WHAT'S NEW IN AUDIO EQUIPMENT: Las Vegas Show Report

Julian Hirsch Discusses IHF AMPLIFIER MEASUREMENTS

EQUIPMENT TEST REPORTS: Harman Kardon HK 705 Cassette Deck
Vector VRX-9000 AM/FM Stereo Receiver * Jensen System C Speaker
Audio Control C-101 Equalizer/Analyzer * SAE Model A7 Integrated Amplifier

STEVE WONDER: Tuning Up for the Eighties
AND SO IS THE FIGHT ABOUT TUNERS.

At one time the struggle between amplifiers was won by the amp that had the most muscle. And the tuner that brought in the most stations also brought in the most acclaim.

Today, there's one series of amplifiers whose technology has put it in a class by itself. And now, with Pioneer's new TX 9800 tuner it's met its match.

While other tuners offer features that just sound great, every feature in Pioneer's TX 9800 helps to produce great sound.

Unlike ordinary tuners that are content with ordinary circuitry, the TX 9800 has a new Quadrature Discriminator Transformer that works with Pioneer's exclusive PA 3001-A integrated circuit to reduce distortion to 0.05% at 1 KHz and raise the signal-to-noise ratio to 83 dB. Whew!

Many of today's tuners use sophisticated low pass filters to remove the 19 KHz pilot signal that's present in every stereo broadcast. But while they're effective in removing the pilot signal, they're also effective in removing some of the music.

The TX 9800 has Automatic Pilot Canceling Circuitry that makes sure every part of the music is heard all of the time. And that distortion is veritably unheard of.

The crowning achievement of most tuners today is the sensitivity of their front end. And though it's much to their credit to bring in weak stations, it means nothing unless they can do it without spurious noise or other interference.

The TX 9800's front end has three dual gate MOSFET's that work with our five gang variable capacitator to give you an FM sensitivity of 8.8 dBf. And also make sure that your favorite music is not disturbed by what's playing elsewhere on the dial.

And while most tuners today give you one bandwidth for all FM stations, the TX 9800 gives you two. For both AM and FM. A wide band that lets you bring in strong stations loud and clear. And a narrow one that finds even the weakest station on a crowded dial and brings it in without any interference.

All told, these scientific innovations sound mighty impressive. But they wouldn't sound like much without an even more impressive tuning system.

The TX 9800 has a specially designed Quartz Sampling Lock Tuning System, that fortunately, is a lot easier to operate than pronounce.

Simply rotate the tuning dial to your desired station. When the station is tuned exactly right a "tune" light comes on. By releasing the tuning dial you automatically lock onto that broadcast. And automatically eliminate FM drift.

By now, it must be obvious that the same thinking that went into Pioneer's new amplifiers has also gone into their new line of tuners.

So just as Pioneer ended the class struggle between amps, they won the fight between tuners. With a technical knockout.
THE STRUGGLE BETWEEN THE CLASSES IS OVER.

For years people have clashed over which amplifiers are best, Class A or Class B. Expensive Non-switching Class A amplifiers are known to offer the lowest levels of distortion. At the same time, they also offer the highest operating temperatures.

And while Switching Class B amplifiers increase efficiency, they also increase distortion.

So if you're not paying through the nose for a heat-producing Class A amplifier, you'll be paying through the ear for a distortion-producing Class B.

At Pioneer, we believe most of today's Class A and Class B amplifiers are pretty much in the same class. The class below Pioneer's SA 9800.

Pioneer's Non-switching SA 9800 offers the efficiency found in the finest Class B amplifiers. With a distortion level found in the finest Class A. An unheard of 0.005% at 10-20,000 hertz.

And while you're certain to find conventional power transistors in most conventional amplifiers, you won't find them in the SA 9800. You'll find specially developed RET (Ring Emitter Transistors) transistors that greatly increase frequency response. So instead of getting distortion at high frequencies, you get clean clear sound. Nothing more. Nothing less.

Instead of slow-to-react VU meters that give you average readings or more sophisticated LED's that give you limited resolution, the SA 9800 offers a Fluroscan metering system that is so fast and so precise it instantaneously follows every peak in the power to make sure you're never bothered by overload or clipping distortion.

And while most amplifiers try to impress you with all the things they do, the SA 9800 can even impress you with the one thing it simply doesn't do. It doesn't add anything to the sound it reproduces. An impressive 110dB S/N ratio is proof of it.

While these features alone are enough to outclass most popular amplifiers, the SA 9800 also offers features like DC phono and equalizer sections and DC flat and power amps that eliminate phase and transient distortion. Cartridge load selectors that let you get the most out of every cartridge. And independent left and right channel power supplies.

Obviously, it took revolutionary technology to build the SA 9800. But the same technology and skillful engineering that went into the SA 9800 also goes into every amplifier in Pioneer's new series.

At Pioneer, we're certain that others will soon be entering the class of 9800. And though they all may be built along similar lines, in terms of value Pioneer will always be in a class by itself.
The biggest sound in a small speaker is two-thirds Klipschorn at less than half the price.

In 1957 Paul Klipsch designed a small loudspeaker that utilized the same tweeter and mid-range driver as the legendary Klipschorn. He added a 12" woofer and maximized the cabinet volume for exceptional bass response. Until that time, Klipsch had built only corner speakers and the new design was for "against the wall" placement. When he described this accomplishment to a sales representative, the man said it was "heresy" to put so much Klipschorn in such a small speaker that didn't even require a corner.

Because of its high efficiency, the Klipsch Heresy doesn't require expensive, high-powered amplifiers to reproduce the full bandwidth of dynamic sound. This helps you afford a better cartridge, turntable or tape deck.

For tonal detail, definition, imaging, transient response and durability, the Klipsch Heresy is a sound investment because, unlike every other aspect of today's component hi-fi systems, it will not be obsolete ten years from now.

The Klipsch Heresy cabinet is shown here in beautiful, hand-finished walnut. Built to the highest quality construction standards in the industry, you can also choose oak, teak, rosewood, ebony, zebra wood and other exotic wood veneers.

The Klipsch Heresy is one of the most efficient small speakers in the world. Only one watt of power will deliver 96 dB of sound pressure four feet into your room and it can take 100 watts if your ears can. Response range is from 50 to 17,000 Hz plus or minus 5 dB.

This lowest priced Klipsch Heresy comes in unfinished birch plywood for exceptional durability, so if you want great sound without the furniture finish, this is the one for you.

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Mail to: Klipsch and Associates, Inc.

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Or Call: 501-777-6751

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A Legend in Sound.
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COVER: Steve Wonder, photo by Kwame Brathwaite

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HOW NOT TO RUIN YOUR RECORDS

PART I
Don’t “play” over micro-dust

THE PROBLEM:
The greatest cause of record degeneration is micro-dust. All records possess a static charge which attracts a very fine, virtually invisible micro-dust from room air. A record may “lock clean” but contain a fine coating of micro-dust. When you play over this coating, even at one gram of stylus pressure, you grind the micro-dust into the record walls, often forever. Your record then gets “noisy.”

COMMON ERRORS:
Most record cleaners are “pushers”, and simply line up dirt without removing it from the disc. Skating a pusher off the record only spreads micro-dust into a tangent line of danger. Extra-arm devices and all cloths are too coarse to do anything but pass over micro-dust—or gently spread it out.

AN ANSWER FROM RESEARCH:
The exclusive Discwasher System removes micro-dust better than any other method.
1. The slanted pile lifts up rather than lines up debris. The pile fibers are fixed in the fabric better than any other record cleaner, and “track” record grooves rather than scrape them (see figure 1).
2. Alternating “open rows” of highly absorbent backing hold micro-dust taken off the record, and demonstrate Discwasher’s effectiveness over long term use (see figure 2).
3. The inherently safe D3 fluid delivery system and capillary fluid removal allows the most researched record cleaner to be the world’s best.

Fig. 1 Line of micro-dust removed from a “clean” record.

Fig. 2 Accumulated micro-dust from long, effective use of Discwasher System.

Discwasher Group
1407 N. PROVIDENCE RD.
COLUMBIA, MISSOURI 65201
CIRCLE NO. 16 ON READER SERVICE CARD
THE FIRST DIGITALLY RECORDED OPERA set to be released in the U.S. is Beethoven's Fidelio on London Records. Hildegard Behrens and Peter Hofman head the cast, and Sir Georg Solti conducts the Chicago Symphony. The set should be in stores this spring. Polygram used 3M equipment for what is claimed to be the first multitrack digital operatic recording: Wagner's Parsifal conducted by Herbert von Karajan. Analog tapes were also made at the Parsifal sessions, and this summer Polygram officials will decide which to use. Parsifal is due in 1981 on Deutsche Grammophon.

ZENITH AND RCA HAVE SIGNED VIDEODISC technology agreements that give each company access to the other's patented videodisc-player developments. Both Zenith's and RCA's units will be able to play the same videodiscs in the capacitance format. Zenith plans to have its player on the market by the middle of next year at a retail price under $500. Zenith dealers will also sell videodiscs—all mono. Ho, hum.

MAY I HAVE THE ENVELOPE, PLEASE? The Avery Fisher Prize for a young American instrumentalist has been awarded this year to pianist Richard Goode.... The National Academy of Popular Music has given a Lifetime Achievement in Popular Music Award to Ethel Merman.... The American Academy and Institute of Arts and Letters has awarded Goddard Lieberson Fellowships ($10,000 each) to young composers David Chaitkin, of New York City, and Robert Xavier Rodriguez, of Dallas.... The name of Edwin Howard Armstrong, inventor of FM radio, was added to the roster of the National Inventors Hall of Fame.

LONDON RECORDS WILL CEASE TO EXIST as a separate company. The London catalog and certain other assets, such as master tapes, have been sold by English Decca to Polygram, which owns Philips and Deutsche Grammophon. In the United States and Canada, London recordings will now be marketed by Polygram side by side with its other classical labels.

A FIXED-HEAD DIGITAL CASSETTE DECK has been developed by Sanyo. Using a ten-track, single-crystal ferrite head, the stereo unit records on metal tape in the large Elcaset format (3 3/4 ips, 1/4-inch tape). The system emits less mechanical noise, Sanyo claims, than a comparable adaptor/VCR system and yet permits easy editing. Neither production nor marketing plans have been announced.

BARCLAY-CROCKER AND PHILIPS RECORDS have signed a contract permitting the former to release recordings from the Philips and Mercury Golden Imports catalogs on open-reel tapes. Fifteen tapes are expected during the first year of the two-year contract, among them Berlioz's Symphonie Fantastique conducted by Sir Colin Davis and Holst's The Planets conducted by Neville Marriner.

DIGITALLY MASTERED CLASSICAL DISCS are catalogued in Classics Only, which costs 50c and can be ordered from Classics Only, Box 14196L, Columbus, Ohio 43214. All recordings listed in the catalog can be ordered from its publishers. Labels include Angel, Delos, Denon, London, RCA, Sound 80, Telarc, Varèse-Sarabande, and others.

NEW VISTAS IN TAPE PIRACY: English heavy-metal rockers Judas Priest have fallen victim to what is apparently the first-ever kidnapping of a master tape. The Priest's new album was being mixed at Electric Lady Studios in New York City when it was stolen during a recent break-in. Faced with the prospect of having to rerecord the entire album, the managers of the group rejected police advice and shelled out the demanded $100,000 in ransom. The tape was returned with only minor damage.

ENGLISH ROCKER BRAM TCHAIKOVSKY completed his second album just prior to the Soviet invasion of Afghanistan, but its release has been delayed by executives at American Polydor. It seems Bram, not known for political convictions, wanted to call the disc "The Russians Are Coming."
Speaking of Music...

By William Anderson

THE ORIGINAL-INSTRUMENT RAG

Time was when I would have run miles to keep a shawm, a rackett, a sackbut, or any number of other ancient instruments from assaulting a pair of ears that had grown up to more modern sounds, more recent musical conventions. That was back during the Early Musicological Period, when scholars, having just discovered phonograph records and some of the profitable academic uses to which they might be put, were intent on improving them into the ground by subjecting them to rediscovered performance-practice rules as rigid as an amendment to Mosaic law. The result of an awful lot of good scholarship was, in short, a lot of awful music, and the listening public grew wisely wary of anything smacking too much of “research.”

We’ve grown even more wise since then, having learned in most cases to put scholarship in the service of making music rather than the other way around. “Ancient Instrument Syndrome” lingers on in some quarters, however, still characterized by the onset of a headache (and the previously cited urge to run) at the mere mention of “original instruments.” I would like to assure fellow sufferers that such responses are entirely uncalled-for in the case of (steady!) the Academy of Ancient Music’s new series of unusual original-instrument performances of Mozart symphonies for L’Oiseau-Lyre (the first-released volume, containing eleven early works, is reviewed in this issue, page 72).

The symphonies are, in fact, so unusual that I find them a little difficult to characterize justly in purely musical terms. Perhaps visual ones will do the trick: they sound to me the way Stanley Kubrick’s breathtakingly beautiful movie of Thackeray’s The Luck of Barry Lyndon looked—brilliantly colored, filled with graceful, hypercivilized figures moving against sublime vistas in a transparent yet softly radiant atmosphere. Thackeray subtilted his satire A Romance of the Last Century, which is to say Mozart’s eighteenth. To put it in terms of one of those grand generalizations my mind finds congenial, the nineteenth century was in thrall, intellectually and artistically, to the heart, the eighteen to the head. Musically, at least, we have not, even this far into the twentieth, moved all that far from nineteenth-century Romanticism, so when we think of “symphonies” we think largely in terms of Beethoven, Brahms, and (lately) Mahler—bulky, weighty works of Dimension and Import. Some of these heavy expectations have, I think, insensibly crept into many Mozart performances, and to our loss.

And so, if these symphonies have not satisfactorily engaged my attention before this, I am inclined to blame performances too richly opaque with the sound of modern instruments to admit that lambent eighteenth-century light, too busy looking for dark-browed passion to discover graceful wit. Granted that the very idea of a “symphony” was still in the process of development, and that Mozart was but a feisty teenager (sixteen to eighteen years old) when he wrote them, these early symphonies are not like that at all. The music is written—and here played—with a contagiously effervescent, lighthearted, and thoroughly intellectual clarity that simply sweeps the listener away. Example, you say? Try the Symphony in E-flat Major (K. 132), especially for the extraordinary juxtaposition of moods between Minuet and Trio—and even within the Trio itself—and come away convinced. For myself, I have resolved to be kinder in future to musico-
y and to original instruments as well (oh, those juicy gut strings, those sonorous natural horns!).

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EDGAR W. HOPPER
MEMOREX HIGH BIAS TEST NO. 5.

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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.

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CIRCLE NO. 33 ON READER SERVICE CARD

LETTERS TO THE EDITOR

Pink Floyd

- I was very impressed with Noel Coppage's review of Pink Floyd's "The Wall." I am a great fan of theirs, and I think it is about time this fine group got some credit for their excellent performance.

AHMAD REZAI
Wichita, Kan.

- I question the sanity of Noel Coppage. Comparing Pink Floyd's "The Wall" to the Who's "Tommy" (in the March issue) is like comparing a compact stereo system to a $15,000 component setup. The album in no way goes beyond Fleetwood Mac's "Tusk" but struggles to stay five laps behind it. Mr. Coppage's definition of a "rock" album is obviously a bit distorted. Pink Floyd may make good music to pop reds to, but calling "The Wall" or even "Dark Side of the Moon" rock music is insane. I would buy even a Kiss album before I would buy "The Wall." Many Pink Floyd fans claim that the best thing about them is "the great sound effects, man." I suggest that anyone who really wants a sound-effects album can get one for around $1.99 at his nearest hi-fi dealer.

WILLIAM L. PAGE
Raleigh, N.C.

Lulu's Last Word

- In his March review of the first complete recording of Berg's Lulu, Eric Salzman raised a question about the word the Countess Geschwitz utters at the very end of the opera. Indeed, it does not appear in the libretto; nevertheless, I believe I know what the word is. It is the adjective verflucht (cursed). We are familiar with this word within the context of Lulu because in the countess' short aria toward the end of the final uncompleted scene [in older, fragmentary productions], she sings several times the phrase "Verfluchtes Leben"—literally, "Cursed life!" (in Angel's libretto booklet accompanying the recording of the incomplete Hamburg production this is translated as "I curse my life!")

In any case, it remains a mystery why this utterance was included in the opera and even more why Deutsche Grammophon did not include it in its libretto booklet. Still, I cannot think of a better word to describe the pitiful Geschwitz's life.

RICHARD DEANE
Richmond, Ky.

Fuzzy Mac

- My advice to Russ Rawlings, who claimed in his February letter to have bought a "fuzzy-sounding" copy of Fleetwood Mac's "Tusk," is that he should not have delayed a minute returning it to the record dealer for a full refund or another copy from a fresh batch. My copy of "Tusk" is almost flawless, so there must be some good ones out there, although it may require a little effort to obtain one. If the record companies think they can pass off inferior discs stamped out with a worn master, then we must just pass them back to them—at $12 to $15 for a double-disc album we'd damn well better! So don't smile when you return a bad record; you're miffed, right? And getting "raped," as you put it, is no laughing matter. Demand a good copy of "Tusk," go directly home, set the volume for loud, and hear the Mac as they were meant to be heard.

JOSEPH C. DESY
Burlington, Iowa

Direct-cut Hines

- My compliments on Stereo Review's choice of Earl Hines as recipient of its 1979...
At last, an amplifier that listens to loudspeakers.

You buy an amplifier to drive loudspeakers. If you're like most people, you rely heavily on distortion "specs" to make a buying decision. SAE found that today's specs don't tell you everything. How could they when the tests for these specs don't even require an amplifier to drive a loudspeaker!

They use a load resistor instead... a static, predictable, unchanging representation of the dynamic, unpredictable, ever-changing loudspeaker. As a result, specs can't tell you how well an amplifier is going to handle your loudspeakers. SAE has researched this problem and developed a test which actually measures the amplifier while it drives a loudspeaker.

Chart I shows the response of our all new 250 watt/channel* 2401 Dual High Resolution Power Amplifier under conventional tests and under SAE's new "real world" tests. As you can see, this amplifier performs much the same whether connected to a load resistor or a loudspeaker. It really listens to your speaker's needs.

Chart II shows how a conventional amplifier attempts to handle the same situation.

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Our TK1 3" high frequency speakers add brilliance and clarity to your car sound (also a great remedy for already installed lackluster systems).

The SK1 5½" extended range speakers are the heart of our system and have Altec's famous crispness and efficiency.

Altec's SW1 Power Bass provides the rich, low bass that's been missing in automotive sound.

INCREDIBLE CAR SOUND IN THREE EASY STEPS. AND ONE HARD ONE.

Let's break all rules and get to the hard one first. Number four: $350 for a complete car stereo speaker system. Gulp. But considering what you paid for the stereo in your dash, if you don't have good speakers, all that money is simply wasted.

Before we get to number one, a word about our whole Voice of the Highway™ system (the AL1). It's extremely modular. So much so, you can buy any part of it and enhance what you've got now. Of course, it's best to get it all and listen to car stereo as it's supposed to sound.

A system designed exclusively for the road, but engineered to rival the one in your living room.

Now to number one, a pair of TK1 3" high frequency drivers that deliver the highest highs you've heard in car stereo. It's a dimension other speaker systems just don't have.

