with the doubtable Prof. Schickele was, of course, a happy one—at first. But after a time I began to sense some rather alarming changes in myself. My musical consciousness had become cluttered with surrealistic images. To my horror, for example, I imagined Frédéric Chopin, small, pale, and coughing, loitering in the Place Vendôme, grinning, and pinching the rumps of carriage horses, making them cry out in pain. I saw Felix Mendelssohn, superbly accoutered but picking his nose in public. Perhaps most shocking of all was the vision of Richard Wagner, somewhat disturbing in the Place Vendôme, grinning, and picking his nose in public. Perhaps most shocking of all was the vision of Richard Wagner, somewhat disturbing in the Place Vendôme, grinning, and pinching the rumps of carriage horses, making them cry out in pain.

Shaken, I finally reported these disturbing visions to Prof. Schickele. He simply smiled seraphically (or maybe drunkly, now that I look back on it) and congratulated me on my newfound maturity and realism. I knew then the time had come to take up other pursuits.

The professor’s research goes forward, however, and the music of P.D.Q. Bach receives continued indecent exposure in concerts and recordings. What makes the phenomenon endure? Schickele has been carrying on now for more than twenty-five years, if memory serves, yet the latest annual Christmas concerts at New York’s Avery Fisher Hall were packed, as always. And this year’s national tour will include no fewer than fifty-five concerts. Could Anna Russell have played to such audiences? After her great Wagner skit and a few minor tidbits, she had little more to offer. Victor Borge, with his five or six excellent routines, fills a Broadway theater, but not every year. Joshua Rifkin’s short-lived foray into musical humor, the “Baroque Beatles Book,” was well done—perhaps too well done, and a bit chilly. Schickele’s only serious contender might have been Gerard Hoffnung, whose early death makes the point moot.

Schickele’s admitted early inspiration was that fountainhead of American musical humor, Spike Jones, and Schickele’s humor, like Jones’s, is distinctly American. Russell, Borge, and Rifkin had about them a certain sophistication that Schickele, at his best, utterly lacks. His slapstick, pratfall sort of humor is often so terribly self-indulgent, outrageously sophomoric, and inexcusably bad that we find ourselves laughing not so much at the jokes themselves as at his nerve in trying to pull them off. Thus, the hiss and the boo have become accepted responses at the concerts, ultimately eliciting a deliciously crummy comeback from Schickele that might have come from a men’s-room wall: “Truth is a statue, and all of you are just a bunch of pigeons.”

Musically, too, the humor is unmistakably American: slipshod cadences, embarrassing country and western melodic fragments, blue notes, unexpected dissonant clusters, outdated scat phrases such as “shoop-doo,” Guy Lombardo endings, and ridiculous-sounding homemade instruments. All of these carefully calculated incongruities are familiar, of course, from the music of Spike Jones. But their use by Schickele in the context of baroque music is even more striking, because the general style of that era is by now so familiar, and it represents the epitome of periwigded musical dignity and sophistication.

The latest recording, the eighth in the P.D.Q. Bach research series, is the weakest, for some of the reasons already discussed: The music is almost too good and too careful. There is a slick quality to the “discoveries” and performances not in keeping with the composer’s familiar sleazy style. The Bluegrass Cantata sounds a bit self-conscious, lacking the earthy clumsiness and mellow tackiness of earlier works. It is all too cool now. Gone are the gutsy slapstick of the “Hysteric Return” recording, the glorious wackiness of the Beethoven Fifth sportscast, the inspired lunacy of the fugue from the Toot Suite. The quotations from the Brandenburg Concertos seem dutiful, lacking the unstudied ease of previous plagiarisms. This is not to say that the cantata lacks all charm; the aria “Du bist im Land” is wonderful, and the work does have a rousing finish. The performances—especially those of Eric Weisberg (mandolin), Bill Keith (banjo), and tenor John Ferrante—are marvelously skilled.

The Ne-No Nonette features a single percussionist but a wide and peculiar array of percussion instruments. Though it occasionally offers some funny sounds, the in-

Laurence Widdoes, a composer, was instrumental in early P.D.Q. Bach research; readers of the Definitive Biography will recall his devoted restorations of the beer-stained manuscripts. An artist to boot, he also takes responsibility for the rendering above.
Peter Schickele
by Lawrence Widdoes

Instruments do not really fit the fabric of the music as do, for example, the unusual instruments in The Seasonings; here they are simply lined up and played one after the other. Hear Me Through, one of the singing commercials that reputedly made P.D.Q. Bach so wealthy, is a rather pale reworking of an earlier commercial from "P.D.Q. Bach on the Air" (Vanguard VSD 79268).

For all its faults, the new album will, of course, be indispensable to fellow camp followers, who have discovered that being slightly deranged is a wonderful and rewarding way of life. But it is not the best introduction to the music of this zany composer. The deprived few still to be initiated will do well to start with "On the Air" or "The Intimate P.D.Q. Bach" (Vanguard VSD 79335); from there on, you are perilously on your own.

Far more welcome at this point is a disc that affords us an all too rare sampling of the "straight" (I refuse to say "serious") music of Peter Schickele. He is currently represented in SCHWANN by only two listings: Fantastic Garden (Three Views from the Open Window), with Jorge Mester and the Louisville Orchestra (Louisville S 691), and The Lowest Trees Have Tops for soprano, flute, harp, and viola, performed by the Juble Trio and John Graham (Grenadilla 1015). Another work, Pentangle for horn and orchestra, will also appear shortly on the Louisville Orchestra label. Schickele has, of course, written an enormous amount of non-P.D.Q. Bach music, and I have heard much of it. It is frequently strong and highly individual and always expert. Why has Vanguard been so slow to give it to us?

Schickele is a large, gentle, sensitive, and often funny man, and these are precisely the qualities he exhibits in his compositions. Stylistically, he is quite versatile, as is apparent from the contrasting sides of this recording. A single style would be entirely too constricting for him.

The Knight of the Burning Pestle is a seventeenth-century play by Beaumont and Fletcher that was turned into a musical by Schickele and American director Brooks Jones in 1974. The nine songs presented here are broadly funny and occasionally lyric and touching. They are quite tonal, varied in character, with typically accomplished arrangements—direct, unfussy, and very attractive. "My Mother Told Me Not to Worry," the most beautiful of the lot, is very close to current pop and performed accordingly by Margot Rose. Elsewhere, there are faint reminders of Kurt Weill.

Side 2 is made up of sterner stuff. This is the facet of Schickele we would all like to hear more of. (Yes, we still love you, P.D.Q., but please take the backseat for a while.) The elegies for clarinet and piano represent him at his melodic best, with a wonderful liquid flow to the clarinet lines that proves irresistible. The first two are dedicated to a friend and a relative now deceased, and they must have been nice people; there is an affecting, slightly bluesy quality to both numbers, and the major/minor/dominant ninth tonal scheme is sufficiently varied. On the other hand, the repeated triads in the third number, characterized as a sort of "ritual ... after the eulogies have been given," are a bit wearing.

The Summer Trio is the strongest work here. Less closely tied to major/minor tonality, it has a bristly insistence. The slow music is lyrical but not gooey, and the jazz walking bass in the second movement is very well handled, without a trace of the archness such a device can fall prey to.

Though this music has no place in the avant-garde (whatever that means today), there is much enjoyment to be had here. It seems a pity that a composer of Schickele's obviously superior gifts should spend comparatively little time composing and promoting his own music.

P.D.Q. BACH: Black Forest Bluegrass.
John Ferrante, tenor; Peter Schickele, bass; New York Pick-Up Ensemble, Robert Bernhardt, cond.* Wind octet and percussion, Schickele, cond.** Ferrante, bargain counter tenor; Schickele, snake; instrumental ensemble.** [Seymour Solomon, Maynard Solomon, Peter Schickele, and William Crawford, prod.] VANGUARD VSD 79427, $7.98.

Blaues Gras (Bluegrass Cantata)*; No-No Nonette; Hear Me Through**.

SCHICKELE: The Knight of the Burning Pestle: Songs (9).* Elegies.' Summer Trio.**
Lucy Shelton, soprano; Margot Rose, alto; Frank Hoffmeister, tenor; Robert Kuehn, baritone; instrumental ensemble, Peter Schickele, cond.* Richard Stoltzman, clarinet; Schickele, piano.** Walden Trio.** [Seymour Solomon, Peter Schickele, and William Crawford, prod.] VANGUARD VSD 71269, $7.98.
Critical Choice

The most noteworthy releases reviewed recently


BERG: Lulu. Stratas, Boulez. DG 2711 024 (4), March.

BRUCKNER: Te Deum. Forster. PHILIPS MHS 4005, Nov.


HINDEMITH: Mathis der Maler. Fischer-Dieskau, Kubelik. QUINTESSENCE PMC 7103, Nov.

MOZART: Quintets for Strings (6). Budapest Quatuett.

MOZART: Quintets for Strings (6). Budapest Quatuett.


MOZART: Duo Concertantes for Guitar and Basso Continuo. Jouy, Landowski.


SCHUMANN: Symphony No. 4 in E, Op. 73. Streicher, Oistrakh, Blomstedt. ARABESQUE SAGA 3869 (3), Feb.


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

harpischordists. The demands posed by the French Overture are rather different, of course, but Verlet’s rhythmic impulse is no less gratifying. Welcome, too, is her marvelous way of shaping phrases, of accentuating climactic points and giving “breath” between them. That she is capable of great subtlety is richly revealed in the third of the four duets from Bach’s Clavierbüchlein. Part III. (Although this collection is expressly intended for organ, harpsichordists have long laid claim to these curious duets; I suspect Bach would have been happy to have heard them on any contemporary keyboard instrument.)

In the Goldberg Variations these qualities go a long way toward avoiding the numbing monotony that can so easily ruin a performance, especially when, as here, all repeats are played. Verlet’s interpretation is one of the finest I’ve heard, in fact, and—no mean compliment—I found it arresting from beginning to end. That said, it must be added that the very virtues of her general approach are sometimes exaggerated to grotesque extremes. At the outset, her insistence on forward motion prompts much too fast a tempo in the Aria, and in Variation 13 the character of the writing (evocative of the slow movement of an Italian violin concerto or even of a baroque operatic solo) seems to imply a much slower basic pulse than it receives here; in Variation 15, moreover, Verlet’s rather hurried pace does not allow one to savor the poignant chromaticism. In the opening Aria and Variation 26, there is a tendency to rush toward the end of measures and a consequent distortion of rhythms. The application of inegaliété seems general but, I must confess serious reservations about the lurching, pointed inequality in Variations 23 and 29. I am also bothered by occasional attacks of “henpeck” clipping of note values, as in Variation 4 and 22—and in the first movement of the Italian Concerto. My other complaint is with the performance (or splicing) of groups of variations as continuous movements, a perverse decision evidently intended to highlight the performer’s conception of the work’s structure; the effect is sometimes extremely jarring.

Apart from the last point, the flaws are small details in performances otherwise immensely enjoyable and admirably recorded. Both releases feature the same pleasant-sounding harpsichord: a 1976 Dowd—from the Paris workshop—d’après Nicolas and François Blanchet, 1730. S.C.

BEETHOVEN: Sonatas for Violin and Piano (4).

Arthur Grumiaux, violin; Claudio Arrau, piano. PHILIPS 9500 055*/220*, $9.98 each. Tape: 7300 473*784*, $9.98 each cassette.


A certain intangible quality in these recordings—the first of a projected set of the ten sonatas—augurs ill for this partnership of distinguished artists; apparently, the best one can hope for is a workable entente cordiale and, with luck, some flashes of inspired individual playing. Though there are no glaring ensemble lapses—the small ones are not necessarily fatal, as the successful collaborations of Szegiti/Schnabel, Morini/Firkusny, and Szeryng/Rubinstein demonstrate—neither is there any real meeting of minds.

After a long hiatus, Arrau seems to have lost the knack of playing true chamber music. Perhaps he never had that knack to the degree that Schnabel, Curzon, or Bauer did, but he certainly sounded more bodily involved in his Beethoven cycle with Szegiti (Vanguard Everman SRV 300/3E). He seems reluctant to take a commanding lead, preferring instead to be gruffly meditative. But he doesn’t really follow, either, and his stort, rich, bass-oriented touch resolutely refuses to blend or support, just as his unsponsive phrases and rubatos never quite mesh purposefully. Grumiaux, with his seamless, suavely produced tone, tries to soar, but his flights of fancy are held down by Arrau’s sobriety like a butterfly pinned to a mounting board. (The Op. 24 Adagio is a perfect case in point.) Not one of these performances comes close to the songful ones Grumiaux once recorded with Clara Haskil, nor do they have the range of these performances comes close to the songful ones Grumiaux once recorded with Clara Haskil, nor do they have the range of performances that Arana later on. These performances are no glaring ensemble lapses—the small ones are not necessarily fatal, as the successful collaborations of Szegiti/Schnabel, Morini/Firkusny, and Szeryng/Rubinstein demonstrate—neither is there any real meeting of minds.

After a long hiatus, Arrau seems to have lost the knack of playing true chamber music. Perhaps he never had that knack to the degree that Schnabel, Curzon, or Bauer did, but he certainly sounded more bodily involved in his Beethoven cycle with Szegiti (Vanguard Everman SRV 300/3E). He seems reluctant to take a commanding lead, preferring instead to be gruffly meditative. But he doesn’t really follow, either, and his stort, rich, bass-oriented touch resolutely refuses to blend or support, just as his unsponsive phrases and rubatos never quite mesh purposefully. Grumiaux, with his seamless, suavely produced tone, tries to soar, but his flights of fancy are held down by Arrau’s sobriety like a butterfly pinned to a mounting board. (The Op. 24 Adagio is a perfect case in point.) Not one of these performances comes close to the songful ones Grumiaux once recorded with Clara Haskil, nor do they have the range of these performances that Arana later on. These performances are not necessarily fatal, as the successful collaborations of Szegiti/Schnabel, Morini/Firkusny, and Szeryng/Rubinstein demonstrate—neither is there any real meeting of minds.

After a long hiatus, Arrau seems to have lost the knack of playing true chamber music. Perhaps he never had that knack to the degree that Schnabel, Curzon, or Bauer did, but he certainly sounded more bodily involved in his Beethoven cycle with Szegiti (Vanguard Everman SRV 300/3E). He seems reluctant to take a commanding lead, preferring instead to be gruffly meditative. But he doesn’t really follow, either, and his stort, rich, bass-oriented touch resolutely refuses to blend or support, just as his unsponsive phrases and rubatos never quite mesh purposefully. Grumiaux, with his seamless, suavely produced tone, tries to soar, but his flights of fancy are held down by Arrau’s sobriety like a butterfly pinned to a mounting board. (The Op. 24 Adagio is a perfect case in point.) Not one of these performances comes close to the songful ones Grumiaux once recorded with Clara Haskil, nor do they have the range of these performances that Arana later on. These performances are not necessarily fatal, as the successful collaborations of Szegiti/Schnabel, Morini/Firkusny, and Szeryng/Rubinstein demonstrate—neither is there any real meeting of minds.

After a long hiatus, Arrau seems to have lost the knack of playing true chamber music. Perhaps he never had that knack to the degree that Schnabel, Curzon, or Bauer did, but he certainly sounded more bodily involved in his Beethoven cycle with Szegiti (Vanguard Everman SRV 300/3E). He seems reluctant to take a commanding lead, preferring instead to be gruffly meditative. But he doesn’t really follow, either, and his stort, rich, bass-oriented touch resolutely refuses to blend or support, just as his unsponsive phrases and rubatos never quite mesh purposefully. Grumiaux, with his seamless, suavely produced tone, tries to soar, but his flights of fancy are held down by Arrau’s sobriety like a butterfly pinned to a mounting board. (The Op. 24 Adagio is a perfect case in point.) Not one of these performances comes close to the songful ones Grumiaux once recorded with Clara Haskil, nor do they have the range of these performances that Arana later on. These performances are not necessarily fatal, as the successful collaborations of Szegiti/Schnabel, Morini/Firkusny, and Szeryng/Rubinstein demonstrate—neither is there any real meeting of minds.
An acknowledged world leader in loudspeaker design and engineering, KEF has developed a monitor-standard speaker system that is both small—only ¼-cubic foot in size—and truly "high" fidelity. While these objectives are not new, the Reference Series Model 101 speaker system represents the first time that both are available in one product.

The Model 101 is, therefore, ideal for use in locations where an accurate small speaker is required in keeping with the rest of a high quality audio system.

System Design

Despite all the ingenious ideas that have been proposed by various speaker manufacturers over the years, the three basic parameters of Enclosure Volume, Bass Response and Efficiency are still related by unchanged physical laws. What is different is the thorough manner in which KEF engineers have, with the use of advanced technology, optimized the relationships between these parameters.

Starting with the premise that prospective Model 101 users will have substantial amplification available, KEF engineers achieved a response from this small enclosure of 90Hz–30kHz ±2dB (-10dB at 47Hz).

KEF's leadership in computer-aided digital analysis techniques enabled them to optimize the design of the drivers, crossover network and enclosure to achieve a Target Acoustic Response without repetitious trial and error experimentation. Much of this technology, which did not previously exist, has been applied to the design and production of a small high fidelity speaker system for the first time in the Model 101.

Once the desired prototype was completed, KEF applied the same unique computer-aided techniques developed for the production of the critically acclaimed Model 105, so that the sound quality originally achieved in the laboratory prototype will be available to every user.

In addition, the high standards of the computer-aided production and assembly procedures enable precision-matched pairs of stereo loudspeakers to now be offered. For example: every Model 101 driver is tested and matched to tolerances of better than 0.5dB, and crossover networks to tolerances of 0.1dB; each pair of drive units is matched not only to each other, but to the other components in the system as well.

Loudspeaker Protection

The major problem with small, relatively less efficient loudspeakers is thermal overloading of the voice coils. KEF engineers have developed a unique self-powered electronic overload protection circuit, S-STOP (Steady State and Transient Overload Protector).

Musical peaks are generally of short duration, so tweeters can handle far in excess of their normal program rating. A similar situation exists with low frequencies and their effect on the bass unit. Consequently any form of fuse protection can reasonably limit the instantaneous peak handling ability of the system, yet fail to protect the system against a very high average power level. KEF's solution is to incorporate a protection circuit which takes into account the instantaneous power applied to each drive unit and also computes the length of time the signal is applied. The law under which it operates resembles very closely the temperature rise within the voice coil. A potentially damaging signal is immediately attenuated by about 30dB, and the full signal is automatically reconnected when it is safe to do so.

As a result, the Model 101, although only ¼-cubic foot in size, is fully protected against fault conditions when used with amplifiers of up to 100 watts per channel.

The Model 101 is obviously not your average "miniature" speaker system where the quality of sound or power handling capacity is compromised by the small size of the enclosure. Nor is it inexpensive. If you require a speaker system that is both small and truly high fidelity, visit your authorized KEF dealer for a thorough demonstration. For his name, write: KEF Electronics, Ltd., c/o Intratec, P.O. Box 17414, Dulles International Airport, Washington, DC 20041.
reduces the orchestral heft—which is to say, the string complement—to dimensions comparable to those of Beethoven's time and uses single woodwinds. Beethoven symphonies have been recorded by chamber orchestras before: Marriner gave us a few, and the Walter/Columbia Symphony and Scherchen/Vienna State Opera Orchestra performances suggest a cutback of personnel. But all of these accounts fudged the issue to some degree, Marriner's string tone beefed up with dubious reverb and Walter's and Scherchen's woodwind lines no more distinguishable than usual. In contrast to these mistaken attempts to simulate large-ensemble sonority, the present production wears its intimacy like a badge of honor.

One of the unexpected upshots is that, although the strings are fewer, more of the detail in their parts emerges from the tonal fabric: Divisi writing is far more telling than usual; dynamic inflections, such as the hairpin crescendos and diminuendos, make greater dramatic effect; ostinato and Alberti figurations come clearly to the fore; and when the double bass enters to reinforce the cello line at climactic moments, the listener becomes more acutely aware of the entrance because of the sparseness of the forces.

There are, however, some losses as well. For all the keenness of the smaller dynamic inflections, a few of the larger climaxes inevitably lack lung power; predictably, the thunderstorm is disappointingly scrawny. Thomas has obvious affection for this genial music, and most of the playing is precise and admirably paced. Tempos are brisk, and rhythms are lean and kinetic. Once or twice, particularly in the outer movements, the direction verges on precious affectation, but in the main this is a loving, intelligent, and well-recorded Pastorale. H.G.

Herman Krebbers, violin; Concertgebouw Orchestra, Bernard Haitink, cond. Philips Festivo 6570 172, $6.98. Tape: 7310 172, $6.98 (casette).

If your local orchestra presented its concerto master in a warhorse violin concerto, would you trouble to attend, let alone buy it on a record? The Concertgebouw isn't just a local orchestra, of course, and Herman Krebbers can hold center stage very well. He plays Brahms with utterly luminous tone, an aristocratic confidence in the face of technical hurdles, and a terraced shaping of phrases and dynamics that freshly confronts expressive meanings. Even with modern tape splicing, many a superstar violinist has sounded less precisely on pitch (e.g., the exposed but utterly secure landing on the stratospheric A at measure 348 of the first movement). In the Adagio, Krebbers dovetails with the woodwind choir as if he were playing chamber music with friends.

Haitink is of a mind with Krebbers all the way, and the warmth, richness, and freedom from distortion of Philips' mastering (this is not a reissue, but a first U.S. appearance of a fairly recent recording) are unexcelled.

Don't get me wrong. I'm not throwing out my Heifetz/Reiner (RCA LSC 1903) or Neveu/Dobrowen (late Forties EMI, never issued here) recordings, both of which feature a vehemence and propulsion far removed from the serene breadth and poise of Krebbers and Haitink. I also retain my attachment to the warmly idiosyncratic first Ferras recording with Schuricht (early London mono). But nothing in the recent lists (including Haitink's other recording with Szeryng, Philips 6500 530) has so refreshed my joy in this work. A.C.

BRUCH: Works for Violin and Orchestra.

This pair of discs—containing first recordings of almost all of this material—completes the most extensive Bruch recording project ever, complementing the Accardo/Masur readings of the first two vio-

lin concertos (Philips 9500 422, March 1979) and the Scottish Fantasia and Op. 84 Konzertstuck (Philips 9500 423, August 1979). The newest installments may well be the most important of all, since the Third Concerto and the serenade prove to be vintage Bruch.

Though his Second Concerto seems a stale rewrite, the Third is every bit as good as the First. Like No. 1, it was written for Joseph Joachim, and its pugnacious opening chords make clear that it is to be a large-scaled, tough-minded composition—as close to Brahms as Bruch ever came. To be sure, lyricism abounds, especially in the Adagio, but this work of 1890 shows that the composer had learned a thing or two in the twenty-two years that separate it from its hackneyed but lovable predecessor.

The character of the serenade, a very different work, also reflects the personality of its dedicatee. More sweetly introspective, it was composed in 1901 for Pablo Sarasate; Toscanini is reputed to have said that "Sarasate played like a lady." The shorter pieces are also quite lovely but are essentially sketches for the bigger essays.

A constant in the performances is excellent collaboration. Accardo's lean, pure style provides an excellent foil for this mostly somber music, and the dark, granitic orchestral backdrop (more forwardly miked than usual in this Philips/VEB Deutsche Schallplatten coproduction) gives strength and sentiment to what could easily sound merely turgid. H.G.

CAGE: The Seasons, WUORINEN: Two-Part Symphony.

American Composers Orchestra, Dennis Russell Davies, cond. [Carter Harman, prod.] Composers Recordings SD 410, $7.95 [recorded in concert, December 11, 1978].

These works represent the tame sides of both composers. To John Cage, tameness came early and naturally—one might almost say prehistorically, since The Seasons predates his experiments with chance, silence, notation, and noise. Charles Wuorinen, on the other hand, has only recently discovered a docile side, and his move toward domestication has proved to be both a joy and a problem.

This novel direction makes Wuorinen's Two-Part Symphony the more interesting piece here, albeit not the more memorable one. Written in 1977-78, it might have been called Symphony in C or Short Symphony, but those titles had already been used, so the composer settled on Two-Part. The work is indeed in two parts, the second half prefaced by a slow section that could stand as an intervening
NOW THAT YOU'VE GOT THE COMPONENTS YOU WANT...
GET THE ONE YOU NEED.

A SCOTCH CASSETTE IS THE ONE COMPONENT THAT LETS YOU GET IT ALL OUT OF YOUR SYSTEM.

There isn't another cassette made that can give you better sound than Scotch. Rich, true, pure sound. The best your stereo can deliver.

Take Scotch Master® Series for example. Three premium cassettes with three different oxide formulations designed to bring out the best in the type of music you record.

If you record music at high sound levels, like rock, choose Master I® for normal bias. It gives you the volume level you want without the distortion some low noise tapes can induce.

Master II® for chrome bias is ideal for classical or mood music. Sensitive and quiet, it can record the softest passages without interfering tape hiss.

Master III® (FeCr) will give you outstanding clarity for any recording, plus a high-end brilliance that delivers truly remarkable sound on your car stereo. Every tape in the Scotch line is made with the same kind of care and precision that went into your other components, to give you all the performance your system can deliver.

SCOTCH METAFINE: THE ULTIMATE COMPONENT.

When Metafine metal particle tape was introduced, it was so advanced most decks couldn't record on it. Now, metal-compatible decks are available and Metafine is stretching cassette recording almost to the limits of the audible range.

NO TAPE COMES CLOSER TO THE TRUTH THAN SCOTCH.

More than 30 years of research, technology and innovation go into each of our cassettes. What comes out is the truth. No more. No less.

SCOTCH RECORDING TAPE. THE TRUTH COMES OUT.
middle movement. Had Wuorinen chosen to re-employ one of the other titles, however, it might have been even more significant, since his tendencies toward conventionality manifest themselves here in references, homages, and a distinct shortage of imagination.