Just as essential, number two, our SK1 3½" speakers. Designed for extended range and for fitting in where nothing else will. The sound? It's what made Altec famous: clean, clear and tight.

Number three is a unique requirement: the SW1 Power Bass. A self-powered subwoofer that fills out the entire system, improves its dynamic range and reduces distortion. Its unique die-cast structure contains a 40-watt amplifier, electronic crossover, balanced inputs and an active equalizer. And the results are dramatic. (Or you can add the Power Base to your existing speakers for $219.95 and still get great sound.)

Now back to number four, our $350 item. If you want true car stereo, super efficiency and clear performance (not just so much noise on the road), you have to give our Voice of the Highway™ a listen. We believe it's the only speaker truly designed for the car. (And when it's installed by an authorized dealer, we'll guarantee it for as long as you own the car).

In addition to our AL1 system, we also have an incredible set of 6" x 9" Duplex speakers. They're ideal for all cars with severe space limitations, because they easily mount into a door. They also can be used with the AL1 system or are available themselves at $159.95 per pair.

LISTEN. FREE GAS.

Just to get you to listen, we'll pay for your gas money. Take this ad to your car stereo dealer, listen to the speakers, and we'll send you $2 for gas money, whether you buy or not. That's how confident we are you'll like our Voice of the Highway.

So when it comes down to the four steps, all of them are really easy to take. One at a time, or all at once. Including the last one. It won't be so hard, once you really listen. Hear Altec's Voice of the Highway™ today and end up driving a real bargain. For the name of your local dealer, call toll-free (800) 528-6050, Ext. 731; in Arizona (800) 352-0458.
Certificate of Merit. Earl Hines is truly one of the giants of American music and is most deserving of this award.

However, I was disappointed that the accompanying article on Hines in the February issue failed to acknowledge his contribution to the world's audiophiles by not including his direct-to-disc recording, "Fatha" (M&K RealTime RT-105), in the "Hines on Disc" section. An occasional complaint about direct-to-disc and digital recordings is that too few major artists are represented on these records, which makes Earl Hines' album all the more significant.

Few recording combine music of his stature with such high technical quality.

Chuck Back
M&K RealTime Records
Culver City, Calif.

Discussion

Concerning "Discophobes and -phobes" in the March "Letters," I was pleased to note that someone shares my views on disco but very disappointed to read that rock and classical music are "dead." Was How can STEREO REVIEW print such a fallacy without at least responding to it? Not only has classical music been around for hundreds of years, but it certainly isn't losing popularity either. Disco is but a short-lived star in the eternal firmament of classic music. Mozart was four years old when he wrote his first symphony, which is four trillion times more than I can say for Giorgio Moroder, Donna Summer, or Gino Soccio.

Ty C. M. Hoffman
Crestline, Ohio

The best comment of all on rock-lovers' detestation of disco is the fact that disco clubs are now playing more and more rock music. They couldn't lick 'em, so they joined 'em. Dance on, baby!

Angie Bianco
Brooklyn, N.Y.

Donna and Tonio

I couldn't help noticing an irony in STEREO REVIEW's 1979 Record of the Year Awards (February issue). A few years down the road, Tonio K. 's "Life in the Foodchain" will, from all indications, be the kind of narrow-minded hypocrites that they accuse the critics of being. STEREO REVIEW's critics are professional journalists. As such their job is to get a reaction from their readers. Nowhere in the magazine does it state that they are music-making know-it-alls. And who would read reviews that make every album out to be the potential best seller of the year?

Randal Pocock
Alexandria, Va.

Big Ten Bands

I have been recording Big Ten bands at football games with the crowd sounds, cheers, etc. It's a great hobby, and I think tapes of this sort may have commercial potential. There are hundreds of bands to record, and the musicians and students alone would be a pretty good market. What can I do with this idea? Can I buy a tape duplicating machine and make copies of my recordings? What do you suggest?

Paul Gordinier
Chicago, Ill.

The Editor replies: As I see it, this proposal presents three kinds of problems.

(1) Legal: When you buy a ticket to a football game, the contractual obligation by the seller involves only the "live entertainment"—the game itself and whatever half-time diversions he cares to include. He has not sold you the right to record.
Transform your home into a nightclub, concert hall or cathedral.

Even the finest stereo cannot create the illusion of "being there" in the same acoustic space as the musicians.

Now you can experience the impact of hearing sound in three dimensions with the ACS 10 Acoustic Dimension Synthesizer. The ACS 10 uses sophisticated digital time delay techniques to recreate the ambiences of a concert hall, an 800-seat stadium, or a cathedral.

Stereo Review* on the ACS 10 experience: "...a totally unobtrusive, natural ambience can be achieved—demonstrated by you experienced it, it's very difficult to give up."

The Complete Buyer's Guide to Stereophile Equipment put it this way: "If you have a good stereo system and ask yourself, 'Is there anything I could do for under $150 that would do so much to improve the realism of music reproduction in my home, then the answer is certainly to do no, it's that good.'"

For more information, write ADS, Dept. S-B14, or call 1-800-824-4288 (California 1-800-852-7777) toll free, and ask for Operator 485. Or better yet, take your favorite records to your ADS dealer and let him demonstrate how the ACS 10 can create the live musical experience in your home.


Silly Season

- Thank you for Paulette Weiss' very humorous and insightful February column, "The Silly Season." In these days of world-weary and bizarre rock megastars, it's refreshing to read that there are still plenty of loonies around.

BILL SCHUBERT
Orangeburg, N.Y.

Audio Accessory?

- After reading about Jeffrey Greenberg's protective sign, "This equipment is worth more than you are; please don't touch," in January's "Installation of the Month," there was no way I could resist sending you a copy of the sign I use for the same purpose [see below].

BILL DE SOUZA
Salem, Ore.

What's in a Word?

- I'm trying to broaden my knowledge of classical— or should I say "serious"?— music, but my progress is hindered by the ubiquitous occurrence of foreign words and phrases that I don't understand. For instance, in the December 1979 review of Mozart's The Marriage of Figaro are "Non più andrai," "Voi che sapete," and "Venite inginocchiatevi." Now how in the world am I to know what those mean? How much trouble would it be to offer translations in parentheses after all foreign words or phrases used in Stereo Review?

GLEN E. WHITTINGTON
Anthony, N.M.

Music Editor James Goodfriend replies: The examples given are all quotations from the text of the opera and were used only to identify particular arias. Translations would not be of any great service to "venite inginocchiatevi," for example, means "Come, kneel!" More general foreign-language musical terms are usually included as "loan words" in any large English dictionary, but learning the titles of works and (particularly) arias in the major and some minor) European languages takes a little work (anything worthwhile does). Such knowledge is far from being an affectation; perhaps refusing to deal with any language but English is.

Archivists, Attention

- I have a complete set of Stereo Review back through 1967. Anyone interested?

ROBERT J. HELWIG
9205 Cherry Tree Drive
Alexandria, Va. 22309

STEREO REVIEW
Be possessive. Curl up in the comfort of your favorite chair within a K-340 Concert Hall of your very own. There you can be sensually involved and you disturb no one else.

The new AKG K-340 is the first uniquely engineered headphones to combine the advantages of "electrostatic" and dynamic transducers together with passive diaphragms. The result of intensive studies in psychoacoustics, they are designed to effectively produce sound which precisely simulates the listening experience one enjoys from high quality speakers in free space. Their superior sound offers hours of contentment.

Listen to these "live" performance headphones at your AKG dealer today, or write us directly.
All the members of Empire's Dynamic Interface family of phono cartridges weigh 5.3 grams, use samarium-cobalt magnets, and have a simplified mounting procedure, a 20-degree vertical-tracking angle, and a stylus-lock system to prevent stylus misorientation. The top-of-the-line 600LAC uses a tapered aluminum-alloy cantilever and a "large-area-contact" stylus. Effective tip mass is 0.6 milligram; dynamic compliance is 20 microdynes per centimeter. Recommended tracking force is 20 micrograms. Frequency response is given as 20 to 28,000 Hz ± 13/4 dB. Channels are balanced within 1 dB, while separation at 1,000 Hz is 30 dB. Recommended loading is 47,000 ohms and 150 picofarads. The bass and treble tone controls offer a choice of nine turnover frequencies each, and there are switchable infrasonic and high-frequency filters. Three tape recorders may be connected to the C-5000A, each with separate dubbing and monitor controls. The unit measures 20 x 14 x 71/2 inches and weighs 25 pounds. Price: $1,395. 

Circle 121 on reader service card

The A4-14 biamped speaker system from Audio Pro contains an amplifier to drive a dual 5-inch-driver version of the Audio Pro B2-50 subwoofer. A separate amplifier drives the unit's 41/2-inch midrange driver and 1-inch soft-dome tweeter. Frequency response is given as 30 to 20,000 Hz ± 13/4 dB. Channels are balanced within 1 dB, while separation at 1,000 Hz is 30 dB. Recommended loading is 47,000 ohms and 150 picofarads. The other five models in the line have biradial, elliptical, or spherical styli and track at progressively higher forces (up to 3 3/4 grams). Prices: 600LAC, $175; other models from $125 to $40. 

Circle 120 on reader service card

The dbx Model 224 Type II noise-reduction system contains four compander circuits for simultaneous stereo encoding and decoding of tapes as they are recorded. It is claimed to provide up to a 40-dB increase in usable dynamic range through fixed 2:1 compression and 1:2 expansion. The rack-mountable Model 224 will also decode dbx-encoded discs. The device has a dynamic range (the ratio of the peak-signal level to the weighted background noise) of 110 dB. Frequency response is ± 1 dB from 30 Hz to 20 kHz, total harmonic distortion is less than 0.5 per cent (less than 0.1 per cent from 30 Hz to 14 kHz), and intermodulation distortion measured by the SMPTE method is less than 0.2 per cent. Nominal input level is 300 millivolts (6 volts maximum). Dimensions are 1 1/4 x 17 1/2 x 6 1/2 inches. Price: $275. 

Circle 124 on reader service card

(Continued on page 18)
A lot of cassette makers have probably considered asking Stevie's opinion about their performance. But he's such a perfectionist, they may have been scared off. Stevie won't make excuses for a cassette. He wants big studio sound out of it. And for many cassettes, that's asking a lot.

Not for TDK SA. The surface of this high bias tape is packed with a specially treated particle called Super Avilyn. With it, TDK has revolutionized the way you hear recorded cassette music. No rock is too hot to handle. Classical music keeps all its dynamic range. Jazz sizzles without a hiss. There's headroom for all the challenge and drama of music. And all the delicate overtones in between.

Stevie says, "It's a little music machine that delivers the best sound, for its size, I've ever heard." And TDK SA will keep delivering.* Its 250 components go through thousands of checks. There are 1,117 checkpoints for the shell alone. It was 1,060, but our engineers never stop making improvements. Which is what you'd expect from a perfectionist.

* 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.
The finest audio component must do more than merely sound good.

For an audio component to be the absolute finest, it must satisfy all design parameters. Audiophiles tell us the ideal component is a straight wire with gain. The TA-150's all-electronic design comes closest, which helps explain why its sound rivals the finest separates.

Scientists tell us the perfect machine would have no moving parts. The TA-150 has but one, a single programmable knob.

Designers tell us that form must follow function. The beauty of the TA-150 is that the world's most sophisticated receiver is also the easiest to operate. Sound, science, and style. The total design approach to audio.

Digital-audio VCR Adaptor Comes with Software Sample

Sanyo includes with each of its Plus 10 digital-audio VCR adaptors a digitally recorded Beta-format videocassette of Ry Cooder’s “Bop Till You Drop” album. The Plus 10 adaptor converts analog audio signals at line level or from microphones into a pseudo-video signal for recording on any U.S.-standard videotape machine. Encoding is according to the EIAJ digital-audio-adaptor standard. The complete adaptor-plus-VCR digital-audio recording system has a frequency response of 20 to 20,000 Hz, +0, -1 dB, harmonic distortion of 0.03 per cent, unmeasurable wow and flutter, and a dynamic range of at least 85 dB. Features of the Plus 10 include a high-performance, low-noise stereo-microphone preamplifier; 50-dB-range LCD level meters switchable between peak or peak-holding ballistics; switchable EIAJ-standard preemphasis to reduce high-frequency noise; and an error-rate display to show the operation of the Plus 10's digital error-correction circuitry. Price: $3,995.95.

Celestion’s New Four-model Speaker Line

The four acoustic-suspension systems in Celestion's CS series have walnut-grain vinyl-covered enclosures and use many of the drivers from the Celestion Ditton series together with a new midrange and new cross-over networks. The CS 7 (left) measures 30½ x 14¼ x 10½ inches. Frequency response is stated as 45 to 20,000 Hz ± 3 dB into a half-space. Crossover frequencies are 800 and 4,000 Hz. Sensitivity is 87.5 dB sound-pressure level measured at 1 meter with a 1-watt input signal. Driver complement is a 12-inch woofer, a 1-inch dome tweeter, and a 4-inch cone midrange. The CS 5 (center) uses the same tweeter and midrange but has a 10-inch woofer. Its frequency response is from 55 to 20,000 Hz. The CS 5 measures 22½ x 13½ x 11 inches and weighs 28½ pounds. The CS 3 (right) has a dome tweeter and an 8-inch woofer; frequency response is 62 to 20,000 Hz. The C121 (not shown) measures 15½ x 10½ x 9 inches and has a 1½-inch tweeter and a 7-inch woofer. Frequency response is 65 to 18,000 Hz. Nominal impedance for all models is 8 ohms. Prices: CS 7, $329.50; CS 5, $239.50; CS 3, $139.50; C121, $99.50. Celestion Industries, Dept. SR, P.O. Box 521, Kunholm Drive, Holliston, Mass. 01746.

Apres Audio’s “Elegant” Plexiglas Audio Furniture

The “Elegant” stereo cabinet from Apres Audio provides record-storage space on a shelf suspended from crescent-shaped Plexiglas panels. The upper cabinet has a drop-latch Plexiglas door as well as a vented rear panel. The wooden parts of the cabinet are either oak or oak veneer. Overall dimensions are 33½ x 46 x 18½ inches, and internal dimensions of the upper cabinet are 8 x 42½ x 17½ inches. Some assembly is required. Price: $579. Apres Audio, Dept. SR, 3 Revere Court, Suffern, N.Y. 10901.

(Continued on page 20)
THE CRUCIAL LINK

BETWEEN HERE:

AND HEAR.

THE ONE COMPONENT THAT MAKES ALL YOUR OTHER COMPONENTS SOUND THEIR BEST.

Every tape that carries the Scotch name is made with the same kind of care and precision that went into your other components. And that makes it a component in its own right. Perhaps the most important one of all. Because if the cassette doesn't deliver, neither can the rest of your system.

SCOTCH METAFINE® FOR PURISTS WHO DEMAND THE ABSOLUTE PUREST IN SOUND.

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.

Metafine gives you higher highs and lower lows than chromium dioxide tapes. In fact it actually delivers twice the output of those tapes.

The same dedication to technological perfection that made Metafine possible is part of every Scotch Cassette you buy. You'll hear it in all three of our Master® Series formulations: Master I® (normal bias) for recording at high volume without distortion. Master II® (chrome bias) for quiet music where tape hiss could interfere. Master III® (FeCr) for outstanding clarity and high-end brilliance.

NO TAPE COMES CLOSER TO THE TRUTH THAN SCOTCH:

More than 30 years of research, technology and innovation go into each one of our cassettes. What comes out is the truth. No more. No less.
THE AUDIO PRO A4-14
BIAMPLIFIED LOUDSPEAKER

The only bookshelf-size* speaker with a built-in subwoofer.

Audiophiles tell us the ultimate speaker system uses bi-amping and subwoofers. The bi-amped A4-14's, with their built-in "ACE BASS" subwoofers are an entire audiophile system in bookshelf-size enclosures.

Acoustical engineers tell us that the ideal loudspeaker would be a single radiating point. Because of its built-in subwoofer, the Audio Pro A4-14 comes closer to this ideal than any other full range loudspeaker—without sacrificing bass.

Designers tell us that speakers should be heard and not seen. Due to their compact size and full complement of room-balancing controls, the A4-14's can deliver their optimum performance—wherever they are placed.

Sound, science, and style. The total design approach to audio.

Optional floor stands available.

For more information and your nearest dealer CALL TOLL FREE 800-638-0228.
Maryland: 410-459-3292 COLLECT.
Metro D.C. 459-3292

CIRCLE NO. 5 ON READER SERVICE CARD

HEALTHKIT RECEIVER

Has Digital Frequency Display

□ The power-amplifier section of Heathkit’s AR-1650 receiver kit is rated at 125 watts continuous minimum per channel into 8 ohms with less than 0.05 per cent total harmonic distortion from 20 to 20,000 Hz. The FM selectivity is 1.8 microvolts. The i.f. bandwidth is switchable, with selectivity varying from 40 to 80 dB. Although it does not use digital synthesis, the tuner in the AR-1650 incorporates a precision tuning system said to correct for mistuning. A digital frequency display shows AM and FM station frequency. The receiver’s bass, midrange, and treble tone controls can be bypassed with a front-panel switch. A low-frequency filter has a −3-dB point of 30 Hz with a 12-dB-per-octave rolloff. Switching facilities handle two phono inputs and two tape decks. The kit is available with either anodized black or natural-aluminum front panels. Prices: with anodized black panel, $799.95; with aluminum panel, $779.95.

CIRCLE 129 ON READER SERVICE CARD

Optronica Tuner

Offers Multiple Tuning Modes

□ The Optronica ST-9405 digitally synthesized AM/FM stereo tuner offers several alternative tuning methods. A sweep mode indicates station location with LEDs along a horizontal scale. A zone-scan system allows selection of a 1-MHz (FM) or 50-kHz (AM) zone, displays the number of stations in that zone, and automatically tunes to the lowest-frequency station in the zone. An auto-search mode scans the entire broadcast band at a selected speed and stops at each station. Finally, direct frequency-entry tuning is possible. The frequencies of ten selected stations are maintained in the tuner’s memory circuits even if the power is removed. Bandwidth of the i.f. section is adjustable, and there is a high-frequency blend switch to reduce noise in stereo broadcasts. FM sensitivity is 1.7 microvolts, and total harmonic distortion is 0.2 per cent in stereo in the wide i.f. mode and 0.3 per cent in the normal i.f. mode. Frequency response in FM is 30 to 15,000 Hz, ± 1.5 dB. Dimensions are 3 x 17 x 15⅞ inches. Price: $1,000.

CIRCLE 130 ON READER SERVICE CARD

An Acoustical Labyrinth Speaker
From Radio Shack

□ Radio Shack’s Realistic Optimus T-70 speaker system uses an acoustically tuned labyrinth enclosure which is said to reinforce bass response and to provide high efficiency. The speaker uses an 8-inch long-throw woofer and a high-efficiency soft-dome tweeter with a crossover frequency of 2,000 Hz. Frequency response is given as 55 to 20,000 Hz ± 8 dB. The unit will accept up to 75 watts of continuous power and will produce a 90-dB sound-pressure level at 1 meter with a 1-watt input. To assure continuity of grain pattern and color, the cabinet has a mitre-folded walnut veneer machine from a single panel. The floor-standing speaker measures 29¼ x 10⅞ x 10⅞ inches. Price: $129.95.

CIRCLE 130 ON READER SERVICE CARD

(Continued on page 22)
Unique qualifications.

For example, a tweeter mounted directly in the grille. It’s the Jensen 6½" Coax II car stereo speaker. And by putting the 2" tweeter where it is, we’ve improved the high frequency dispersion. And slimmed down the speaker.

Experienced treble-shooter... for better dispersion.

High frequencies can be tricky... they usually just want to travel straight forward. But the up-front position of this direct radiating tweeter helps disperse those highs throughout the whole car.

So whether you install these speakers low in your front doors or back in the rear deck, you can be sure you’re going to hear all of the treble this unique speaker has to offer.

Beefed up music.

That’s what you’ll get from the 6½" Coax II. Music with plenty of meat on its bones. Music with a frequency response that stretches from 50 Hz to 40,000 Hz.

Not only from the tweeter in the grille. But also from the 6" woofer behind it. This woofer’s hefty 16 oz. magnet and large 1" Nomex® voice coil serve up a second helping of full, balanced bass. While a responsive rim suspension and meticulous cone design give this speaker extra sensitivity.

This highly efficient, 4 ohm Coax II will handle up to 50 watts of continuous power. And make the very most of it.

A slimmed down speaker.

No extra fat on this speaker... it’s only 1½” deep and it fits your current 5½” cutout. So it will fit in more car doors, more rear decks, and more tight spaces than ever before.

The Jensen 6½” Coax II is also easier to install, thanks to its new uni-body construction. The grille is permanently affixed to the speaker unit. Which not only makes installation easier, but also means a sturdier speaker with less vibration.

Excellent references.

Give a listen to the new Jensen 6½” Coax II’s. The speakers with the grille-mounted tweeters.

We think you’ll agree that they’re just the right speakers to fill the position in your car.
A DIFFERENT KIND OF RECORD CLUB

Details: You can now own every record or tape that you may ever want...at tremendous savings and with no continuing purchase obligations of any kind. You can get valuable free dividend certificates, you can get quick service and all the 100% iron-clad guarantees you want.

Now you can stop price increases that leave you with less music for your record and tape budget. You can guarantee yourself more music for less money through membership in Discount Music Club.

Look at these benefits:

**TREMENDOUS SAVINGS**
on every record and tape in print—no "agree-to-purchase" obligations of any kind.

**DISCOUNTS OF 43% TO 73%**
off mfg. suggested list...special catalog features hundreds of titles and artists.

**ALL LABELS AVAILABLE**
including most imports through special custom ordering service. If we don't stock it, we'll get it for you.

**SCHWANN CATALOG**
lists thousands of titles, classical, pop, jazz, ballet, opera, musical shows, folk, rock, vocal, instrumental, country, etc.

**DISCOUNT DIVIDEND CERTIFICATES**
Dividend Gifts—Every shipment carries a dividend gift or dividend certificate. Certificates redeemable immediately for extra discounts.

**NEWSLETTERS**
informations in the world of music; concerts, critiques, new releases...special super-sale listings at discounts of up to 73%.

**DISCOUNT ACCESSORY GUIDE**
Discount Music Club is your complete one stop music and accessory buying service.

**QUICK SERVICE**
same day shipping on many orders...rarely later than the next several days. Partial shipments always made in the event of unforeseen delay...all at no extra cost to you.

**100% IRON-CLAD GUARANTEES**
on all products and services. Everything is guaranteed factory fresh and free of defects or damages of any sort. Your total satisfaction is unconditionally guaranteed.

Discount Music Club is a no-obligation membership club that guarantees tremendous discounts on all stereo records and tapes and lets you buy what you want...when you want...or not at all if you choose.

These are just a few of the money-saving reasons to write for free details. You can't lose so why not fill out and mail the coupon below for immediate information.

**DISCOUNT MUSIC CLUB, INC.**
9-0580
250 Main Street, New Rochelle, N Y 10801

NAME
ADDRESS
CITY
STATE ZIP

Circle 131 on reader service card

**Avid's Contoured Speaker Systems**

Next to the top of Avid's new line of car speakers is the Model 5 two-way system intended for either surface or subsurface mounting. Employing a 41/2-inch woofer crossing over at 5,500 Hz to a 1-inch soft-dome tweeter, the Model 5 is said to have a midrange response specially contoured for car listening. It can handle up to 75 watts continuous program material, and nominal impedance is 4 ohms. Sensitivity is 1 watt for a 95-db sound-pressure level at 1 meter, and frequency response is 60 to 20,000 Hz ± 5 dB. Measuring 93/16 x 1 x 53/4 inches, the Model 5 is supplied in pairs. Price: $175.

Circle 131 on reader service card

**Two-way Speaker From Fujitsu Ten**

The Model SSB-4B37 is a new two-way car speaker system from Fujitsu Ten. With a maximum power-handling capacity of 40 watts, the system utilizes a 4-inch woofer with an 8-ounce magnet and a 1-inch high-frequency driver having a magnet weight of 31/4 ounces. Frequency response is 70 to 22,000 Hz, with a sensitivity of 1 watt for an 87-db sound-pressure level at 1 meter. Nominal impedance is 4 ohms. The system drives are hermetically sealed in a rectangular die-cast-aluminum enclosure measuring approximately 9 1/2 x 5 1/2 x 6 1/2 inches. Price: $149.95 per pair.

Circle 132 on reader service card
"The Realistic® STA-2200 is a highly advanced stereo receiver which sounds every bit as good as its specifications and our measurements suggest... an impressive value for the money."*

Computerized All-Digital Tuner

Breakthrough is a word Realistic seldom uses, but nothing else describes the STA-2200. And the critics agree. The heart of the tuner is the quartz-locked, microprocessor circuitry that ends mechanical tuning problems.

Radio Electronics magazine puts it this way: "On the whole, the receiver embodies a great many design features, most of them concerned with the ease of use and convenience of accurate tuning."* Bright fluorescent digits display each station's frequency with absolute accuracy, and computer-type tuning automatically scans up or down the FM and AM bands. You can store any six FM and any six AM stations in the microprocessor for instant touch-button recall.

Radio Electronics also says: "The STA-2200 is a joy to use."† For example, you can command the receiver to sample each station in the memory, then touch-select the one you want. There's also Dolby® FM Noise Reduction, LED signal level indicators, and the display doubles as a quartz clock.

Stereo Review summed up the STA-2200's tuner by saying it "worked to perfection." And Radio Electronics said "...because of its clever design and pleasing layout, we have assigned a VERY GOOD R.E.A.L. rating to the STA-2200."†

Advanced MOSFET Amplifier

The STA-2200 uses a new breed of power transistors called MOSFETs. Their ultrahigh-speed operation brings you stunningly accurate sound reproduction through superior linearity, superior slew rate and inaudible T1M.

Radio Electronics says "The unit seems quite conservatively rated in terms of power output, as well as rated distortion, delivering a clean 72 watts per channel at mid-frequencies and just under 70 watts per channel at the 20 Hz and 20 kHz frequency extremes for its rated total harmonic distortion of 0.02%."† You can monitor the output with the 10-step, dual range output LED power indicators.

Stereo Review reports "There are no signs of skimping in any area of its design or construction." The amplifier features go on and on. We've included 11-step bass and treble controls with turnovers for controlling ranges below 150 Hz and above 6 kHz, tone defeat, monitor and dubbing controls, Hi-MPX filter. And more!

Says Stereo Review: "With the STA-2200, Radio Shack has made it perfectly clear that the technical sophistication responsible for the overwhelming success of the TRS-80™ computer system has been applied very effectively to their high fidelity products."*

We couldn't have said it better. Thanks, guys!

Radio Shack®
The Nationwide Supermarket of Sound

* Quoted by permission from Hirsch-Houck Test Labs Report, Feb., 1980, Stereo Review. (Copyright Ziff Davis Publishing, all rights reserved)
The STA-2200 is 599.95, at participating stores and dealers, price may vary. Dolby® is a trademark of Dolby Laboratories.
WHAT'S HAPPENING ON THIS PAGE SHOULDN'T HAPPEN ON YOUR RECORDING TAPE.
It’s called print-through. And if you think it interferes with your reading, you should hear what it does to your listening.

It happens on tape that has low magnetic stability. Music on one layer of the tape is transferred to music on an adjacent layer, causing an echo.

At Maxell, we’ve designed our tape for superior magnetic stability. So what’s happening to the opposite page won’t happen to your music.

You see, we believe you should only hear the music you want to hear. Nothing less, and nothing more.

IT’S WORTH IT.
It sounds like music.

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

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

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

Audio Q. and A.

TV-FM Coupling

Q. I have installed a small color TV set in the same cabinet that houses my hi-fi system and would like to use the same antenna to feed both my FM tuner and my TV. I have been told (1) that there is no problem in doing this and (2) that there is a severe loss of signal with a two-set coupler. What do you say?

AL PARNELL Laredo, Tex.

A. There is no problem if the coupler used is adequately designed. I recently made the mistake of buying an under-$3 house-brand coupler from an "electronic supermarket" chain. When I hooked it in, my FM signal strength fell to a fraction of its former level. I opened up the coupler to see what the problem might be—and found it to be inherent in the design. Inside the coupler was a network of resistors which might work well in preserving the 300-ohm, match between the antenna, FM tuner, and TV set, but at the cost of a considerable signal loss. When I substituted a Winegard CC-33 "color-coupler," which employs more complex inductive coupling, only a barely detectable loss of signal strength showed up on the tuner’s meter and everything worked fine. The most annoying part of my misadventures with two-set coupling is that the very effective Winegard coupler has a list price of about $3.25, only about $1 more than the virtually useless resistor type. Caveat emptor!

Amplifier Power / Load

Q. I have been told that I could change the impedance presented to my amp by installing a resistor across each of the speaker-output terminals in parallel with the speaker wire. Will 8-ohm resistors across my 8-ohm speakers provide 4 ohms to each channel of my amplifier and thus make it more powerful?

FRED ROSETTA Chapel Hill, N.C.

A. Yes, 8-ohm resistors connected across 8-ohm speakers will provide nominal 4-ohm impedance loads to the amplifier. And yes, 4-ohm loads for most amplifiers will produce some increase in the maximum power available at a given distortion level. However, since the resistors will also absorb half the power output of the amplifier, the net result will be less power available to your speakers than before you started fooling around.

A practical way to achieve what I think you are trying to do is to buy another set of speakers of the same model you now use and connect them in parallel with your present speakers as shown in the accompanying sketch. It's important that the pluses (+) and commons (−) of each new speaker be connected to the equivalent terminal on the older speaker units. And if you wire each additional speaker side by side with the original right- or left-channel unit as shown, you'll achieve a greater power-handling capacity and more bass. (The bass won't go lower in frequency, but there will be more of it because of coupling between the systems.)

The improved power handling will enable you to play your speakers louder—or add equalization—without excessive distortion. You might also achieve enhanced high-frequency dispersion if you set up each pair of speakers slightly carried away from each other as shown. However, if you have 4-ohm speakers or if their nominal 8-ohm rating falls much lower at certain frequencies, your amplifier may not be able to take the resulting lower-than-4-ohm load. Incidentally, the reason for using the same model...
for your new speaker pair is to ensure that the impedance curves of the two systems match so the amplifier power is divided between them equally at all frequencies.

Warped Discs

Q. I am finding, to my great consternation, that some of my older records are warped in the outer 1/4 inch or more. The warp is bad enough that the stylus (with less than 1 gram of tracking force) simply leaps out of the groove while going over the hump on each revolution. My records are stored in the usual vertical rows. What could be the cause of it? What could I do to straighten them out or at least restore them to playable condition?

YONG J. KIM
Thousand Oaks, Calif.

A. As far as the cause of your problem is concerned, look for anything that could result in uneven heating of your stored discs. For example, are your record cabinets near a radiator or a wall with a chimney or steam pipe running through it? Does strong sunlight pass across your record cabinet at certain times of the day? And sometimes, even with normal storage, molded-in stresses that originate during pressing will be released, causing warps.

As far as dewarping is concerned, the old-standby technique is to clean the disc carefully and sandwich it between two 13 x 13-inch sheets of clean, heavy plate glass. The sandwich should be heated to about 135 degrees Fahrenheit for about 10 minutes. Remove from the heat and allow the sandwich to cool for 24 hours while being pressed under a set of heavy books, weights, or whatever. An electric heat lamp is the preferred source of the required 135 degrees, although a warm stovetop or bright sunlight will also work. I'm told that two or three tries may be necessary in order to get the heating correct and even.

The mistracking or groove skipping produced by warping occurs because the total mass of the tone arm plus cartridge body is such that the arm is literally thrown out of the groove through inertia by the undulating record surface. A lighter arm/cartridge combination or one with some kind of a “shock-absorbing” damper is much less subject to warp effects. In addition, if the arm/cartridge mass interacts with the stylus compliance to resonate mechanically in the 4- to 10-Hz area (statistically the frequencies at which most record warps occur), warp sensitivity will be worsened.

It's likely that your discs may be playable, warps and all, if the proper equipment is employed. The built-in damper brushes in the new series of Shure cartridges do very well in assisting tracking of warped records. Other aids to warp tracking are the add-on DiscTracker, the lightweight cartridges from Ortofon and Micro Acoustics, and the ULM low-mass tone arms on Dual record players. Many of the radial-tracking players should also do well on warped discs, assuming that their arms are low-mass as a result of their short length. And, lastly, your records, warped or unwarped, would probably be happier being tracked at a gram or more rather than less.

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

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We bring it back alive.

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Are your records really clean? Vac-O-Rec, the sure way.

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

The result - a really clean record free of dirt and surface noise. Vac-O-Rec is UL and CSA listed. Don’t put up with noise, or risk damage to your priceless records. See Robins Vac-O-Rec at your dealer. Manufactured in U.S.A. by Robins Industries Corp., Commack, N.Y., 11725.

Circle No. 47 on Reader Service Card

May 1980
Readers frequently ask us how they might go about becoming recording engineers, but it is not always perfectly clear from their letters just what kind of picture of the profession is in their minds. For some young people, a job as a recording engineer may be a realistic professional goal; for others it may represent only the living out of a power fantasy of sitting behind a glass window at an enormous mixing console, creating a new hit for the Eagles or Fleetwood Mac. But a career as a recording engineer involves the investment of a good deal of time, money, and effort, and it is rather more of a nuts-and-bolts affair than an opportunity to keep company with the rich and the famous.

Unfortunately, one can't (yet) go to college for a degree specifically in recording engineering, as one can, say, in mechanical or electrical engineering. There is an increasing number of institutions, however, that do provide appropriate training. A logical first step is to get as much information as possible on the many various facets of engineering in the audio field (not everyone will be a knob-twirler) and on where specialized training is available. The Audio Engineering Society (60 East 42nd Street, New York, N.Y. 10017) has a committee specifically devoted to this, and among the materials they have put together is a geographical listing of colleges and other institutions that offer even a few audio courses. They also have booklets describing the different areas of audio engineering and the hiring practices in the industry. Write to them and they will send you, without charge, their complete packet of information on audio education.

There are also two schools that do specialize in recording engineering. One is the Institute of Audio Research (64 University Place, New York, N.Y. 10001). It has its own classroom facilities, control room, disc-cutting room, and testing/maintenance shop. The curriculum is extensive, with courses offered on all levels. The Recording Institute of America (15 Columbus Circle, New York, N.Y. 10023) works mainly through affiliated recording studios in forty-one cities throughout the U.S. and Canada where the studio personnel serve as instructors. Its basic offering is a ten-week once-over-lightly program in multitrack skills and tape-recording theory. It could be considered as not only basic audio training but also a way of learning, with a relatively small investment of time, what the field is about and whether it's for you. Both schools will send you toll information on request at no charge.

Both of these schools teach the basic mechanics, but they can give you only the training, not the talent. And even both of these together won't provide an automatic pass into a top job. Remember that no school can guarantee employment—particularly in a field as competitive as that of recording.

For every pair of hands operating a recording console, however, there are many others performing equally satisfying if less celebrated functions. And not everyone in the field of audio is involved in recording; there are also the people who handle sound reinforcement in churches and at rock concerts, for instance. Then there's the design consultant (P.O. Box 552, Beverly Hills, Calif. 90213), which offers a ten-lesson correspondence course for $75. Each of the lessons explains a particular aspect of hi-fi equipment. This is not aimed primarily at consumers but rather audio sales people. The Society also has a course for $200 that includes about two hours of videotaped material. Consumer Associate Memberships are offered to the general public; details are available on request.

For anything beyond the basic consumer level, some electronics know-how is helpful. One way to acquire a modest grasp of electronics is to read up on it (I'll be tackling the subject of appropriate introductory books in a future column). For something more thorough, I suggest a course at a technical school. Many people don't have such schools in their immediate vicinity, but there are many correspondence schools with courses in electronics, equipment servicing, computers, etc. For a free directory of accredited home-study schools, write to the National Home Study Council, 1601 18th Street, N.W., Washington, D.C. 20009. The same organization also offers a 136-page paperback entitled There's a School in Your Mailbox ($3.50 plus 50¢ postage and handling) a consumer's guide to home studies in general.
We submit: the Bose® 901® Direct/Reflecting® Speaker System provides more value in concepts, materials and performance than any other speaker system.
Tape Tecnicalese

Q. I've recently read ads for "quartz-locked PLL servo-controlled direct-drive capstan" tape recorders. I didn't know what all that gobbledegook meant when they were talking about turntables, so now it's come to recorders. Can you please supply a translation?

A. Since I am myself probably sometimes guilty of the same kind of ad-talk technicalese you complain of, let me try to dispose of some of my guilt by attempting an explanation.

Working backwards in your description, virtually every tape recorder has a rotating shaft, called a capstan, which pulls the tape forward by pressing it against a rubber "pinch-roller." The tape moves forward because it is caught in the middle and "wrung out" like a shirt in an old-fashioned laundry wringer.

What drives the capstan? A motor, obviously, whose rotation is transmitted to the capstan either (a) directly, when the capstan shaft is an extension of the shaft of a relatively slow-running motor (this is "direct drive"), (b) by a belt-and-flywheel combination, or (c) by a system of rubber-rimmed drive wheels. In these last two examples, the motor turns at a different rate from the capstan.

Regardless of how the capstan is driven, the motor speed must be stabilized against variations in the load, the line voltage, or other factors. This is done in "quartz" watches, thus creating your "quartz-locked PLL servo-controlled direct-drive capstan."

Such a system reacts not only to the overall rotational speed of the capstan, but actually to minute portions of a single revolution, keeping the drive motor on exact speed. This is about as accurate a method of ensuring proper tape speed as is currently known. It is able to correct for not only long-term speed variations but also for minute to minute inaccuracy (that is, wow and flutter) as well.

Whether this sort of ultra-precise regulatory mechanism is "worth it" is, of course, a question I can't answer. Mozart, it is reported, had not only "absolute pitch," but was able to say that a particular instrument was tuned one half a quarter tone lower than he had heard it the week before. That's the kind of difference you might find between a direct-drive system with all the additional regulating electronics and one that is not aided by such technological achievements.

Microprocessor Control

Q. Now that microprocessors are being used to set the bias and equalization of recorders, when can we expect to get cassette decks that will "listen" to a passage of music and then automatically choose an appropriate recording level?