Nevertheless, when he notes that he had "a very good time" writing the piece, one can easily believe him. Gone is the sense one had so often with the early Wuorinen that he was trying hard to be erudite and esoteric; this music has a welcome flow and a feeling of inevitability that were not companions of his previous creations. Yet the symphony brings to mind several names, including those of Stravinsky and Bartók, but not that of Wuorinen. Understandable as it is that such a switch in style could cause an identity crisis, one must conclude that the newly tamed composer still hasn't found a way to purr differently from anyone else.

Cage, however, is a natural-born musical pussycat, and though he would undoubtedly fidget the idea, his early contributions have turned out to be every bit as important and influential as his more outrageous ones. The Seasons, written thirty-three years ago for the Ballet Society and dedicated to its director Lincoln Kirstein, has little to do with Vivaldi's famous work of the same name, but it is graphic, colorful, and, in the best old-fashioned sense of the word, charming.

Cage wrote, "The Seasons is an attempt to express the traditional Indian view of the seasons as quiescence (winter), creation (spring), preservation (summer), and destruction (fall)." One might relate this to Wuorinen's use of the Greek cosmological word ylem ("that on which form has not yet been imposed") in connection with his symphony, but Cage's four seasons make up a mild, temperate landscape.

He relaxes in his summertime so convincingly that one wants to get out the hammock and the beer and loll away the warm afternoon. Fall and its "destruction" come with the heavy march of determined soldiers, yet even this cold onslaught isn't particularly threatening. There are other theoretical and numerological bases to The Seasons, but frankly they don't matter. A third of a century after its premiere, the work has a delightful, almost pacifying effect.

Both works are performed by the American Composers Orchestra, conducted by Dennis Russell Davies, for whom the Wuorinen symphony was written. This ensemble could undoubtedly play Beethoven quite wonderfully, but the point is that it plays new music extraordinarily well, and that's more than enough reason for its continuing to thrive. K.M.


This fine-sounding recording is confusingly billed as "Ultra Fi-direct disc-digital-high technology tape," and a column on the back of the jacket discusses the assets and limitations of all these methods, implying that all are indeed used here. Not so: This is, in fact, an analog product, whose only departures from the norm are high-speed (30 ips) tape mastering and (apparently) careful processing and pressing. Which goes a long way toward confirming my nagging suspicion that the real reason audiophile products sound better is that more care is lavished on their production, not because of any intrinsic superiority in the method of capturing live sound.

If anyone can deliver note-perfect performances without benefit of retakes and splices, Di Bonaventura can. Years ago, I heard him do just that in a recital performance of Chopin's B minor Sonata. His recorded performance, presumably edited, is equally poised but considerably riper and more interesting. Without being in the least eccentric, the rendition abounds in noteworthy details. Di Bonaventura observes the exposition repeat in the first movement, as do Argerich and Weissenberg but, to my knowledge, no other artists. He has an acute ear for inner voice detail, without its being obtrusive. He is a master at shifting gears and characterizing phrases without in any way departing from modern practice or violating the longer line; the sense of continuity is far stronger, for example, than in Ashkenazy's recent London version (CS 7030, February 1979), cultivated and well played though that was. Throughout, the purring passagework is a joy to the ear—and a perpetual source of despair, undoubtedly, to any rival practitioner.

The annotation states that Di Bonaventura made the first American recording of Prokofiev's Seventh Sonata, but I can find no evidence to disprove my belief that Horowitz claims that distinction. In any event, the present account, slightly understated but very spry and transparent, is more akin to the linear Richter interpretation (Turnabout TV34359) than to the more massive and heroic readings of Horowitz (RCA ARM 1-2952) and Gould. Again, the pianistic finish is most impressive; only a bona fide virtuoso could clarify the onslaught of the finale to such degree without sacrificing headlong momentum. The piano tone is a bit spikier on the second side, which contains the Prokofiev and the last movement of the Chopin, but the sound of this excellent release remains of demonstration caliber. H.G.


Cleveland Orchestra, Lorin Maazel, cond. [James Mallinson, prod.] London CS 7129, 58.98.

Once again, the Clevelanders seem the ideal Debussy orchestra, playing with bejeweled tonal delicacy, millisecond exactitude of ensemble, and superhuman control. Maazel combines the virtues of previous Cleveland Orchestra recordings of La Mer, the surging impetuousity of Rodzinski's old 78 (variously transferred to LP) and the meticulous precision and transparency of Szell's Odyssey Y 31928. Maazel's use of rhythmic distensions for emphasis is less problematic here than in his last Debussy recording (London CS 7128, November 1979).

London captures the vertical strands of La Mer as well as it did for Solti and the Chicago Symphony (CS 7033, August 1977). Notwithstanding my earlier praise for that version, upon rehearing it, I find the Mack truck power of the Chicagoans overbearing compared to the Alpha Romeo sportiness of the Clevelanders. Maazel's taut, brisk reading joins a select group that includes Ansermet (London, deleted), Boulez (Columbia MS 7361), and Haitink (Philips 9500 359).

Unlike La Mer, which can stand di-
And here's why.
The Jensen R430 AM/FM Stereo/Cassette Car Stereo Receiver is our top-of-the-line. Our best. And for a lot of very good reasons.

Its functions.
Advanced functions that really make a difference in your music.
Functions like Dolby Noise Reduction for clearer reproduction of Dolby-encoded cassettes and FM broadcasts.

And a function like Loudness Compensation of +6dB at 100 Hz to improve bass at low volumes.

Interstation FM Muting lets you tune out annoying between-station noise when tuning. While an FM Local/Distant switch allows you to optimize the receiver's sensitivity for strong or weak signals.

The R430 even offers separate bass and treble controls.

Bi-Amplification.
It's a function worth knowing about. Because of the real difference it can make in your music.

The Bi-Amplification function of the Jensen R430 uses a low level passive crossover to split the audio signal into low- and high-frequency bands. The low frequency signals are then sent to one set of amps. And the high signals are sent to another set of amps.

From these amps, the high signals are fed to one set of speakers. And the low signals are routed to another set of speakers. A much more effective use of power.

But what does bi-amplification mean? It means the R430 will provide lower distortion...and higher listening levels...with a given power input. No small feat.

It gives you a second, completely different way of listening to your music. With the option right at your fingertip.

A separate power amp.
Actually four OTL amps; two for each channel. This trunk-mounted unit accompanies the R430 to deliver a Continuous Average Power Output of 30 watts per channel. Plenty of low-distortion power, excellent heat dissipation, an ideally suited component to handle the R430's bi-amp mode.

More features.
Electronic feather-touch switches command a whole array of functions.

LED indicators glow when they're engaged.

And a unique Automatic Tape Alarm helps prevent damage that causes wow and flutter. If a cassette remains engaged when the ignition is turned off, lights flash and speakers beep, reminding you to remove it.

Respectable specs.
Great sounding music is the result of great specs. And with specs like the R430's you can imagine why we're so proud of its sound.

Total Harmonic Distortion is 0.4% at 52 watts; 1kHz. The Frequency Response measures out at 30 to 18,000 Hz (-3dB). And the Weighted FM Signal/Noise Ratio (less Dolby) is 68dB.

Is it any wonder why we say the R430 Receiver is our best?
versity and repetition, Scriabin’s Poem of Ecstasy doesn’t wear well. I continue to find it loud, overorchestrated, and redundant, though I warm to the artistry of Stokowski (London Phase-4 SPC 21117) and admire the sanity and lucidity of Abbado (DG 2530 137). Maazel, less analytic about solo highlights, has one decisive advantage: That tiresome, fatuous trumpet tune is played with minimal vibrato and portamento. A.C.

DEBUSSY: Pelléas et Mélisande.
CAST:
Mélisande  Frederica von Stade (s)
Yniold  Christiane Barbaux (s)
Geneviève  Nadine Denize (ms)
Pelléas  Richard Stilwell (b)
Golaud  José van Dam (b)
Arkel  Ruggero Raimondi (bs)
A Shepherd/ The Doctor  Pascal Thomas (bs)

COMPARISON:
Söderström, Shirley/ Boulez  Col. M 30119

To quickly characterize this new Pelléas: It is on the whole mellifluousy sung by a cast whose voices and musical approaches share a general softness of attack and shadiness of timbre, thus according well with the homogeneity of orchestral sound obtained by the conductor. It is a thoroughly musical performance, by which I mean that it leaves the impression of a concert rendition, rather than a stage performance. Since its conductor is a strong-minded one in command of his own expert orchestra and the cast carefully selected, the reading has some very beautiful and powerful things about it and takes an identifiable stance on the work—so it is a contribution.

The nature of the performance inspires thoughts that run in ironic little circles. Maurice Maeterlinck, at the time of Pelléas and the other Symbolist plays that established his early reputation, wanted an actorless theater, one in which human normality could not intrude upon the symbolic progress of mystic communication. Or, to put it in terms of his personal predicament, he created out of a need to express a very intense, very private psychic world whose reality depends on the consistency and specificity of its unlikeliness to more ordinary perception, yet whose embodiment can be accomplished only through creation of a stage-world in which the elements (especially people) are not always going to behave according to the laws of that private universe. Can’t live with ‘em, can’t live without ‘em—a problem felt by most playwrights, but the young Maeterlinck was an extreme case, and of course except for a very limited life in small theaters of the fin-de-siècle Parisian avant-garde, these plays have remained largely objects of study rather than of performance.

Along happens young Debussy in search of a text that won’t remind him of Wagner’s. In a sense, his search parallels that of Maeterlinck: Let’s have an opera without all that singing, to go along with this play without acting. This eagerness to eschew all the vocal forms of opera and all the developmental forms of Wagnerian music-drama, together with the peculiar appropriateness of the composer’s harmonic language and timbral spectrum for the world of the play, is widely and properly understood as a vital portion of the composer’s contribution to the opera.

But it is the practical, active effect of these attributes that accounts for the comparatively workability of the opera (and I think “comparatively workable” is about the right designation) as opposed to the play. The musical language is more than suggestively shifty, it’s sensually compelling, like a long sense-memory exercise on the environment of the drama—its outer world, much more than the inner. Oddly, though the musical description is sensuous, and as surely of the recognizable, natural world as a Rossini or Verdi storm scene, it has the effect of persuading audiences that it is about Maeterlinck’s mystical inner world, and that this world may be worth entering. In fact, it appears to be more about the realms of light and beauty to which the characters’ souls dimly aspire than about the fleshly fidelity to which dualistic mysticism has us condemned, and which is such a powerful deterrent to audience sympathy.

And all this nonsinging, which is in operatic terms so mysteriously subtle and reticent, and seems to leave so much unexpressed, is upon examination just what Debussy intended it to be—a step toward a more realistic, dramatically justified mode of musical expression, by means of which the vocal line transcends our more normal forms of discourse by relatively minor degrees, and only in response to urgencies for which words will not suffice. (Debussy defined the necessity of singing in opera in virtually the same words as did Walter Felstenstein.) Naturally, this has the effect of magnifying, not reducing, the performer’s role, of giving him more of the ammunition Maeterlinck would like to have taken from him.

So here is Debussy, giving to Maeterlinck’s play generous measure of all the qualities the author would like to have kept out and, since these are precisely the ingredients needed to give the play performance life, lending the author his one continuing claim to theatrical attention.

And here further is Von Karajan, who in principle would appear to agree with Maeterlinck. That is (and this is the reason actors are so inconvenient), the characters are seen as beings whose consciousness does not contact the true reality, carrying on an unwitting struggle against forces that remain undefined. To act, to choose, is to assume a responsibility and freedom that destroy the reality of such a world. Marionettes are the perfect actors, and they are just what Maeterlinck wanted.

Herr v.K. is the perfect interpreter, not of Debussy, but of Maeterlinck. But of course whereas Maeterlinck’s characters wandered through the castles and forests of his inner world, slaves to his psychic needs like Pirandello’s six characters and controllable while unperformed, Karajan’s singers are selected musical instruments that prowl amongst the shadowy glades and thickets of the Berlin Philharmonic, quite incapable of actions that do not accord with the master plan of the Higher. This is surely not what Maeterlinck had in mind (it was he who was to supervise the characters’ fates), and as to whether Destiny should be named Maurice or Herbert, I wish we could drop in on that one, fortified with the amused program note I imagine Debussy would provide.

Maeterlinck’s dream theater is evoked by any recording, for in this medium we are at last rid of the damned performers. True, they leave their scent. We track them through the grooves with styli
For less than $400
Audiovox can put the sound of home stereo in your car.

With four power-coordinated components that will "charge" your car with 30 watts per channel.

The COSC-5A. The incredibly slim (just 1 1/4" deep) coaxial speaker system that fits practically anywhere, in imported and domestic cars! Shallow 1 1/4" design - special shallow depth provides easy installation in all door panels unable to accept bulkier coaxial speakers. 5" Woofer - Air-suspension design to allow free cone response. Produces deep Bass at extremely high input power levels. Special 1" heat-proof voice coil allows sustained operation at high power without voice coil distortion. 1" Tweeter - with TDK Summarium cobalt magnet, usually found only in costly home speaker systems. Provides unmatched high-frequency response combined with a wide-dispersion capability.

The AMP-600B. To make the sound fit the internal size and shape of your car with 30 watts per channel to boot. An impressive way to turn ordinary stereo into true hi-fi Super Power. It produces unbelievable power... up to a maximum of 60 watts RMS stereo output... with slide bar control of the entire audio reproduction range. You control the response from Bass through Treble, a total of five ranges, customizing the audio to your enjoyment and to the size and shape of your car.

The Tryvox 30. A 3-way stereo speaker system built around 5 1/4" woofer, 2 3/4" mid-range and 1" horn tweeter speakers mounted on 5/8" particle board like quality home hi-fi speakers to give better baffling and solid bass response. The Woofer - giant 20 ounce magnet combined with flex-edge air-suspension and a high temperature 1" voice coil for rich bass at maximum power. The Mid-Range - A powerful ferrite magnet drives this incredibly responsive mid-range featuring a mylar dome and extra heavy cone for crisp audio. The Tweeter - A full dispersion, wide angle short horn tweeter that captures all the highs and delivers them to you as brilliantly as the original recording.


For further information, write to: Robert Harris, Technical Director, Dept. 12L, Audiovox, 150 Marcus Blvd., Hauppauge, New York 11787

Audiovox autosound systems are designed and developed by the audio research laboratories of Shintoist Co., Ltd., Yokohama, Japan. © 1980 Audiovox Corporation

Circle 7 on Page 99
sharpened and drawn, and if we're experienced hunters, a glimpse of the spoor is enough to conjure a magnificent vision of the beast. A whopper he always is, powerful and quick and alert, caught at the stretch of some mortal action in a lush or dizzying locale.

So how sobering it generally is when, thirty-dollar pasteboard in hand, we corner the prey at last and discover an entirely ordinary, vulnerable creature with a slight limp and a puny horn, exhaustedly foraging at the bottom of a gully amid the weeds and tin cans and beer bottles. Is this Alaska yet? No, it's only Mahagonny. And we feel the force of Maeterlinck's wish, for surely our illusions are wonderful, and it's not easy to surrender them for realities of which the best that can be said is that they have a certain presence, a certain unpredictability, a certain potential for interaction—that they are, in short, realities. Besides, we saw ourselves, bone-to-bone and steady in the sling, sending that single shot to the heart as he charged from the brake. It's hard to admit that the real question is whether or not we can hit a motionless target at fifty yards, and that the recoil left our shoulder aching for a fortnight.

How gratifying it can be, with just a spin of the platter, to at once indulge our illusions and to put these animals exactly where Maeterlinck saw them, endlessly and half-apprehended environment (the weeds and tin cans and beer bottles). Is this the music, the Maeterlinckian notion that a stretch of some mortal action in a lush or dizzying locale...

An impeccably musical Melisande

record—a fact I appreciate more thoroughly with the passage of time and repeated comparisons. The others are not, but that is through incompleteness of execution, and not through design.

The Desormière recording, whose age dictates a compression of orchestral sound and a simplicity of highlighting, preserves an age when French opera (emphasis on both words, please) was actually performed. The singers compel attention via their unfailing competence, their suitability for their roles, their easy stylistic agreement. The orchestra is firmly conducted by an experienced fellow who is content to be a master, not a Master.

We might say that Karajan's case against Debussy on behalf of the young Maeterlinck is fairly complete, for no other performance I've heard so mercilessly clarifies Debussy's connections with styles, both antecedent and descendant, he wouldn't have cared to be associated with. Parsifal hits us in the face in the early interludes, Tristan in the late ones. And in many of the accompanimental and descriptive passages, especially those for muted strings, we're given a bath in '30s easy listening of the sort that was cribbed from Debussy and Ravel—you can see that blonde moderne furniture, V-neck cocktail dresses, lipstick on the cigarette butts, the whole picture. All defensible, of course, mostly beautifully played if you accept the cushioned attacks and phrasing (as opposed to the sharpness of Boulez with the Covent Garden orchestra), and carried through with consistence and proportion. The interludes become the high points of the performance (Destiny at length swallowing the kit and caboodle), and the late ones, along with the second fountain scene, have stupendous weight and intensity—I was almost put in mind of Furtwängler's Tristan, the Act II pages embracing the entrance of the hero. While Karajan does not secure (or, I assume, seek) the amazing rhythmic lucidity of Boulez, there are points where his more basic sense of rhythmic line pays off, as in the 6/4 tread ("Lourd et sombre") of the beginning of the vault scene.

The cast is superbly chosen to carry through the concept: lovely, genteel voices and tempos, refined and sensitive musical minds. Contrast is minimized—from the lyric "mezzo-soprano" of Von Stade's voice to the light high bass of Raimondi's is not a wide span, particularly with a baritone Pelléas and a soft-textured bass-baritone Golaud in the middle reaches. Von Stade's performance is beautifully intoned and impeccably musical. Since on the one hand the role is low for a soprano and on the other Von Stade's timbre is by no stretch that of a mezzo but that of a medium-weight lyric soprano, the categorization is no problem at all. I am at times touched and charmed by her reading in the same way one is touched and charmed by a fine Debussy pianist. I am unable to derive from it the slightest definition of Melisande's feelings, actions, or traits, beyond unquestionable good taste and superb manners (qualities it seems most unlikely Melisande would possess) and an occasionally detectable tristesse.

Stillwell, a little more projective of personal qualities, employs his warm voice with the heady fluency of the true haryon Martin. I have come to a fairly clear preference for a tenor in this music—a voice like that of the young Jansen (on Desormière) or the young Maurane (on Fournet, and both these artists recorded the role second times, for Cluytens and Ansermet, to lesser effect), or the darker, more metallic tenor of Shirley, makes the best case for the music and brings welcome touches of textual relief. But Stillwell solves the role with admirable ease, never letting the voice overweight or cloud up in the area of the break, and though like all baritones he is pressed by the tessitura of his final scene, he doesn't let it defeat him.

I find Van Dam a boring Golaud, despite good musicianship and quite lovely vocalism. The sound of the voice is always a pleasure, and with so few singers nowadays in command of the even gradation and well-bound legato that goes with his deeply tanned tone, perhaps we oughtn't look the gift horse in the mouth. But this is a long role, and one of tremendous opportunities. Van Dam's assumption of it at the Met was, I thought, an uninformed walk-through, but it seemed unfair at the time to leap to
ANNOUNCING
RECORDS IN REVIEW
1980 EDITION

Edited by Edith Carter

- It's new! "The 25th comprehensive edition of the "bible for record collectors."
- This 400 page hardcover volume contains all review of classical and semi-classical music appearing in HIGH FIDELITY during the past year.
- Reviews cover all types of music — vocal, orchestral, chamber, and solo — medieval to contemporary.
- All available formats shown — discs, tape, cartridges, and cassettes, in stereo and quadraphonic.
- Written by HIGH FIDELITY's staff of knowledgeable and noted critics.
- Arranged both alphabetically and by musical category for ready reference, including an index of performers.

RECORDS IN REVIEW
15 DAY TRIAL EXAMINATION FORM

☐ Yes! Please send me (copy(ies)) of the brand new 1980 Edition of RECORDS IN REVIEW for 15 days trial examination. If dissatisfied in any way, I may return the book(s) for a full credit or refund within 15 days. I pay only $15.95 per book, plus $1.25 for shipping.


☐ Send the reprints of earlier volumes. State year(s):

☐ I enclose $_________ 0 Charge to ☐ Master Charge 0 Visa

Card expires __________ Signature __________

Mail to: Wyeth Press, 1 Wyeth St., Marion, Ohio 43302

NAME
ADDRESS
CITY
STATE
ZIP

Allow 4 to 6 weeks for delivery. Residents of Ohio, MA & NY add applicable sales tax.

COMMENTS ON EARLIER ANNUALS:

"Comprehensive coverage of each year's recordings gives a surprisingly well-rounded picture of what's available on records, and most reviews describe the work as well as the performance, providing each annual with a permanent use."

Saturday Review

"The record collector who is bewildered by the sheer number of discs which are issued each year will find this book valuable as a means of bringing order out of chaos."

Chicago Tribune

"HIGH FIDELITY has become something of a bible for record collectors and also for those who are simply interested in listening to music on records. One of the magazine's most attractive features is the long and complete section devoted each month to reviews of the new recordings, reviews that are complete, detailed, and authoritative. They are also honest, which is the best possible recommendation."

The Hartford Times

"The standard reference work for the review of long play classical and semi-classical records."

Berkshire Eagle
(Pittsfield, Mass.)

ALSO AVAILABLE

- Volume 24, 1979 Edition $15.95 plus $1.25 for shipping
- Volume 23, 1978 Edition $15.95 plus $1.25 for shipping
- Volume 20, 1975 Edition $14.95 plus $1.25 for shipping

All previous editions of RECORDS IN REVIEW, 1955 through 1976 (volumes 1 through 19), are available in hardcover reprint editions @ $37.50 per volume plus $1.25 for shipping. State year(s) des red.
any conclusion, since the house production goes all the way with M.M. and eliminates acting completely. Here, though, the story is the same—a nicely equalized, almost casual vocalization, invariably round and soft in attack regardless of intent, and a lack of core or bite in the inflection that seems as much an absence of dramatic will and imagination as of vocal method. At the awful emotional climaxes of the late scenes with Yniold and Méliand, he contributes only the most obvious indications. This is good singing, and possibly he is no more to be blamed than the others, but his role is the most severely damaged by such lacks, and comes up monotonous.

Raimondi seems an odd choice for Arkel, but in fact he has clearly made quite an effort to find a solution for the role. He has a reasonable musical affinity for the style, and employs a gently touched piano that does indeed sound at moments like a French "voix caverneux". His opening scene is successful, and later, in the few moments where the singer of the role must open out, he has more to offer tonally than most. But in Acts IV and V, where the role has its sustained passages, his attempt to deal softly and inwardly with the declamation that lies persistently around B and C becomes too croonish and gummy. A piece of work one must respect, but only partly successful.

Nadine Denize, yet another mezzo with attractive tone that has no trace of depth or darkness, deals straightforwardly with Genevieve. Her reading of the letter falls a bit flat because of the lack of character in the sound (I see one review believes the mike placement was disadvantageous—that's not how I hear it, but one way or another you get the idea); she is fine when she sings out by the seashore. The Yniold is a grownup soprano (Christiane Barbaux), the solution I favor, and quite good. The doctor's pleasant voice is rather light, and it sounds as if he has been ordered to not sing too much.

The recording does not capture the detail or the small balances as well as Columbia's for Boulez. But it's not intended to, and it does contain the remarkable dynamic range inherent in the reading. The surfaces of my copy were not very clean.

Pelléas is an opera that has been well served on recordings. None of the seven LP performances is, on balance, a failure. This one offers a slant on the work that is not my preference. Maeterlinck was wrong. I want a conductor who understands and projects the piece in a more than purely musical sense, and performers with marked individual qualities and strong feelings for the personal situations of their characters. It's a shame that the rest of Boulez' cast is not on a level with his leads, and that Desormiere's could not have been recorded twenty years later. But if you were to own all three, you'd have the waterfront pretty well covered. C.L.O.

FERNEYHOUGH: Transit. Rosemary Hardy, soprano; Linda Hurst and Elisabeth Harrison, mezzo-sopranos; Peter Hall, tenor; Brian Etheridge, baritone; Roderick Earle, bass; London Sinfonietta, Elgar Howarth, cond. [James Mallinson, prod.] Decca Headline HEAD 18, $9.98 (distributed by London Records).

The thirty-six-year-old English composer Brian Ferneyhough is fast establishing himself as one of the major composers of the younger generation. His output, already totaling some twenty published works, has attracted growing attention in the world press, particularly in England and Germany (where Ferneyhough resides); Transit won the 1979 Koussevitzky International Record Award as the best new orchestral work to receive its premiere recording.

Continued on page 90
When it comes to fitting any audio or video recorder, there's no apparent difference between Fuji and any other brand of cassettes: we all fit the same.

But there, the resemblance ends. Because tapes are manufactured to very different quality standards with different materials and technologies, Fuji's performance is unique.

Take video. Our VHS and Beta cassettes improve performance on any recorder. Providing sharper pictures. More lifelike color. And freedom from noise and distortion.

In audio, our premium FX-I, FX-II and low-noise FL set new standards for accurate sound reproduction. And extended response. Our revolutionary new Fuji Metal Tape goes even further. With ultra-wide response. Dramatically-improved dynamic range and sound quality comparable to studio open reel recordings.

So, whatever you're recording—on whatever brand of recorder—discover how good your machine really is. With Fuji—the tape that helps it perform so much better.

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
ARABESQUE RECORDINGS
the New Choice in classical music

TRADITION, ah, tradition! Where would Opera be without it? Certainly, the very grand Nineteenth Century tradition of singing style and operatic production is gone, along with those who personified it. Yet, certain performances will always be glowingly recalled as "classic," and many of them were heard in The Barber of Seville.

This ARABESQUE new release is history encapsulated—the 1929 first-ever recording of Rossini's comic masterpiece! We are treated to some of the greatest performances of the age...Mercedes Caspier, Dino Borgioli, Salvatore Baccaloni, and Ricardo Stracciari as Figaro, a role he sang more than 1,000 times.