A. As I'm sure you're aware, there have been various kinds of "automatic level-setting" circuits available in tape recorders for years, even before the increasing widespread utilization of microprocessor chips. A "switchable limiter" feature on a deck, for example, holds the output level of separate components to differ roughly the same. If you can achieve a loudness-level match at the speakers, you'll automatically have a signal-level match at the "tape-out" jacks. It can't get a matching level at the speakers with the preamp's volume control unchanged, there will always be an inherent difference in level at your "tape-out" jacks, but that shouldn't bother you since you'll find large differences in peak level from one program to another anyway. Because the number of questions we receive each month is more than we can reply to individually, only those letters selected for use in this column can be answered. Sorry!
NO RUM REFLECTS PUERTO RICO LIKE RONRICO.

Puerto Rico is the Rum Island, the world's foremost rum-producing region. And Ronrico is the rum—authentic Puerto Rican rum since 1860. Ronrico's smooth, light taste has been the pride of six generations of Puerto Rican rum masters. One sip will tell you why.

RONRICO: AUTHENTIC RUM OF PUERTO RICO.
Direct Drive and solenoid controls in a new cassette deck.

Here is the very latest cassette deck technology. The new Fisher DD300 Cassette Deck has direct drive tape transport for lasting, unvarying performance, feather-touch solenoid electronic controls for superior operation and metal tape compatibility for the ultimate in frequency response. There's an incredible amount of advanced engineering packed into this new Fisher cassette deck.

Direct Drive tape transport.
The rugged capstan on the DD300 is directly driven by a high-torque 18-pole brushless, coreless DC flywheel motor, optimized for the critical record and play transport functions. It glides silently at a steady 360 RPM. And, it eliminates the problems of conventional high speed DC brush motors and drive belts. Wow and flutter are down to an amazingly low 0.04%. A separate motor is provided for fast forward and rewind. No compromise.

Feather touch electronic controls.
Goodbye to the old "clunk-clunk" of manual controls. A feather-light fingertip touch sets the DD300 in motion. An IC logic circuit actuates the solenoid transport function for instant, silent, positive action. LED's light up to continuously display what functions are in operation.

Metal tape compatibility. If you want to try the new metal particle tape you've been hearing so much about, the DD300 is ready. Get set for an astonishing improvement in signal-to-noise, dynamic range and a frequency response of 30Hz-18kHz ± 3dB. Get set, too, to make recordings that rival studio-produced tapes.
Drive coils provide pulsating magnetic field to propel flywheel.

Sensing coil between driving coils and flywheel magnet continuously monitors speed in DC servo circuit.

Dynamically-balanced flywheel weighs over 1/2 lb, helps maintain speed accuracy, low wow and flutter.

Capstan shaft is directly connected to, and is part of the flywheel. There are no belts, no pulleys.

It's what you'd expect from the new Fisher. We don't have the space to list all the other features of the new Fisher DD300. Features that are indicative of the high technology of the new Fisher. We invented high fidelity over 40 years ago. And we've never stopped innovating. If you're ready for the latest cassette deck technology, see the new DD300 at your Fisher dealer.

Fisher Corporation, 21314 Lassen Street, Chatsworth, CA 91311

© Fisher Corporation, 1980
The facts are stacked for Sony's metalists.

Metal's mellow. Metal sings. Metal soars in frequency response and rockets the dynamic range upwards.

The new metal tapes are a multi-decibel boost to serious ears. But it takes a very special cassette deck to give you this higher-fi.

Two special "metalists" from Sony: The new TC-K65 and the new TC-K55I.

**Head Facts**

Sony's new Sendust & Ferrite heads in our new decks are uniquely composed of ideal electromagnetic properties to give you maximum performance with any tape. Regular-fi, chrome, FeCr or metal.

Sendust, Ferrite and a head gap spacer of extremely hard quartz are engineered together for a mirror-like surface, long head life, sharp gap edges and no asymmetrical wear.

**Two-Motor Facts**

A linear-torque BSL (Brushless & Slotless) motor precisely maintains the all-important capstan speed. And an FG Servo-controlled motor drives the supply and take-up reels.

The BSL motor, in a major design breakthrough, has no slots to cause uneven torque distribution.

**Microcomputer Facts**

Sony's new microcomputer logic control lets you speed through any operation sequence by merely pressing the appropriate feather-touch bar.

This digital technology in each of our decks even allows you to record at any moment during playback.

**Other Facts**

Other distinguished features: The TC-K65 has a Random Music Sensor (RMS) that lets you preprogram any desired selections in any desired order.

A computer-like display signals your selections in bright LED lights. Clearly revolutionary LED Peak Meters display recording and playback levels with sixteen digits per channel. These new meters "hold" peak levels and respond instantly for truer recording.

The TC-K55I utilizes two large VU meters, and a five-element LED display indicates peak levels for more accurate recording.

The new Sony TC-K65 and the new Sony TC-K55II. The facts are in.
IHF Amplifier Measurements

The current Institute of High Fidelity Standard Methods of Measurement for Audio Amplifiers (IHF-A-202, 1978) has been in effect for nearly two years, but, as expected, it has been adopted only slowly and partially by most component manufacturers. Since our product reviews began to use the new tests defined by this standard almost immediately, there may still be some discrepancies between our numerical test results and the published specifications of many hi-fi amplifiers.

Some of these, like the use of 1 watt as the reference power level for sensitivity and signal-to-noise measurements, are not a problem since a simple numerical conversion can transform our figures to those of a manufacturer who bases his specifications on an amplifier's full rated power output (or vice versa). A couple of the tests in the current standard are new, however, and their significance may not be appreciated.

Most amplifier measurements in the new standard are based on the manufacturer's chosen "full-power" rating for the amplifier. If it is rated at 100 watts, we use that as the full-power level for determining many of its distortion characteristics. Good practice requires that a product be able to surpass its minimum ratings in order to allow for component tolerances. Thus, any amplifier should be able to deliver some what more power than its rated maximum output.

How much of a "safety margin" to allow is a decision made by each manufacturer. Since his advertised power rating is linked by Federal Trade Commission regulations to a frequency range through which it applies and to a distortion level that must not be exceeded, it is to the manufacturer's interest to design a product that will easily produce its rated power at a distortion level safely below the rated maximum. This means that any given sample of that amplifier will almost certainly be able to give a higher output if one is willing to accept higher distortion, and even more power if measurement is made in the midrange of frequencies (most amplifiers show a rising distortion level at very low and/or very high frequencies).

Clipping Headroom

The IHF clipping-headroom rating is a simple expression of how conservatively the manufacturer has rated his amplifier. Suppose that an amplifier is FTC-rated to deliver "100 watts per channel continuous power from 20 to 20,000 Hz into 8-ohm loads with no more than 0.05 per cent total harmonic distortion." At 1,000 Hz, it might be able to deliver 120 watts at 0.05 per cent distortion. If the drive level were to be further increased, actual output-waveform clipping might occur at 140 watts. This effect normally comes on very suddenly, so that one need merely watch the output waveform on an oscilloscope and read the output voltage at the point where the tops and bottoms of the sine wave flatten out, or "clip."

The IHF standard conditions for this test are the same as those for the continuous-power-output measurement with both channels driven simultaneously into the amplifier's rated load impedance (usually 8 ohms). To place the continuous-power and clipping-power output levels in proper perspective, the difference between them is expressed in decibels rather than watts. In the example above, the power ratio is 140/100 = 1.4, which is equivalent to about 1.5 dB. The use of the decibel rating makes it easy to compare amplifiers having very different power-output ratings.

To the consumer, the clipping power indicates the actual maximum continuous power-output capability of an amplifier freed from the somewhat artificial restraints imposed by market competition and the FTC advertising rules. Since it is expressed relative to the advertised power, it is nothing more or less than an indication of the conservatism of the manufacturer's specified power ratings, and the higher the clipping-headroom rating the greater the degree of that conservatism.

The level of distortion is the major distinction between the FTC power-rating condition and the amplifier's performance at a higher power just below clipping. However, there is no significant audible difference under normal listening conditions between 0.005, 0.05, or even 0.5 per cent distortion, and it is doubtful that anyone can distinguish between amplifiers which are alike in all respects except for the differences in their distortion at full power.

When comparing amplifiers of the same power rating, the IHF clipping-headroom figure gives a clear picture of the actual differences between the units in respect to continuous power-output capability. Most of the time the clipping headroom will be less than 1 dB, which is hardly significant. If it is much larger than that, the reader can infer that the manufacturer has chosen to understate his amplifier's true power ability, perhaps to be able to claim a lower distort-

Tested This Month

Harman Kardon hk 705 Cassette Deck ● Vector VRX-9000 AM/FM Stereo Receiver
Jensen System C Speaker ● Audio Control C-101 Equalizer/Analyzer
SAE Model A7 Integrated Amplifier

MAY 1980
tion rating, a higher clipping-headroom rating, or simply to be more conservative. On the other hand, a very low clipping-headroom figure may indicate that the published power rating of the amplifier is close to its actual maximum output. This does not necessarily mean there is a design weakness. The manufacturer may be deliberately cutting it fine to gain a marketing advantage over other more conservatively rated amplifiers by appearing to offer "more watts per dollar."

**Dynamic Headroom**

Another new rating is the IFH dynamic headroom. This is a successor to the much-abused "music-power" rating of a few years ago. It is based on a valid premise: that music waveforms contain high-amplitude peaks of brief duration and irregular occurrence. Most amplifier power supplies are loosely regulated, so their output voltage is high under conditions of light load (no signal or low average power output) but drops appreciably when the amplifier is made to deliver a large continuous power output. On a music waveform, such an amplifier can deliver more short-term power during clipping-headroom ratings (say less than 1 dB) than it can on the continuous basis, which is recognized in the IHF standard, in which the dynamic-headroom rating is a primary specification, while the clipping-headroom is a secondary—optional—rating. Dynamic headroom can help explain why some amplifiers can be played "louder" than others of the same or higher power ratings without excessive distortion.

Returning to our hypothetical 100-watt amplifier, suppose that a tone-burst signal drives the amplifier to 200 watts at the clipping point. Since this is twice the amplifier's continuous rating, the IFH dynamic-headroom rating is 3 dB. Because of the nature of musical waveforms, the amplifier is called upon to deliver much more power during program peaks than an average or continuous power measurement made during the playing of music would suggest. It is the clipping of those peaks that signifies amplifier overload in a real-world listening situation.

This might lead one to conclude that, given its 3-dB dynamic headroom, the amplifier we have described could be the audible equivalent of a 200-watt amplifier despite its 100-watt rating. In many cases, this would be a correct conclusion. Although it might be cheaper and lighter than a 200-watt amplifier with ratings a dynamic headroom (say less than 1 dB) it could play at least as loud and possibly louder without sounding distorted. Exceptions to this rule would include musical circumstances in which the amplifier is called upon to deliver high power continuously while simultaneously reproducing short-duration high-level music peaks (as in many works for organ or full orchestra).

To sum up the meaning of the dynamic- and clipping-headroom ratings to the average user, we can say that, all else being equal, amplifiers with larger dynamic- and clipping-headroom ratings are preferable to those with appreciably smaller ratings (small differences are not important). However, "all else" is almost never equal, and other factors may be of greater importance in any individual case. Of the two, dynamic headroom is the more important since it has the more direct relationship to the audible performance of the amplifier with real music programs.

The dynamic-headroom measurement is also very convenient for determining how much power an amplifier can deliver into very low load impedances, such as 2 ohms. Although there are no standard pairs of 4-ohm speakers, and the impedance of most speakers falls below their rated values at some frequencies. Given all this, it is useful to know how an amplifier behaves when driving such a low-impedance load. Most amplifiers are specifically not rated for very-low-impedance loads and are protected against them by relays or fuses that cut off the outputs at a safe level when the load impedance falls too low. At H-H Labs we currently measure distortion versus power output into 2 ohms regardless of the amplifier's ratings.

By using the dynamic-headroom test signal, we can safely drive almost any load without damage to the amplifier and without triggering its protective system since the average power is very low. The output level at clipping into 2 ohms makes it very clear whether the amplifier has sufficient dynamic current output is limited by protective circuits or simply by the internal impedance of the power supply or the output transistors. In the latter case we sometimes find that the amplifier can deliver huge short-term power outputs to low-impedance loads without damage or serious distortion. In our view this desirable characteristic for any high-quality amplifier to have, assuming that it will be used to amplify music and that its reliability and safety have not been compromised by this capability.
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.

MCS Series Audio Components sold exclusively at JCPenney.

MCS Series
IT MAKES EVERYTHING CLEAR.
Sold exclusively at JCPenney.
Equipment Test Reports
By Hirsch-Houck Laboratories

Harman Kardon hk 705 Cassette Deck

The Harman Kardon hk 705 is the first available cassette recorder that incorporates the new Dolby HX "headroom-extension" system. The HK process (described more fully in Craig Stark's "Tape Talk" in the September 1979 issue of Stereophonic Review) extends the high-frequency overload capability of a Dolby-B equipped cassette deck during recording by reducing the overload capability of a Dolby-B equipped "Tape" in the September 1979 issue of STEREO REVIEW. The HK process incorporates the new Dolby HX "headroom-exaggeration" that uses a single Sendust record/playback head and a capstan driven by a d.c. servo-motor. The HK process provides for inserting a quiet subsonic (below 20 Hz) filter and to activate either the regular Dolby noise-reduction system or its HX version. These latter two buttons are illuminated.

Distortion at 1,000 Hz, measured at the 200-nWb/m Dolby 0-dB level, was 0.7, 2.2, 1.7, and 1 per cent, respectively, for our ferric, CrO₂, ferrichrome, and metal reference tapes. Listed in the same order, these tapes rated input levels of +5, +2, +3, and +4.5 dB before distortion reached the 3 per cent third-harmonic point used for signal-to-noise ratio measurements. Unweighted S/N without Dolby-B was 52.8, 54.4, 55.7, and 55.8 dB for the four tapes, respectively, and these figures increased to 65, 66.6, 67.1, and 67.8 dB, respectively, with Dolby noise reduction and standard IEC "A" weighting. The S/N with Dolby plus CCIR/ARM weighting was 63.2, 66.1, 67, and 66.5 dB.

Distortion measured 0.035 per cent with the usually specified weighted-rms method, and 0.046 per cent when using the DIN peak-weighting scale. Both of these figures are exceptionally good, especially for a single-capstan deck. Fast-forward and rewind times for a C-60 cassette averaged 76.5 seconds.

The line-input signal level of 45 millivolts (Continued on page 41)
Taste country fresh Salem

Light mountain breezes. Clear rippling water. And country fresh Salem menthol. That's satisfaction.

Gear's all packed—you're headed for good times. All that stands in your way is that 120 mile stretch of highway. But the company is special, the road's open and the sound is Sparkomatic. So even the going is going to be great.

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THE SPARKOMATIC SOUND.
FOR AMERICA'S TRAVELIN' MAN WHO PLAYS BY EAR.
(mV) was required to produce a 0-dB indication on the LED string, and the corresponding output (maximum) was a very high 1.5 volts. Microphone sensitivity, using our 600-ohm generator, was 0.15 mV, and the microphone overload level was reached at 15 mV—not an overgenerous margin, but undoubtedly adequate for the medium-impedance microphones that would be used for anything but the recording of music with a very wide dynamic range. Headphone listening level was more than adequate with both 600-ohm and 200-ohm (nominal 8-ohm) phones.

The tracking accuracy of the regular Dolby-B circuits, measured at -20- and -30-dB levels, was very good (±1 dB or better) up to 15 kHz, above which levels the curves tended to diverge somewhat. We were naturally more interested in the performance of the Dolby HX “headroom-extension” system, however. The best way to illustrate its effectiveness in terms of measurements is to refer to the 0-dB level curves for overall record-playback response. With Maxell UD XL-I tape, the high-frequency overload point using the HX system fell almost exactly halfway between the curve shown for Maxell UD XL-I and that shown for the metal TDK-MA.

Comment. The audible benefits of the Dolby HX system in the hk 705 are clearly evident in direct-comparison listening tests, though they depend considerably, like the benefits of metal-alloy tape, on the material being taped. On straight FM material and on most regular discs we did not hear a “night-and-day” difference, but on the most demanding material (FM hiss and master tapes with substantial high-frequency content) the difference was very clear. In normal recording of such material, the highs can often be dulled because of tape saturation. The HX system (or metal tape) dramatically alleviates this problem. The effect of the HX process was most noticeable with less-than-premium cassettes, which can cost one-fourth as much as metal cassettes yet sound very nearly as good. Most important, we could hear no unwanted side effects when using the HX system; if any are there to be heard, it is probable that they could be spotted only with a three-head machine capable of instant direct comparisons. With its overall high performance, sleek styling, and the HX feature, the Harman Kardon hk 705 represents a more than worthwhile value at what, in today’s market, is not a very high price.

Circle 140 on reader service card

* Vector VRX-9000

AM/FM Stereo Receiver

Although Vector Research is a new name on the U.S. audio scene, the Vector hi-fi component line already consists of four receivers and three cassette decks spanning a broad range of prices and operating features. The top-of-the-line receiver, the VRX-9000, features digitally synthesized tuning plus a full array of control features. The power-output ratings of the VRX-9000 are 80 watts per channel into 8-ohm loads (or 90 watts into 4 ohms) from 20 to 20,000 Hz with no more than 0.08 per cent total harmonic distortion.

The dark-gray panel of the receiver has clearly visible yellow-white markings that contrast with its black control knobs and switches. Most of the controls across the bottom of the panel appear conventional. The PHONES jack at the lower left is followed by a SPEAKERS selector that controls two pairs of speaker outputs. Each of the three tone-control knobs (BASS, MID, and TREBLE) has eleven detented positions, and a small toggle switch bypasses all tone-control circuitry. A continuously variable LOUDNESS control (engaged by pulling the knob out slightly) operates independently of the VOLUME control. With the loudness knob fully counterclockwise, frequency response is nominally flat; rotating it clockwise produces a bass boost that increases with the rotation.

The VOLUME and BALANCE controls are mounted concentrically, with a number of lightly detented positions for the former and a center detent for the latter. Two toggle switches control the tape-recording functions. The TAPE MONITOR switch connects the playback output from either of two tape decks or the selected program source to the receiver’s amplifiers; TAPE COPY cross-connects the tape decks for dubbing from either one to the other. The FUNCTION knob selects PHONO, TUNER, or AUX inputs. (Incidentally, all the round knobs could benefit from a more clearly marked index “pointer.”)

A single row of control buttons and lights across the middle of the panel includes a pushbutton power switch and a “protector” light that glows for a few seconds after the receiver is turned on and until the power-supply voltages have stabilized, after which the receiver’s protective circuits connect the speakers to the amplifier and the light goes out. If the amplifier should be overloaded for any reason, the outputs cut off and the light goes on. To reset the circuits, the receiver must be shut off; after a few moments it can be restarted.