These renowned singers know no peer, and now, they are captured anew as if by magic, drawing upon the recording techniques used that day in Milan over 50 years ago. Then, there were no 32-channel digitals, no mixing or editing; singers, in fact, were often made to begin mid-aria for the direct-to-disc recording. The transfers we have made from the 16 original 78 rpm's are new and achieve the best possible fidelity.

So listen—and rejoice, Opera lovers—for although these voices no longer exist, you may nonetheless for certain performances will always be glowingly recalled as "classic," and many of them were heard in The Barber of Seville.

There are twelve principal sections, each with its own distinct character and instrumental sound. Vocal sections alternate regularly with purely instrumental ones, the only exceptions being the last two, which are vocal and linked together to form a kind of climactic finale. The voices, used almost exclusively in ensemble (although there is a very brief bass solo near the end), intone texts from Paracelsus, Heraclitus, and the Corpus Hermeticum "(a collection of writings, supposedly by the mythical ancient Egyptian sage Hermes Trismegistus, identified in the sixteenth century as forgeries from the Hellenistic period"). The words, however, are fragmented into their syllabic constituents and are for the most part intended to be incomprehensible.

There are two basic, alternating types of instrumental music: "tuttis," relatively heavily scored, and "verses," more lightly orchestrated and featuring a solo woodwind (flute, clarinet, and oboe, respectively, in the three verses) in a concertante manner.

What most distinguishes Transit is how convincingly it moves through this sequence, communicating a sense of formal continuity and direction rather than seeming a mere series of isolated "movements." This accounts for at least one aspect of the title, as Ferneyhough consistently creates effective transitions from one segment to the next, so that one flows logically from the other despite its strongly contrasting character. The music itself is intensely personal and uncompromisingly serious. Technically, it features an interesting combination of strict serial procedures and more intuitively conceived modifications. Ferneyhough is especially accomplished at producing striking formations of timbre and texture that gradually change and become extended formal developments. The result is music that always sounds up to date but is by no means unreasonably difficult to follow. Moreover, the listener feels that he is hearing something important. This music communicates, no matter how difficult its message may be to decipher verbally.

Judging by this work, the first Ferneyhough composition I have heard, he has a remarkable gift for working with musical ideas of unusual scope and expressive power. His is clearly an important new voice.

HANDEL: Alexander's Feast.

Helen Donath and Sally Burgess, sopranos; Robert Tear, tenor; Thomas Allen, bass; King's College Choir (Cambridge), English Chamber Orchestra, Philip Ledger, cond. [Christopher Bishop, prod.] Angel S2B 3874, $17.96 (two discs, automatic sequence).

COMPARIOSN:

Haroncourt/Vienna Con. Musicus Tel. 26.35440

In my recent encounter with Nikolaus Harnoncourt's recording of Handel's "oratorio" Alexander's Feast (May 1979), my delight in hearing this magnificent masterpiece overshadowed most of the reservations usually evoked by performances of the Concentus Musicus, with its weak orchestra of "original" instruments and a "leader" who apparently operates by remote control. Now there comes another recording, conducted by a knowledgeable professional presiding over a first-class modern orchestra.

The difference between the two versions is forcefully evident after a few measures of the fine overture. The violins are warm and expressive but never overpowering, their pianos soft yet substantial; the attacks and releases are precise, the dynamic nuances delicate, and the balances superlative. The minuet that concludes the French overture reveals the elegant Handel, whom we so seldom encounter in performances. There is no comparison between this kind of altogether musical playing and the ideologically encumbered performance of the Harnoncourt ensemble, despite the latter's undoubted competence. Philip Ledger does not rigidly follow uncertain rhythmic laws, does not overdut, and keeps everything clear and airy. The clarity, precision, and dynamic range proper to every occasion are maintained unfailingly.

So far my prayers are answered, but now the singers enter. The first soprano and the tenor occupy such prominent places in the unfolding of the work that they can make or ruin a performance. Here Harnoncourt has the edge, because Ledger's singers let us down. Helen Donath, a soprano favorably known, is not at her best;
she has a nice voice, and she is an intelligent and fervent musician, but, at least in this recording, vocal control is missing. In quieter passages she does well, but most of the time her voice is tremulous; in fact, it wobbles almost to the extent of becoming an involuntary trill. On the other hand, her deliberate trills are poor. The tenor, Robert Tear, another singer widely known and well thought of, is equally unsatisfactory; in the fast passages he huffs a good deal, the vocalises do not seem to agree with him, and he has difficulties with low notes. Felicity Palmer and Anthony Rolfe Johnson, their counterparts in the Telefunken album, are solidly on pitch, comfortable vocally in all situations, and although perhaps a little mannered, distinctly superior to their competitors.

The less able Donath and Tear do, however, maintain a desirable heroic/dramatic tone. We must remember that in the center of Dryden's ode stands a triumphal campaign of Alexander the Great, with such other protagonists as Timotheus, a famous singer in antiquity, and Thaïs, the celebrated courtesan; the "gentle" St. Cecilia, to whom the work is dedicated, is dragged in rather peremptorily at the very end as a near non sequitur. Fortunately, the tone of the poem and the richness of Dryden's language were congenial to Handel, and there is never a weak spot in this score full of wonderful melodies.

The choruses in both recordings are excellently trained, but Harnoncourt's mixed chorus sounds better than the Cambridge body, which relies on boy trebles and altos. The latter are very good, they are on pitch, and there is no hooting. Compared with the Stockholm Bach Choir's luminous trebles and altos, however, their voices are colorless. Both versions fail to supply enough harmonic support for the arias accompanied by concertante violins (all violins in unison) and bass; since the bass is figured, the continuo is obviously counted upon to replenish such two-part settings to complete the harmony.

In sum, both of these recordings have advantages and disadvantages, and they are not interchangeable. So it comes down to whether you want good singing and are willing to take Harnoncourt's tepid historicism as part of the bargain, or whether you want a live, vibrant background and will tolerate somewhat flawed singing. P.H.L.

Advertisement

The Watts Parastat

In 15 seconds your records are clean, dry and ready to play.

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.
Power

Is a crucial factor in determining the performance of an amplifier. One of the most important measures of power is a specification called dynamic headroom: the amount beyond continuous average power available to handle the peaks and transients of musical program material.

The Apt 1 Amplifier has unusually great dynamic headroom. It also has the most important measures of great dynamic headroom. It also has the amount power is a specification called performance of an amplifier. One of the driver circuit, and protection circuit features and performance, the Holman Preamplifier is especially free from such problems. Together, the Holman Preamplifier and the Apt 1 Amplifier can eliminate the major interactions present in modern hi-fi systems. Separately, they can solve real-world problems, and so make real-world music systems work better and sound better.

Apt Corporation
Box 512
Cambridge, Massachusetts 02139

For an Apt 1 Amplifier brochure and the name of your local dealer.
For a Holman Preamplifier brochure and name of your dealer.
For an Apt 1 Owner’s Manual, please send $4 ($5 foreign).
For review reprints.

Name ____________________________
Address ____________________________

Sonics.

That, in the final analysis is what counts.

System interfacing problems account for most variations among otherwise fine equipment. Thanks to an unequalled combination of features and performance, the Holman Preamplifier is especially free from such problems. Together,
The Holman Preamplifier and the Apt 1 Amplifier can eliminate the major interactions present in modern hi-fi systems. Separately, they can solve real-world problems, and so make real-world music systems work better and sound better.

Apt Corporation
Box 512
Cambridge, Massachusetts 02139

For an Apt 1 Amplifier brochure and the name of your local dealer.
For a Holman Preamplifier brochure and name of your dealer.
For an Apt 1 Owner’s Manual, please send $4 ($5 foreign).
For review reprints.

Name ____________________________
Address ____________________________

SONICS.

That, in the final analysis is what counts.

System interfacing problems account for most variations among otherwise fine equipment. Thanks to an unequalled combination of features and performance, the Holman Preamplifier is especially free from such problems. Together, the Holman Preamplifier and the Apt 1 Amplifier can eliminate the major interactions present in modern hi-fi systems. Separately, they can solve real-world problems, and so make real-world music systems work better and sound better.

Apt Corporation
Box 512
Cambridge, Massachusetts 02139

For an Apt 1 Amplifier brochure and the name of your local dealer.
For a Holman Preamplifier brochure and name of your dealer.
For an Apt 1 Owner’s Manual, please send $4 ($5 foreign).
For review reprints.

Name ____________________________
Address ____________________________

92

power. Perhaps we are hearing a new Bernstein.

The strings have always been the Israel Philharmonic’s strongest element, and they respond to Bernstein’s lyrical line even more markedly than did the New York Philharmonic’s in his earlier versions of these symphonies (Columbia MS 7057, 7295). This is, I suspect, partly a matter of his own current stylistic concept, although one cannot rule out the possibility that he is responding sympathetically to the group’s character.

The woodwinds and brass are distinctly inferior; except when spotlighted explicitly by Mendelssohn’s scoring, they contribute little more than an amorphous background to the overall texture. Top and bottom predominate, without the detail and clarity Bernstein usually elicits. This may be due to the circumstances of live recording, circumstances beyond the conductor’s immediate control. The acoustics of a well-filled hall, the effect of an audience on the performers, and a different recording team may all have contributed to a lighter, less forward sound, quite different from that which Bernstein has usually produced in his Columbia studio recordings with the New York Philharmonic. Yet he is a strong conductor, and if he is not here the energetically driving leader we have come to know so well, perhaps the difference does indicate a change in style. His infectious response to sentiment is better controlled than in the past—almost strangely introverted. His control of climax, so essential to his dramatic sense, is still evident, but the impact one expects from him isn’t quite achieved.

Fascinating as this record is, it cannot receive unqualified recommendation because of the Israel Philharmonic’s shortcomings. Bernstein fans may want to look into possible new facets of his approach, but they will probably prefer his earlier versions. The best account of the Italian is still Riccardo Muti’s with the New Philharmonia, although for some the seduction of the wondrous digital sound of the Vienna Philharmonic under Christoph von Dohnányi (London LDR 10003) may compensate for a rather dull performance. P.H.

MESSIAEN: Quatuor pour le fin du temps.

Luben Yordanoff, violin; Albert Tétard, cello; Claude Desurmont, clarinet; Daniel Barenboim, piano. [ Günther Breest, prod.] DEUTSCHE GRAMMOPHON 2531 093, $9.98.

COMPARISON:

Tashi RCA ARL 1-1567

In 1972, DG missed a golden opportunity to record this work with the Boston Symphony Chamber Players. In the performance I heard that season by Silverstein, Eskin, Wright, and Kalish, Messiaen’s transfigured vision of hope in the midst of desolation emitted a hypnotic radiance I have yet to encounter in any other interpretation.

Now DG has recorded this unique composition in Paris under the watchful eyes and ears of the composer, and that should count for something. Indeed, balances are impressive, and most of the tempos are very close to the metronome markings. An exception is the sixth section, “Dance of Fury, for Seven Trumpets,” understandably below snuff, given its trickily syncopated unison writing.

The players work efficiently together, but limitations appear where individual contributions come to the fore. Tétard’s slow vibrato becomes nerve-racking in “Praise to the Eternity of Jesus.” At cue D in the final “Praise to the Immortality of Jesus,” Yordanoff’s landing on the G string sounds more syrupy than seraphic, while Barenboim’s pianism is disconcertingly violent in the repetitive chord patterns of thirty-second notes followed by double-dotted eighths. Compare Peter Serkin in the Tashi performance: so coiled in rhythm, so terraced in the use of diminuendos. In the unaccompanied clarinet section, “Abbyss of the Birds,” Desurmont manages the one-measure swells from ppp to ffff nearly as smoothly as Tashi’s Richard Stoltzman, but he also steals breaths and makes minor rhythmic errors.

Overall, the flaws of this new recording don’t counteract its virtues, including of course that clear, rich DG recording job. I’d recommend it over the serviceable Grunenberg/Pleeth/De Peyer/Béreff version (Angel S 36387) or the somewhat rough and unsubtle Cohen/Eddy/Rabbai/Levin recording (Candide CE 31050), despite the latter’s moderate price and inclusion of a filler (Merle noir, for flute and piano). Among commercial recordings, though, pride of place goes to Tashi, a group whose charter membership was defined by the unique scoring of this work; it repays the favor with playing of uncanny virtuosity, control, and musical acumen. A.C.

MOZART: Requiem, K. 626.

Helen Donath, soprano; Christa Ludwig, alto; Robert Tear, tenor; Robert Lloyd, bass; Philharmonia Chorus and Orchestra, Carlo Maria Giulini, cond. [Christopher Bishop, prod.] ANGEL SZ 37600, $8.98.

So they are at it again, but the result is once more disappointing. Mozart’s Requiem exacts a regrettable toll. It must be
the lack of rapport with that curious stylistic merger of the music of church and theater in the orchestral Mass of the eighteenth century, baffling to both musicians and churchmen ever since the Romantic era, that accounts for the dearth of really fine performances of this much-admired classic. The stylistic blend is even more problematic in Mozart’s case because his Requiem is both highly personal and severely liturgical in spirit.

Still, a good musician, and especially an Italian, should find his way on purely musical grounds, and it is surprising that a conductor of Carlo Maria Giulini’s stature should not have fulfilled our hopes—but then, he is in good company. In his defense, I must say at the outset that Angel’s very poor sound must have thwarted his intentions; the excellent chorus in particular falls victim to faulty engineering. Nevertheless, there are things here that must be laid straight at Giulini’s door.

While the great fugue and several other fast numbers move at a good clip, some tempos rival Klemperer’s. The “Rex tremendae” is very slow, as is the “Recordare”—those fine soloists gasp a little in order to breathe at the right places—and that inessential employment of pared-down operatic accompaniment and almost Palestrinian polyphony, as in the otherworldly “Oro supplex,” perhaps the most gripping passage in the Requiem.

The attacks are sometimes lazy, with basses and timpani the main offenders; the trombones are all over the place, though by now it is pretty well agreed that with a fully staffed chorus no colla parte playing is necessary, and the trombones should be restricted to obbligato passages, which are not difficult to locate. So we must consign this recording to the ranks of the many also-rans that offer decent enough performances of the score without touching on the mysterious depths of this last testament of a genius already in sight of the Elysian Fields.

A brief postscript: Almost all recordings of musical settings of the Mass proceed from number to number either without pause or, at best, with a very slight one, even shorter than the rests observed between movements of a symphony. In this case, the recording launches the tremendous “Dies Irae” instantly after the Kyrie, which is disconcerting and blunts its explosive force. The liturgy prescribes several chanted prayers or readings between the two, as indeed between some of the other pieces, and the composer counted upon this separation. The “Dies Irae” would sound really apocalyptic if the shattering empty fifth that closes the Kyrie were permitted to evaporate from consciousness. P.H.L.


SAINT-SAENS: Samson et Dalila.

CAST:

Dalila: Elena Obraztsova (ms)
Samson: Placido Domingo (t)
Messenger: Gérard Friedmann (t)
First Philistine: Constantin Zaharia (t)
High Priest: Renato Bruson (b)
Abimélech: Pierre Thau (bs)
An Old Hebrew: Robert Lloyd (bs)
Second Philistine: Michel Hubert (bs)
Chorus of the Orchestre de Paris, Orchestre de Paris, Daniel Barenboim, cond. [Günther Breest and Michael Hor- nath, prod.] Deutsche Grammophon 2709 095, $29.94 (three discs, manual sequence).
Tape: 3371 050, $29.94 (three cassettes).

This brings to three the number of complete recordings of Saint-Saëns's most famous opera—hardly his only one—currently available. All are worthy performances, although in the final analysis the choice is between the earliest (1963) on Angel and the latest. This performance is much more centered around Daniel Barenboim's warm and vibrant conception, spaciously recorded, but choice will ultimately depend on one's reactions to the material in Elena Obraztsova.

Samson et Dalila has often been "condemned" as an oratorio masquerading as opera—a charge that has some foundation but does not hold if one equates "oratorio" with "antidramatic." The opera works musically, and it works on-stage; it always has, and I suspect it always will. Its oratorio overtones serve to channel Saint-Saëns's romanticism into a solid structure that is not static, but dynamic. Samson's character development, from leader of the oppressed through enslavement, lust, downfall, and enlightenment in blindness (the mill scene of Act III, perhaps Saint-Saëns's greatest dramatic writing) to the anguish and conviction of the final scene, provides the impetus for the drama. That character is superbly drawn, and its strength allows the more celebrated pages of the score to assume their proper significance: colorful, varied, musically ravishing, but dramatically secondary to Samson's plight.

That said, it must be noted that Barenboim's conception, although always dramatic, moves the work closer to oratorio than to opera. He adopts a leisurely pace throughout, emphasizing the sheer sensuous aspects of the writing through phrasing and ritards. His excellent large chorus follows his lead very well but sounds more like an ordinary chorus than like an opera chorus. Its soft-grained singing in the first scene is quite beautiful, but that is its fault:

It is simply too comfortable to convey the idea of a populace crushed by misery and oppression, yearning for salvation. The yoke is too easy. Similarly, the last scene does not have the measure of the fevered hysteria that delineates the Philistines in their wanton revelry before the disaster.

Placido Domingo's entrance ("Arrête, o mes frères") is treated lyrically rather than as an expression of frustrated rage (compare it to Jon Vickers' hammer stroke), and his view of Samson is presented throughout from a lyric rather than a dramatic point of view. This can be justified if there is a consequent enlightenment in the third act, but I never felt anguish in Domingo's mill scene, and his final scene seemed outside the character rather than at one with it, as it must be. Domingo's lesser attention to firmness of vocal line and accuracy of note values adds to this more generalized treatment of Samson, one that robs the hero of his rightful stature.

Obraztsova is even more of a problem. On-stage the deficiencies of her large and romantic mezzo—a constant vibrato, an erratic equalization, a "covered" sound, as though sung into a brass cistern—are mitigated and even taken on an intriguing individuality. But on records these faults are magnified and obscure her very real attention to sonority and characterization. She tries to compensate (as she does on-stage) by adopting a tigerish intensity, and this can be thrilling. Yet here, at Barenboim's slow tempos, and given her general indifference to legato (which is, as with so much French opera, of paramount importance), the declamatory outbursts stick out uncomfortably. Since records rob her of her considerable visual assets as an actress, her performance, conscientious as it is, lacks the unity it possesses on-stage and tends to dissolve into isolated moments.

Renato Bruson makes a dry-voiced High Priest, a bit uncomfortable in his French but nonetheless properly hectoring and implacable. The supporting cast is unremarkable, except for Robert Lloyd's well-sung Aged Hebrew.

Good, then, but not great. Its main competition, however, is close to being great. I have always felt that the Angel version stands as one of the finer opera recordings made—if not on the first list, certainly on the second. Rita Gorr, at the height of her vocal eminence in 1963, is a simply magnificent Dalila. Her vocal clarity and firmness are a joy, as are her attention to the vocal line and the variety of inflection she brings to it. One might want a bit more plushness and sexuality, but this is first-rate operatic singing. Ernest Blanc, if again a dry-voiced High Priest, is likewise excellent; the language is at the constant service

Mail to:
High Fidelity
One Sound Ave.
Marion, Oh. 43302
of the music, and the conception is fully dramatic.

Vickers' Samson is, admittedly, rough-edged: not by any means letter-perfect in French, given to his trademarked (but at this stage still incipient) croon in softer passages, and generally declamatory. But, grand Dieu! This is a Samson—a leader of his people—whose animal vitality leads inexorably to his enslavement and enlightenment. Vickers has rendered the final act better since 1963, but even then it was infused with the spirit demanded by the text and the music. His Samson eclipses Domingo's, despite the latter's greater lyric gifts.

Georges Prêtre's conducting career has been uneven, but from the start he has had a strong rapport with this score. His leadership—leaner, more propulsive, and more rhythmically alive than Barenboim's, yet luscious enough when the occasion warrants—is closer to the spirit and drama of the work, even though Barenboim brings out felicities that Prêtre does not.

The RCA recording (ARL 3-0662) is not in a class with either of these. James King sings a constricted, effortful Samson, Bernd Weikl is an acceptable High Priest, and Giuseppe Patane's conducting is little better than routine. Its calling card is the Dalila of Christa Ludwig, sung with appropriate sensuousness, yet always dramatic. But Ludwig, alas, cannot carry the show. P.J.S.

SCHICKELE: The Knight of the Burning Pestle: Songs (9); Elegies; Summer Trio. For a featurette, see page 76.

SCHUBERT: Sonata for Piano, in B flat, D. 960. Lili Kraus, piano. VANGUARD VSD 71267, $7.98.

This just misses being a great performance. Never one to underplay, Kraus sees not only dreamy, drawn-out lyricism in this sonata, but also drama and tension. To express them, she inserts subito fortes, changes a dynamic from pp to a hefty mezzo forte, stresses the big line at the expense of minute rhythmic detail, and favors explosive vehemence.

As applied to Schubert's companion opus, the A major Sonata, D. 959 (long a Kraus specialty, which Vanguard should invite her to re-record), her willfulness and vitality seem appropriate and even riveting, but the longer-breathed B flat Sonata needs a more patient, less brusque treatment. The "excitement" seems artificial; after once being startled by Kraus's pouncing and driving, I longed for a wider range of color and a more beautiful sonority. Still, she is always interesting and often splendid, particularly in her heroic reading of the Andante sostenuto. This is easily one of the finest recordings of the work.

Vanguard's sound is adequate without being especially luminous or sonorous. The review copy had somewhat noisy surfaces and a little warpage. H.G.


Back to reality.

Loud louds and soft softs. That's what your records and tapes can't give you. Current recording and broadcasting techniques just can't reproduce the wide dynamic range of live performance. That's why you need MXR's Dynamic Expander. You've got to hear it all.

The MXR Dynamic Expander restores a large portion of those lost musical dynamics. It puts power back into loud moments, and lets sensitive subtleties come through. So get back to reality with the MXR Dynamic Expander.

MXR INNOVATIONS, INC., 740 Driving Park Ave., Rochester, New York 14613, (716) 254-2910
Both of the new editions supersede the clangorous old one by Brendel and Gießen (Turnabout THS 34265). The Unicorn is a luxury item offering a superlatively imported pressing and a topflight orchestral framework. The performance is satisfying on all grounds, lyrical yet strong, and captured in beautifully clear, resonant acoustics. But then, orchestral finesse and careful rehearsal are less crucial here than in certain other concerted works, and the Philharmonia Hungarica, though raw sounding, is more than adequate in the Turnabout entry. Rose is perhaps even more persuasive than Rogoff, with a somewhat sterner, aggressively rhetorical approach. His performance triumphantly survives close-up reproduction, which flattens the bass line but imparts a wiry sound to the piano’s middle range. Both versions are worthy, but Rose’s, with processing better than average for Turnabout, is clearly the better value.

The companion works on the Turnabout disc are lots of fun. The Weber, fitted with an introduction culled from an earlier Weber polonaise, was dedicated to Henselt, one of Liszt’s foremost pianistic rivals, and dates from around the same time (1850) as the Wanderer Fantasy. The Ruins of Athens Fantasia of 1848–52 was Liszt’s second outing with the Beethoven opus (preceded by a Capriccio alla turca for piano solo). Rose plays both to the hilt, and the slightly uncouth sound of the orchestra presents little problem.

Rogoff’s disc offers another excellent account of the Schumann piano concerto, unaffected in its phrasing but with a few minuscule lapses in ensemble (in the first movement’s A flat section, for example); in a masterpiece like this, such things are important. In addition, the pace of the third movement is slightly too comfortable.

H.G.

**SCRIBA**: Poem of Ecstasy, Op. 54—See Debussy: La Mer.

**SHOSTAKOVICH**: Song Cycles.

Irina Bogacheva, mezzo-soprano*; Yevgeny Nesterenko, bass**; Moscow Chamber Orchestra, Rudolf Barshai, cond.; Moscow Radio Symphony Orchestra, Maxim Shostakovich, cond.** [A. Jung, V. Antonenko, Y. Kokhshyan, prod. J. Columbia/Melodiya M 2 34594, $17.98 (two discs, manual sequence).


Two of these cycles, Suite on Verses by Michelangelo (1975) and Six Songs to Poems by Marina Tsvetayeva (1974), date from the final phase of the composer’s career; the third, Six Romances on Verses of English Poets (Shakespeare, Raleigh, Burns, and an anonymous versifier), though rescored for bass and chamber orchestra in 1971, was originally written for voice and piano in 1942. As one might imagine from the differences among the three collections of poems and from Shostakovich’s well-established sensitivity to the nuances of poetic language, each of the cycles is distinctive. Yet all of them—even the one written more than thirty years earlier than the others—are marked by a mood of somber introspectiveness.

The songs as a whole betray a powerful, highly individual sense of moral disillusion, even of despair. Yet there is also a countervailing confidence. Not simply because the group of Michelangelo poems chosen by Shostakovich concludes with “Immortality” and the twice-repeated maestoso affirmation of its final line, “And in death, decay will not touch me.” Nor because the English lyrics end on a note of satirical extroversion. Nor, again, because the last of the Tsvetayeva poems is a heartfelt statement of gratitude and dedication to the poet Anna Akhmatova, savagely attacked (and mostly silent) during the long night of Stalin’s ascendancy.
The confidence glimpsed overtly in such places as these is more pervasive and implicit in all three cycles: It is to be found in Shostakovich's incomparable artistry, in the assurance and skill with which all of these poems have been transformed into music. In these cycles Shostakovich's mastery of orchestral effects—the variety of timbres, textures, and colors he conjures up—is especially notable, from the delicacy of the accompaniment to Burns's "Comin' Thro' the Rye," composed mostly of celesta, violins, and violas, to the unexpected flourishes of accentuation provided by the xylophone in Tsvetayeva's "Poet and Tsar" and the violence of the brass introduction to Michelangelo's sonnet "Rage."

But, above all, the confidence manifests itself in the conviction Shostakovich brings to the realization of his texts, the controlled but heartfelt emotion he creates through them. About the personal meaning of these songs there can be little doubt. Part of their impact is derived from the way they so memorably fuse art and politics: It is hard to miss the pertinence to the composer of Michelangelo's disgust at the Rome of Pope Julius II; of Burns's "Macpherson's Farewell," with its cry "Forgive my country!"; of the poem addressed to the persecuted Akhmatova by a poet who, not long after writing it, hanged herself in despair. All three works testify to the ennobling power of art and are as rewarding as any music I have heard for a very long time.

The highest praise I can give the performances (recorded, it would seem, between 1975 and 1976) is to say that they are entirely worthy of Shostakovich's songs. Yevgeny Nesterenko phrases with breadth and majesty, while at every point giving appropriate emphasis to inflections of the text. Irina Bogacheva is equally distinguished. Both orchestras and their conductors are admirable collaborators.

The sound, which naturally varies somewhat, is intimate without being aggressive. There are good notes, transSTRUCTIONS, and, I am glad to report, literal progressions. There are good notes, trans- somethings, is intimate without being ag-

The highest praise I can give the performances (recorded, it would seem, between 1975 and 1976) is to say that they are entirely worthy of Shostakovich's songs. Yevgeny Nesterenko phrases with breadth and majesty, while at every point giving appropriate emphasis to inflections of the text. Irina Bogacheva is equally distinguished. Both orchestras and their conductors are admirable collaborators.

The sound, which naturally varies somewhat, is intimate without being aggressive. There are good notes, trans-literations, and, I am glad to report, literal translations from the Russian. Not to be missed.

D.S.H.

CAST: Don Carlos.

VERDI: Don Carlos.

CAST:

Verdi: Don Carlos.

CAST:

Elisabeth
Mirella Freni (s)

Edita Gruberová (s)

Barbara Hendricks (s)

Agnes Baltsa (ms)
José Carreras (t)
Horst Nitsche (t)
Piero Cappuccilli (b)

Jose van Dam (bs)

Nicolai Ghiaurov (bs)

Ruggero Raimondi (bs)

José van Dam (bs)


Anyone who wants to buy a Don Carlos without the Fontainebleau act now has the choice among this new Angel album, the 1951 Cetra set, still available in the Turnabout/Vox historical series (THS 65054/6), and the 1954 HMV set, now available on Seraphim (6004). (The 1966 London [OSA 1432] and 1971 Angel [SDL 3774] sets include the Fontainebleau act, as did the 1962 Deutsche Grammophon version, now deleted.) The choice among the three four-acters is not quite as simple as might at first appear. Turnabout and Seraphim are more appropriately cast and much
cheaper; on the other hand, the recorded quality of the former is poor and of the latter fair; and in both the text is sadly disfigured by those "theater cuts," not acceptable in the theater anymore and unforgivable in a recorded performance. The album at hand presents no textual problems: It is a complete recording of the opera as Verdi revised and abridged it in 1882–83 and as he brought it to the stage of La Scala in 1884, in Italian translation, with his future Otello in the title role.

The problem is, rather, whether anyone still wants—the records—a Don Carlos shorn of the long, beautiful duet that forms most of the Fontainebleau act. In the theater, the case for the abridged version can be argued, and Karajan presented it powerfully in his famous Salzburg production. But that Salzburg performance was cruelly cut—it was a drastic abridgment of the already abridged version. In his recording, Karajan has reinstated the missing passages. I'm surprised he didn't add Act I as well, to make his set fully competitive with the Solti (London) and Giulini (Angel) versions, which give us more music, but also occupy only eight sides.

The Salzburg Carlos, which underlies this new recording, opened in 1975. Its stable elements have been Freni's Elisabeth, Cappuccilli's Posa, and Ghiaurov's Philip, but Placido Domingo was then the Carlos, and Christa Ludwig, followed by Eva Randova, sang Eboli. In the 1978 revival, Carreras, Gruberova, and Van Dam were in the cast; the recording was made in Berlin shortly after the 1978 festival, and Baltsa (who had been singing Eboli in Berlin) and Rainoldi (who had sung one Philip in Salzburg) joined the studio cast. It was recorded in six days, two sessions a day.

The four-act version, it must be said, does suit Karajan's view of the work as a heavy, somber drama—massive, imposing, almost unrelied in its noble earnestness. The Fontainebleau idyll has fled before it begins; the start is the stark funeral chant of the monks. Many of Karajan's tempos are slow—slower than those Verdi indicated. Eboli is no sparkling coquette. The "Veil Song"—marked allegro brillante with an allegro giusto refrain—is not glittering diversion tossed off by the court ladies while they await the Queen's return, but a grand display piece; instead of quasi-improvised flamenco cadenzas, Baltsa launches into something like a tremendous Valkyrie battle cry. The galant grace of the succeeding trio, where Eboli and Posa chat about Paris fashions, becomes something slow and labored. "O don fatale" is not allegro. Posa's "Per me giunto" is slow. The lovers' parting duet, "Ma lasci ci vedremo," is slower than the marked quarter-note 60, and the tender 12/8 throbbing is dragged out.

The second scene of Act III (well, it's really Act II in this version, but to avoid confusion I'll stick to the five-act numbering) is well matched by Karajan's approach. Verdi once described this huge auto-da-fé finale as the heart of his opera, and it's the only scene of the 1867 original he left unaltered in his revision. Karajan catches the weight, the splendor, the terror, the excitement of these public confrontations—a Meyerbeer spectacular, added to the original Carlos scenario at Verdi's own request, but composed as if to show that massed forces and grand spectacle could serve more elevated ends than those Meyerbeer and Scribe had in mind. In carrying over something of these oppressive and hectic splendors into every other scene of the opera, Karajan is, of course, being true to one element, and an important one, of Verdi's drama. As one of the album essays puts it, "there is always a cloud over the bright Spanish sun." At Salzburg there was; the production was unremittingly severe in its grandeur, and that sense comes across in the recording. But I think something Verdi also intended has been lost: contrasts, moments of lightness, and a kind of straightforward lyricism in which both the characters and the audience forget, for a moment, the terrible pressures of Church and State and, to put it too simply, "enjoy the music."

So there are times when I find something exaggerated about this powerful and deeply pondered reading. In the introduction to Act V, for example, the contrast between the soft-breathing horns and the loud-swinging strings is almost too much. The superb Berlin orchestra, which plays as if it were an extension of Karajan's thought, can at a touch, at a glance, surge into a fff of the utmost force and beauty, or sink to a scarce-audible pp whisper. (The recording, in turn, is achieved across a very wide dynamic range; at a setting that makes one strain to catch the softest passages, the loudest passages may well have the neighbors complaining.) Have the drums ever banged so loudly at the Inquisitor's outburst "O Re, se non fassi con te?" Have the chromatic string figures that frame Elisabeth's "Rendetemi la croce"—ff, then ppp, then ppppp—ever spanned so large a dynamic range? Has the crash at Posa's "la pace è dei sepolti" ever been more hysterically violent? This is an extreme realization of the colors and the dynamic contrasts in Verdi's score. It is wonderful in a way; the deep, formidable growl of the Inquisitor's entrance music is filled with menace and power. But perhaps it goes too far. Certainly, it lacks naturalness.

Karajan is the dominating presence, and the Berlin Philharmonic holds the

---

**HIGH FIDELITY'S**

**Free Armchair Shopping Service**

On the card opposite, circle the number indicated at the bottom of the ad or at the end of the editorial mention of the product you're interested in. (Key numbers for advertised products also appear in the Advertising Index.)

Type or print your name, address, and zip code on the card. Postage is prepaid.

Mail the card today. You'll soon receive free product literature and specifications from manufacturers.

---

**MAIL ORDER BUYER'S SERVICE**

Three Great Buyer's Guides From **HIGH FIDELITY** Order Now!

**1980 HIGH FIDELITY Test Reports $3.95 Circle 161**

**1980 Buying Guide to Stereo Components $3.95 Circle 162**

**1980 Stereo Test Reports $2.95 Circle 164**

To order, circle the number on the attached card that matches the number of the Buyer's Guide you want. Enclose payment plus $1.00 for postage with your order and mail to:

**HIGH FIDELITY**
One Sound Avenue
Marion, Ohio 43302

(Enclose payment. No credit orders.)
Perfection for the Professional

Drawing upon their unequalled 30 year leadership in magnetic recording technology, Tandberg's TD 20A open reel tape recorder extends their traditionally superior level of performance to even further limits—to even beyond the present capabilities of today's magnetic recording tape! This is due to Tandberg's exclusive ACTILINEAR Recording System, which not only provides up to 20 dB headroom margin over existing tape, but is specifically designed to be used with the new high coercivity tapes that will appear in the market in the near future—including the soon-to-be-available metal particle tapes. No other quality open reel tape recorder can make this obsolescent-proof claim today.

The ACTILINEAR Recording System's extremely linear frequency response ("ruler flat" according to some test reviewers) not only makes the TD 20A essentially immune to slew-rate limiting and transient intermodulation distortion (TIM), but also means better transient response and lower distortion overall.

Adding to the TD 20A's superior level of quality & performance is its unique PROM computer-controlled four-motor transport, as well as its many standard operating features that permit a degree of performance and control flexibility that you would expect only from Tandberg—the world leader in tape recorders.

Visit your authorized Tandberg dealer for a demonstration of the TD 20A. Check our guaranteed minimum specifications and rate them against any other manufacturer. Combined with the unsurpassed ease of operation & control, the TD 20A is probably more tape deck than you actually need. Isn't it the way things should be?

For your nearest dealer write:
Tandberg of America, Inc.
Labriola Court
Armonk, N.Y. 10504

Tandberg's unique ACTILINEAR Recording System, offering up to 20 dB headroom margin over existing tape. And easily adjustable for use with the new high coercivity tapes to come, so your TD 20A is obsolescent-proof.


Optional PCM infrared wireless remote control for an ease of operation that doesn't tie you down to the length of a cable. Plus automatic start & stop via a timer switch (optional).
No. 1 in c, Op. 68
Karajan, Berlin Phil.

No. 2 in D, Op. 73
Karajan, Berlin Phil.

Variations on a Theme by Haydn, Op. 56a
Giulini, Phil. Orch. † Schubert:Sym. 8
Sera: S-60335

CHOPIN, FRÉDÉRIC
Ballades 1, 2, 3, 4 (Op. 23, 38, 47, 52)
Aniels † Impromptus Sera: S-60356

ELGAR, EDWARD
The Dream of Gerontius, Op. 38
Hodgkin, Ear, Luxon, Gibson, Scottish Nat'l Orch. & Cho. [E] 2-Van. 71250/9

GOUNOD, CHARLES
Symphonies (2): No. 1 in D, No. 2 in Eb (1855)
Plasson, Capitole de Toulouse Orch.
Ang. SZ-37726

GRIEG, EDWARD
Sonata No. 2 in G for Violin & Piano, Op. 13
Bor, Lowenthal † Saint-Saëns:Vn Son. 1
Pet. 2014

HAYDN, (FRANZ) JOSEPH
Italiano Qt † Mozart:Qr 17

KRENEK, ERNST
Capriccio for Cello & Orchestra (1955)
Elzing, Stevens, Amer. Camerata † Dus-semb; Moss
Orion 79362

LISZT, FRANZ
Légendes (2)
Ciccolini (see Piano) Sera: S-60343
Piano Music Ciccolini: Invocation & Funérailles; Deux Légendes; Venezie e Napoli
Sera: S-60363

MAHLER, GUSTAV
Symphony No. 4 in G
Mathis, Karajan, Berlin Phil.

MORROSS, JEROME
Concerto for Flute with String Quartet (1978); Sonata for Piano Duet & String Quartet (1975)
Zlotkin, Sortomme Qt; Arruzzi, Gianattn- gio, Sortomme Qt Var./Sara. 81103

MOURAVIEFF, LEO (1905-
Nativité, for String Trio & Orchestra
Faerber, Württemberg Ch. Orch. † Shostakovich:Ch. Sym.; Teherepin

BACH, JOHANN SEBASTIAN
Cantatas
No. 91, Geland sei du, Jesu Christ
2-Tel. 2635441
No. 92, Ich hab' in Oetes Herzd und Sinn
2-Tel. 2635441
No. 93, Wer nur den lieben Gott waltet
Wiedl, Esswood, Equiluz, Van der Meer, Harmoncourt, Concertus Musicus, Tölz Boys Cho. [G] † Can. 91, 92, 93
2-Tel. 2635441

BEETHOVEN, LUDWIG VAN
Concerto (5) for Piano & Orchestra
No. 2 in Bb, Op. 19
Arrau, Haitink, Concertgebouw Orch. † Son. 21 Phi. Fest. 6570173; ∊ 7310173
No. 5 in Eb, Op. 73, “Emperor” Pollini, Böhm, Vienna Phil.
DG 2531194; ∊ 301194

Overtures
Jochum, London Sym. (Coriolan, Egmont, Fidelio, Leonore 3) † Sym.
8-Ang. SZ-3890(Q)

Quartets (16)
Cleveland Qt (Op.18) 3-RCA ARL3-3486
Sonatas (32) for Piano
No. 21 in C, Op. 53, “Waldstein” Arrau † Con. 2 Phi. Fest. 6570173; ∊ 7310173
Symphonies (9) (complete)
Jochum, London Sym. † Over.
8-Ang. SZ-3890(Q)

BRAHMS, JOHANNES
Symphonies (4)

MASSIVE RECORD RELEASES
The following listings are excerpts from the “New Listings” section of the February Schwann Record & Tape Guide. Some listings contain a cross-reference (†) to other works on the recording. Letters in brackets refer to language used in vocal music (G, German; E, English, etc.). Cassette editions are indicated by the symbol L. Quadriphonic discs are indicated by a Q following the record number; digital discs are indicated by a D following the record number.

E2

HIGHER FIDELITY

MOZART, WOLFGANG AMADEUS
Concerti (23) for Piano & Orchestra
No. 9 in E (P. 271)
Brendel, Marriner, St. Martin’s Acad. † 2-Piano Con. Phi. 9500408; ∊ 300616
Concerto No. 10 in E (P. 273)
Brendel, Cooper, Marriner, St. Martin’s Acad. † Con. 9 Phi. 9500408; ∊ 300616
La Clemenza di Tito, K.621
Mathias, Varady, Berganza, Schreier, Adam, Böhm, Dresden St. Orch., Leipzig Radio Cho. [I] 3-DG 2799092; ∊ 371049
Quartet in F for Oboe & Strings, K.370
Figueur, Esterhazy Qt † Qt K.407
Tel. 642173; ∊ 442173

Quartets
No. 17 in Bb, K.458, “Hunting”
Italiano Qt † Haydn:Qt 76/3 Phi. 9500662; ∊ 300762
Quintet in E for Horn and Strings, K.407
Baumann, Esterhazy Qt † Oboe Qt Tel. 642173; ∊ 442173

Symphonies (41)
No. 40 in g, K.550
Karajan, Berlin Phil. † Sym. 41
DG 2531138; ∊ 301138
No. 41 in C, K.551, “Jupiter”
Karajan, Berlin Phil. † Sym. 40
DG 2531138; ∊ 301138

PLEYEL, IGNAZ
Grand Duos (3) for 2 Flutes, Op. 68
Carstairs, Douglas † Haydn:2 Fl-Cello Trios; G. Sammartini Orion 78322

PUCCINI, GIACOMO
La Bohème
Ricciarelli, Putnam, Carreras, Wixell, Davis, Royal Op. [I] 2-Phi. 6769031; ∊ 7599116

RIMSKY-KORSAKOV, NIKOLAI
Scherherazade, Op. 35
Svetlanov, London Sym. Ang. SZ-37555

RUBINSTEIN, ANTON
Concerto No. 1 in e, Op. 25
Fardink, Freeman, Royal Phil.
Orion 79347

SAINT-SAENS, CAMILLE
Sonata No. 1 in d for Violin, Op. 75
Bor, Lowenthal † Grieg:Son. 2 Pel. 2014

SAMMARTINI, GIUSEPPE
Trio Sonatas
Douglas, Carstairs (flutes), Gibson, Rosen (in F) † Haydn:2 Fl-Cello Trios; Pleyel
Orion 78322

SCARLATTI, ALESSANDRO
Concerti grossi (12)
I Musici (No. 1-6)
Phi. 9500603; ∊ 300725
Il giardino di amore (1700-5)
Gayer, Faasbinder, Stadmair, Munich Ch. Orch. [I] DG 2535361; ∊ 3335361

SCHUBERT, FRANZ
Quartets
No. 12 in c, “Quartettssatz”, D.703
Italiano Qt † Qt 14 Phi. Fest. 6570180; ∊ 3710180
No. 14 in d, “Death & the Maiden”, D.810
Teach yourself the basics with...

The Step-by-Step Guide to Photography
By Michael Langford

Here's the one volume every beginning photographer needs — a complete, basic guide, organized for understanding and absolute practicality, devoted to the essentials of taking and making good pictures. Clearly illustrated with over 800 drawings and photographs, many in color. At each step of the way, specific exercises and assignments test and extend the reader's understanding of procedures and principles, including:

- Fundamentals of Camera Operation
- Film-loading and Focusing
- Processing and Printing
- Techniques
- Equipment
- Color Photography
- Individual Photographic Style and Approach
- How to use Natural Lighting
- Making Enlargements
- Picture Building
- Darkroom Techniques
- And Much More

Produced by the same editors and designers responsible for the two great photographic best sellers, The Book of Photography and The Photographer's Handbook.

Photographer's Book Service
1 Wyeth Street, Marion, Ohio 43302

Please send me ________ copy(ies) of The Step-by-Step Guide to Photography by Michael Langford @ $15.95 plus $1.25 each for shipping. Residents of OH, NY, and MA add applicable sales tax.

☐ I enclose $ __________. ☐ Charge to

☐ VISA ☐ Master Charge

My Credit Card number is ____________________________

Interbank number ________________________________

Card Expires ________________________________

Signature

Name

Address

City __________ State __________ Zip __________

Please allow 4 to 6 weeks for your order to be mailed.
If the recorded music you purchase and listen to is important in the way you enjoy life . . . you ought to know about a goldmine of helpful information for every record collector.

Schwann Record & Tape Guide

is a compilation of information about records and tapes of many classifications. This wonderfully useful catalog uncovers titles you didn’t know were available, helps you select versions by conductors and artists whose work you prefer . . . shows you money-saving reprints on budget labels . . . and much, much more.

More than 65,000 records and 8-track and cassette tapes are listed in the monthly Schwann-1 and its semi-annual companion, Schwann-2. All are available through your record dealer if you ask for them by Schwann title and number. Schwann opens up rich rewards in your record collecting hobby. See your record dealer for latest copies.

**Schwann-1** Monthly. Lists the month’s new releases in every category. Also nearly 45,000 available recordings on 702 record labels, 231 tape labels, 82 quadraphonic labels, in classical, recent popular, rock, jazz, musical shows, country, opera, ballet, electronic, etc. $1.25 at your dealer’s.

**Schwann-2** The semi-annual companion catalog for specialized categories: pop more than two years old, classic jazz, classical classics of the pre-stereo era, also the great re-issue catalogs: international pop & folk on domestic labels, spoken, educational, religious, etc. $1.25 at your dealer’s.

---

**SPECIAL PRICE SAMPLE OFFER**

If your favorite store doesn't carry Schwann, order samples by mail, but please try your dealer first. Prices include postage and handling.

- Latest Schwann-1 (monthly) ........................................... $2.50
- Latest Schwann-2 (semi-annual) ................................. $2.50
- Combination Offer: latest Schwann-1 (monthly) and latest Schwann-2 (semi-annual) ............... $4.50
- Basic Record Library booklet.
  Lists 1,000 suggestions in classical music by musical periods for your enjoyment
  Send 75¢ for cost of handling and postage.

I enclose $ for the items checked above.

Name __________________________
Address ________________________
City ____________________ State __ Zip __________

Dealer’s Name & Address ______________________________

ABC Schwann Publications, Inc.
2160 Patterson St., Cincinnati, OH 45214

---

**E4 HIGH FIDELITY**

Italońsk Qr † Qr 12
Phi. Fest. 6570180; /7310180
Symphony No. 8 in b, “Unfinished”, D.759
Giulini, Phil. Orch. † Brahms:Haydn Var.
Sera, S-60335

SCHUMANN, ROBERT
Fantasia in C, Op. 17
Rubinstein † Novellettes
RCA ARL1-3427; /ARK1-3427
Novellettes, Op. 21
Rubinstein (Nos. 1 & 2) † Fant.
RCA ARL1-3427; /ARK1-3427

Songs

3-DG 2709088

SHOSTAKOVICH, DMITRI
Chamber Symphony for String Orchestra, Op. 110 (arr. Barshai from Qr No. 8)
Faerber, Württemberg Ch. Orch. † Mouravieff; Tcherepnin
Turn. 34545

STRAVINSKY, IGOR
Firebird/Suite
Mata, Dallas Sym. † Sym. in 3
RCA ARCI-3459 (D)
Symphony in Three Movements
Mata, Dallas Sym. † Firebird
RCA ARCI-3459 (D)

TCHAIKOVSKY, PIOTR ILYICH
Symphony No. 6 in b, Op. 74, “Pathétique”
Haitink, Concertgebouw Orch.
Phi. 9500610; /7300739

TCHEREPNIN, ALEXANDER
Bagatelles (10) for Piano & Orchestra
Meyer-Josten, Faerber, Württemberg Ch. Orch. † Mouravieff; Shostakovich:Ch. Sym.
Turn. 34545

VERDI, GIUSEPPE
Requiem Mass
Scotto, Baltsa, Luchetti, Nesterenko, Muti, Phil. Orch., Ambrosian Cho. [L]
2-ANG. SZ-3858

VIVALDI, ANTONIO
La Stravaganza, Op. 4)
Ayo, I Musici
2-Ph. Fest. 6770029; /7650029

WAGNER, RICHARD
Der fliegende Holländer
Silja, Uhl, Crass, Greindl, Sawallisch, Bayreuth Fest. (1961) [G]
3-Ph. Fest. 677003; /7650052

© 1980 ABC Schwann Publications
limelight. Elisabeth and Carlos, roles for an Aida and a Radamès, are entrusted to a Mimi and a Rodolfo. This is Karajan's way. (Freni and Carreras were, in fact, the Aida and Radamès of his Salzburg Aida last summer, and his recording with them is due later this year.) Freni is very beautiful in the final duet, tender, limpid, and true. Karajan never makes her force. All the role is sweetly and purely sung. But she is not the "real thing." She lacks the command that a soprano with bigger reserves of weight and power—a Caniglia, a Tebaldi, a Caballé—brings to the part. Carreras might not have been called on to force, but he does. He sings the strenuous passages with a kind of flat-out quality. The engineers have been careful not to let him be drowned; but even though a phrase like his cry con disperazione "Il cieco avaro un giorno sol mi dà" remains audible above the orchestra, it lacks the needed ring of metal in the timbre.

Cappuccilli begins badly. He sounds somewhat tired, even old, in "Carlo chi è sol," especially in the second verse. The voice needs pressure to gain its colors, richness, and firm focus. Posa's "Inaspettata aurora" (at the close of the duet with Philip) is an aside marked to start mezzo voce at its first appearance and p at its second; Cappuccilli sings it in full voice—and makes a fine sound. He is impressive in the dialogue before the trio "Tremo per le", there is a Straccini-like force and brightness in the phrases. Karajan holds "Per me giunto" to Verdi's pp, at a slow andante sostenuto justified by the quarter-note 58 marking, and provides a soft cushion of sound. Cappuccilli keeps to the markings, and essays a pp, trés doux at the climactic F, but the tone loses focus. Again at the "No, ti serva per la Fiandra": It is marked piano, but the cut of the phrases and the sense of the words posits a more exciting, incisive kind of soft singing than Cappuccilli provides.

I first heard Ghiaurov nearly twenty years ago, in Don Carlos, at La Scala. He was singing the Inquisitor to Boris Christoff's Philip, and he made a tremendous sound. He is impressive in the dialogue before the trio "Tremo per le", there is a Straccini-like force and brightness in the phrases. Karajan holds "Per me giunto" to Verdi's pp, at a slow andante sostenuto justified by the quarter-note 58 marking, and provides a soft cushion of sound. Cappuccilli keeps to the markings, and essays a pp, trés doux at the climactic F, but the tone loses focus. Again at the "No, ti serva per la Fiandra": It is marked piano, but the cut of the phrases and the sense of the words posits a more exciting, incisive kind of soft singing than Cappuccilli provides.

What we need now is (1) a recording of the Fontainebleau-plus-1883 Don Carlos in the original language, and (2) a recording of the 1867 Don Carlos, including the ballet and also the scenes Verdi cut before the premiere (the opening chorus, the Posa arioso, the Elisabeth/ Eboli duet, the Carlos/Philip duet, etc.)—a rather different, more expansive, but also splendid opera. It's not a practicable version for the theater, but it would offer on disc a good deal of almost unknown music by the mature (post-Forza) Verdi that is well worth hearing. Abando's 1977 Scala performance was a mish-mash of versions. Before the promised Deutsche Grammophon recording based


**Recitals and Miscellany**

**THE GOLDEN AGE OF ENGLAND.**

B Deller Consort. [David Joselewitz, prod.] QUINTETTENZENCE PMC 7143, $3.98.


TAVERN SONGS: Catches, Glee, and other Diverse Entertainments of Merrie England.

BR Deller Consort, Alfred Deller, dir. [Seymour Solomon, prod.] BACH GUILD HM 62, $4.98 [from BACH GUILD 561, 1957].

TO DRIVE THE COLD WINTER AWAY: A Fireside Presentation of Music for Merrymaking Down the Ages.

St. George's Canzona, John Sothcott, dir. [Francis Grubb, prod.] VANGUARD VSD 71261, $7.98.

The death of Alfred Deller has not deprived us of the unique sound of the first great twentieth-century counterenner, for his voice is happily preserved on a multitude of recordings (more widely available, it should be noted, in this country and in France than in England). Always active in the studio, he was making new records until very shortly before his death (a complete version of Purcell's King Arthur, released on French Harmonia Mundi, is among the most notable). And reissues continue to appear: The first two records listed here date, respectively, from thirteen and twenty-two years ago.