The AUDIO MUTE switch reduces the volume by 20 dB, and there are separate LOW FILTER and HIGH FILTER switches. The MODE button selects MONO or stereo operation, and the DEEMPHASIS button changes the FM de-emphasis from 75 to 25 micro-

MAY 1980 41
selected program source. Two pushbuttons station muting. Colored lights identify the decoder. Another button controls FM inter-
seconds for use with an external Dolby FM decoder. Another button controls FM inter-
station muting. Colored lights identify the decoder. Another button controls FM inter-

Since the tuning is completely electronic, the Vector VRX-9000 does not have a tuning knob. Two large flat buttons, marked up and down, are the tuning controls. A mo-

Laboratory Measurements. Although the power transistors and their heat sinks are located within the cabinet of the VRX-9000, ample ventilation is provided through openings in the top and bottom of the cabi-
net so that it does not become unduly hot during extended high-power operation or during the one-hour FTC preconditioning period.

The 1,000-Hz power output at clipping into 8-ohm loads was about 101 watts (IHF clipping headroom was 1 dB); with 4-ohm loads the outputs clipped at 136 watts (clipping headroom 1.78 dB). Although the re-

With 8- or 4-ohm loads, the distortion at 1,000 Hz was typically about 0.01 per cent at low levels, rising to about 0.02 per cent just below the clipping point. With 2-ohm loads the distortion was about 0.02 per cent at most power levels, decreasing slightly to less than 0.015 per cent just before the pro-
tective relay operated. The IM distortion (Continued on page 44)
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The distortion was only slightly affected by frequency. The rated-power and half-power distortion readings were between 0.02% and 0.04% per cent from 20 to 20,000 Hz. At one-tenth rated power, the typical reading was 0.015 per cent, reaching a maximum of 0.04% per cent at 20,000 Hz.

For a reference output of 1 watt, the amplifier required 23.5 millivolts (mV) at its AUX input, or 0.42 mV at the phono input. The respective A-weighted signal-to-noise ratios (S/N) were 75 and 71 dB. The phono input overloaded with 330 mV at 1,000 Hz, 314 mV at 20 Hz, and 257 mV at 20,000 Hz (the last two referred to the equivalent levels at 1,000 Hz). The phono-input impedance was 50,000 ohms in parallel with 50 picofarads.

Measured through the AUX input, the amplifier's rise time was 7 microseconds and its slew rate was 14.3 volts per microsecond. The IFH slew factor exceeded our measurement limit of 25. The calibration of the power-output meters was typically within 10 to 15 per cent of the actual output into 8 ohms, although the errors were much larger at some points near the lower ends of the scales.

The tone-control characteristics were conventional, with a sliding bass-turnover frequency and the high-frequency curves hinged at about 1,500 Hz. The midrange control had its maximum effect between 1,000 and 1,500 Hz with a total range of about ±6 dB. When the tone controls were switched in (at their flat settings) the overall gain of the amplifier dropped about 1.5 dB. The low filter increased response by about 1.5 dB between 30 and 40 Hz and cut off sharply below 25 Hz. The high filter had a 12-dB-per-octave slope with a response 3 dB down at 6,000 Hz. The loudness controls were not affected by the volume-control setting, and the LOUDNESS knob produced an effective boost of about 13 dB below 50 Hz. There was a slight fixed high-frequency boost (about +3 dB at 20,000 Hz) when the LOUDNESS knob was pulled out. The RIAA phono equalization was flat within 0.5 dB overall from 20 to 20,000 Hz and did not change detectably when measured through the inductance of a typical phono cartridge.

The FM-tuner sensitivity was a very good 9.8 dBf (1.6 microvolts, or µV) in mono and 17 dBf (4 µV) in stereo. The stereo switching threshold was 14 dBf (2.7 µV) and the muting threshold was an unusually low 9.8 dBf (1.6 µV). This was sufficient to exclude interstation noise without preventing the reception of very weak signals.

The more important 50-dB quieting sensitivity was 12 dBf (2.2 µV) in mono with 0.6 per cent total harmonic distortion (THD). In stereo it was 35 dBf (30 µV) with 0.5 per cent THD. At 65 dBf (1,000 µV) the distortion was 0.11 per cent in mono and 0.26 per cent in stereo. The respective S/N readings were 76.5 and 71 dB. The signal-level lights came on at inputs from 19.8 dBf (5 µV) to 64 dBf (900 µV).

The stereo frequency response was ±1 dB from 30 to 15,000 Hz and the 19-kHz pilot carrier in the tuner output was at a low 68 dB level. The stereo channel separation was a maximum of 43 dB between 1,000 and 1,500 Hz, falling to 20 dB at 30 Hz and 27 dB at 15,000 Hz.

The FM capture ratio was a very good 1 dB at 45 dBf (100 µV) input and 0.8 dB at 65 dBf. The respective AM-rejection figures were 53 and 56 dB. The FM tuner of the VRX-9000 had exceptional image-rejection ability: it is rated at 100 dB and measured at the extreme of our signal generator's capability at 107 dB. The alternate-channel selectivity was 67.5 dB and the adjacent-channel selectivity was 3.3 dB. The only measurement made on the AM tuner was of its frequency response, which was unusually flat though not particularly wide. It was within ±1 dB from 33 to 3,000 Hz, and down 6 dB at 4,000 Hz.

Comment. The Vector VRX-9000 is a distinctively styled receiver whose "businesslike" appearance is consistent with its fine performance. It handles smoothly, with the complete freedom from noise that seems to be typical of digitally synthesized receivers and tuners. We were impressed not only by the exceptional IFH usable sensitivity of the FM tuner section (which is really not its most important characteristic) but by the manner in which the receiver surpassed virtually every one of its performance specifications in our tests. The few instances where our measurements failed to match the ratings were in that "gray area" of testing where r.f. and low-level audio measurements become very tricky.

The Hold-Scan feature is a nice way to cover a frequency band and sample every signal one comes across, although it is not quite as fast as "old-fashioned" manual tuning. In less populous areas served by only a moderate number of stations, it might well be as fast as manual tuning, but in the New York area, with more than fifty FM stations and an uncountable number of AM stations on tap, patience is called for when scanning the bands. In the case of AM, it certainly would be much easier and faster if the tuning scanned in 10-kHz steps as the manual states. However, there is the benefit of noise-free tuning between stations (the receiver is muted in AM as well as FM when scanning), a feature not often found in AM tuners. And should the AM channel spacing be changed to 9 kHz, as has been discussed, the tuning of the VRX-9000 would not be made obsolete.

The fact that the loudness control is sep... (Continued on page 46)
If you want a frequency response with more dynamic range and more high-end extension, you'll want nothing less than metal tape. And for about $380 there are many metal tape decks to choose from. But if you want more than just metal, you'll want what most other comparably priced decks don't give you: The Technics RS-M63.

The RS-M63's 3-head configuration lets you do what most other comparably priced decks don't: Monitor your recordings while you're recording. And, since our separate HPF record and playback heads are precisely gapped and enclosed in a single housing, you won't get azimuth error. What you will get is an extremely wide frequency response with CrO₂ tape and an incredibly high response with metal tape.

<table>
<thead>
<tr>
<th>Wow and Flutter</th>
<th>Frequency Response</th>
<th>S/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.05% WRAS:</td>
<td>20Hz-20kHz (metal)</td>
<td>67 dB Dolbyin</td>
</tr>
<tr>
<td></td>
<td>20Hz-20kHz (CrO₂)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>20Hz-17kHz (normal)</td>
<td></td>
</tr>
</tbody>
</table>

As good as that sounds, double Dolby will make it sound even better because there are separate Dolby circuits for recording and playback. So you can monitor your tapes with the full effects of Dolby Noise Reduction. That means a lot when it comes to accurate recordings.

So do the RS-M63's fluorescent (FL) bar graph meters. Especially when it comes to dynamic range. Because with their device attack time of just 5-millionths of a second, they can respond to the most sudden musical transients.

To help you make the most of all this performance, the Technics RS-M63 has a fine bias adjustment, so you can get the most out of all kinds of tape. And you'll spend more time listening to music and less time searching for it, because we include the memory features you need. Like auto-rewind, auto play and rewind auto play.

Technics RS-M63. The only deck to consider when you consider what you get for the price.

*Recommended price for Technics RS-M63, but actual price will be set by dealers.

Dolby is a trademark of Dolby Laboratories. CIRCLE NO. 59 ON READER SERVICE CARD

**Before you spend $380 on a metal tape deck, make sure it has 3 heads and double Dolby.**
arate makes that feature really useful on the VRX-9000. Unlike most loudness compensators, the Vector's control works very well and sounds fine. As a matter of fact, such a statement could be made about the receiver as a whole. Despite its "black on black" motif, the Vector VRX-9000 manages to avoid a starkly functional, institutional appearance. It sounds and handles as good as it looks, which is saying a lot.

Circle 141 on reader service card

Jen sen System C Speaker

Jensen's System C is a compact, floor-standing, three-way speaker system with three vertically aligned front-radiating drivers plus a second rear-facing tweeter to enhance its high-frequency dispersion by means of reflections from the rear wall. The handsome oak-veneered cabinet has a snap-on grille of dark brown cloth. Removing the grille reveals the 10-inch woofer plus a 2-inch soft-dome midrange driver and a 1-inch soft-dome tweeter above it. To the left of the high-frequency drivers is a long vertical slot for the bass-driver vent, and to their right are two controls giving a continuous adjustment of the midrange and high-frequency driver outputs. They are calibrated to give a flat acoustic-power output at their 0-dB (12 o'clock) positions and can vary the outputs of their respective drivers over a +2- to -8-dB range.

The rear-facing driver is a 2-inch cone tweeter located near the top center of the cabinet. The recommended placement of the Jensen System C is from 1 to 2 feet from the back wall, which should be a hard surface for best scattering of the rear-radiated high frequencies. The speaker is designed primarily for vertical installation on a low stand, table, or shelf, but it can also be placed horizontally.

The nominal system impedance is 8 ohms, with a 5-ohm minimum rating. Amplifiers delivering from 9 to 125 watts per channel are recommended for use with the System C. It has a protective relay within its crossover circuit that prevents driver damage from prolonged high-power operation and does not interfere with high-level transients. The System C has a frequency-response rating of 47 to 21,000 Hz (+2, -4 dB). Its crossover frequencies are at 51 (acoustic), 900, and 5,500 Hz.

The overall dimensions of the System C are 23 3/4 inches high, 14 1/2 inches wide, and 12 1/2 inches deep. It weighs 52 pounds. The system has a five-year transferable warranty, covering shipping costs to and from an authorized repair station. Suggested retail price of the Jensen System C is $399.95.

- Laboratory Measurements. Splicing the reverberant-field frequency-response curve to the close-miked bass curve resulted in a unusually wide, flat, and smooth overall frequency-response curve. Determination of the optimum splice frequency was simplified by the speaker's obviously flat frequency response—it was immediately apparent when we listened to it.

Including a slight "jog" in the response curve at 900 Hz (presumably attributable to the crossover to the midrange driver at that frequency), the overall frequency response of the speaker was within +3,5, -2.5 dB from 33 to 20,000 Hz (and apparently well beyond that frequency, although we did not make measurements beyond 20,000 Hz). The actual acoustic-power response of the System C is probably more uniform within the audio band than our measurement method is able to resolve. The high-frequency dispersion was excellent up to 10,000 Hz, with no significant difference between the left and right speaker-response curves (and only a moderate difference between 10,000 and 20,000 Hz). The measurement was made on the axis of one speaker and about 30 degrees off the axis of the other. The speakers were placed on 7-inch-high stands about 1 foot from the wall for both measurements and listening tests.

The woofer's response was very flat over most of its operating range, with a rise of about 3 dB at 65 Hz and a gradual fall in output below that frequency. However, the output at 20 Hz was only 5 dB below the midrange level, which is impressive performance for a compact vented system. The bass distortion at a constant nominal input of 1 watt (2.83 volts) was about 0.5 per cent or less from 100 to 60 Hz, rising to 1.5 per cent at 50 Hz, 5 per cent at 40 Hz, and 11 per cent at 30 Hz. A ten-fold power increase made little difference in the shape of the distortion curve, but it increased distortion to 1 to 1.5 per cent from 100 to 60 Hz and 8.5 per cent at 40 Hz.

The midrange- and tweeter-level controls were able to cut off their respective drivers completely when set to their "Lo" markings beyond the -8-dB calibrations. The midrange control affected frequencies between 1,000 and 6,000 Hz, boosting the output by the indicated 2 dB or cutting it by as much as 15 dB. The tweeter control boosted the output between 1,500 and 8,000 Hz by about 1 dB and by 2 to 2.5 dB above that frequency. At its minimum setting it reduced the output by about 3 dB above 2,000 Hz and attenuated it steeply above 10,000 Hz. Our basic measurements were made with both controls set to 0 dB, and that setting also gave us the best sound.

The system impedance was about 30 ohms at 20 Hz (and still higher at lower frequencies), dropping to 9 ohms at 40 Hz before rising to a peak of 27 ohms at 60 Hz. The next minimum of 8 ohms at about 150 Hz is the basis for the system's nominal 8-ohm rating, and the impedance remained above 8 ohms up to about 1,400 Hz. The minimum impedance in the audio range was 4 ohms between 10,000 and 20,000 Hz. In general, we would agree with the advertised 8-ohm rating, but paralleling a couple of these systems on an amplifier with limited high-frequency current-output ability might not be advisable.

The sensitivity of the System C was exactly as rated, with an 87-dB sound-pressure level measured at a 1-meter distance when we drove the speakers with 2.83 volts of random noise in the octave centered at 1,000 Hz. The tone-burst response was good throughout the speaker's range, with the ex-
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Audio Control C-101 Equalizer / Analyzer

A Graphic equalizer allows separate adjustment of the level in each of a number of frequency bands which are normally contiguous and which, in combination, cover the full audio range. A typical graphic equalizer has ten or twelve individual octave-wide filters with level controls for each (in duplicate for the two stereo channels). Simpler equalizers have only five to seven bands averaging two octaves in width.

Equalizing a music system by ear with an octave-band equalizer can be very difficult for the inexperienced. The inevitable interaction of the controls and the problem of locating the specific frequency band that contains some perceived sonic flaw contribute to the difficulty. A successful room or speaker equalization requires a suitable test-signal source (not a musical program) and a detector or display instrument that measures the sound-pressure level at some preferred listening location in the room. A convenient and widely used test signal is “pink noise,” which is random noise containing equal energy in each frequency octave. It is usually created by passing the output of a white-noise generator (which has equal energy in each unit of frequency) through a filter that attenuates the high frequencies at a 3-dB-per-octave rate.

Since the pink-noise test signal covers the entire audio range simultaneously, the room-equalization process requires some form of frequency-selective meter or spectrum analyzer that can measure the sound-pressure level (SPL) in each segment of the audio range as the equalizer controls are adjusted. An alternative is to have the signal itself separated into octave bands by filters (sometimes this is done by recording such a signal on a disc for playback through the system) so that the output of the microphone can be read on a simple wideband meter as the equalizer is adjusted.

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The Audio Control C-101 is one of the few instruments that combine a ten-band equalizer with a real-time spectrum analyzer whose bands coincide with those of the equalizer. It also has a built-in pink-noise generator and comes with a wide-range microphone, so the C-101 is a complete room/speaker equalization system.

Across the panel of the C-101 are twenty vertical sliders with adjacent controls covering the left and right channels for each frequency band. They are center-detented and have an adjustment range of ±15 dB marked on the panel at 3-dB intervals. The center frequencies of the filters are 32, 60, 120, 240, 480, 960, 1,920, 3,840, 7,680, and 15,500 Hz. To the right of the equalizer sliders is a rectangular window framing the spectrum-analyzer display. This consists of ten vertical columns, each displaying the output of one of the analyzer filters on nine red LEDs. Spaced at intervals of 4 dB (switchable to 2 dB), these lights glow in accordance with the level in each frequency band. The center row is marked “0 dB,” so the display range is either ±16 or ±8 dB about the reference level.

To the left of the display are pushbuttons, marked Equalizer Program and Equalizer Tape, which connect the equalized signal to either the line or the tape outputs at the rear of the unit. The two buttons are mechanically interlocked so that only one can be engaged at a time. Since the C-101 is normally connected in the tape-monitor loop of an amplifier or receiver, the tape-monitor function is duplicated on its panel by a Tape Monitor pushbutton. Below it are two buttons that control added features that are not directly connected with the equalization functions. The Subsonic Filter cuts off at an 18-dB-per-octave rate below 20 Hz, and the Rumble Reducer achieves a somewhat similar result without affecting the frequency response of the system. It blends the stereo channels at frequencies below 200 Hz to cancel any out-of-phase (vertical) rumble that may be present. Since there is usually little or no stereo information at those frequencies anyway, not much is lost by converting them to mono.

The controls at the right side of the spectrum-analyzer display include a power button and a function switch that converts the readout from a spectrum-analyzer display (marked RTA) to a Level display. In the latter mode, all ten columns of LEDs vary simultaneously in accordance with the overall program level. The Range button changes the display range from 4 to 2 dB for a more detailed presentation. The next control is Display Action, which affects the response time of the display. The Slew position is convenient for equalizing with pink noise since it smooths out the rapid, random level fluctuations associated with that type of signal. The Fast mode is preferable for following musical program peaks. The bottom control is a small knob, marked Input Level, with a center detent marked CAL. It varies the input sensitivity of the analyzer and display section. When the microphone is plugged into a jack located on the rear of the instrument, it replaces the input from the amplifier. With the Input Level control at CAL, the display reads directly on a third amplitude scale, in acoustic SPL, from 60 to 92 dB (A-weighted). With the level control the sensitivity can be increased or decreased to cover a total range from 40 to 127 dB.

The microphone supplied with the C-101 is a miniature (1/4-inch diameter) condenser microphone powered by a 5-volt supply through the signal cable. Because of this voltage, other types of microphones should not be plugged into the C-101, nor can its microphone be used in other applications, such as tape recording. The Audio Control microphone is flat within ±1.5 dB from 30 to 20,000 Hz, well beyond the quality level...
The SAE Model A7 integrated amplifier is one of that company's "SAE Two" line of moderately priced components manufactured in Japan to SAE designs and specifications. Like the other SAE Two units, the Model A7 is finished in satin black with walnut-finish wooden side plates. The Model T7 digital tuner is a matching companion piece.

The SAE Model A7 is rated to deliver 70 watts per channel to 8-ohm loads from 20 to 20,000 Hz with no more than 0.05 per cent total harmonic or intermodulation distortion. The upper portion of its front panel appears to be a conventional tuner "dial window," with a single large knob to its right where a tuning control is usually located. In this case, however, that knob is the volume control, and it is lightly detented at forty positions.

Much of the area behind the window is devoted to the amplifier's fluorescent level display, two parallel rows of light segments that form blue lines proportional in length to the instantaneous power output in each channel. The lights are calibrated at 3-dB intervals over a 30-dB range. Adjacent to each row of lights is a scale calibrated in watts (delivered to 8-ohm loads) from 0.07 to 70 watts, and beyond the 70-watt indication is a red peak light that presumably indicates an overload condition.

The power display can be switched to read the signal voltage at the tape-recording outputs (in which case the display reading is not affected by the volume-control setting). The words power and tape appear in red behind the window to identify the display mode. Two other illuminated indicators, marked TAPE 1 and TAPE 2, show the tape-monitor-switch settings.

Just below the window are a number of small pushbutton switches with a red LED above each of them. The four at the left—marked PHONO 1, PHONO 2, TUN, and AUX—are input selectors; the three at the right are for input selection. A 0-dB reading on the level display indicates an overload condition.