The first is an attractive compilation of English music from, and around, the reign of Elizabeth I; the selection is almost entirely secular, but is curiously framed by two sacred pieces. If you enjoy Deller's intimate, one-to-a-part renderings of the Byrd Masses, then these motets (Byrd's "Ave verum Corpus" and Tallis's "Salveator mundi") will be deeply satisfying—cool, restrained, with no cathedral-like acoustic to soften the edges of the music. We are more accustomed to hearing madrigals performed on this small scale, so there are fewer revelations on the rest of the disc: Wilbye's famous "Sweet Honey-sucking Bees" sounds rushed, but his "Draw on, Sweet Night" is eloquent, with firm, well-focused bass and bright, clear soprano. Several items, including the Byrd lullaby, are performed by soloist and lute—a fact of which the sleeve-note writer was unaware. Alfred and Mark Deller do two Morley canzonets with delicious verve. The sleeve is generally uninformative: Deller's singers are named, but who sings which solo items is not listed, nor are the viol players in Dering's jovial (and here rather precious) "Cries of London"; nor is the lute player identified, which, considering that he plays two solos by Dowland, is inexusable. Is he Robert Spencer? No texts are provided.

"Tavern Songs" is one of those compendious collections that span such a wide range of music that one style of performance cannot possibly be appropriate for all the items. Zoom from early seventeenth-century war songs to early nineteenth-century glee club material, through catches by Purcell and drinking songs by Eccles—and there is still the remote beauty of Cornyshe's "Ah Robin" (c. 1500) unaccounted for. To all this music Deller and friends bring a restrained, ever so polite, gently humorous style that contrasts oddly with some of the rambunctious sentiments expressed. The Purcell catches are sung in commendably unexpurgated versions, though the smuttiest aspects of these remarkable pieces are represented only by one in which the repeated cries of "So kiss my Ar—" are nicely completed from another part in the canonic texture by the final consonants of "once, twice, thrice." There really should be a background noise of clanking glasses, uproarious laughter, and giggling serving wenches; perhaps listeners are expected to provide their own.

The final record is an amiable piece of nonsense by a lively English group that treats early music very much as an extension of the folk tradition. These "medievalized" Christmas carols, side by side with Praetorius dances and the odd serious thirteenth-century motet, make a successful but unstylish sequence. Playing is vigorous but not always well tuned, and the singing is feeble indeed. It's all good fun, so long as no one imagines that this is how the music actually sounded. N.K.
For only $2.95 you can learn all you need to know about the latest tape systems.

Before you spend hundreds of dollars on equipment and hundreds of hours using it, invest a little money and time to make sure you get exactly what you need.

High Fidelity’s editors have put it all together in the 1980 Buying Guide to Tape Systems.

Special features include:

- Pay only what you want to for a cassette deck
- Pros evaluate 10 top cassette decks
- Inside secrets of superior tape recording
- No-cost tips for cleaner sound
- 7 simple steps to super car stereo
- Is now the time to invest in home video?
- What owner’s manuals don’t tell you

Plus

- Special buying guide section covering more than 1000 models

Mail this coupon with $2.95 and you’ll be the expert your friends turn to for advice!
The Tape Deck

The musicassette Vox Box

So succinct, the descriptive phrase "Vox Box" must have contributed significantly to both recognition and sales of the long-familiar series of budget-priced multiple-disc sets. (Was its inspired inventor intuitively aware of the mnemonic potential of both spondaic meter and the rhetorical principle of *parochezia*—repetition of the same sound in words in close or immediate succession?) Therefore the Moss Music Group does well to crown its expansion of musicassette production by extending the Vox Box idea to tapes: three-cassette packages with booklet, $15.98 each. The packaging design and dimensions are distinctive, but since the height is identical to that of the DG/Philips Prestige Boxes and the width slightly less than that of the London type, the Vox Boxes present no new storage problems.

I've heard only four of the first twelve releases, but these are undoubtedly representative of the series' generally first-rate Dolby tape processing and varied programmatic appeal. Particularly rewarding is CBX 5133, the extensive Skrowaczewski/Minnesota survey of Ravel's orchestral works produced in 1975. The 1974 Slatkin/St. Louis compendium of Gershwin's orchestral and concerted works, with pianist Jeffrey Siegel (CBX 5132), also has many admirable features—including a fine Cohan Overture and Cañafish Row (Gershwin's own Porgy and Bess suite)—but too much else that lacks Gershwin's quintessential jauntiness.

Abbe Simon, expectedly, and Herbert Beissel and the Hamburg Symphony, more surprisingly, are (along with their audio engineers) hard to match for consistent satisfaction in their 1973 recording of Chopin's *Overture* for piano and orchestra, now in CBX 5126. But the more recent (1976) first volume of Anthony Newman's Bach Preludes and Fugues, with choral preludes interspersed (CBX 5479), I can commend only to Newmaniacs. I like neither the tonal qualities of the Keiser organ nor the indulgently idiosyncratic readings. My copy was defective, with Sides 2 and 3 running backward—probably an isolated first-production aberration, since the copy was immediately replaced by a correct one.

Instruments: Viola, baryton...

In addition to its "original" instruments series, greeted in February, Telefunken has launched a Virtuoso Chamber Music series ($9.98 each cassette), also with Tri-Tec processing. It leads off with perhaps the best-played viola recital ever recorded, a program of Schumann, Stravinsky, Bach-Kodaly, and Vieuxtemps (4.42075) by Atar Arad and pianist Evelyne Brancart. Thus reminded, I will also make room, finally, for an equally warm recommendation of Arad's earlier recording of viola works (Telefunken 4.42007) by Hoffmeister, Paganini, and Carl Starnitz, with the Philharmonia Hungarica under Reinhard Peters.

Even my obsessive fascination with odd sounds is stretched too far by the Munich Baryton Trio's recording of five Haydn's 125 trios for baryton, viola, and cello (Nos. 44, 52, 61, 96, 101; Archiv 3310 405, $9.98). For all their musicological earnestness, the performances teeter on the brink of tedium.

... Oboe, horn, flute... My personal instrumental biases—as regular readers are surely aware—tilt strongly toward the winds in general, the reeds in particular. And indeed my keenest delights this month are provided by that oboist supreme, Heinz Holliger, who offers the third installment of his Vivaldi concerto series (Philips 7300 726, $9.98), with 1 Musici, and two Albinoni releases—four solo and four duo oboe concertos from Op. 7, with Hans Elhorst and the Camerata Bern (Archiv 3310 409, $9.98), and four solo concertos from Op. 9, with 1 Musici (Philips 7313 012, $9.98).

The leading hornist of recent years, Barry Tuckwell, re-records his celebrated Haydn concertos (two by Joseph, one by Michael) in Angel 4SZ 37569 ($8.98). This version is better, except that the English Chamber Orchestra's accompaniments, conducted by Tuckwell, are no match for the Marriner/Academy ones on Argo.

The Irish-leprechaun challenger to Jean-Pierre Rampal's long dominance of the flute discographies, James Galway, expands the concerto repertory with a mildly attractive *Concerto pastoral* commissioned from Joaquin Rodrigo and couples it with his own flute transcription of Rodrigo's *Fantasia para un gentilhombre* for guitar (RCA Red Seal ARK 1-3416, $8.98). Both are well played and recorded, with Eduardo Mata leading the Philharmonia Orchestra, but everything else pales in comparison with a superb Telemann program (RCA ARK 1-3488, $8.98), in which Galway doubles as conductor of the Solisti di Zagreb in the popular A minor Suite and the less familiar Concertos in G and C. Though no specialist in baroque style, Galway brings such zest and pellucid tone to this delectable music that he proves quite irresistible.

... Harp, lute, guitar

The incomparable Spanish harpist, Nicanor Zabaleta, records far too seldom these days, which further enhances the value of his superbly colored French program (Deutsche Grammophon 3301 051, $9.98) of mostly novel works by Damase, Roussel, Salzedo, Samuel-Rousseau, Tailleferre, and Tournier, along with transcriptions of Ravel (Pavane) and Debussy (Aragonese No. 1).

Nonesuch's recent cassette debut list ($4.96 each) featured two notable lute recitals: one, more than a decade old, with Walter Gerwig playing a program of suites by Bach, Buxtehude, and Pachelbel (N5 1229); the other, an English program (N5 1363) by a talented youngster, Paul O'Dette, making his American debut in a set of eight of Dowland's best pieces coupled with an even more attractive—and historically valuable—batch of seven works by Byrd.

Yet the Old Master lutenist Julian Bream must always be reckoned with, as he demonstrates anew in one of his most impressive, yet immediately delightful, historical documentaries to date: "Music of Spain," Vol. 1 (RCA Red Seal ARK 1-3435, $8.98). It presents vihuela pavanes and fantasias from Luis Milan's *El Maestro collection de 1535-36* along with even more rewarding fantasias and *diferencias* from Luis de Narvaez' *Los seys libros del Delphin de música* of 1538.

Then, as always, there is the seemingly inexhaustible flood of guitar recitals and concertos, but only two recent releases fully held my attention. One is Narciso Yepes' latest remake of the perennial favorites, Giuliani's Op. 30 Concerto and Rodrigo's *Fantasia para un gentilhombre*, this time with the English Chamber Orchestra under Garcia Navarro (DG 3300 975, $9.98). The other is the Romero's remake of Rodrigo's *Concierto Andaluz* and the *Concierto de Aranjuez* with Pepe Romero as soloist (Philips 7300 705, $9.98); the accompaniments by Neville Marriner and the Academy of St. Martin-in-the-Fields are far above average.  

*HF*
Now there's a tuner that works as accurately as a radio transmitter and as easily as a car radio.

You can tune the B760 manually in increments of 25 or 50kHz, or program up to 15 stations in memory for instant selection. Just touch a button for the station you want, and in less than a second the muting light goes off and the digital readouts and tuning meters confirm your station selection.

Both memory and manual tuning are controlled by an advanced digital-frequency-synthesizing circuit with a differential phase-locked loop that compares the output of the master oscillator with a quartz crystal reference frequency. If there's any difference, corrections are made instantaneously, maintaining an accuracy of ±0.005%. (That's better than many radio stations can achieve!)

The B760's CMOS memory is so sophisticated that it can automatically direct an antenna rotator toward each memorized station, and even has a battery pack to protect the memory if you unplug the tuner or lose AC power.

Other features include an optional plug-in Dolby circuit board, oscilloscope outputs to help you minimize multipath distortion, selectable 25, 50 or 75 microsecond FM deemphasis, adjustable-threshold interstation muting, a headphone jack with level control and a high-blend switch to optimize reception of distant stations.

It's all put together with attention to detail and durability for which the Studer Revox company is so well known. With things like plug-in circuit boards, RF shields plated to resist oxidation and even a coaxial delay line to maintain proper phase, everything is made just a bit better than it has to be. Because we want everything to be perfect.

five new Shure Cartridges feature the technological breakthroughs of the V15 Type IV

Plus
Unprecedented stylus protection

Shure has written a new chapter in the history of affordable hi-fi by making the space-age technological breakthroughs of the incomparable V15 Type IV available in a complete line of high-performance, moderately-priced cartridges: the M97 Era IV Series Phono Cartridges, available with five different interchangeable stylus configurations to fit every system and every budget.

The critically acclaimed V15 Type IV is the cartridge that astonished audiophiles with such vanguard features as the Dynamic Stabilizer—which simultaneously overcomes record-warp caused problems, provides electrostatic neutralization of the record surface, and effectively removes dust and lint from the record—and, the unique telescoped stylus assembly which results in lower effective stylus mass and dramatically improved trackability.

Each of these features... and more... has been incorporated in the five cartridges in the M97 Series—there is even an M97 cartridge that offers the low distortion Hyperelliptical stylus! What's more, every M97 cartridge features a unique lateral deflection assembly, called the SIDE-GUARD, which responds to side thrusts on the stylus by withdrawing the entire stylus shank and tip safely into the stylus housing before it can bend.

NEW! M97 Series Era IV Phono Cartridges...
Five new invitations to the new era in hi-fi.

<table>
<thead>
<tr>
<th>Model</th>
<th>Stylus Configuration</th>
<th>Tip Tracking Force</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>M97HE</td>
<td>Nude Hyperelliptical</td>
<td>¾ to 1½ grams</td>
<td>Highest fidelity where light tracking forces are essential</td>
</tr>
<tr>
<td>M97ED</td>
<td>Nude Biradial (Elliptical)</td>
<td>¾ to 1½ grams</td>
<td></td>
</tr>
<tr>
<td>M97GD</td>
<td>Nude Spherical</td>
<td>¾ to 1½ grams</td>
<td>Where slightly heavier tracking forces are required</td>
</tr>
<tr>
<td>M97EJ</td>
<td>Biradial (Elliptical)</td>
<td>1½ to 3 grams</td>
<td>For 78 rpm records.</td>
</tr>
<tr>
<td>M97B</td>
<td>Spherical</td>
<td>1½ to 3 grams</td>
<td></td>
</tr>
<tr>
<td>78 rpm Stylus for all M97's</td>
<td>Biradial (Elliptical)</td>
<td>1½ to 3 grams</td>
<td></td>
</tr>
</tbody>
</table>
The Commodores: “Easy” like $60 Million
by Steven X. Rea

Tommy McClary, his white Adidas pressed up against the sound-booth glass, sits in an insulated cubicle adjoining the studio control room eliciting a succession of country licks from the acoustic guitar on his lap. He is overdubbing a part for the intro to Wake Up Children, a song on the Commodores’ newest LP, scheduled for April release. Reclining behind the 24-track console at Motown’s Hollywood studio, the group’s coproducer James Carmichael—a wry, wizened black man in his middle forties—lights another in a seemingly endless chain of cigarettes, pushes his glasses up along his nose and shakes his head ruefully. “Tommy, that sounds like some kind of slide guitar or something. What are you doin’?”

“I know it does, I know.” McClary says, grinning back through the thick sheet of glass that separates the two rooms. Engineers Calvin Harris and Jane Clark and drummer Walter “Clyde” Orange exchange amused glances, as if to say. “Uh oh, here comes another argument.”

Carmichael’s credits span two decades as an arranger, conductor, and ghost musician for such Motown acts as the Jackson 5 and Diana Ross & the Supremes. He has guided the Commodores through six years of hit records, starting in ’74 with the disco/funk Machine Gun and continuing with numerous pop, r&b, and crossover hits, such as the r&b rocker Brick House, the soul ballad Three Times a Lady, and the out-and-out country ballads Easy and Sail On, last year’s huge single.

Past country success or no, right now a slide guitar seems to be too much for Carmichael to cope with. McClary enters the control room to hear the playback, after which an amicable but spirited debate between the producer and the tall.
The Commodores' ability to move records is unarguable, but because their label only recently became affiliated with the Recording Industry Association of America (which monitors and certifies sales) there's no official tally of the band's sales to date. According to Motown, all nine of their albums have gone gold (500,000 units) and several have reached triple platinum status (3 million). Worldwide record sales are put in the vicinity of $60 million.

In 1968, McClary, Richie, and King—all business majors at Alabama's Tuskegee Institute—formed a band called the Mighty Mystics, covering tunes such as Tobacco Road and James Brown's Cold Sweat. Williams, an engineering major, was playing keyboards in a band called the Jays. Soon after the Mighty Mystics and the Jays heard each other perform at a freshman talent show, they joined forces to form the nucleus of the Commodores. Orange, the only music major in the bunch, replaced the original drummer, Andre Callahan, and Ronald LaPread, another engineering major, replaced bassist Michael Gilbert. Since late 1968 that lineup has remained unchanged. Frat parties, club dates on the “chitlins circuit,” and all-white debutante dances followed.

From the beginning the Commodores have placed a strong emphasis on “commercialism” and “versatility,” playing hits by pop acts like Three Dog Night as well as Sam Cooke scorers. Those early decisions have paid off: Today their concerts draw an almost equal number of blacks and whites.

This broad-based appeal no doubt comes from their very diverse backgrounds as well. Richie and LaPread are Tuskegee natives, King is from Birmingham, Orange and McClary from Florida, and Williams from Mississippi. Because of their Southern black roots, the Commodores' musical heritage encompasses the '60s Motown sound, r&b, gospel, and rural blues. And Richie, whose grandmother was a classical music teacher, grew up listening to Bach, Beethoven, and Mozart; his uncle, Bertram Richie, was one of Duke Ellington's arrangers. Add to these an impatient finger on the radio dial, and that brings country & western, jazz, and Top 40 to bear on Richie's context.

"People always want to tag us," he says, "by citing James Brown and the Temptations as our main influences. But we also grew up in a pop environment. We listened to the Beatles, Jimi Hendrix, Led Zeppelin, Glen Campbell, and Merle Haggard as much as we listened to Brown. We consider ourselves a pop band playing popular music. We're not just a soul act or a country act or a disco act."

Even the awards they've received have been diverse: They were Billboard's Top Soul Album Artists (and Top Box Office Artists) and Rolling Stone's Soul Group of the Year in 1978, and Record World named them Top Male Group, Top Crossover Group, and Top Album-Selling Group. In that same year, Three Times a Lady won ASCAP's Country Songwriter Award and the American Music Award for Best Pop Single.

All of that is a far cry from the rather unspectacular results of their first—and only—LP on Atlantic, which was re-
It was when they hit the European stages, though, without an album or any previous familiarity, that they knew they had it. The success of their show, choreographed by King, proved them masters at working an audience. In fact since campus days, their emphasis has been on live performance, and Richie says he writes his songs with a show, not a record, in mind.

The group returned from their modest but triumphant 1970 European tour and were booked as the opening act for the Jackson 5. Since then the Commodores have become top box-office, easily packing 20,000-seat sports arenas. In June they kick off a 100-date, five-month tour and were booked as the opening act for the S.S. France cruise to Europe. “We played one show over and one show back,” recalls McClary. “It gave us a chance to play for all kinds of people. We did things like Wichita Line-Man. We even did the Theme from Love Story!”

Good business sense is one reason they’ve lasted so long; impartiality is another. Their publishing company, for instance, is set up so that no one Commodore gets left out in the financial cold. “We didn’t want to do that,” says McClary. “We wanted to play our own tracks. Motown said, ‘Play your own tracks?’—like we were nuts.” “We were self-contained,” adds LaPread, “and that didn’t jive with Motown’s assembly-line system.”

Finally, after running the gamut of in-house producers, they met Carmichael. “I saw him at a show where the Commodores were a supergroup to be reckoned with. He was good—I thought he was really good. He showed me how to write a song, and before I knew it, I was writing songs.”

The group is musically ambitious, but they’re also acutely aware of the marketplace. For instance, though they listen to a good deal of reggae, they’ve yet to incorporate any of its elements into their own music. “I don’t think the masses are ready for it yet,” says Richie. “Maybe in another album or two we might play some reggae.”

Carmichael also helps maintain a consistent market profile by keeping their sound within a certain stylistic framework. “He strikes a real balance with us,” Richie explains, “because he has a very conservative attitude toward recording, and, of course, we have no attitude at all. We’re cut there in left field, believe me.”

Watching the Commodores go through rigorous nights of arranging, rehearsing, and finally recording a song like Wake Up Children easily belies that off-hand jest. So does the fact that, in a highly volatile industry, they’ve maintained the same personnel, staff, manager, producer, engineers, and record company throughout their last highly successful decade. The six still reside in relatively modest homes in and around Tuskegee—Richie, Orange, King, and Williams with their wives and children. LaPread is a widower; McClary is the sole bachelor.

One gets the feeling that, naturally, the Commodores are success-oriented, but they’re motivated less by a lust for cash than by a healthy sense of competition. Their oft quoted goal is to be “bigger than the Beatles.” Whether they’ll achieve that is doubtful. What isn’t so doubtful is that having shaken off the r&b stereotype they are a supergroup to be reckoned with.
Back in the Home Studio: The $2,000 Difference

by Bennett Evans

In the February issue we described how to build a one-room studio for $2,000. Not the biggest studio, nor the ideal studio, but one that would enable you to make clean, even moderately elaborate demo tapes and perhaps to earn a little money.

In this installment we'll move into slightly greener pastures—$2,000 greener, to be exact. How you spend your money depends, of course, on where you're starting from. If you followed our advice last time, you already own a mixer, some mikes and stands, and perhaps a quarter-track, but probably a half-track, tape deck. If you're happy with the deck you have, and with the service you get on it, consider buying another of the same make. If you've been doing your own servicing you'll be able to use your hard-won expertise to keep the new deck running right.

THE DECK

Our previous tape deck price range was $725 to $1,600. The sixteen decks listed on page 111 cost between $1,499 and $2,050, and with more money come more features. For easier editing, virtually all of them provide for cueing (listening) during fast-forward and rewind, and hand-rocking the reels to locate precise splicing points. Several also allow for "dump editing," i.e., winding off unwanted portions of the tape without the takeup reel whizzing around and damaging the end of the tape that you've decided to save.

The Akai Pro-1000, Ampex ATR-700, and Tandberg TD-20A (all two-channel decks) have mixing facilities for up to four line inputs, which makes mixing down from a quarter-track simpler. Also, the Ampex and Akai have four mike inputs, which can be invaluable if you don't own a mixer or if you frequently do simple remote and don't want to lug your mixer along. Those inputs (and those of the Otari MX-5050-2SH and Technics RS-1520) accept balanced lines, allowing longer mike-cable runs without noise pickup. Several decks have standard or optional balanced inputs and outputs for line-level signals, even where they don't have balanced mike connections.

Some of the more expensive decks have no mike inputs at all. These are designed for a typical pro studio environment, where all microphones are connected to the mixer or console. Because these machines provide easier access to the bias and recording-EQ controls, you can adjust them to the specific requirements of different types of recording tapes. Some also have switch-selectable NAB (National Association of Broadcasters) equalization (for U.S. use) and CCIR/IEC equalization (Europe), in case you exchange tapes with overseas studios.

Channels & tracks. Most small studios today are pop-oriented, which usually means they make multitrack recordings. The more tracks available, the better, but our budget restricts us to a four-track deck. You'll also need a two-channel machine for mixdown. The question is, should it have half- or quarter-track heads? Half-track (also called two-track) is the studio standard. If you send your tapes out to be disc-mastered, for example, the cutting house will probably expect, and certainly prefer, half-track tapes. The half-track format also provides about a 3-dB better signal-to-noise ratio than quarter-track. Of course, you can't economize on tape—by flipping it over and recording in the other direction—the way you can with quarter-track. (Having done that, by the way, don't forget that editing tracks going in one direction will wreak havoc on those going in the other.)

Most of the decks listed are available in half- and quarter-track configurations. Many—like the Technics RS-1500US—have additional heads, so that the half-track deck can play quarter-track tapes, and vice versa. The RS-1500US also has interchangeable head assemblies for recording half- and quarter-track tapes. Both of the Pioneer machines carry that versatility one step further: Change the 2022's half-track head assembly for a four-track one, and you have a quarter-track, two-channel machine. Add a second record/play amplifier, and you have a four-channel one.

THE MIXER

The main difference between a $2,000 and a $4,000 studio is the capability provided by a second deck. But that's not the only difference. By careful spending, you can get a little more of everything else: more mikes (again I recommend Dick Rosmini's piece in the April 1978 BACKBEAT), more stands, more mixer. Note that I said more mixer, not more mixers. For the most part, one big mixer beats two little ones—unless they can be ganged or stacked together. Some of the mixers covered last time—the 6-in/2-out Sony MX-650 and 670, the Tanco 6201B, and the 6-in/4-out Teac 2A—are stackable. Tanco's expansion unit (8201REB, $975) isn't just a duplicate mixer; it adds eight more inputs to the 6201B's six, plus reverb and equalization.