The equalizer filters bypassed, the frequency response was down 0.1 dB at 5 Hz and 50 kHz, and down 0.3 dB at 100 kHz. The unweighted noise in the output was less than 80 microvolts, our measurement limit. A 0-dB reading on the level display required an input of 0.575 volt with the input level knob set to CAL. At maximum sensitivity, only 15.6 millivolts gave a 0-dB indication, and the control was able to cut off the level display section completely at its counterclockwise limit.

The center frequencies of the spectrum-analyzer filters were well within 5 per cent of their indicated values. The SPL readings on pink noise were in error by 4 to 10 dB at smaller intervals are really necessary. Nevertheless, the C-101 makes a worthwhile improvement, probably because it eliminates the notoriously untrustworthy human ear from the process—which is, after all, one of objective measurement and not one involving subjective quality judgments. If the instrument did not do its job properly, the end result would almost certainly be worse than the unequalized sound, but since it was in every case a significant improvement, we can only conclude that the C-101 was equal to the task.

Once the room was equalized, we pulled out the microphone plug and found the spectrum analyzer display of the electrical program to be highly informative. As the unusually detailed instruction manual states, the C-101 is "one heckuva light show" and one can learn a great deal about the actual frequency and energy distribution of music by watching it in action. The manual, which was only in preliminary form at the time of test, was one of the best we have ever seen for a consumer product; written in a breezy, conversational style, it leaves no question unanswered about how the Audio Control C-101 should or should not be used.

This equalizer/analyzer is, in short, an impressive package of electronic capabilities priced at a level that would have been unthinkable only a year or two ago. No doubt semiconductor developments have had much to do with this, but we sense also a considerable engineering talent behind the C-101. Maybe not every audiophile needs one, but everyone who has a chance to use and enjoy this intriguing product will surely want one.
marked L FILTER, LOUDNESS, and MUTING (−20 dB). The remaining button, which does not have a LED associated with it, is the power switch.

The remaining controls form another row across the bottom of the panel. There are center-detented knobs for the bass, mid, and treble tone controls and the balance control. The SPEAKERS knob activates either, both, or neither of two sets of speaker outputs. A headphone jack is located between the speakers knob and the balance control.

The remaining controls are six lever switches. The TONE switch bypasses the tone-control circuits, and the DISPLAY switch selects either the power or the tape readout on the fluorescent display. The tape-monitor switch connects the amplifier to the playback output of either of the two tape decks the amplifier can handle or to the selected source, and next to it is a dubbing switch that connects the decks for copying tapes from either one to the other. The SAE Model A7 has a third insertion point in its signal path, for accessory signal processors such as equalizers or noise reducers, so that the tape-recording control features need not be sacrificed for those purposes. The switch marked EXT PROS connects such a device into the line (where it will operate on the signal being heard) or into the tape outputs for modifying a signal before it is recorded. The remaining switch (MODE) provides stereo, reversed stereo, or mono operation.

The terminal speakers in the rear of the amplifier are insulated spring clips marked to indicate that two sets of 4-ohm speakers can be used with the Model A7, from which we infer that it is one of the few amplifiers for which 2-ohm loads are permissible (although it carries no specific rating for that load). In addition to the various signal-input and output connectors, there are PRE OUT and MAIN IN jacks joined by removable jumper links so that devices such as electronic-crossover networks can be connected between the preamplifier outputs and power-amplifier inputs. There are two unswitched a.c. outlets and two switched outlets, the latter rated for a total load of 550 watts.

The SAE Model A7 is approximately 18½ inches wide x 13¼ inches deep x 5½ inches high, including the knobs and feet. It weighs 22¾ pounds. Suggested list price is $400.

Laboratory Measurements. The one-hour preconditioning period at one-third rated power left the top of the SAE Model A7 moderately warm directly over the power-transistor heat sinks (which are enclosed within the cabinet and cooled by convection with air that enters the bottom of the cabinet and exits at the top).

Output at clipping into 8-ohm loads at 1,000 Hz was 90 watts per channel, for an IFH clipping-headroom rating of 1.09 dB. Although the amplifier carries no power ratings with other load impedances, the clipping-power outputs with 2-, 4-, and 16-ohm loads were 78, 128, and 51 watts per channel, respectively. The short-term maximum output with the 20-millisecond tone bursts of the IFH dynamic-headroom test signal was 208, 139, and 90 watts for 2-, 4-, and 8-ohm loads. The IFH dynamic-headroom (8-ohm) therefore was 1.09 dB, making the Model A7 one of the very few amplifiers having identical IFH clipping-headroom and dynamic-headroom ratings (which indicates exceedingly tight powersupply regulation).

A reference power output of 1 watt required a high-level input of 17.5 millivolts (mV) or a phono input of 0.25 mV. The A-weighted signal-to-noise ratios were identical at 77 dB for all inputs (referred to 1-watt output). The phono input overloaded at 205 mV at both 1,000 Hz and 20 Hz. At 20,000 Hz, the equivalent overload input was 178 mV. The phono-input resistance was 41,000 ohms, shunted by a relatively low 70 picofarads.

The distortion at 1,000 Hz with 8-ohm loads was very low, at 0.001 and 0.002 per cent for all power outputs between 1 and 80 watts. The IM distortion was about 0.007 to 0.008 per cent from a few watts to 80 watts, rising at very low power levels to 0.02 per cent at 1 watt and 0.055 per cent at 0.1 watt.

When driving 4-ohm loads, the Model A7 had a distortion of 0.003 to 0.004 per cent from 1 to 110 watts. Even 2-ohm loads did not cause an appreciable rise in distortion, which measured 0.005 to 0.006 per cent from 1 to more than 50 watts output varied from about 100 to 300 Hz as the tone control was adjusted, while the treble curves were hinged at about 2,000 to 3,000 Hz. The midrange tone control had its maximum effect between 1,000 and 2,000 Hz, although it affected almost the entire audio range. The loudness compensation boosted both low and high frequencies at reduced volume settings. The RIAA phono equalization was perfectly accurate from 70 to 20,000 Hz (any error was less than the width of the pen trace of our graphic recorder) and dropped an insignificant 1 dB at 20 Hz. It was completely unaffected by the inductance of a magnetic cartridge connected to the phono input.

The fluorescent power display responded very rapidly to program peaks. Although it was bright and easy to read, the location of the display behind the plane of the front panel makes it visible only from a rather narrow vertical viewing angle in front of the amplifier. At most power levels, the display indications were quite accurate. Since the lights are switched on and off abruptly, there is little ambiguity in the readings, and the error is typically 10 to 15 per cent at power readings above 4.5 watts and somewhat greater at the lower readings. The final peak light did not come on until the output was severely clipped.

Comment. The SAE Model A7 is an excellent example of the "new breed" of ultra-high fidelity.(Continued on page 52)
HEAR WHAT YOU'VE BEEN MISSING!

Listen with an 801 Omnisonic Imager,™ a quantum leap forward in stereo reproduction!

OMNISONIC IMAGERY™ IS HERE!
Our innovative state-of-the-art electronics create a totally unique sound environment never before possible. With an 801 Omnisonic Imager™, you can now experience the physiological sensation of what amounts to three-dimensional sound reproduction — what we call omnisonic imagery™ — from just two speakers. Sound appears to come from many sources in the listening area, depending on the quality of the signal source. A common reaction is to look about for other speakers. And you don't have to sit rigidly fixed at a focal point between the speakers to enjoy omnisonic imagery™!

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SAE Model A7
Integrated Amplifier
(Continued from page 50)

low-distortion amplifiers that are difficult to measure even with good laboratory instruments. While it is generally agreed that there is no intrinsic audible advantage in such vanishingly low distortion levels, they do indicate the ability of the engineers to meet their precise design goals.

Although the Model A7 does not present a technically overwhelming appearance from the front (possibly owing to its all-black motif, which tends to downplay the number of controls), it has a surprisingly high degree of flexibility. Provision for two high-level and two phono inputs is not unusual in amplifiers at this price level, but the combination of two tape-monitor loops, the external processor loop, and the interruptable preamplifier/power-amplifier connection makes possible rather complex system combinations using some of today's signal-processing accessories. It should be possible to connect expanders, noise reducers, time-delay devices, electronic crossover networks, and the like without even giving up the amplifier's basic tape-recording and dubbing capability. The unusually high switched a.c. load capacity of 550 watts means that extra power amplifiers (as required for bi- or tri-amplified systems or time-delay ambiance-enhancement systems) can be controlled from the Model A7 as well.

We do not generally go into detail about the "sound" of amplifiers since we find that when their power and loading limitations are observed they simply do not sound different one from the other. What makes a more immediate (and lasting) impression on us as we test an amplifier is how well (or poorly) it copes with unusual signal and loading conditions. Nothing we did to the Model A7 did any lasting effect on it or even required replacing a fuse (which was perhaps fortunate, for the fuses are inside the cabinet and not accessible to the user). When the Model A7 shut down due to excessive current demands from a 2-ohm load, service was automatically restored in a few seconds. It was never unstable (again, bursts of ultrasonic oscillation under certain conditions of drive and load are more common than many people would suppose, and they could well account for some of the sonic differences heard when listening to an overdriven or overloaded amplifier).

We could go on at some length about all the bad things the SAE Model A7 did not do. What it did do was amplify and control the signals we fed into it, contributing no audible noise or distortion to the program. It drove speakers of all kinds with ease, never calling attention to its presence by a click, thump, or other unwanted sound. As we see—and hear—it, that is what an amplifier is supposed to do, and that is what the Model A7 does so effectively. In brief, the SAE Model A7 is a fine medium-price, medium-power, very-high-performance amplifier with exceptional control versatility.

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* From independent lab tests reported by Len Feldman in Audio Magazine, February, 1980. Write for your free reprint.
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Going on Record

By James Goodfriend

MAIL-ORDER MOZART

Time-Life Records, the people who brought to those who buy their records through mail order the Beethoven Bicentennial Series (seventeen volumes), have now decided to bring us Mozart (number of volumes unspecified). Mozart is obviously (see Igor Kipnis’ review of a group of his symphonies on page 72) getting “hot.”

Time-Life’s Beethoven set was an extensive selection from Deutsche Grammophon’s “complete” Beethoven. The Mozart set will also be selective rather than complete in any sense, but it will include five operas (name ’em; you can’t be wrong), large numbers of symphonies, piano concertos, sonatas, wind concertos, and string quartets, plus a selection of serenades, divertimentos, concert arias, and violin sonatas. Violin concertos, string and other quartets, variations, and sacred music were not mentioned in the information available to me, but presumably they will play some part in the whole. The performing artists thus far cited show the source of the recordings to be London Records, with occasional contributions from other companies.

The series will be available by mail from Time-Life Records, 541 North Fairbanks Court, Chicago, Ill. 60611. The price per volume is $24.95 plus shipping and handling costs, or $29.95 for Dolby-encoded cassettes. With the first volume you buy you get a copy of Arthur Hutchings’ Mozart, The Man, The Musician, a large, impressive-looking, and erudition-filled book of almost three hundred pages (the page-numbering system is unorthodox) and multitudinous illustrations (many of which, oddly, have nothing to do with Mozart).

The contents of the first volume of the series—“The Late Piano Concertos”—very likely indicate some of the directions the series will follow and how the approach will differ from that of the Beethoven set. The five-record album contains Concertos Nos. 18 through 27 (K. 456, 459, 466, 467, 482, 488, 491, 503, 537, and 595) in performances by six different pianists, six different conductors, and six different orchestras. Such variety is categorically different from the approach of the Beethoven set and, to my mind, far preferable. Many listeners have simply never learned to differentiate between the style of the performer and the substance of the music, and their perceptions, therefore, become frozen. For all the advantages of the “integral set” (and I would not deny there are some), repeated exposure to one performer’s way with Beethoven or Mozart or Bach leads to a stultified, perhaps even false view of the music and its range of performance possibilities.

So there is in this set the sheer joy of some of the greatest and most delightful music Mozart or anyone else ever composed, but there is something else too. After having heard the vivacity of the playing of Daniel Barenboim (English Chamber Orchestra) and Vladimir Ashkenazy (Philharmonia Orchestra) in Concertos Nos. 18 and 19, respectively, the large-scale drama of Julius Katchen (Münchinger, Stuttgart Chamber Orchestra) in No. 20, and the four-square objectivity of Karl Engel (Hager, Salzburg Mozarteum Orchestra) in No. 22, to come upon Clifford Curzon’s (Kertész, London Symphony Orchestra) laid-back, understated, exquisitely subtle performances of Nos. 23 and 24 is a mind-expanding experience. This is not to say that Curzon’s performances are necessarily the best in the set, but simply that his Mozart is so different from the others that it makes one that much more aware of the range of this music. Actually, my own favorites here are Katchen’s D Minor (which may be too big a performance for some tastes) and Alicia de Larrocha’s No. 27, in B-flat (Solti, London Philharmonic), a less earthy and more subtle performance than one might expect from her of this subtlest of all Mozart piano concertos.

But most of the performances here are admirable (Ashkenazy also plays No. 21 and Larrocha No. 25). Only Engel’s rather pedestrian-sounding Nos. 22 and 26 (probably the two most difficult to bring off) seem to me less than that, and there may be listeners who like those as well as any.

The recording quality is variable but never less than adequate, the pressings good. The set comes with an eighteen-page book of excellent notes by Richard Freed, Alan M. Kriegsman, and Klaus G. Roy—and, of course, there is that bonus book.
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Use a tape cassette that gets the most out of your car's sound system. Get the new PRO III from BASF—it's the car tape.
In a clearing surrounded by lush green foliage and covered by the soaring glass dome of the New York Botanical Gardens in the Bronx, Stevie Wonder stands surrounded by an attentive crush of press, paparazzi, groupies, and traveling companions. The occasion is a promotional party, part of Motown Records' media blitz in support of Wonder's just-released, long-awaited new album, "Journey Through the Secret Life of Plants." Buses full of members of the Fourth Estate have been carted to this appropriately secret destination, and the noise and confusion as they scramble for seats is drowning out Stevie's opening remarks. He falls silent, fingers the cordless silver microphone, and waits.

"Can we hold it down, please!" shouts Ira Tucker, the slender black man standing to Stevie's right. "Can we please show the host some respect!" The noise subsides. Tucker smiles like the veteran of press wars he is. He's been with Stevie since the 1972 Rolling Stones tour/extravaganza, which turned out to be a kind of baptism under fire. "The guys handling press for the Stones figured, 'Why let anybody know about Steve?' After all, he was just the opening act and the tour was completely sold out up front." But Tucker helped his client get considerable publicity mileage out of the grueling month and a half of one-nighters, and he stayed on as his inventive, innovative press agent. In 1973, for example, Tucker daringly blindfolded the press for an "Innervisions" listening party (and later helped pull Stevie out of a two-week coma after a near-fatal auto accident by continuously humming Stevie's Higher Ground in his ear). In 1976, he helped fly a planeload of reporters to a farm in Massachusetts for the premiere of "Songs in the Key of Life." Tonight's horticultural blowout is similarly his brainchild.

It is also something of an anomaly in the middle of the record industry's current economy binge, but then Stevie Wonder is something of an anomaly himself. Conventional wisdom has it that to sell records you must tour regularly and release albums at nine-month intervals. Not Stevie. It has been three years since his last album or live performance. Before that, it was two years. These long silences have become almost legendary, and Stevie has started writing little explanatory notes about them on his album jackets. The one on "Journey" reads "Each life has its own beat, moving through space at its own pace... waiting is not what I meant for you... I will move as swiftly as life demands, but never so fast as not to give you my very best."

This kind of intense, one-to-one audience rapport is rare in pop music (though it has been noted that Stevie's influence on the pop audience in the Seventies was as pervasive as Bob Dylan's was in the Sixties), but it is no rarer than the music that inspires it. No matter how carefully you sift through the extraordinary history of Lulu Hardway's third child, Steveland Morris (born, as he says, "blind, black, and bowlegged on May 13, 1950 in Saginaw, Michigan"), you'll find no direct models for the sounds he has created nor hints of the direction his career would take. Which is not to say that Stevie Wonder has no musical influences or that his is not a classic American rags-to-riches tale, rather that there has never been anyone quite like him before.

The saga of Wonder's rise to international superstardom is fairly well known, but the details bear recounting. When Stevie was eleven years old, a cousin introduced him to Ronnie White, then (as now) singer with Smokey Robinson's old group the Miracles. Stevie, weaned on rhythm-and-blues, already knew his way around a piano, could also play drums and harmonica, was, as a matter of fact, pretty much a prodigy. White set up an audition at a small-time record company headed by a frustrated singer/songwriter named Berry Gordy Jr., and Stevie was signed almost immediately. There were a few local hits (including..."

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By Zita Allen
“Everyone has a special part or place in my life, and I thank them for that….It’s a kind of spiritual collaboration.”

the immortal Contract on Love), and then his career exploded with a raunchy harmonica number, recorded live, called Fingertips. The record sold 1.6 million copies, and Little Stevie Wonder, billed as “the twelve-year-old genius,” was well on his way to becoming a household word. So, quite naturally, was Motown Records (named, of course, for Detroit, America’s “Motor Town”), Gordy’s by-now not so small-time label.

Throughout the Sixties, Stevie churned out hits for the fledgling Motown empire: Uptight, Nothing’s Too Good for My Baby, Signed, Sealed and Delivered. If You Really Love Me, and several others (including, oddly enough, an innovative cover version of Dylan’s Blowin’ in the Wind). Most of these were written for Stevie by the writers of Motown’s sizable pool of “house” composers, just as others were written for the Supremes, the Four Tops, or the Temptations. Occasionally he was allowed to write or produce for other artists in the corporate stable (indeed, he spent every free minute, when he wasn’t attending the Michigan School for the Blind, getting under foot at other people’s sessions), but as a rule the company had him locked into the role of a performer. And there were, of course, the usual blunders. Motown, even then, had a hungry eye on the Las Vegas scene, with the results that Stevie was assigned not only a cover of Sillibird’s Alfie as “Little Stevie” business has got to stop here, but an all-harmonica version of Alfie as “The Stevie Sound,” and it didn’t exactly do them justice. So, quite naturally, the label had to be renegotiated, and Stevie emerged with a virtual Declaration of Independence: he got possession of a million dollars that had been held in trust for him by Gordy, higher royalties, publishing rights to his own songs, and, most important, an unprecedented degree of artistic control. The ink was hardly dry on the 120-page contract before Stevie released “Music of My Mind” (an album edited down, at a cost of $200,000 of his own money for studio time, from over two hundred self-produced and self-written tunes he had in the can). His second decade in the music business, this time as a full-fledged, independent pop creator, had begun in earnest.

Wonder’s Seventies music, a prodigious mix of r-&-b, rock-and-roll, jazz, electronics, and general razzmatazz, was almost alarmingly successful both commercially and critically. By mid-decade, as lofty a voice as Time magazine decreed that Stevie was “a monster,” a star who can automatically fill any arena or stadium and whose records, both in the stores and on the radio, transcend musical categories in their appeal.” The facts bear this out. All the Seventies albums went platinum, each spawned (at the very least) one gold single, and their creator won a total of fourteen (!) Grammys. You Are the Sunshine of My Life, which won Best Song in 1974, is already a standard and may well be the most covered song of the last decade. Perhaps not since Lennon and McCartney has a songwriter been so widely admired (McCartney, for his part, drove the point home by putting “We Love You, Stevie” in Braille on the cover of a Wings album).

Stevie has won much of this immense respect from both industry and public by consciously ignoring the artistic boundaries critics are so fond of. Pigeonholes, says Wonder, give him a serious case of claustrophobia. He bristles at the merest mention of such musical labels as r-&-b because they suggest to him the crippling restrictions once wrapped up in the old euphemism “race music.” “It implies that if you’re one color you make one kind of music, and if you’re another color you make a totally different kind. Music is supposed to be colorless.” Colorless or not, there is clearly something very unusual about his music. Just before the release of “Plants” he negotiated yet another landmark contract with Motown, one giving him even more artistic control and a rumored $13 million.
Now, though, for a brief moment he is relatively alone. Perched on the edge of a beige sofa in the office's cozy piano room, he says "my life is surrounded by love" in a manner sincere and direct enough to dignify the most mundane of utterances. His eyes are hidden behind tortoise-shell sunglasses, and he talks openly about his blindness: "One eye is blind because of a dislocated nerve, the other has a cataract." A secretary brings Steve a mug of hot herb tea and closes the door on the way out so the interview can be conducted in an oasis of calm. Steve leans forward and immediately tackles the subject of why some critics were so surprised at his choice of a symphonic structure for "Journey." "I chose that structure because I thought the album demanded to be done that way. It might surprise some people, but not my fans. The people who will be shocked are the ones who haven't listened to me consistently. You see, I've been working on this all my life, really." He pauses, sipping from the mug and carefully placing it on the floor by his right foot. "Maybe it does sound different, but the point is, every step I've taken so far has been an influence on this album. For instance, I use synthesizers here just as I used them on Pastime Paradise. I use the dream machine here that I used on Village Ghetto Land. Black Man on 'Songs in the Key of Life' has a lot in common with 'Black Man' on 'Pastime Paradise.' I would explain what was happening in the film visually, and in the right headphone [Olazabal] would give me the time of the actual frames. He would tell me the starting time of a sequence and count the frames till it would end. They put it all on this four-track tape: the sound of the film, the sound of Gary explaining, and the sound of Gary counting on three of the tracks; the fourth would be used for the music whenever I finished it. Then they made me a copy. I'd take it home, listen to it a few times, and work the music out on a tape cassette. I would play along with it, and get the time signature I felt was conducive to the sequence. That's how we did it."

At first it wasn't as simple as it might sound, however. "You've got to remember that I worked with this quite a while. The first stuff I did I didn't like, so I did it over again. But, in the end, you know what it was really? God just gave it to me. He gave it all to me, he truly did."

"I was staying at my mother's house one day, just listening. For the first time I was by myself and I was listening. I came up with this thing. [He hums the opening bars of the first tune on the album, the instrumental Earth's Creation.] You know, it was like a big monster plant growing. Well, from there I began to feel more and more
comfortable, and I let my creativity go free. I just said, 'Let me try this. It's different!' And I tried, and I felt real good about it, and it just got easier and easier.

That is, as 'easy' as it can be when you have to produce a double album almost singlehandedly. Wonder must be used to it by now. Look at any one of his album jackets and most of the time you'll find he's written both words and music, played most of the accompanying instruments, and sung lead and back-up vocals on most of the tunes. This might lead some to conclude that Wonder is a sort of Rundgrenesque technocrat maverick running indulgently amuck through the recording studio. They would be mistaken, for he does have a very special kind of help. Take another look at those album jackets and you'll find a list of family and friends he thanks "for giving one of the greatest gifts that can be received—your time and your kindness." On "Songs in the Key of Life" the list seems endless, running the gamut from A (his daughter Aisha) to Z (Frank Zappa), with the likes of David Bowie, Natalie Cole, Roberta Flack, and David Sanborn in between. "Everyone has a special part or place in my life, and I thank them for that because whatever they have given has been part of whatever my creativity has come to. It's a kind of spiritual collaboration."

"Journey" has a list of collaborators too. Steve wrote the single, Send One Your Love, at Roberta Flack's house. "We were working on a song for the album [Don't Make Me Wait Too Long] and I said, 'Ooh, Roberta, I've got to get this song finished.' She sat right there writing down the lyrics while I tinkered at the piano."

The late Minnie Riperton inspired the haunting instrumental cut Ecclesiastes. "That was her favorite chapter in the Bible." Steve shakes his head from side to side, murmuring her name over and over again.

"I was in love with her. When I heard her album [Come into My Gar-
den] I said, 'Oh, I'm going to marry her.' Syreeta and I had just broken up, and I said, 'Oh, that's the one, that's it, buddy.' Minnie was so elegant." His voice trails off.

"I dedicated Ecclesiastes to her. I wrote it, and then I found out that she was really, really worse. She heard the whole album on tape before she died—I wanted her to hear everything."

"Journey" has actual artistic collaborators as well as inspirations. "I collaborate with people because they might have something to say and can say it better than I can," he admits. In this case this means his ex-wife Syreeta Wright and friends Yvonne Wright and Michael Sembello. "I just give them the basic idea of a song on tape. I might have words here and there and the basic feeling. I sing it, but I don't finish it either because I don't have the chance or the inspiration isn't coming fast enough. Or I just feel they could write a better lyric."

"For example, Michael: he wrote one of the songs on "Key of Life," a song called Saturn. I was about to write something like... [he leans over and sings into my tape recorder]... Packing my bags/Going away/cause you don't treat me right/Cause you treat me like a dog, a dirty dog/Going back to Saginaw where the grass is green..." He stops and chuckles. "Michael's lyric is much better."

Another important factor in the creation of Steve's music is his engineer. For "Journey" Gary Olazabal not only set things up so that Steve could compose music for a movie he couldn't see, but he dashed around taping the roar of a Concord jet taking off in L.A., the explosion of a '59 Ford in Mexico, an elephant in the zoo, the shush of waves lapping against the hull of a ship, and countless other sounds Steve mixed in with the instruments (using a new gadget called the digital melodian). Steve himself used to carry a tape recorder around with him all the time, sometimes stopping in mid-conversation to record musical doodling that he would later develop into full-blown songs. "I'm going to start doing that again," he says. "There's so much music in the air."

And other places. "You hear this music in your mind first; that's the way it is for me, anyway. Then I go after getting it exactly the way I imagined it. If it doesn't come out the way it is in my mind, it has to come out either better than that or equivalent to it. If it's in a different fashion, it's got to be just as good."

So far, Steve's prolific output has taken him through two decades and into the beginning of a third. Tucker insists, "The Eighties are just wide open, waiting for someone to take them. I think that someone is Steve. He's still here, he's still available, still accessible. Not many artists made it through the Seventies. Where is Al Green? What happened to Barry White? What happened to Peter Frampton? One minute you see them, the next minute they're gone, buried in the Seventies. Steve has survived two decades already, and he started out the beginning of the Seventies as just an opening act for the Rolling Stones. Why, by the mid-Eighties he'll have been in this business for twenty years and he won't even be thirty-five."

Steve, on the other hand, just looks at the future with an air of wonder, patience, and gratitude for what he's already received. Life, after all, has been good to him. "As I look back on my life," he says philosophically, "I know I could not have known the good without the bad I've had. We've traveled a long way and well." He breaks off, and then, with a sly grin, he parodies a toothless old man. "Steve ain't dead yet. He's still hot."

As if he had to tell us.

Zita Allen, formerly on the staff of Rolling Stone, has contributed to the Amsterdam News, the New York Times, and the Village Voice and has also been a TV commentator.
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As many audiophile readers must by now be aware, the Electronic Industries Association stages a pair of Consumer Electronics Shows each year. For the past several years, the smaller winter CES has taken place in Las Vegas, the larger summer show five months later in Chicago. Despite the use of the word “Consumer” in its official title, the show is consumer-oriented only in the sense that the products displayed are ultimately employed and enjoyed in the home (or, increasingly, in the car) rather than in a factory, a space shuttle, or an aircraft carrier.

The attendees at the shows, moreover, do not qualify as “consumers.” You can’t, in fact, even get in unless you are a member of the “trade,” meaning that you are a manufacturer, importer, wholesaler, retail dealer, or manufacturer’s “rep” for the equipment being shown (the “press,” needless to say, gets a special dispensation). The attendees are there essentially to buy and sell, and many measure a show’s success by the dollar value of the orders written—or at least by the buyer interest expressed in the quantity of warm bodies flowing through the exhibit area.

For the exhibitors, the Winter Consumer Electronics Show (WCES) has always been slightly problematical: just how big a splash should they try to make? Obviously, if the attendance is going to be significantly smaller than that at the summer show (or if the economy is slow, dealer cash flow is constricted, or whatever), then the introduction of important new products will be held off until then. On the other hand, if orders can be diverted from the competition by an early-bird announcement of a new product, or if dealer reaction to changes in features or styling is being researched, or if new dealers or reps are being sought, then the high price of an exhibit at the WCES may be worth the investment in time, money, and hard work.

In any case, the number of both exhibitors and attendees at the WCES over the years has been growing, and this year’s show was the biggest yet: the sponsors claimed an attendance of more than 50,000.

The Jockey Club, a smallish hotel located at about the center of the Las Vegas “strip” action area, housed the exhibitors of “high-end” or “esoteric” components. The concentration of audio equipment in a single locale had substantial advantages for those footsore seekers—and sellers—of equipment representing the ultimate audio truths. Those who had to brave the main show in the cavernous expanse of the Las Vegas Convention Center were forced to seek out the audio products amidst a potpourri of calculators, home computers, electronic watches, telephones and accessories, TV, CB, radios, and video (cameras, recorders, games, and tapes—both blank and prerecorded, with ratings from G to XXX).

Among the new audio products (to be covered in detail below) there could be discerned a trend toward a mild upgrading of the dollar/performance ratio and a more sensible approach to the power race that has in the recent past produced unliftable and even uninstallable 200-watt-per-channel receivers. Given the inflation that has troubled the U.S. and Japan for the past decade, the fact that today one can actually buy a product
with improved performance over last year's models for about the same number of inflated dollars is a tribute both to the hi-fi industry's innovative talents and the tumbling costs of high-grade semiconductors.

The performance improvement in amplifier distortion is a nebulous thing, being far more measurable than it is audible, but it is very easy to get a handle on just what power has to cost. By the time you read this, both the Adcom and the Carver power amplifiers will have broken through the "dollar-per-watt" barrier, the Adcom through clever application of existing technology, the Carver through a radically new approach to power-supply/output-stage design.

As far as appearance is concerned, most of the new products seen were a joy to behold. They are slim, sleek, and low-profile, and they make extensive use of LEDs, fluorescent meters, and digital station readouts. The "slide-rule" dial scales that have been a very visible feature of all tuners and receivers since hi-fi's early days are being replaced slowly but irrevocably by the digital readouts. (The interim silliness of having a digital readout plus a mechanical dial is apparently coming to an end under the pressure of the increased cost of mechanical—rather than electronic—assemblies.)

A final word: the conditions of show coverage as well as space limitations make it impossible to provide catalog-type coverage of every product in every manufacturer's line. We have therefore restricted ourselves to the new products that caught our attention; readers should remember, of course, that listings do not constitute approval nor omissions indicate disapproval. We apologize to those manufacturers who showed important products we somehow missed and assure our readers that they will be covered in the "New Products" columns in months to come.

The consensus of press and other show attendees seems to be that most manufacturers were holding back all, most, or at least some of whatever audio wonders they currently have in the works. Which means that the relative trickle of new products shown at the winter CES will probably swell to a flood by summer. In the meantime, what follows represents what we saw and heard in the Las Vegas Convention Center and the various hotels during the four days of the WCES in early January. And now... on with the Show!

Receivers

On the evidence of the units introduced at the January WCES, there seem to be two major developments in the receiver market. The first is the almost universal use of complex integrated circuits to perform some or most of the functions required of a stereo FM tuner. These ICs range from the somewhat "old-hat" ones that perform the stereo demultiplexing function to sets of chips for complete digital-synthesis FM and AM tuning.

The second major trend, as mentioned earlier, is toward lower power. Abandoning the "watts race" of a few years back, the largest receiver manufacturers seem to have stabilized their product lines with output powers reaching 100 watts per channel or so. Ironically, this comes at a time when wide-dynamic-range software is just becoming widely available and appreciated. Direct-to-disk, digitally mastered, and dbx-encoded discs generally require much higher peak powers than conventional recordings for clipping-free reproduction. Unfortunately, the specification most revealing of an amplifier's performance in this area, IHF dynamic headroom, is rarely given in data sheets, much less in press releases.

Both of these trends can be seen in new introductions by Sony. Receivers in their STR-V series have output powers ranging from 28 to 55 watts per channel and prices from $260 to $500. The two bottom-of-the-line models, the STR-V25 and STR-V35, each use servo-lock tuning. The multiplex decoding is performed by a phase-locked-loop (PLL) integrated circuit. Mechanical meter movements have been replaced by LED displays in these models, although tuning is still accomplished with a knob-and-dial system. But even this has been replaced in the two top-of-the-line models, the STR-V55 and STR-V45. Both of these units use frequency-synthesis tuning for AM and FM reception. Frequency-synthesis tuning simplifies—indeed, almost mandates—the use of automatic, preset, and scanning station selection in addition to digital station-freQUENCY displays. The Sony units, along with quite a few other manufacturers', have all these features.

Technics' five receiver introductions have output powers between 18 and 63 watts per channel and prices from $180 to $420. All of them use an IC for their AM-tuner sections. Distortion at half-power output, even for the 18-watt-per-channel SA-101, is specified as 0.009 % at 1.000 Hz. Interestingly, the phono-input signal-to-noise ratios given for this product line improve with decreasing receiver cost, from 73 dB for the SA-505 to 76 dB for the SA-101.

Marantz also introduced five receivers, with output powers from 88 watts per channel down to 25 watts into 4 ohms and prices from $695 to $275. The flagship model SR 8000 features frequency-synthesis tuning, seven AM and seven FM presets, and electronic station searching. The FM tuner allows tuning in 50- and 100-KHz steps in addition to the normal 200-KHz divisions. This provides compatibility with cable-TV systems as well as the possible change in FM channel spacing now under consideration by the FCC. On the AM side, the SR 8000 will also tune in 9-KHz steps in addition to the conventional 10-KHz steps and is therefore compatible with the proposed change in AM channel spacing.

Pioneer announced four new models, all featuring Fluoroscan meters to display output power (from 30 to 150 watts per channel, depending on the model). Prices range from $300 to $275. None of the models have station presets, but the top three models (the SX-3900, SX-3800, and SX-3700) have quartz servo-locked FM-
LAS VEGAS 1980 WCES

Amplifiers

The generalizations we made about receivers hold true for integrated amps as well: there's a trend toward lower powers, and creeping integrated-circuit featureism is much in evidence. Marantz showed three new integrated amplifiers, two of which (the PM-700 and PM-500) have five-band equalizers (the PM-700 has separate tone controls for each channel). The $420 PM-700 delivers 87 watts into 4 ohms (or 70 watts into 8 ohms) with less than 0.05 per cent total harmonic distortion (THD). The amplifier is cooled by "heat pipes" using Freon fluorocarbon. The LED power meters on the two top-channel units are calibrated in terms of peak-output power, so the PM-700's full-scale reading is 280 watts into 4 ohms.

Aiwa introduced two minicomponent integrated amps priced at $160: the SA-A22U and the AA-16BH. Both measure approximately 8 1/4 x 2 3/4 x 6 3/4 inches, but the former has a LED output-power display (from 0.1 to 40 watts) while the latter can be powered either from the a.c. line or by a car, boat, or camper battery.

Akai showed three integrated amps with output powers from 37 to 68 watts per channel and prices from $230 to $350. All have fluorescent power indicators with a range switch to monitor low output levels. Each amp can switch up to two tape decks and two loudspeaker systems, and each has a switchable infrasonic filter and a clipping indicator. Nikko's new units, the NA-890 to NA-590, deliver from 70 to 35 watts per channel and are rack-mountable. They too have infrasonic filters. Denon's PMA-530 (60 watts per channel) has moving-coil and moving-magnet inputs; Rotel's RA-1010 has the same features plus LED power meters.

Kenwood's KA-80 (a match for their KT-80 tuner) delivers 48 watts per channel. Kenwood contends that the iron parts of a component's chassis cause some sort of distortion, and so their L-01A integrated amplifier eliminates this "magnetic distortion" by the use of polymers in the panel and chassis, nonmagnetic switch housings, and a power transformer separated from the amplifier. Output power of this $1,500 unit is 100 very clean watts per channel. Lux showed the L-580 ($795, 100 watts per channel) and L-480 ($495, 70 watts per channel) integrated amps, each incorporating their "duo-beta" double-feedback-loop circuitry; NAD showed a prototype of their Model 3040 integrated amplifier. The unit has a projected price of about $350 and will put out 40 watts per channel, but with a 3-68-dB dynamic headroom and higher outputs into low-impedance loads. Also, it will include a "speaker-lead-compensation" circuit and a bass-equalization circuit to extend the useful range of an acoustic-suspension speaker by a full octave at the low end. This feature will be adjustable for speakers of several different bass-resonance frequencies and will incorporate a 12-dB-per-octave bass boost with a Q of 0.7 and a steep infrasonic rolloff.

In separates, preamps seem to be getting more attention from manufacturers than power amplifiers. And power amps are also following the low-power trend common to integrated amplifiers and receivers, though at a slightly higher average power level.

Self-contained moving-coil pre-preamps are becoming more common with preamplifiers. An example is Nikko's Beta 40 preamp ($450), which has a moving-coil pre-amp, switchable moving-magnet input resistance and capacitance, subsonic filter, and gold-plated connectors. Optonica's slim-line SO-9205 also has these features and sells for $350. Both types of these units were designed before the current high prices for gold.

Eumig showed their $580 C-1000 preamp (also with moving-coil preamp) and Phase Linear introduced the low-profile Model 3300, Series II preamp ($399.95). Lux had two new models, the
(Continued from page 64)

\section*{NEW PRODUCTS}

\subsection*{Tuners}

Automatic features made possible—and practical—by digital techniques and integrated circuits have taken over at all the price ranges of FM tuners. An example of this is the \$900 Sony ST-J88B. The unit incorporates quartz-locked digital frequency-synthesis tuning, seven station presets, phase-locked loop (PLL) multiplex decoding, active 19-KHz pilot-tone-cancellation circuits, and metal-nitride-oxide-semiconductor (MNOS) memory ICs. Akai's AT-V04 ($280) also has seven station presets and performance specifications claimed to be better than most FM broadcasts. This level of performance is typical of most new tuners, especially those using advanced circuit techniques. Indeed, in several areas, such as signal-to-noise ratio, present-day FM tuners are close to the theoretical limits of performance determined by the modulation system and the broadcast frequencies. Most of the innovations, therefore, will have to come in the way of features.