Speaking of reverb and EQ, let's look at some of the other features you'll find in mixers costing between $700 and $1,500. (February's range was from $160 for the Heath Kit TM-1626 to $599 for the Tanco 6201B.) Virtually all of them are stereo boards, with just two output channels. You'll rarely be doing four-channel...
<table>
<thead>
<tr>
<th>Make &amp; Model</th>
<th>Price</th>
<th>Tracks</th>
<th>Channels</th>
<th>Speeds</th>
<th>Heads</th>
<th>Meters</th>
<th>Sync</th>
<th>Pitch Control</th>
<th>S/N</th>
<th>THD</th>
<th>Frequency Response</th>
<th>Mike Inputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akai Pro-1000</td>
<td>$1,995</td>
<td>2/4</td>
<td>2</td>
<td>15.7%/3%</td>
<td>4</td>
<td>2 (see remarks)</td>
<td>no</td>
<td>no</td>
<td>60</td>
<td>1%</td>
<td>40-24k ± 3</td>
<td>4b</td>
</tr>
<tr>
<td>Remarks: Built-in 4-input mixer; ¼-track record &amp; play plus ¼-track play; separate transport and electronics; pan pots on two inputs; independent mixer output for use with other deck; external processor loop; front panel bias adjust and metering; front panel equalization adjust; edit cueing; dual capstan drive; selectable peak/VU metering; cue in fast-wind; optional wireless remote.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ampex ATR-700</td>
<td>$1,795</td>
<td>2/4</td>
<td>15.7%</td>
<td>3(4)</td>
<td>2 VU</td>
<td>yes</td>
<td>± 5%</td>
<td>60</td>
<td>0.3%</td>
<td>40-15k ± 3</td>
<td>4b</td>
<td>(40-18k ± 3)</td>
</tr>
<tr>
<td>Remarks: Space for optional 4th playback head; memory counter reads in minutes and seconds; manually defeatable lifter for cueing; motion-sensing logic; remote control; switchable NAB or IEC equalization; VU meter range switchable (0,+3,+6); built-in 4-in, 2-out mixer; master gain control; provision for dump edit; 3-position bias and EQ switches; also available for 3% &amp; 7%, and for ¼-track.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ferrograph 7602AH</td>
<td>$1,950</td>
<td>2</td>
<td>15.7%/3%</td>
<td>3</td>
<td>2 VU</td>
<td>yes</td>
<td>± 7%</td>
<td>66</td>
<td>0.7%</td>
<td>25-20k ± 2</td>
<td>2u</td>
<td>(30-20k ± 2)</td>
</tr>
<tr>
<td>Remarks: Adjustable fast-wind speed; master gain control; inter-track transfer for sound-on-sound or echo; mute switch to cut output during fast-wind; optional remote control and indicator units; bass and treble controls; optional Dolby ($400); motion-sensing logic; ¼-track available.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Otari MX-5050-2SH</td>
<td>$1,695</td>
<td>2/4</td>
<td>15.7%</td>
<td>4</td>
<td>2 VU</td>
<td>yes</td>
<td>no</td>
<td>68w</td>
<td>1%</td>
<td>50-18k ± 2</td>
<td>2u</td>
<td>(50-22k ±2)</td>
</tr>
<tr>
<td>Remarks: Optional balanced mike inputs; optional remote control; dump edit provision; built-in splicing block; tape lifter defeat; front-panel bias adjust with test oscillator; adjustable recording EQ and reference levels; motion-sensing logic.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Otari MX-5050B</td>
<td>$2,050</td>
<td>2/4</td>
<td>15.7%/3%</td>
<td>4</td>
<td>2 VU</td>
<td>yes</td>
<td>± 7%</td>
<td>66</td>
<td>0.7%</td>
<td>25-20k ± 2</td>
<td>2u</td>
<td>(30-22k ± 2)</td>
</tr>
<tr>
<td>Remarks: All features of 2SH, plus: increased headroom; DC servo capstan motor with pitch control in recording and reproduce; peak-reading LEDs on meters; switch-selectable for 7% and 3% ips; memory counter; switch-selectable NAB/IEC EQ; balanced input available for line only.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pioneer RT-2022</td>
<td>$1,590</td>
<td>2</td>
<td>15.7%</td>
<td>3</td>
<td>2 VU</td>
<td>yes</td>
<td>no</td>
<td>57</td>
<td>1%</td>
<td>40-20k ± 3</td>
<td>2u</td>
<td>(30-22k ± 3)</td>
</tr>
<tr>
<td>Remarks: Machines identical save for head assembly and second 2-channel record/play amp on 4-channel version; RT-2022 convertible to RT-2044 for $420; switch-selectable fixed or variable bias; 2 EQ positions each for NAB and IEC; 1 kHz/10 kHz test oscillator with external output; locking cue control; optional remote; wide-range meters calibrated from -40 to +6 VU.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pioneer RT-2044</td>
<td>$2,010</td>
<td>4</td>
<td>15.7%</td>
<td>3</td>
<td>4 VU</td>
<td>yes</td>
<td>no</td>
<td>55</td>
<td>1%</td>
<td>25-20k ± 2</td>
<td>4u</td>
<td>as above</td>
</tr>
<tr>
<td>Remarks: Machines identical save for head assembly and second 2-channel record/play amp on 4-channel version; RT-2022 convertible to RT-2044 for $420; switch-selectable fixed or variable bias; 2 EQ positions each for NAB and IEC; 1 kHz/10 kHz test oscillator with external output; locking cue control; optional remote; wide-range meters calibrated from -40 to +6 VU.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teac Tascam 35-2</td>
<td>$1,900</td>
<td>2/4</td>
<td>15.7%</td>
<td>4</td>
<td>2 VU</td>
<td>no</td>
<td>± 10%</td>
<td>63w</td>
<td>1%</td>
<td>40-18k ± 3</td>
<td>0</td>
<td>(40-22k ± 3)</td>
</tr>
<tr>
<td>Remarks: Optional DBX; front-panel bias and EQ adjust; LED peak indicators; cue and edit; dump edit; motion-sensing logic; optional remote.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teac Tascam 40-4</td>
<td>$1,700</td>
<td>4</td>
<td>15.7%</td>
<td>3</td>
<td>4 VU</td>
<td>yes</td>
<td>Opt.</td>
<td>63w</td>
<td>1%</td>
<td>40-15k ± 3</td>
<td>0</td>
<td>(40-18k ± 3)</td>
</tr>
<tr>
<td>Remarks: Optional DBX; LED peak indicators; cue and edit; optional variable-speed adaptor yields ±20% speed adjust but eliminates 7% speed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technics RS-1500US</td>
<td>$1,500</td>
<td>2/4</td>
<td>15.7%/3%</td>
<td>4</td>
<td>2 VU</td>
<td>no</td>
<td>± 6%</td>
<td>68w</td>
<td>2%</td>
<td>20-25k ± 3</td>
<td>2u</td>
<td>(30-30k ± 3)</td>
</tr>
<tr>
<td>Remarks: Isolated-loop drive; quartz locked direct-drive motor; logic control; optional remote; can operate on 24 VDC; tape counter reads minutes and seconds; 3 position bias and EQ selectors; meter scale selector; timer-start; edit dial; interchangeable 4/2-track head assembly; built-in stroboscope; bias and EQ adjustments on bottom; cue and edit.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technics RS-1520</td>
<td>$2,000</td>
<td>2/4</td>
<td>as above</td>
<td>4</td>
<td>2 VU</td>
<td>no</td>
<td>± 6%</td>
<td>60</td>
<td>0.8%</td>
<td>± above 2b</td>
<td>2b</td>
<td>as above</td>
</tr>
<tr>
<td>Remarks: Similar to 1500 but with balanced-line inputs; front-accessible bias/EQ adjust; built-in test oscillator; tape dump.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
- *Performance at 7\% ips (15 ips in parentheses); w = weighted. Since different manufacturers use different weighting and measurement systems, do not assume that figures are directly comparable.*
- *b = balanced input, u = unbalanced.*
recording. Instead, you’ll be doing multi-track recordings on your four-channel machine, and mixdowns from multitrack to your two-channel unit. For that, you’ll need a slew of microphone inputs, four line inputs, and two output channels. Most of the boards in this range fill the bill, with from six to twelve input channels, switchable to either line or mike.

Unlike the lower-priced mixers, many of these have balanced mike inputs. (Any board designed for serious use should have low-impedance inputs, of course.) Nowadays, most input modules have sliding controls or faders, though some still use rotary pots. There are advantages to both: Faders give you a quick visual indication of what your settings are, and it’s easier to move a bunch of them at once. Rotary pots save space on the control panel, and, in some cases, allow for more precise adjustments than the short fader paths found on many of these boards.

Some mixers in this range have equalization for each input, usually in the form of low-, mid-, and high-frequency tone controls. Equalizers with shelving characteristics tend to be more common in still higher-priced boards and have elaborate graphic equalizers or even parametrics.

Panning (electrically positioning a signal anywhere between channels) is probably more useful in mixing down from a multitrack than in a live stereo recording. In the latter, you can move your mikes or performers to place the sounds where you’ll want them in the final stereo image. Once they’re on separate tracks, though, panning is the only way to get them anywhere but far left, far right, or dead center. (Reverb can help a little too, if your reverb system blends channels.)

The number of patch points—that is, points of access to the circuits—increases as the price goes up, too. Studio mixers in the kilobuck range usually have patch points at the input and output to every circuit stage. That lets you pull all kinds of tricks: ganging equalizers for extreme frequency tailoring, patching around circuit stages that go blooey in the
Glossary of Tape Deck Features

**Balanced lines**, usually found in professional studio equipment, are heavywight, two-conductor-plus-shield lines and 3-pair XLR connectors. The ground lead is separate from the two that carry the signal in order to reduce hum pickup. Home gear uses conductor-plus-shield—or unbalanced—lines, with the signal return fed through the grounded shield and terminated at the "cap" of the relatively flimsy pin ("RCA" or "phono") connectors. Home setups rarely require the long cable runs that studios do, so noise buildup is less critical.

**CCIR/IEC** is the standard equalization curve used in some foreign countries, as opposed to the **NAB** equalization curve used in the U.S. **Cue** can mean different things to different companies, but it usually means that the tape lifters can be defeated so that the tape remains more or less in contact with the heads in fast modes. This enables you to listen to tape "chatter" in such modes to find a specific section of the tape. Many decks automatically reduce output level during cueing to save wear and tear on tweeters and to avoid magnetizing the heads.

**DBX** is a noise-reduction system that uses complementary compression and expansion to reduce tape noise. Not all DBX systems are precisely compatible with each other; check before playing back tapes made on a different deck with DBX encoding.

**Dolby B** is another noise-reduction system and is more widely compatible than DBX. In a real pinch, Dolby-encoded tapes can be played on non-Dolby machines, by using tone controls or equalizers (to roll off the highs) to approximate Dolby-decoded response.

**Dual capstans** in a drive system usually means that there are capstans and pinch rollers both before and after the tape heads. This isolates the tape from outside drag or vibration and maintains optimum tape-to-head contact.

**Dump edit** enables you to wind unwanted portions of tape off ("dump") while listening for the start of the desired portion. When dump edit is engaged, the takeup motor automatically shuts off. To dump edit without this feature, you either must remove the takeup reel or manually hold it fixed throughout the process.

**Equalized meters** are recording-level meters that read the signal after, rather than before, the recording equalization circuits. Signals that might cause tape saturation because they've been boosted by these equalization circuits are more easily detected with such meters.

**External processor loop** allows the signal to be fed through an external equalizer, noise-reduction unit, reverb device, or other signal processor. It works exactly like the tape-monitor loops on most home preamps.

**Four-track/four-channel:** In studio use, "four-track" denotes a tape deck with four separate record/playback channels, each using a separate tape track. The term "four-channel" would seem useful to distinguish these decks from quarter-track stereo decks, whose tapes have four identical tracks, though only two can be recorded or played simultaneously. But since the four tracks of four-channel decks are more often used independently (for multitrack recording) than together (for quadriphonic use), the term four-track has stuck and is unavoidable studio parlance.

**Isolated loop** (closed loop) is a transport system in which the tape is pressed against both sides of a single, very large capstan by pinch rollers and passes over the heads between its first and second contacts with the capstan. As with the dual-capstan drive, this isolates the tape from outside influences where it passes over the heads. The difference is that both pinch rollers press the tape against a single capstan, rather than against two separate ones.

**Memory rewind** allows you to automatically rewind to a preselected spot on the tape, for easier location of the start of the last take.

**NAB** is the equalization curve used in the U.S. (See CCIR/IEC.)

**Peak indicators,** usually flashing LEDs, are used in conjunction with average-level (VU) meters to warn the operator of signal transients that are strong enough to cause distortion, yet too fast for VU meters to respond to.

**Peak meters** display peak, rather than average, signal values. They're sometimes referred to as PPMs (Peak Program Meters).

**Pitch control** is a variable speed adjustment (usually ±5% to ±10%) useful for increasing or decreasing tape time or matching the pitch of instruments recorded at different times.

**Quarter-track** usually describes a format that records four tracks on a tape, with two tracks (1 and 3) recorded in one direction, and the other two (2 and 4) recorded in the other. (See four-track.)

**Transport logic** protects the tape from breaking or stretching by automatically stopping it briefly after fast wind or rewind and record or play-back. **Motion-sensing logic** can make the stop even more brief since it senses when it's safe to begin play rather than waiting a fixed period of time.

**Two-track** is a tape format that records two tracks, each almost half the tape's width, with a small, unrecorded guard band between them. Also called half-track.

**VU meters** indicate average, rather than peak, recording levels. Though not all averaging meters meet the true VU standard (which rigidly defines the response to certain specified test signals), most are marked VU nonetheless.
middle of a session (usually just when you’ve become familiar with which input pot controls which instrument), inserting external signal-processing devices, and so on. With enough patching, you can reconfigure your board as easily as you can stack piles of toy blocks—with the advantage that everything goes back to normal the instant you pull out the patch cords.

The $700 to $1,500 boards usually provide several operator conveniences that can speed up a session considerably. CUE SEND sends the signal from a given board input to a headphone circuit, so the performers can listen to, for example, the rhythm tracks while overdubbing. Some boards also have a CUE CHANNEL, which picks up any input channel whose fader is pulled all the way down. This enables the engineer to listen to it without feeding it into the mix; it can be used to check signal quality, to tell when a tape track is nearing the point where you want to mix it in, or even to cue up tapes and records that will be fed into the mix later. MONITOR ASSIGNMENT buttons control which signals are fed to control-room speakers, which to speakers in the studio, which to headphones in each location, and so on. TALKBACK systems let the operator talk to the musicians via a mike on the board. His comments or instructions can be fed to their headphones or, between takes, through the studio monitors. All of these features tend to be necessary only when the control room and studio are separate. But even if you’re working in one room (and we assume you are), keep the possibility of a separate control room in mind while you’re selecting your equipment.

As studios get larger, even common features like VU meters become more important. In a small setup, you can put your tape deck right behind your mixer and use its recording-level meters directly. But if you have two decks, or if you must peer over the board to see what the musicians in the next room are doing, you’ll need a mixer with its own meters. In most studio control rooms, the tape decks are set up behind the operator.

**ON THE UPGRADE**

Regardless of whether or not you think you’ll be upgrading your studio, believe me it pays to shop for equipment with expansion in mind. For instance, you’ll want to get a board with provision for outboard signal-processing, such as echo. A few mixers have it built in, but you’ll need an additional echo unit (or a reverb or delay unit) eventually, so make sure there’s a place to patch it in. EFFECTS BUSSES (such as echo) can take their signals from before or after the input faders. Most mixers use postfader SEND, since effects then follow the rise and fall of the input signal naturally. But some interesting, if unnatural, effects can be achieved by feeding the effects busses directly from the input, before the signal is attenuated by the fader, which some consoles also allow. You’ll find submaster controls on a few boards in this price class, and quite a few at higher prices. These let you fade several inputs in and out at once—useful, for example, when you’ve assigned three mixes to the drummer or brass section.

Of course, there’s a lot more to a studio than tape decks and mixing boards, even if they are the two largest hardware investments you’ll make. There are outboard equalizers and echo, reverb, and delay devices; compressors, limiters, and noise reduction; rhythm devices; vocoders and synthesizers; equipment racks (all that stuff has to go somewhere); patch bays; fuzz boxes, flangers, wah-wahs, etc. Most of these are available at moderate prices—but the cost of fully stocking a studio with them adds up. In our next installment, we’ll see how many of these extras, in addition to the basics, a $10,000 budget will buy.

Saving up to move from the $2,000 to the $4,000 level may take a while, and moving from $4,000 to $10,000 takes even longer. But the time’s not wasted: While you’re working, you’re learning. For the most important part of your studio isn’t what’s in your studio. It’s what’s in your head.
ESS Heil Wins Again

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

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

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

The students listened in groups of 30 or less to the same musical material played on each of the speakers in head-on comparisons, without knowledge of speaker brand or model. They were then asked to choose the best sounding speaker. At U.C.L.A. and Wisconsin, the students chose ESS in 13 out of 14 comparisons, while at Georgia Tech ESS was chosen amazingly in 24 out of 24 comparison situations.

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

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

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

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

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

Take the ESS Listening Test yourself!

*Suggested Retail Price
Report from Winter NAMM: Less Hype, More Substance

by Fred Miller

As the “me” decade closes and we embark upon what promises to be a period of technological advancement beyond our wildest dreams, musical instrument and accessory manufacturers appear to be buckling down to no-frills, common-sense marketing and merchandising practices. The NAMM (National Association of Music Merchants) shows of the late ’70s were loaded with Madison Avenue hype—buttons, bumper stickers, balloons, and buxom babes wearing costumes of every description. Fortunately little of that was in evidence at last January’s convention in Anaheim, California. (Perhaps NOW finally caught up with NAMM.) The emphasis this time seemed to be on the product, not the packaging.

Among the new items on hand was a carrying case/drummer’s rug combination from D’Aleo’s of California. The rug provides a stable surface for setting up a drum kit and rolls up to hold up to eight heavy-duty stands in a shoulder-strap arrangement. Another innovative goodie, the Ploeger Sound Mirror, clips to the bell of a saxophone and reflects the sound back up to the player without interfering with what the audience hears. (No more playing into the wall to hear yourself!) And CC Banta displayed a bass marimba with huge wooden keys with tuneable resonators.

Casio, Inc. — famous for their pocket calculators and musical timepieces — entered the musical instrument field with a series of good quality, low-cost electronic keyboards. Ranging in size from the 2½-octave Casiotone 10 up to full-sized keyboards, they are quite straightforward in operation and incorporate a wide range of instrument voices. Further down the aisle, Fender displayed its new bite-sized Rhodes Stage Piano with 54 keys. Fender is now making the tops of all its Rhodes (the 73- and 88-key as well) flat, at long last realizing that musicians occasionally need to be able to read music. This should also make it easier to stack the instruments. Con Brio introduced its ADS (Advanced Digital Synthesizer) 100, which comes complete with a programming panel, floppy discs (storage mediums for digital information), and a video screen. It reminded me of an elaborate version of RMI’s keyboard computer. Moog’s newest synthesizer entry is the Liberation, a portable, 3-octave monophonic unit that looks weird and sounds great. Speaking of looking weird, Zephyr Manufacturing has designed a truly wonderful mike stand that tilts toward the performer from its base and eliminates the need for goosenecks and booms. Another amazingly simple idea for my why-didn’t-I-think-of-that file.

There were also many old favorites at the show, devices introduced over the past couple of years that have withstood the test of time. The Roland Rack, for example, has become a very popular item, which isn’t surprising since it’s such a useful concept: an easily movable unit that incorporates such performance basics as preamp, power amp, flanger, delay line, compressor, etc. And electronic-drum manufacturers Synare and Syndrum are alive and well, refining a concept that just three years ago seemed downright revolutionary.

Although this was said to be the biggest NAMM Western Market show yet, it was clear that some belt-tightening has been going on in the industry. From where I sit, that’s a healthy trend. I’m looking forward to a decade that will be shorter on flash and pizzazz than the ’70s were but longer on value and substance.
All you feel is the music.

Music should be a sensory delight. But it can't give you the pleasure you deserve if your headphones squeeze your ears and hurt your head.

The Beyer DT 440 is quite probably the world's most comfortable headphone. At 9 ounces, it's not quite the world's lightest (that record belongs to our Beyer DT 302). But with its sponge-padded ear-cups and low-pressure air-filled headband, it's so beautifully balanced it just about disappears.

When you plug in the DT 440 you'll be part of an almost unbelievably realistic musical experience. The strong bass, high efficiency and fast transient response have all been acclaimed by sophisticated audiophiles, audio critics and musicians worldwide. And the DT 440's open-air, high-velocity design gives you a perfectly natural balance between recorded and environmentally-present sound.

The overall sound is absolutely clear, yet at the same time, warm and rich. With smooth, undistorted reproduction across the entire audible spectrum.

Stereo imaging approaches the ideal, providing accurate and dramatic locating of each and every sound source.

Please visit your Beyer dealer. He'll make you feel better.

BURNS AUDIOTRONICS, INC.
5-05 Burns Avenue, Hicksville, NY 11801 • (516) 935-8000
In Canada, H. Roy Gray, Ltd.
“Rock & Roll for a Desert Island”

by Stephen Holden

A nyone interested in rock and the literature that has grown up around it must read Stranded: Rock and Roll for a Desert Island (Alfred A. Knopf, $12.95), a collection of essays edited by Berkeley-based writer Greil Marcus, who received a National Book Award nomination several years ago for his Mystery Train. For Stranded he asked twenty rock critics—fifteen men and five women—to respond to the question, What one rock & roll album would you take to a desert island? Though the essays aren’t all first-rate, together they present a powerful case for rock & roll as an art form and for rock criticism as a vital literary genre.

Nurtured in the pages of Crawdaddy, The Village Voice, and the mid-Sixties magazine Eye, rock criticism has developed into a uniquely open-ended personal, political, and cultural forum as stylistically diverse as the music it considers. Unlike his theater and film comrades, the rock critic doesn’t have the power to make or break records commercially—radio does, principally. This makes him all but irrelevant in the marketplace, but at the same time it frees him of the temptations of publicity-mongering for his own benefit. Especially in the last five years, rock critics have used this freedom to take on what the Rolling Stones have meant to him over the years. Gonzo journalism in the mode of Hunter Thompson, this funny, druggy reminiscence is a tour de force of intellectualized adolescent macho grossness. Equally iconoclastic is Ed Ward imagining the demise of the Five Royals, a fictional Fifties rhythm & blues group. This is the book’s closer, and sandwiched between it and Tosches’ joyride are a dozen or more pieces whose imaginative boldness and sheer zest outstrip most of what you’re likely to find in a whole year’s worth of The New York Review of Books. In reassessing the Rolling Stones’ late-Sixties masterpiece “Beggars Banquet,” English critic Simon Frith makes a strong case for the album as “hilarious” and the Stones as “petite bourgeois jesters” and “poets of lonely leisure” whose rebellion has been “an aesthetic style without a core.” Writing about Lou Reed and the Velvet Underground, Ellen Willis celebrates the history of the punk-stance in rock & roll, then uses Reed’s Street Hassle as the launching pad for a poetic leap of faith: “I believe that body and spirit are not really separate, though it often seems that way. I believe that redemption is never impossible and always equivocal. But I guess that I just don’t know.”

D iscussing the aesthetic-punk dichotomy more hard-headedly, this time in relation to the New York Dolls, Village Voice critic Robert Christgau concludes, “Their music synthesizes folk art’s communion and ingenuousness with the exploded forms, historical acuity, and obsessive self-consciousness of modernism.” In these very well chosen words, Christgau comes closer than anyone has to defining the essence of post-countercultural rock. Jay Cocks uses the career of Huey “Piano” Smith as the springboard for a vivid, stylish musicomiotic history of New Orleans. Lester Bangs gets to the heart of Van Morrison’s “Astral Weeks” by starting with a reminiscence of his own life at the time of its release (1968). He then literally enters the world of the album to the point where his language and Morrison’s run together. The most compassionate and daredevil critic of all, Bangs ends his piece with dazzling side-by-side quotes from Morrison and poet García Lorca. The book’s funniest change of pace is from Bangs’ piece to Dave Marsh’s, which is a compilation of an imaginary album, “Onan’s Greatest Hits,” for the solitary man. “The real truth,” writes Marsh, “is that rock was invented by teenagers with pimples, and acned adolescents are mostly getting it on with their fingers.”

Stranded’s two best chapters—Tom Carson on the Ramones’ “Rocket to Russia” and John Rockwell on Linda Ronstadt’s “Living in the U.S.A.”—couldn’t be more dissimilar. Writing about the Ramones, Carson confirms Christgau’s aesthetic, but with exciting rhetorical punches: “...the appeal of twisting the whole hierarchy of success and defeat around to make it say the opposite of what it seems to mean. It’s not graffiti transformed into art so much as it’s art redeemed by the spirit of graffiti.... You could say that it’s all a joke, done just for fun; but in America, simply having a good time is an elusive, tricky ideal, and even jokes have a moral significance...the kind of deadly serious kidding that rock ’n’ roll, and America, couldn’t live without.”

Rockwell’s paean to Linda Ronstadt is the longest chapter and the only one to use standard musicological terminology. Though not many people will share the extent of Rockwell’s adulation (he even prefers Ronstadt’s version of Warren Zevon’s Mohammed’s Radio to Zevon’s own), his essay, gathering together detailed musical analysis, various strands of rock history, biography, and personal reminiscence of his friendship with Ronstadt, is as comprehensive and passionately argued a piece of critical advocacy as I’ve ever read.

Editor Marcus, who in Mystery Train staked his claim to being rock criticism’s archtraditionalist, caps Stranded with an “essential” discography that’s as fascinating as it is partisan. Like all the best essays in the book, his list is informed with a brutal zeal for the authentic, combined with an equally brutal rejection of everything else. It is this zeal—adolescent insight and passion, focused, refined, and turned outward—that characterizes Stranded. Never mind that the use of intellectual dialect to exalt an anti-intellectual culture is a fundamental, unresolved paradox; the writing is hot.
Zevon Strikes Again
by Crispin Cioe

A serious songwriter is one whose tunes have legs of their own. With Warren Zevon’s third album (discounting a misguided and recently re-released disc from his very early days), both singer and songs now stand foursquare as substantial, if grisly, presences in pop music. Though his talent and skewed sensibility were clearly established with his first two Asylum LPs, production weaknesses prevented an equally strong musical identity. The first, “Warren Zevon,” lacked punch and sounded murky, while “Excitable Boy” had a slick veneer that obscured his rock & roll soul. From all available reports, Zevon either couldn’t or wouldn’t take a strong artistic hand in those earlier projects. But “Bad Luck Streak,” co-produced by engineer Greg Ladanyi, is his own album with his own musical footprints clearly audible on every song. Not surprisingly, those footprints are just as idiosyncratic as his gripping, often oblique tales from beyond. These are songs of displacement.

of people (and in one case of an animal) who are achingly uncomfortable in a hostile world. To match that, there’s often a teeth-gritting, genuinely schizophrenic tension to the military rhythms Zevon uses. Sometimes he generalizes, as on the title track where the singer moans, “I’m down on my knees in pain, swear to God I’ll change.” The song is like a young boy’s nightmare of violent discipline, set in some surrealistic “dancing school.” Wild Age celebrates the classic American bad boy, a la James Dean, Marlon Brando, et al., with bittersweet backing harmonies from Eagles Glenn Frey and Don Henley. Rick Marotta’s muscular, crackling drums figure prominently in the mix on these songs, while David Lindley’s weeping guitar solos add a touch of melancholy. Bed of Coals deals with the kind of morbid, self-pitying paranoia that is as American as country music. Fittingly, Ben Keith’s fureoreal pedal steel guitar wafts through the song, as Zevon describes a “bed of coals, bed of nails,” complaining that “I’m too old to die young, and too young to die now”—without, of course, even identifying any specific ailment.

Ironically, as his stories become more specific, they become more universal, penetrating deeply into modern life and its discontents. Play It All Night Long paints an intensely grim portrait of southern life. While the band plays a dirgelike approximation of Lynyrd Skynyrd, the singer wails: “There ain’t much to country living—sweat, piss, tears, and blood.” Again, Lindley’s atmospheric guitar poignantly underscores the chorus: “Sweet Home Alabama, play that dead man’s song, turn those speakers up full blast, play it all night long.” On Jeannie Needs a Shooter, written with Bruce Springsteen, Joe Walsh’s ringing guitar sets up a heavy-metal buckdance figure to accompany a western fable of star-crossed lovers, and a supremely ironic punch line sabotages the song’s initial Romeo and Juliet expectations. Only Zevon could write a straight ahead song about mercenaries soldiers, and Jungle Work lays down the album’s fiercest rock & roll. As the singer describes “battle in hell,” a darkly ascending string section leads up to the chorus chant: “strength and muscle and jungle work.” The verses could have been taken straight from the pages of Soldier of Fortune magazine, but the blood-curdling death screams on the fadeout are pure Zevon.

And yet, there’s an idealist’s moralistic edge to his celebrated flirtation with violence, as if he were as interested in purging evil as portraying it. Sometimes that romanticism emerges full-blown: Played on piano and harmonica alone, Bill Lee is a simple and earnest homage to the iconoclastic baseball pitcher, a man Zevon obviously admires for his outspokenness. Gorilla, You’re a Desperado is a pure delight and one of his best compositions ever. Like Kafka’s Metamorphosis in reverse, the song is about a “big gorilla at the L.A. zoo, [who] snatched the glasses right off my face, took the keys to my BMW, left me here to take his place.” Unfortunately, the gorilla also assumes the singer’s problems and ends up “very depressed, [he] went through transactional analysis.” The album’s sole cover tune is the Allen Toussaint (alias Naomi Neville) chestnut A Certain Girl, which the Yardbirds once popularized. The only truly lighthearted song here, it nonetheless fits Zevon’s dour profile like a glove.

Three instrumentals, string quartets really, serve as introductions to as many songs. All are tasteful, recalling such composers as Samuel Barber and even Béla Bartók. Such eclectic programming works only because Zevon has literally turned his eccentricity into an integrated, discernible style. The album’s one odd-tune-out is a very straight ballad, Empty-Handed Heart, which talks about lost love in a “personal” way. When he sings, “Sometimes I wonder if I’ll make it without you—I’m determined to,” I think of Ross MacDonald, another Southern California writer who freely mixes the gruesome and the sentimental. “It isn’t possible to brush people off,” wrote MacDonald, “to let alone yourself. They wait for you in time, which is also a closed circuit.” Only romantics with their eyes wide open could write like this, and Warren Zevon’s characters, including himself, know that circuit well.

The Brides of Funkenstein:
Never Buy Texas from a Stranger
George Clinton, William Collins,
& Ron Dunbar, producers
Atlantic SD 19261
by Crispin Cioe

Funk for George Clinton is like classical Indian music for Ravi Shankar or the blues for Otis Rush: a concrete musical form within which to develop a complete musical world view. Seen this way, all of
Clinton's productions (Parliament, Funkadelic, Parlet, etc.) are more than just commercial outlets—they're variations on a recurring theme. The Brides of Frankenstein—Dawn Silva, Sheila Horn, and Jeanette McGruder—also have been Funkadelic's lead female vocalists for years. On "Never Buy Texas from a Stranger," Clinton casts them in the hard-edged funk landscape that is the Funkadelic trademark (in contrast to Parliament's smoother pop surfaces). The Detroit influence that permeated that band's early-'70s songs, like Standing on the Verge of Gettin' It On, dominates here. Rocking guitars from Garry Shider, Mike Hampton, and Eddie Hazel slide between Bootsy Collins' bazooka-like bass and the Brides' multilayered vocals.

On Smoke Signals these threads weave a fabric of shifting densities that ranks with Clinton's best work to date. The Brides chant phrases like "I'm sending up smoke signals, baby," in unusually voiced, angular harmonies, against which each singer steps out to solo and shout, space-age gospel style. In less capable hands, this might have come across as either chaotic or boring, but George has learned his formalist lessons well from the classic James Brown and Motown litanies. (In fact, he was a Motown staff songwriter in the mid-'60s.) Even his serio-comic moralizing, like the follow-up to the title track line—"and never buy a bridge when you're in Brooklyn"—makes sense with the Brides wailing away over music this strong.

**Burning Spear: Harder than the Best**

L. Linda (Jack Ruby), Winston Rodney, & Karl Pitterson, producers

Mango MLPS 9567

by Crispin Cioe

In Jamaica and the world at large, Winston Rodney of Burning Spear (the other members are Delroy Hines and Rupert Willington) has been a charismatic reggae star for several years, equal to Bob Marley as a musical poet and seer. "Harder than the Best" is a best-of collection, and, since his records pop up only sporadically in America, it serves as a solid introduction to his special gifts.

Where Marley and Toots Hibbert (of Toots & the Maytals) have drawn on American soul music for inspiration, Burning Spear is more African-based, and

**The Clash: London Calling**

Guy Stevens, producer

Epic E2 36328 (two discs)

by Sam Sutherland

Until now, the Clash has been lionized as much for its potential as for the quality of its recorded work. To a rock intelligentsia frustrated by the genre's commercialism and subsequent loss of urgency, the awkward angles and rough edges of the band's early singles and albums were proof of its authenticity. The flaws of those records, such as haphazard production and sequencing (due in large part to ongoing squabbles with the record company), were elevated to the status of
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!
The Ramones: End of the Century
Phil Spector, producer
Sire SRK 6077
by Sam Sutherland

The Ramones—a successful Phil Spector production

scars of uncompromised moralism.
Yet this recklessly honest British quartet has been as limited as it has been liberated by the very passion so central to its critical esteem. It has been the galvanic live show that fleshed out the earnest rapport the band sought with its audience: on record, too often the narrow stylistic range and intensity of performance obscured the humor and humanism that emerged so vividly on stage.

"London Calling" transcends that paradox, achieving a quantum leap in the breadth and clarity of the Clash's music. As such, it marks a triumphant turning point for the band, and possibly for the new rock movement with which it is associated. This is openhanded, openhearted rock modeled on classic sources and requiring little additional explanation beyond the songs themselves.

Apart from letting several tracks retain the simpler attack of earlier Ramones records, Spector applies his more familiar techniques of sonic hyperbole to a willing subject: the gloriously unsophisticated protagonist that is the hero of every Ramones song. With the common goal of unabashed pop sentiment, rather than "artistic" pretense, "End of the Century" succeeds as a witty expansion of this prototypical punk band's exuberance.

Doug Sahm: Hell of a Spell
Dan Healy, producer
Takoma TAK 7075
by Sam Sutherland

"Hell of a Spell" is the first Doug Sahm record in several years to find a home on a national record label. And it's both significant and heartening that his return to wider visibility comes under the aegis of the revitalized Takoma label.

"Hell of a Spell" is the first Doug Sahm record in several years to find a home on a national record label. And it's both significant and heartening that his return to wider visibility comes under the aegis of the revitalized Takoma label.
Doug Sahm

Sahm hasn’t compromised the proud regionalism that has always been his trade mark and that perhaps is the key to both his vitality and his checkered commercial past.

Even his ‘60s rock efforts indicated his sense of Texas soul, tapping Tex-Mex roots and associated blues styles as much as rock & roll. Since then, “Sir Douglas” has turned his back on pop or rock hybrids to range through blues, country and western, and other local treasures as models for his own material.

As the liner explains, “Hell of a Spell” is devoted to “real S. A. blues... like the old days, back on the east side.” That San Antonio musical dialect, which fleshes out classic blues forms with tight horn choruses and a fluid interplay between guitar and keyboards, is interrupted only once, on the title track. Here, Sahm’s modified reggae points up the Jamaican roots for his own material.

The songs and their alternately swinging and sultry performances all sound like authentic blues classics, but then Sahm has pried this style long enough to earn credentials as a blues artist, not just a rock pretender flexing his sense of scholarship. The pop/rock syn
Bruce Woolley,
Musical Frankenstein

by Steven X. Rea

Bruce Woolley & the Camera Club
Mike Hurst, producer
Columbia NUC 36301

Bruce Woolley has seen the future of rock & roll and has embraced it with enthusiasm. The visual realization of that would be Bruce Woolley hugging himself.

The various musical trails blazed into the '80s by the likes of Elvis Costello, Devo, Brian Eno, and Talking Heads have met head on with the pure pop artistry of such hitmakers as the Electric Light Orchestra and 10cc in the '70s, and the Dave Clark Five in the '60s. Their collision is embodied in one young English singer/songwriter—a cynical, intelligent, yet still romantic tunesmith by the name of Woolley. He has glommed the avant-garde precepts of the art-rockers, learned the misanthropy of the punk-rockers, acquired the frigid precision of the technorockers, and borrowed the simple grace and melodic sway of the popsters. He is a musical Frankenstein, his debut LP a summoning of sundry parts into one devastating monster.

Woolley cowrote Video Killed the Radio Star, a No. 1 hit in Britain and a charted single in the States as performed by a group called the Buggles. The Buggles' version—like their name—is cutesy teenybopper dross with a syncopated synthesizer sheen. On "Bruce Woolley & the Camera Club," Video Killed the Radio Star opens with the singer muttering the first verse in a vacuous whisper: "I heard you on the wireless back in '52, lying awake intently tuning in on you," then stately organ chords burst in and the song takes off. Woolley infuses passion where the Buggles employed mere gimmickry. The result is that the song's theme of machine vs. man, technology vs. the individual, becomes clear.

Though futuristic, sci-fi trappings permeate much of his world. Woolley's main concerns are with human needs and desires. The LP's opener, English Garden, is a first-person account of impending senility or loss of sanity in the wake of stardom—all that's left for the protagonist are his flowers: "When the weather is right I do as a gentleman should, In my English garden." Here his vocals owe something to the distraught, twisted inflections of Talking Heads' David Byrne; the sense of reality-as-we-think-we-know-it slipping from the singer's grasp suggests Byrne's own paranoid world view.

Love and romance are dragged coolly and ironically around the field in the form of jealousy (the melodically stunning Dancing with the Sporting Boys), rejection (No Surrender), manipulation (Johnny), adulation (You Got Class), and spiteful farewells (Goodbye to Yesterday). Woolley is thus a pop craftsman in the classic sense, singing the classic themes—love. But the framework of the songs is starkly modern.

The Camera Club is integral to all of this. Apart from sharing songwriter credits on several tracks, the quartet is adept at shifting rhythms, variably evoking taut, robotlike riffs, fluid, Eno-type electronic reveries (the instrumental W.W.9), hard rock, or smooth, lilting pop. Rod Johnson's drums are crisp and terse. Matthew Seligman's bass shores up and propels the whole works. Ex-Vibrator guitarist David Birch keeps things to a palatable minimum but isn't afraid to let loose a shrill guitar line when one is called for. The ultimate shaper of the Camera Club's sound, though, is keyboardist Tom Dolby. The warm, regal tones of Bach, the sloppy effervescence of the Dave Clark Five in Flying Man (a totally blatant reworking of Glad All Over), and the mechanical rhythms in Clean/Clean all appear mercurially at his command.

Bruce Woolley approaches his music with restraint and a sharp, biting wit. His lyrics are eloquent, sometimes surreal evocations of man in the modern world. Amidst the slick, swelling harmonies of "Bruce Woolley & the Camera Club" there's a lot of wry humor. There's something to be taken seriously here too, and that is the very heartening indication of where pop music is heading in the '80s.
Arthur Blythe: In the Tradition
Bob Thiele & Arthur Blythe, producers. Columbia JC 36300
by Don Heckman

Arthur Blythe has apparently been bestowed Columbia's mantle of Resident Contemporary Jazz Alto Saxophonist. Fine. He's a solid, interesting—if not terribly startling—player and deserves every shot he can get. But why toss him into the studio with an old-timer like Bob Thiele and ask him to play standards? Sure, Ellington's Caravan and In a Sentimental Mood, Waller's Jitterbug Waltz, and Coltrane's Naima are lovely pieces that deserve continuous examination. But shouldn't young recording artists first of all have a chance to speak their own words, to send their own messages, before we ask them to interpret the work of their illustrious forefathers?

Blythe obviously loves and understands Ellington, and, unlike one or two other young players who come to mind, he is generally comfortable with tough changes (especially in the bridge of Sentimental Mood and in the witty chromaticisms of Jitterbug Waltz). But, though he plays with verve and enthusiasm, he is generally upstaged by pianist Stanley Cowell. (Sometimes it is easier to be a sideman.) The fact is, Blythe has nothing particularly new to add to any of these standards and seems most at home on his two originals—Break Tune and Hip Dripper.

It's also worth noting that Columbia's production leaves a lot to be desired. Steve McCall's drums and Fred Hopkins' bass sound fine, but Cowell's piano notes resonate like those of a cheap upright, and Blythe's alto sounds as though it was recorded inside a concrete sewer pipe.

John Faddis: Good and Plenty
Vic Chirumbolo, producer
Buddah BDS 5727
by Don Heckman

What are we to make of this? At the age of eighteen, John Faddis was one of the hottest young trumpet players on the New York jazz scene. I've heard him play brilliantly in every kind of setting, from big-band section work to small-group improvising. He has exceptional range, technique, and imagination.

But what he's playing here is trash. Sure, Leon Pendarvis is a hot arranger; sure, he knows how to put an act on the Top 40 charts. But how sad it is that his particular brand of magic (sorcery?) has to be inflicted on a talent as fine and special as Faddis'. Yes, the big bucks potential of this album is a helluva lot better than that of a three-session, five-man jazz recording. And God knows, Faddis deserves the cash a lot more than some of the turkeys fluttering around the charts these days. But I wish there were a better way.

Anyhow, in case you can't repress your masochistic bent, "Good and Plenty" is disco-jazz, overproduced, overhyped, and cruel to the ears. So don't say I didn't warn you.

The Fabulous Bill Holman
Reissue supervised by John Norris & Bill Smith
Sackville 1980
by John S. Wilson

Bill Holman's writing for big bands is focused on fundamentals. It is simple.
New Acts

by Steven X. Rea

D. L. Byron:
This Day and Age
Jimmy Lovine & Shelly Yakus. producers
Arista AB 4258

“This Day and Age” doesn’t let up. Its taut, high-powered rock charged along by pulsating guitars and drums. New Yorker D. L. Byron has his band, Protector 4, and producer Jimmy Lovine to thank for the thundering, relentless sound. Tracks such as Lorryanne, Love in Motion, and Get With It roar into high gear. Byron’s songs and vocal phrasing are equal parts anthemic like Springsteen and jerky Costello, with just a dash of the other Elvis on some of the late-’50s-tinged cuts (Listen to the Heartbeat). What grates here is Byron’s affections: a good songwriter framed in a surging new waveish setting, he nonetheless owes too much to the aforementioned artists to be taken seriously.

Richard Fagan
Bob Gaudio, producer
Mercury SRM 1-3811

Richard Fagan gained industry attention via his songwriting credits on several Neil Diamond LPs. The surprise here is that instead of opting for Diamond’s postured, soupy, dramatic approach, Fagan rocks straight ahead. He sings with a Dylan-esque edge, while tracks like Don’t Bother Coming Up. I’m Coming Down suggest the rough, frayed sound of Bob Seger. Toto’s David Hungate and sessioners such as keyboardist Jerry Corbetta flesh out a solid solo outing.

The Last:
L.A. Explosion
John Harrison & the Last, producers
Bomp BLP 4004
(2702 San Fernando Rd., Los Angeles, Ca. 90065)

Sixties influences abound in this low-budget production from L.A.’s independent Bomp label. The Last, an Angeleno quintet, runs the gamut from the Beatles to the Byrds, keeping it simple, short, and snappy. Arrangements are a touch lackluster, and the energy level a little low—a veteran producer would help spark things up a bit.

The Lonely Boys
Andy Arthurs, producer
Harvest ST 12030

Known as Little Bo Bitch in their native England, Lonely Boys is a more apt moniker for this lightweight foursome. Pop/rock is their game, irradiated by Dermot Moughan’s keyboards, with just the slightest nod to the new wave here and there. Lead singer Tony Watson’s Cockney twang is the only ragged element in the band’s catchy gloss. Well/Brecht influences appear on the bouncy The Lover. Not substantial stuff, but not awful either.

Ian McLagan:
Troublemaker
Geoff Workman, producer
Mercury SRM 1-3786

Original Small Face and longtime keyboardist with the Rolling Stones/New Barbarians axis, Ian McLagan steps out on a jaunty, rollicking solo foray with help from Keith Richards, Ron Wood, Stanley Clarke, and Ringo Starr. He is an eloquently plainspoken songwriter who comes straight to the point. His vocals are brash and spirited, making up in rowdy enthusiasm for what’s lost in his limited range. A couple of languid reggae numbers veer from the British rocker’s true course, providing the only dull moments in this otherwise affable affair.

Off Broadway U.S.A.: On
Tom Werman, producer
Atlantic 319263

Off Broadway is another midwestern quintet that travels Cheap Trick turf: the Beatles, the Move, the Who, and, in this case, Badfinger. Producer Tom Werman has framed this spirited aggregation in the same rich, textured setting that has marked his work with Cheap Trick. Lead singer/songwriter Cliff Johnson does a wonderfully nasal McCartney, and his cohorts proffer bountiful harmonies. This is pop with a capital P: Hooks run rampant, and a punchy, gutsy rhythm section underpins the airy melodies. “On” is a lot more consistent than Cheap Trick’s “Dream Police.”

William Oz
Stewart Levine, producer
Capitol ST 12015

Substandard rock & roll here comes from a far too serious East Coast-based singer/songwriter. William Oz evinces some flair for melody, but inane lyrics and stereotypical macho/rock posturings are a total turnoff. His band’s adequate playing is supplemented by synthesizer wiz Larry Fast’s dense electronic backdrop. Denser still are the people who handed Oz a record contract.

Pearl Harbor
& the Explosions
David Kahne, producer
Warner Bros. BSK 3404

This Bay Area quartet fronted by singer/songstress Pearl E. Gates landed a record deal after a homemade single. Drivin’, started taking to the FM airwaves. Drivin’ is the best cut here: booming, ruff rock that, well, drives. The threepiece Explosions’ strategy is to burrow into a rhythm hook and stay there; consequently, some of this debut LP is just dull. You Got It (Release It) is the other standout. Despite its image, there’s nothing new wave about Pearl Harbor & the Explosions.

Sue Saad & the Next
Richard Perry & James Lange. producers. Planet P4

This L.A. “newwave” outfit has about as much to do with the newwave as their hair stylists. The tough, nasty (and screechy) stance by Sue Saad is propelled along by speedy guitars, bass, and drums. Reggae touches and some bluesy balladry on several songs ring a lot truer than the bam-bam bam rock. Not your standard Richard Perry production, by the way.
Continued from page 125

direct, and, when performed correctly, swinging. But because of its wide popularity, it has often fallen into the hands of groups that cannot project it properly.

"The Fabulous Bill Holman," originally recorded by Holman in 1957 for Coral records, should serve as an excellent model. Not only has the Canadian-based Sackville reissued it in its original monaural sound and sequencing, but, more importantly, the relaxed performances provide an excellent showcase for Holman's work. There is no heavy pushing, no shrieking brass, no great burst of excitement. Instead, a steady, pulsing momentum flows like a quiet but fascinating conversation. The virtually infallible rhythm section—Lou Levy on piano, Max Bennett on bass, Mel Lewis on drums—guarantees a swinging setting at any tempo. The soloists are also first rate, most notably Ray Sims’s mellow, slightly burry trombone with its occasional echoes of Bill Harris, Stu Williamson's steady, crisp trumpet, rollicking alto saxophonists Charlie Manano and Herb Geller, and Holman himself on tenor.

Holman claims a wide variety of saxophone influences, from Tex Beneke to John Coltrane. The ones most evident here are Lester Young on the solos and Sonny Rollins, whose "Airegin" leads off the set. But on "Come Rain or Come Shine," very little of either's style shows up. Instead, his warm and thoughtful development of the tune makes it almost a complete Holman showcase.

Robert Kraft—an original in a genre filled with poseurs

Robert Kraft and the
Ivory Coast: Moodswing
Phil Galdston, producer
RSO RS 1 3070
by Crispin Cloe

Everything that usually goes awry with modern vocal jazz worked out just
fine on Robert Kraft's refreshingly auspicious debut album. Pianist/singer Kraft emerged from the glitter-prone New York cabaret scene last year with an original pop/jazz sound. His style is rooted in the New Orleans influence of Thelonious Monk, with his rich, dark, and spare piano work. Kraft's style is characterized by a strong sense of rhythm, with a particular focus on the bassline. His songs often feature a combination of blues, jazz, and pop influences, with a strong emphasis on melody and harmony.

Kraft's voice is often described as a smoky, baritone, with a range that spans from deep, soulful tones to soaring, emotive high notes. His phrasing is often compared to the likes of Billie Holiday and Johnny Hodges, with a strong sense of rhythm and a fluid, effortless delivery.

The current tour is an opportunity to experience Kraft's music live, with an intimate performance that showcases his unique talents. The show features a range of songs from his debut album, with a focus on the music that has made him a force in the jazz world. The audience is invited to join Kraft on a musical journey that is both innovative and deeply rooted in the rich traditions of jazz and blues.
**APRIL 1980**

MAIL TO: 825 7th Ave., 6th Floor, New York, N.Y. 10019. Phone: 212-265-8360

GENERAL: All copy subject to publisher approval. First line caps. Users 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-$2.15. 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-$1.29; 3x-$1.280; 6x-$1.275; 12x-$1.25.

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.

FOR SALE

AUDIOPHILES WANTED!! Put your knowledge to use, earn some extra income. We need dealers to sell name brand stereo equipment at substantial discounts in your area. No investment necessary. For information and application please write: ABCO, Dept. CR, 1201 East Main Street, Meriden, Conn. 06450.

HORNS’WOOFERS—MIDS—TV/EEEERS at tremendous OEM savings. Altec, Electro-Voice, Philips, Peerless, Polydor and many others. Dozens of hard to find items used in major manufacturers most expensive systems. Huge selection of crossover networks, subwoofers, crossovers, and musical instruments loudspeakers. Send $11.00 for CATALOG, SRC AUDIO DEPT, HFI 1238 Towerwood Dr., Dallas, TX 75234.

TOP-RANK AUDIO AT LOW LOW PRICES!! Alwa, AR Bose, ESS, JBL, JVC, KLH, Marantz, Onkyo, Phase Line, Pioneer, Sansui, Sony, Soundcraftsmen, Tele and many more we can’t even mention by name. All factory fresh with full warranty. For prices just call 212-254-3125. Or send $2.00 for our informative brochure to DIRECT DISCOUNTS LTD., P.O. Box #1, Cooper Station, N.Y. 10003.

HIGH FIDELITY’S TEST REPORTS 1980, 346 fact-filled pages of information on amplifiers, turntables, speakers, tape decks, receivers and other components. $13.95 plus $1.25 for postage and handling. Order from: High Fidelity’s Test Report 1980, 1 Sound Avenue, Marion, Ohio 43302.

RECORDS IN REVIEW: 1980 EDITION. Available April , the 25th annual edition of the record-buyer’s “bible.” Contains the complete text of all the classical and semi-classical record and tape reviews as they appeared in HIGH FIDELITY magazine in 1979 issues. Durable-cothbound edition, yours for $15.95 plus $1.25 for postage and handling. Send your order to: Wyeth Press, 1 Wyeth Street, Marion, Ohio 43302.

WHOLESALE TAPES, ACCESSORIES & VIDEO

<table>
<thead>
<tr>
<th>BRANDS</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDK</td>
<td>$2.95</td>
</tr>
<tr>
<td>SONY</td>
<td>$2.75</td>
</tr>
<tr>
<td>SHURE</td>
<td>$2.35</td>
</tr>
<tr>
<td>MITS</td>
<td>$2.05</td>
</tr>
<tr>
<td>MAXELL</td>
<td>$1.77</td>
</tr>
<tr>
<td>MEAD</td>
<td>$1.44</td>
</tr>
</tbody>
</table>

MISCELLANEOUS


LOWEST PRICES, HIGHEST RELIABILITY IN MAIL ORDER—Stereo, Esoteric, Auto, and Disco, Video. Over 150 brands all factory fresh, all guaranteed and insured, shipped fast. 4-5 day delivery in most cases with no deposit on most items. Call or write for free catalog and prices. Order hot line (914) 258-4342 9am-6pm, Mon.-Fri., GOLDEN SHED, Hi-Fi, Box 614, Merris Island Road, Pine Island, N.Y. 10969.

GUARANTEED LOW PRICES ON STEREO, VIDEO EQUIPMENT. STELLAR SOUND, 13906 Ventura Blvd., Suite 193, Sherman Oaks, CA 91423 (213) 766-9790.

MISCELLANEOUS

DIAMOND NEEDLES and Stereo Cartridges at Discount prices for Shure, Pickering, Stanton, Empire, Grado, Audio Technica and ADC. Send for free catalog. LT Sound, Dept. HF, P.O. Box 729, Decatur, IL 62521.

MAIL ORDER DIRECT FROM AKIHABARA “TOKYO.” All brands Cartridges, Tonearms of JAPAN. Price list offered Free. Hi-Fi Express, P.O. Box 28, Shtaya, Tokyo 110-91.

ONLY 189 COPIES LEFT! High Fidelity’s Silver Anniversary Treasury will soon be out of print. Don’t miss this opportunity to get your copy of this 348-page hardcover compilation of the best writing to appear in the magazine over the past three decades. Send $9.95 to Wyeth Press, 1 Wyeth Street, Marion, Ohio 43302.

PENTAX OWNERS! Send for Kepler's THE PENTAX WAY, the definitive book by one of the world’s leading experts on single lens reflexes. Over 350 pages with loads of clear, easy to follow illustrations. $27.95 plus $1.75 postage and handling. Send to: Modern Photography’s Photographer’s Book Service, 1 Wyeth Street, Marion, Ohio 43302.

MODERN SHORTSPEAKERS, BEYER MICROPHONES, Jazz and also some REVOLVING PLATINUM PRICES. Send for full literature: Entertainment Sound Services Inc. P.O. Box 176 Jerricko, New York 11753 (617) 921-2249.

MAIL ORDER DIRECT FROM AKIHABARA “TOKYO.” All brands Cartridges, Tonearms of JAPAN. Price list offered Free. Hi-Fi Express, P.O. Box 28, Shtaya, Tokyo 110-91.

SPEAKER LAB

WHOLESALE TAPES, ACCESSORIES & VIDEO

<table>
<thead>
<tr>
<th>BRANDS</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDK</td>
<td>$2.95</td>
</tr>
<tr>
<td>SONY</td>
<td>$2.75</td>
</tr>
<tr>
<td>SHURE</td>
<td>$2.35</td>
</tr>
<tr>
<td>MITS</td>
<td>$2.05</td>
</tr>
<tr>
<td>MAXELL</td>
<td>$1.77</td>
</tr>
<tr>
<td>MEAD</td>
<td>$1.44</td>
</tr>
</tbody>
</table>

QUALITY TAPES, INC., E. 7th St., Dept. HK, Brooklyn, N.Y. 11230.

LOWEST PRICES, HIGHEST RELIABILITY IN MAIL ORDER—Stereo, Esoteric, Auto, and Disco, Video. Over 150 brands all factory fresh, all guaranteed and insured, shipped fast. 4-5 day delivery in most cases with no deposit on most items. Call or write for free catalog and prices. Order hot line (914) 258-4342 9am-6pm, Mon.-Fri., GOLDEN SHED, Hi-Fi, Box 614, Merris Island Road, Pine Island, N.Y. 10969.

GUARANTEED LOW PRICES ON STEREO, VIDEO EQUIPMENT. STELLAR SOUND, 13906 Ventura Blvd., Suite 193, Sherman Oaks, CA 91423 (213) 766-9790.

MISCELLANEOUS

DIAMOND NEEDLES and Stereo Cartridges at Discount prices for Shure, Pickering, Stanton, Empire, Grado, Audio Technica and ADC. Send for free catalog. LT Sound, Dept. HF, P.O. Box 729, Decatur, IL 62521.

MAIL ORDER DIRECT FROM AKIHABARA “TOKYO.” All brands Cartridges, Tonearms of JAPAN. Price list offered Free. Hi-Fi Express, P.O. Box 28, Shtaya, Tokyo 110-91.

ONLY 189 COPIES LEFT! High Fidelity’s Silver Anniversary Treasury will soon be out of print. Don’t miss this opportunity to get your copy of this 348-page hardcover compilation of the best writing to appear in the magazine over the past three decades. Send $9.95 to Wyeth Press, 1 Wyeth Street, Marion, Ohio 43302.

PENTAX OWNERS! Send for Kepler's THE PENTAX WAY, the definitive book by one of the world’s leading experts on single lens reflexes. Over 350 pages with loads of clear, easy to follow illustrations. $27.95 plus $1.75 postage and handling. Send to: Modern Photography’s Photographer’s Book Service, 1 Wyeth Street, Marion, Ohio 43302.

MODERN SHORTSPEAKERS, BEYER MICROPHONES, Jazz and also some REVOLVING PLATINUM PRICES. Send for full literature: Entertainment Sound Services Inc. P.O. Box 176 Jerricko, New York 11753 (617) 921-2249.

MAIL ORDER DIRECT FROM AKIHABARA “TOKYO.” All brands Cartridges, Tonearms of JAPAN. Price list offered Free. Hi-Fi Express, P.O. Box 28, Shtaya, Tokyo 110-91.
**Classified Ads**

**New Equipment for Sale**

**British and European Equipment Direct to You.**

Most quality makes of equipment available at advantageous prices. For price list and price quotes send International Reply Coupon. Send $2 for the brochure you require. Audio 1, Dept A, 190 West End Lane, London, NW6 1SQ, England, Phone 01-794 7848. Visitors welcome.

**Top-Rated Cartridges up to 70% Off!** We feature Acute, ADC, Grado, Nagatron, Onoto, Sonos, Stanton, etc. Unbelievable prices! Call 212-254-3125 for prices, or write to DIRECT DISCOUNTS LTD., P.O. Box 841 N.Y., N.Y. 10003.


**Lowest Prices on Stereo-ESOTERIC Components & Tapes**! Over 150 brands. Send $10 SASE for quotes. Audio Unlimited, 401 Reynolds Circle, #1G, San Jose, CA 95112 (408) 289-8875, 1-6-M-Th.

---

**Slipcases for High Fidelity Magazine.** Simulated blue leather, Holds 6 High Fidelity issues. $4.95 single case, $14 for 3 cases, $24 for 6 cases. USA orders only. Allow 6 weeks for delivery. HIGH FIDELITY Library Cases, Box 5120, Philadelphia, Pennsylvania 19101.

**Free Promotional Albums, Concert Tickets, Stereo, etc. Information:** Barry Publications, 477 82nd Street, Brooklyn, New York 11219.

**Camera Collectors Read Modern Photography's own Jon Schneider on Camera Collecting. 176-page, fully illustrated book on the great and collectible cameras of the past. Details on the great bargains, odd film sizes and handling to: Modern Photography's Photographer's Photo, 215 W. 40th Street, New York, New York 10001.

**Quality Audio Discounted! Car/Home. SASE for quotes. Denico Audio, P.O. Box 6104-H, El Monte, CA 91731.**

**Tapes & Records**

**Live Opera on Reel/Cassette. Thousands of Performances! World-wide since 1930's. Only service that provides the personal attention offered by the Vocal Art. Free Gift, Magnificents Free Catalogue. Live Opera, Box 314, Steenway Station, L.I.C., N.Y. 11103.


VENEZUELA OPERETTA RECORDS, INC. Extensive range, superb vocal performances, on currently available LPs. Free list. P.O. Box 50-B, Dover, Mass. 02220.


DISCONTINUED RECORDS: Classical, Popular, All Speeds. Free Lists, Fred Steinmetz, One Seaview Avenue, Massapequa, N.Y. 11758.

OPERA VIDEO—Magnificent performances from Europe, Beta, VHS Formats. Free catalog, HRE, Box 12, Kew Gardens, N.Y. 11415.

SCHWANN RECORD AND TAPE GUIDE, now available by subscription. Includes 12 monthly issues of Schwann-2, plus Annual Children's Catalog. Annual subscription $125.00, add $10.00 for addresses outside of U.S. Order from: Schwann Record & Tape Guide, P.O. Box 350, Great Barrington, Mass. 01230.

RECORDS FOR COLLECTORS FREE LISTING. RIVERDEAL BOX 5244, HOUSTON, TX 77052.

BRON BEETHOVEN (10 CUTS); MOZART MAGIC (14 CUTS) super samplers—LP's $1.98 each, cassette $2.49 each. Specify. Free Classical/Jazz Catalog. Musical Concepts, Box 5336, Cedarhurst, N.Y. 11516.

CLASSICAL RECORDINGS FOR COLLECTORS. List, send $1.00. ARS MUSICA, 29 Knox Road, Brewster, N.Y. 10509.

SOUNDTRACKS—New and out-of-print film music recordings, free listings and info. CINE MONDO RECORDS, 1488 W. 16th Street, Chicago, Ill. 60612.

VOCAL TECHNIQUES OF THE GREAT SINGERS. Analyzed. Over 100 from Caruso and Ponselle to Pavarotti and Sills described. 17 items including resonance, registration, vibrato and support, $20.00, $26.00 deluxe. WHC, POB 871, Loma Linda, Calif. 92354.


LOVE CATS, CLASSICAL MUSIC? Get "An Album of Cats," number limited edition with booklet, $71.00 postpaid. Harmonic Records, 1520 West 7th St., Bloomington, Ill. 61701.


FIELD REPRESENTATIVES WANTED FOR SAVARD SPEAKER SYSTEMS. Various U.S. territories available. Dealer inquiries welcome. (504) 383-0474

PUBLICATIONS

THE BLIND AND OTHER PHYSICALLY HANDICAPPED can know the joy of reading memorable selections chosen from over 50 outstanding periodicals, completely free of charge. Write CHOICE MAGAZINE LISTENING, Dept. HFC, Box 10, Port Washington, NY 11050 or call 516-883-8280.

BLACKWELL'S BASIC RECORD LIBRARY, A 16-page booklet listing 150 of the really basic compositions from the classical repertory to enhance your personal record collection. Only 74¢ per copy postpaid. Order from: ABC Schwan's, Single Copy Dept., 2160 Patterson St., Cincinnati, Ohio 45214.

NEW YORK PHILHARMONIC GUIDE TO THE SYMPHONY by Edward Downes. This 1,100-page book is a composer-by-composer, A to Z compendium of program notes from the Philharmonic. Send $125.00 plus $1.00 for shipping to: High Fidelity's Music Listener's Book Service, 1 Wyeth Street, Manhattan, Ohio 43302.

IMPROVE YOUR RECORDINGS! How to: enhance recordings, understand technical information, judge and select records. Full, unconditional 30 day guarantee! Send 350 to: CRG Publishers, Box 115, Redondo Beach, Calif. 90277.

Nikon and Nikkormat Owners! Don't be without Keppier's THE NIKON NIKKORMAT WAY, the definitive, most practical reference book for you by the world's leading expert on single-lens reflexes. Over 450 fact-filled pages describing and showing you how to get the most out of your picture-taking. $27.95 plus $1.25 postage and handling. Send to: Modern Photography's Photographe's Book Service, 1 Wyeth Street, Manhattan, Ohio 43302.

COLLEGE STUDENTS! Improve your grades. Send $1.90 for 356-page, collegiate research papers catalog. 10,250 available. RESEARCH ASSISTANCE, Box 25916R, Los Angeles, California 90025. (213) 477-8226.


This record, made in 1977 but just released, is trumpetman Waymon Reed's first as a leader. Although he got his share of solos playing with Count Basie in the early '70s, at that time the individual players were subordinate to the smooth-rolling Basie machine (with the exception of such saxophonists as Jimmy Forrest and Eric Dixon). He left the band in the mid-'70s and free-lanced around New York, playing in theater pit orchestras or backup groups for singers. Now married to Sarah Vaughan, he is her orchestra leader, and, though this puts him up front where he can be seen, he remains in his wife's shadow.

Reed seems temperamentally suited to the essential but unglamorous role of providing a steady core around which other musicians can generate sparks. His quintet here includes Ella Fitzgerald's old trio—Tommy Flanagan on pi...
For free product literature, use the reader service card on page 99. *For more information, write direct to manufacturer.

**ADVERTISING INDEX**

<table>
<thead>
<tr>
<th>Key No.</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action Audio</td>
<td>128</td>
</tr>
<tr>
<td>1</td>
<td>128</td>
</tr>
<tr>
<td>ADC Professional Products, a div. of BSR Consumer Products Group</td>
<td>57</td>
</tr>
<tr>
<td>2</td>
<td>57</td>
</tr>
<tr>
<td>ADS-Analog &amp; Digital Systems</td>
<td>97</td>
</tr>
<tr>
<td>3</td>
<td>97</td>
</tr>
<tr>
<td>Aiwa</td>
<td>26</td>
</tr>
<tr>
<td>4</td>
<td>26</td>
</tr>
<tr>
<td>Akai America</td>
<td>31</td>
</tr>
<tr>
<td>5</td>
<td>31</td>
</tr>
<tr>
<td>Altec Lansing</td>
<td>23</td>
</tr>
<tr>
<td>6</td>
<td>23</td>
</tr>
<tr>
<td>Amp Corp.</td>
<td>92</td>
</tr>
<tr>
<td>7</td>
<td>92</td>
</tr>
<tr>
<td>Audio Pro</td>
<td>96</td>
</tr>
<tr>
<td>8</td>
<td>96</td>
</tr>
<tr>
<td>Audio Superman</td>
<td>123</td>
</tr>
<tr>
<td>9</td>
<td>123</td>
</tr>
<tr>
<td>Audio Technica U.S. Inc.</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Audiovox Corp.</td>
<td>85</td>
</tr>
<tr>
<td>11</td>
<td>85</td>
</tr>
<tr>
<td>Avanti Corp.</td>
<td>14</td>
</tr>
<tr>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>Bang &amp; Olufsen</td>
<td>Cover III</td>
</tr>
<tr>
<td>13</td>
<td>Cover III</td>
</tr>
<tr>
<td>Bose Corp.</td>
<td>28</td>
</tr>
<tr>
<td>14</td>
<td>28</td>
</tr>
<tr>
<td>Burns Audioelectronics, Inc.</td>
<td>117</td>
</tr>
<tr>
<td>15</td>
<td>117</td>
</tr>
<tr>
<td>Buying Guide to Car Stereo Systems</td>
<td>121</td>
</tr>
<tr>
<td>16</td>
<td>121</td>
</tr>
<tr>
<td>Buying Guide to Tape Systems</td>
<td>103</td>
</tr>
<tr>
<td>17</td>
<td>103</td>
</tr>
<tr>
<td>Caedmon Records</td>
<td>90</td>
</tr>
<tr>
<td>18</td>
<td>90</td>
</tr>
<tr>
<td>Classified Ads</td>
<td>129-131</td>
</tr>
<tr>
<td>19</td>
<td>129-131</td>
</tr>
<tr>
<td>DBX, Inc.</td>
<td>12, 13</td>
</tr>
<tr>
<td>20</td>
<td>12, 13</td>
</tr>
<tr>
<td>Deco Electronics</td>
<td>36</td>
</tr>
<tr>
<td>21</td>
<td>36</td>
</tr>
<tr>
<td>Discount Music Club</td>
<td>120</td>
</tr>
<tr>
<td>22</td>
<td>120</td>
</tr>
<tr>
<td>Discwasher, Inc.</td>
<td>Cover IV</td>
</tr>
<tr>
<td>23</td>
<td>Cover IV</td>
</tr>
<tr>
<td><em>D</em>ual</td>
<td>63</td>
</tr>
<tr>
<td>24</td>
<td>63</td>
</tr>
<tr>
<td>Electro-Voice, Inc.</td>
<td>37</td>
</tr>
<tr>
<td>25</td>
<td>37</td>
</tr>
<tr>
<td>Empire Scientific Corp.</td>
<td>11</td>
</tr>
<tr>
<td>26</td>
<td>11</td>
</tr>
<tr>
<td>Empire Scientific Corp.</td>
<td>91</td>
</tr>
<tr>
<td>27</td>
<td>91</td>
</tr>
<tr>
<td>ESS, Inc.</td>
<td>115</td>
</tr>
<tr>
<td>28</td>
<td>115</td>
</tr>
<tr>
<td>Fisher Corp.</td>
<td>8, 9</td>
</tr>
<tr>
<td>29</td>
<td>8, 9</td>
</tr>
<tr>
<td>Frankiel Street Photo</td>
<td>123</td>
</tr>
<tr>
<td>30</td>
<td>123</td>
</tr>
<tr>
<td>Franklin Mint Records</td>
<td>32-35</td>
</tr>
<tr>
<td>31</td>
<td>32-35</td>
</tr>
<tr>
<td>Fuji Photo Film U.S.A., Inc.</td>
<td>Magnetic Tape Division</td>
</tr>
<tr>
<td>32</td>
<td>89</td>
</tr>
<tr>
<td>Fujitsu Ten Corp.</td>
<td>93</td>
</tr>
<tr>
<td>33</td>
<td>93</td>
</tr>
<tr>
<td>Hi Fi Boys</td>
<td>127</td>
</tr>
<tr>
<td>34</td>
<td>127</td>
</tr>
<tr>
<td>Illinois Audio</td>
<td>101</td>
</tr>
<tr>
<td>35</td>
<td>101</td>
</tr>
<tr>
<td>Infinity Systems, Inc.</td>
<td>38</td>
</tr>
<tr>
<td>36</td>
<td>38</td>
</tr>
<tr>
<td>Institute of Audio Research</td>
<td>International Hi Fi</td>
</tr>
<tr>
<td>37</td>
<td>123</td>
</tr>
<tr>
<td>JBL</td>
<td>59</td>
</tr>
<tr>
<td>38</td>
<td>59</td>
</tr>
<tr>
<td>Jensen Sound Laboratories</td>
<td>83</td>
</tr>
<tr>
<td>39</td>
<td>83</td>
</tr>
<tr>
<td>J &amp; R Music World</td>
<td>102</td>
</tr>
<tr>
<td>40</td>
<td>102</td>
</tr>
<tr>
<td>KEF Electronics Ltd.</td>
<td>79</td>
</tr>
<tr>
<td>41</td>
<td>79</td>
</tr>
<tr>
<td>Maillet Corp.</td>
<td>15</td>
</tr>
<tr>
<td>42</td>
<td>15</td>
</tr>
<tr>
<td>McIntosh Laboratory</td>
<td>62</td>
</tr>
<tr>
<td>43</td>
<td>62</td>
</tr>
<tr>
<td>Memorex Corp.</td>
<td>2</td>
</tr>
<tr>
<td>44</td>
<td>2</td>
</tr>
<tr>
<td>Mobile Fidelity Records</td>
<td>88</td>
</tr>
<tr>
<td>45</td>
<td>88</td>
</tr>
<tr>
<td>MXR Innovations</td>
<td>95</td>
</tr>
<tr>
<td>46</td>
<td>95</td>
</tr>
<tr>
<td>Nakamichi U.S.A. Corp.</td>
<td>65</td>
</tr>
<tr>
<td>47</td>
<td>65</td>
</tr>
<tr>
<td>Ohm Acoustics Corp.</td>
<td>66</td>
</tr>
<tr>
<td>48</td>
<td>66</td>
</tr>
<tr>
<td>Onyco</td>
<td>16, 17</td>
</tr>
<tr>
<td>49</td>
<td>16, 17</td>
</tr>
<tr>
<td>Osaka &amp; Co. (USA) Inc.</td>
<td>69</td>
</tr>
<tr>
<td>50</td>
<td>69</td>
</tr>
<tr>
<td>Park Row Electronics</td>
<td>125</td>
</tr>
<tr>
<td>51</td>
<td>125</td>
</tr>
<tr>
<td>Penney, J.C.</td>
<td>10</td>
</tr>
<tr>
<td>52</td>
<td>10</td>
</tr>
<tr>
<td>Piecinger &amp; Co.</td>
<td>6</td>
</tr>
<tr>
<td>53</td>
<td>6</td>
</tr>
<tr>
<td>Pioneer High Fidelity</td>
<td>Cover III</td>
</tr>
<tr>
<td>54</td>
<td>Cover III</td>
</tr>
<tr>
<td>Pioneer High Fidelity</td>
<td>14</td>
</tr>
<tr>
<td>55</td>
<td>14</td>
</tr>
<tr>
<td>Radio Shack</td>
<td>21</td>
</tr>
<tr>
<td>56</td>
<td>21</td>
</tr>
<tr>
<td>Revox</td>
<td>105</td>
</tr>
<tr>
<td>57</td>
<td>105</td>
</tr>
<tr>
<td>Robbins Industries</td>
<td>40</td>
</tr>
<tr>
<td>58</td>
<td>40</td>
</tr>
<tr>
<td>SAE Inc.</td>
<td>60</td>
</tr>
<tr>
<td>59</td>
<td>60</td>
</tr>
<tr>
<td>Sansui Electronics Corp</td>
<td>60</td>
</tr>
<tr>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Shure Brothers, Inc.</td>
<td>70</td>
</tr>
<tr>
<td>61</td>
<td>70</td>
</tr>
<tr>
<td>Shure Brothers, Inc.</td>
<td>106</td>
</tr>
<tr>
<td>62</td>
<td>106</td>
</tr>
<tr>
<td>Sony Corp.</td>
<td>141</td>
</tr>
<tr>
<td>63</td>
<td>141</td>
</tr>
<tr>
<td>Sound Reproduction</td>
<td>120</td>
</tr>
<tr>
<td>64</td>
<td>120</td>
</tr>
<tr>
<td>Speakerlab</td>
<td>125</td>
</tr>
<tr>
<td>65</td>
<td>125</td>
</tr>
<tr>
<td>Stereo Corp.</td>
<td>127</td>
</tr>
<tr>
<td>66</td>
<td>127</td>
</tr>
<tr>
<td>Stereo Discounters</td>
<td>64</td>
</tr>
<tr>
<td>67</td>
<td>64</td>
</tr>
<tr>
<td>Studer Revox America, Inc.</td>
<td>105</td>
</tr>
<tr>
<td>68</td>
<td>105</td>
</tr>
<tr>
<td>TDK Electronics Corp.</td>
<td>42</td>
</tr>
<tr>
<td>69</td>
<td>42</td>
</tr>
<tr>
<td>Tekc Corp.</td>
<td>29</td>
</tr>
<tr>
<td>70</td>
<td>29</td>
</tr>
<tr>
<td>Technics by Panasonic</td>
<td>3 M Co. Company</td>
</tr>
<tr>
<td>71</td>
<td>81</td>
</tr>
<tr>
<td>Top Discount Audio</td>
<td>128</td>
</tr>
<tr>
<td>72</td>
<td>128</td>
</tr>
<tr>
<td>United Audio Products</td>
<td>63</td>
</tr>
<tr>
<td>73</td>
<td>63</td>
</tr>
<tr>
<td>Warehouse Sound</td>
<td>64</td>
</tr>
<tr>
<td>74</td>
<td>64</td>
</tr>
<tr>
<td>Watts</td>
<td>91</td>
</tr>
<tr>
<td>75</td>
<td>91</td>
</tr>
<tr>
<td>Wisconsin Discount Stereo</td>
<td>40</td>
</tr>
<tr>
<td>76</td>
<td>40</td>
</tr>
<tr>
<td>Wyeth Press</td>
<td>87</td>
</tr>
<tr>
<td>77</td>
<td>87</td>
</tr>
<tr>
<td>Yamaha Audio</td>
<td>39</td>
</tr>
<tr>
<td>78</td>
<td>39</td>
</tr>
</tbody>
</table>

ano, Keter Betts on bass, Bobby Durham on drums—and Basie bandmate Jimmy Forrest on tenor saxophone. The trio’s swinging drive and close interaction gives the disc its momentum. Flanagan is the most spirited soloist, ranging from a lively bebop romp on Charlie Parker’s Au Pri- vate to a blues à la Basie, to a sensitive treatment of the ballad But Beautiful. Even when he is not soloing, Flanagan dominates, filling in the background with fascinating figures. Reed comes into his own most strongly on But Beautiful with a lovely flugelhorn development, and For- rest has his best moments in Thelonious Monk’s Blue Monk. But Flanagan steals the set.

**Lew Tabackin / Warne Marsh: Tenor Gladness**

*Toshiko Akiyoshi, producer Inner City IC 6048 by Don Heckman*

Putting tenor saxophonists Lew Tabackin and Warne Marsh together for a recording is such a fascinating idea that it’s hard to understand why Inner City waited more than three years to release “Tenor Gladness.” (It was recorded in Oc- tober of 1976.) Tabackin is a brilliant, well- articulated, and carefully controlled verti- cal player. That is, he builds his solos rhythmically up from the bottom, always in firm, solid connection with the basic pulse. Marsh—one of the great, under- rated improvisers of the last three deca- des—is precisely the opposite, a paragon of the elusive art of floating above the rhythm. He is as horizontal as Tabackin is vertical, his lines teasing in and out of the pulse, sometimes even in and out of the meter.

Working together, they are a study in contrasts. Fascinating to us as listeners and, I suspect, fascinating to each other for the challenges that each makes upon the other’s abilities. In *Basic #1*, actually a blues, Tabackin revives Don Byas’ classic arpeggiated lines in direct contrast to Marsh’s slipping, sliding excursions across the bar lines. On the Tristanato-ish March of the Tadpoles, Tabackin sticks firmly to his bluesy piano comping, and a rhythmic 4/4 feeling; and we even hear some pas- sages that are quiet and contemplative.

None of this in anyway diminishes the in- tensity of Taylor’s vision. On the contrary, it draws one into the richness of the im- provisational experience far more than did the nonstop whirlwind of his earlier works. For my money, it’s the most fasci- nating recording he has made yet.

**Cecil Taylor: 3 Phasis**

*Samp Parkins, producer New World Records NW 303 by Don Heckman*

Pianist Cecil Taylor, for all his un- questionable genius, has never been a particularly easy performer to listen to. Of all the iconoclastic sounds that emerged from the jazz avant-garde of the Sixties, his were perhaps the most difficult to penetrate.

In the last few years, Taylor has fi- nally begun to receive a few of the accol- ades his talent deserves—a Guggenheim Fellowship, an honorary doctorate from the New England Conservatory, etc.—but his music has remained, for the most part, as unrepentantly thorny as ever. This new release from New World Records places him in a considerably more visible light. I don’t suspect for a moment that “3 Phasis” is going to land on Billboard’s Top 200 LP chart or, for that matter, that many people will have the courage to lis- ten to it all the way through, though they should. But it is the first performance I’ve heard from Taylor in which he seems willing to try to provide the listener with a pathway into his music.

The problem in the past has almost always been an absence of section- alization. The performance tended to fol- low a kind of bell curve of intensity, with- out a moment of peace to catch one’s breath. One suspected that Taylor had a deep-grained prejudice against those most basic musical devices—repetition and variation.

This time around we hear him play- ing moments that are pure nineteenth- century rhapsodies; we hear, on Side 2, a lengthy sequence with a walking bass, bluesy piano comping, and a rhythmic 4/4 feeling; and we even hear some pas- sages that are quiet and contemplative.

None of this in anyway diminishes the in- tensity of Taylor’s vision. On the contrary, it draws one into the richness of the im- provisational experience far more than did the nonstop whirlwind of his earlier works. For my money, it’s the most fasci- nating recording he has made yet.
We submit: the Bose® 901® Direct/Reflecting® Speaker System provides more value in concepts, materials and performance than any other speaker system.
Better Than Any Pusher

No matter how fine the fibers or how soft the "plush"—everything other than the Discwasher system is a pusher.

Pushers only line up dirt and microdust into an even line of contamination. Run your pusher off the record at a tangent—and you spread these particles into a tangent line. And microdust becomes permanently welded into vinyl by a tracking stylus.

Only the Discwasher system has the patented micro-tipped fibers which are directional—slanted—to pick up, hold and thus remove particles from your discs. These same directional fibers also remove fluid and solubilized contaminants by capillary action.

The superior record cleaner—better than any pusher.

discwasher, inc.
1407 N. PROVIDENCE RD.
COLUMBIA, MISSOURI 65201

Now Available with DC-1 Pad Cleaner at no extra charge.