Eumig's T-1000 \$795 tuner, for example, will store ten stations in a complementary-metal-oxide-semiconductor (CMOS) memory maintained by an automatically recharging nickel-cadmium battery. The T-1000 also has switchable i.f. bandwidths to suit normal or crowded-dial tuning conditions. Rotel's RT-1010, for another example, has seven FM and AM presets, and Marantz's $375 ST-500 AM/FM tuner can memorize fourteen stations and tune the FM band in 50- or 100-KHz steps. It also has a LED signal-strength/multipath indicator, selectable i.f. bandwidth, PLL multiplex decoder, and automatic pilot-tone cancellation. Marantz also showed the less feature-full ST-400 ($280) and ST-300 ($225) tuners. Denon displayed the TU-530 with servo-lock tuning and pilot-tone canceler. Toshiba had quite a few tuners, most of which featured digital frequency-synthesis tuning. The newest model was the $260 ST-445 AM/FM tuner with a twelve-station memory and a calibration-tone switch to help set off-the-air recording levels.

\section*{Power Amplifiers}

Among the new power amplifiers shown were the Lux M-4000A (180 watts per channel, $1,495), the Eumig M-1000 (100 watts per channel, \$795), the Nikko Alpha III (80 watts per channel, \$480), and the MTI Model 245 (45 watts per channel, \$950). The slim-line Optonica's SX-9305 (100 watts headroom, \$595). The Model 500 can drive loudspeakers to moderate levels.

\subsection*{At the other extreme, Threshold demon-}

strated their Stasis 1 power amplifier ($3,850), a single-channel, 200-watt unit. SAE brought out three models in their new "01" series, the 2401 (250 watts, \$950), the 2301 (175 watts, \$750), and the 2201 (100 watts, \$550).

Infinity, known for their loudspeakers, showed their HCA (hybrid-class-A) power amp using a tube input stage and a transistor output stage. It had an output-power rating of 150 watts per channel (250 watts into 4-ohm loads) and is \$4,000. Conrad-Johnson's tube power amp is rated at 75 watts per channel into 4, 8, or 16 ohms (\$985). Tandberg's \$1,200 TPA-3003 power amp is rated at 150 watts per channel.

Sony ST-J88B

Denon TU-530

Toshiba ST-445

Optonica's ST-9405 has, in addition to a digital frequency display, an analog tuning "dial" of forty-four LEDs ($1,000). Lux's T-450 (\$395) employs a "closed-locked-loop" system for tuning. It is claimed that this system offers more accurate and stable tuning than quartz-locked and synthesizer systems. In addition, an Accutouch system in this model detects the exact center tuning point and temporarily locks the tuning knob as it reaches the correct point. JVC's T-X5 ($300) uses a phase-tracking-loop detector with a quieting-slope control to lower noise.

Tandberg's TPT-3001 stores eight presets and has a selectable i.f. bandwidth. Kenwood announced two tuners using their pulse-counting detection system, which results in 80-db stereo signal-to-noise ratios for both the \$199 KT-80 and the \$1,000 L-01T. The less expensive of the two models has servo-lock tuning and a recording-calibration switch. The high-end model has a rated stereo separation of 60 dB at 1,000 Hz and THD less than 0.08% per cent in stereo between 50 and 10,000 Hz. (Continued overleaf)
Phono Cartridges

Phono cartridges (as well as loudspeakers) have thus far escaped the invasion of digital integrated circuitry, and the WCES therefore presented no great technological surprises. Some attention has been paid, however, to the cartridge/head-shell interface, and the typical solution has been integration, designing the cartridge and head shell as a single unit. Sony, for instance, introduced the XL-44 ($200) moving-coil cartridge and integrated head shell. It utilizes a "figure-eight" coil said to result in low distortion and high efficiency. ADC showed their Integra series of cartridges integrated with carbon-fiber head shells. The series combines an ADC XLM-type cartridge with a low-mass head shell to reduce the effective mass of the combination by 25 to 50 per cent. The top-of-the-line Integra XLM H1 has a stated frequency response from 10 to 20,000 Hz ±1 dB and a suggested retail price of $130.

Shure showed their M97 series of cartridges which incorporate the viscous-damped dynamic stabilizer/brush and telescoped stylus-shank structure introduced in the V15 Type IV. The series includes five models with tracking forces ranging from 1.5 to 4 grams.

Turntables

The turntable field is also becoming "integrated," what with microprocessor turntable control, quartz-locked direct-drive platters, and all manner of other remote-control and automatic features. Styling has also shifted completely toward a low-profile look, with all the necessary turntable controls located outside the dust cover.

In alphabetical order: Akai showed the AP-2100 ($150), a belt-drive unit with auto-return tone arm. The turntable will connect to selected Akai cassette decks for transport control linked to record cueing. Akai added three semi-automatic arm-cartridge combinations (the Beogram 3404 and 1700).

Denon had their DP-30L(S) direct-drive, auto-lift model available, and Fisher had their MT-6360, a remote-controlled, programmable turntable. It counts bands on a disc and plays only those selected ($350).

Garrard introduced three direct-drive models, the DD450, DD550, and DDQ650. The latter two have front-panel electronically operated controls, straight tone arms, and carbon-fiber head shells. Prices range from $150 to $250. Garrard also had the GT12 MkII belt-drive, single/multi-play unit and the single-play GT120A/F turntable (both about $100).

Hitachi displayed two fully automatic single-play turntables with photo-sensor return mechanisms, the HT-464 ($200) and the HT-466 ($240). Both are direct-drive, though only the HT-466 has a quartz-locked speed-control system. JVC had a $220 quartz-locked, direct-drive model, the QL-A5, and a low-cost ($150) direct-drive unit, the L-A55.

Kenwood had three new fully automatic single-play units at the show. The top-of-the-line KD-850 ($549) is a quartz-locked, PLL, direct-drive unit with a 5.7-pound platter and a separate tone-arm motor. The output cables are low-capacitance, with gold-plated contacts. The $249 KD-4200 can be controlled by the RC-500 remote-control system. The KD-2100 ($169) is a belt-drive turntable with a servo-controlled DC motor.

Three new Marantz turntables all have low-mass, straight tone arms and front-panel controls. The fully automatic TT6000 ($310) has a quartz-locked-servo direct-drive motor, as does the auto-return TT4000 ($250). The semi-automatic TT7000 has a d.c. servo-controlled direct-drive motor. Onkyo's CP-1280F also has a straight tone arm and direct drive with quartz regulation. The effective tone-arm mass is 8.7 grams, effective length is 9 3/4 inches, platter weight is 4.85 pounds.

Optonica showed the RP-9705 unit with remote control. Its automatic programmable music selector enables the listener to enter up to ten different and separate functions and to program the turntable to repeat those selections up to five times. The remote control can also select speeds, preprogrammed selections, and record cueing.

Pioneer introduced five direct-drive turntables with what they consider to be the "optimum"-mass tonearms. The flagship model PL-600 ($399) has the classical suspension system in which the platter, motor, and arm are mounted on a single plate isolated from the cabinet by springs. The rest of the Pioneer line has prices ranging from $299 to $130. Revox had their new B795 Linatrac turntable on display. It had a tangentially tracking tone arm and a crystal-controlled, PLL direct-drive motor with speed accuracy of 0.01 per cent and a start-up speed of less than two seconds ($599). Sanyo's Plus Q60 dual-motor, direct-drive turntable with straight tone arm includes a digital stylus-wear timer and a digital tracking-force gauge. Scott had a $130 belt-drive semi-automatic turntable, the PS18. It
too had a straight tone arm, plus a low-Q, anti-resonance tone-arm counterweight.

Toshiba had the honor of introducing more new turntables at the 1980 WCES than any other manufacturer. All had front-panel controls; four were direct-drive, four belt drive. Prices range from $300 for the top-of-the-line fully automatic SR-Q300 quartz-controlled direct-drive unit with carbon-fiber tone arm to $115 for the belt-driven and semi-automatic SR-A100.

Armless models came from Scotland’s Strathclyde Transcription Developments and from ADC. The STD-305M was specifically designed for reduced audio feedback: the base plate is coated with a vibration-damping material and the dust cover is of heavy-gauge plastic. The ADC 3001 ($250) direct-drive turntable has a “universal” mounting hole and ±5 per cent back: the base plate is coated with a vibrationally designed for reduced audio feed-

Kenwood’s L-07 turntable ($1,700). It naturally incorporates a direct-drive, brushless d.c. motor with quartz-PLL-servo speed regulation. It was engineered for “maximum rotational accuracy and minimum acoustic and mechanical vibration,” so it weighs more than 68 pounds, the “cabinet” being a frame of die-cast aluminum and the base an anti-resonance resin concrete bonded to a thick layer of high-density mahogany board. The tone arm is made of “aircraft-grade” aluminum coated with boron and graphite fibers in a resin. The platter weighs 12 pounds and the controlling electronics are in a separate enclosure to minimize mechanical vibration and electromechanical coupling. Weighted flutter is specified at 0.02 per cent and rumble is better than −94 dB (DIN B weighted, of course).

Tape recorders seemed to be the hottest subject at the show, with many manufacturers showing a multitude of metal-capable cassette decks. Also shown were several new open-reel models, a sure sign that that venerable format is still alive. But the most technologically significant introductions at the WCES were several EI AJ-standard digital-audio adaptors for videotape recorders. Hook one of these units up to any videotape recorder which can record U.S. television signals and you can record two channels of super-high quality digital audio. By high quality we mean a dynamic range of 85 dB, unmeasurable wow and flutter, frequency response flat to within a few tenths of a decibel from d.c. to around 20,000 Hz, and distortion less then 0.03 per cent at maximum recording level. Of course this performance does not come cheap; prices start at around $4,000 (without a videocassette recorder). The units shown came from Sanyo (the Plus 10, which includes a sample digitally recorded Ry Cooder video-

Sanyo Plus D64

Tape Equipment

Sanyo Plus D64

Tea c A-510 Mark II

Nakamichi 670ZX

Te a c 482

Strathclyde STD-305M

Nakamichi revealed (slightly before the WCES) three decks with an automatic azimuth-alignment feature; the models 660ZX, 670ZX, and 680ZX are priced from $995 to $1,550. The machines re-

cord a test tone on the tape and adjust the azimuth of the record head until the phases of the tone from each of the playback heads’ channels match. All three decks have three discrete heads, four-motor transports, and dual-capstan drive, but only the 680ZX provides half speed (15/16 inches per second) operation. Nakamichi also introduced the 481 and 482, each with three heads. The primary difference between the two is that the 482
($775) includes electronics and Dolby circuits for off-the-tape monitoring while the 481 ($655) does not.

JVC's KD-A77 metal-capable deck has off-the-tape monitoring and optional remote control ($570). Their KD-A7 deck ($500) includes a seven-band spectrum analyzer.

Kenwood had two new decks, the $599 UX-2060 and the $225 UX-500. The first is a three-head design with a d.c.-servomotor in addition to fine-tuning controls for bias and equalization. The second has fluorescent meters and a "soft-touch" transport control that simulates the feel of solenoid operation. It too has a variable bias adjustment.

Aiwa showed four new decks priced from $500 to $220. The two top decks (the AD-M700BU and AD-M700U) have two motors, three heads, double Dolby circuits, and a fine adjustment for bias. Akai presented three new units, two with metal capability (the GX-M10, $300; and the CS-M02, $230). Scott had their $250 metal-compatible deck, the 671DM, on display; it includes a rack-mount option.

Nikko has entered the cassette-recorder field with the ND-790 ($330), a model with metal capability, LED peak meters, and a bias control. A less elaborate deck, the ND-490, sells for $250.

Hitachi introduced four metal-capable decks: the new D-3300M and D-90S and the metal-upgraded Models D-980M and D-5500M. The D-3300M ($750) contains Hitachi's Automatic Tape Response System, which automatically optimizes bias and equalization to suit the cassette being used. The deck uses a direct-drive motor for a stated wow-and-flutter specification of 0.024 per cent.

Toshiba had six models on display, ranging in price from $400 to $170 and including a $270 mini-component deck (the D-10). The flagship model PC-X60 has metal capability, logic-controlled solenoid operation, a Sendust record/play head, and a ferrite erase head. Technics also presented a mini-component deck, the direct-drive M-02 ($500). It has solenoid controls, two motors, two heads, metal capability, and fluorescent meters. The company's Professional Series was enlarged by the RS-M85, a two-head, two-motor, quartz-locked direct drive deck ($700). Technics also had a low-cost metal-ready deck (the $200 RS-M11 Mk2) and one of the few non-metal-compatible new decks (the $150 RS-M6).

There were at least four new open-reel decks shown at the WCES, three of which came from Sony. Sony's TC-766-2 ($1,300) and TC-765 ($1,200) are three-head, half- and quarter-track machines, respectively; both take 10½-inch reels. The TC-766-2 includes an extra quarter-track playback head and runs at 7½ and 15 inches per second. Both machines use a dual-capstan drive system, electronic speed regulation, logic control, and front-panel bias and equalization settings. A mechanical-transport, three-head, 7-inch-reel deck was also introduced (the TC-399, $500). It has ferrite heads, bias and EQ controls, and a scrape-flutter filter.

Neal Ferrograph, a British company, was offering to custom-build their SP7 open-reel tape deck for studio, semi-pro, industrial, and educational uses. Options include full- or half-track mono, half- or quarter-track stereo, high, medium, or low tape-speed selections, CCIR or NAB equalization, Dolby B circuits, rack-mount kits, and power-supply variations.
Blank Tape

The most interesting blank-tape developments at the WCES concerned metal tape, its pros and cons. There was skepticism expressed concerning its cost effectiveness, particularly in light of the new Dolby-HX system of headroom extension, which is almost certain to be universally adopted. Some of these doubts were even expressed by the tape manufacturers themselves. Such opinions notwithstanding, there were quite a few metal-tape introductions from a number of manufacturers. In alphabetical order they included: Aiwa, Ampex, Fuji (who announced a C-90 at $12), Hitachi, Maxell, and TDK. Prices for a C-60 metal cassette ranged from about $9.50 to $12.50. BASF is expected to introduce their metal tape shortly.

New coating formulations for chrome tape also occasioned some announcements. RKO introduced their "second-generation" chrome tape, Ultrachrome, in C-60 and C-90 lengths. Empire showed their "EMI Superchrome II," which has a formulation exclusive to EMI. It is said to give better high-frequency response, lower background noise, and greater dynamic range.

TDK introduced a new cassette tape, Optimum Dynamic, designed for normal ferric bias levels and claimed to deliver higher sensitivity and maximum output levels than any other normal-bias tape currently available. Coercivity is 370 oersteds and remanence is 1,550 gauss for both C-60 and C-90 lengths. The TDK Audia tape series has undergone a change of name; it is now called "Acoustic Dynamic" (the "AD" abbreviation remains the same, however).

Open-reel tape saw some action too, with new products from 3M and BASF. The BASF entry, Ferro LH DP 26, is a high-output, low-noise, ferric formulation which comes on 7-inch reels in plastic library boxes. Lengths from 1,800 to 3,600 feet are available with prices from about $13 to $22. "Scotch" Master XS open-reel tape from 3M moves to the top of their consumer tape-product line with 3 dB more low-frequency headroom and 2 dB greater high-frequency headroom than the tape it replaces. It is said to be bass-compatible with most high-end open-reel decks. A 7-inch reel (1,800 feet) costs about $14; a 10½-inch metal reel (3,600 feet) about $36.

And the videotape market had its share of announcements as well. TDK revealed the successful development of Avilyn HG (an improved version of their existing video line), which is now being test-marketed in Japan. Maxell also announced an HG formulation for the VHS format. It is available in four lengths and is designed for better results with 6-hour machines. Claimed are improved audio performance, increased video and chroma signal-to-noise ratio, and higher video output. Approximate list prices for the 30, 60, 90, and 120 lengths are, respectively, $19, $22, $26, and $30. Beta-format tapes in two lengths (L-250, $17, and L-500, $22,50) were also announced. Also, Dupont has entered the consumer field with chromium-dioxide Beta- and VHS-format cassettes.

Another manufacturer, known here more for high-end equipment than for speakers, has now entered the U.S. loudspeaker market. Rovex's four-way system is called "Triton" and sells for $1,599. The system is designed around a subwoofer unit containing two 10-inch drivers and includes a pair of satellites, each containing a 7-inch low midrange, a 1-inch dome midrange, and a 1½-inch dome tweeter. Frequency range of the Triton system is 30 to 25,000 Hz, and it is recommended for use with amplifiers of 20 to 110 watts per channel. Impedance is nominally 4 ohms.

In contrast to the previous two manufacturers, Wharfedale is one of the oldest names in the loudspeaker field. They've come up with a series they refer to as the Total Sound Recall (TSR) line. The smallest of these, all of which bear a strong family resemblance—vertical, with slightly tilted grille-covered fronts—is the Wharfedale TSR 112.

TSR 108. Its bass/midrange driver is just under 8 inches and has a cone made of a new mineral-filled homopolymer to reduce cone breakup and resonance problems. The tweeter is a 1-inch soft-dome unit. Frequency range is 35 to 25,000 Hz and amplifiers of 15 to 80 watts per channel are recommended. The next unit is the three-way TSR 110, made up of two nominal 8-inch drivers and a 1-inch soft-dome tweeter. The two bass/midrange drivers operate together up to about 300 Hz, from which point energy is fed to just one of them—up to about 3,500 Hz, where the tweeter takes over. The material in these drivers is the same as in the TSR 108; frequency range is also the same, but power-handling capacity is up to 140 watts.

Finally, Wharfedale's TSR 112 incorporates four drivers. Its two nominal 10-inch low-bass drivers operate together up to 100 Hz, where one is attenuated and the other continues on to about 600 Hz; at that point the 8-inch upper-bass/mid-
range unit picks up and continues on to 3,500 Hz, where the 1-inch dome tweeter takes over. Frequency range is 30 to 25,000 Hz and power-handling capacity is up to 190 watts.

From JVC come three new speaker systems. The Zero 3 is a new, small member of their Zero Series. It features a lightweight ribbon tweeter for fast, accurate response. The other two units are in JVC’s SK line. The SK-400II ($150 per pair) is a two-way system that will take a peak input of 80 watts; it has an 8-inch woofer and a 2¾-inch tweeter. The SK-600II ($240 per pair) is a three-way system with peak input of 120 watts; it uses a 10-inch woofer, a 2¾-inch midrange, and a 2-inch tweeter.

The Boston A100 ($170) is a new two-way system from Boston Acoustics. It employs a 10-inch woofer and 1-inch soft-dome tweeter, and the rather shallow (8¼ inches) cabinet permits optimum performance even when the unit is on the floor against a wall. Nominally rated at 8 ohms, the A100 can be used with amplifiers of 15 to 150 watts output.

The Epicure 3.0 Series II ($475) is a refined version of the company’s original 3.0 speaker system. It incorporates two improvements: a new acoustical-loading spherical tweeter for less coloration and a midrange/tweeter crossover lowered from spherical tweeter for less coloration and a own 8.5 litre unit, which is pivot-mounted mid- and high-frequency drivers in their housed in a 70-litre enclosure and the this power-handling capacity of 200 watts. In response of 38 to 22,000 Hz ±2 dB and a frequency range of 35 to 20,000 Hz. It’s a three-way system in a 4 x 4 x 7-inch enclosure, and it will handle up to 60 watts input power. More new minis come from AudioSource, the smallest of a group of three being the LS-One ($89.95). With a frequency range of 100 to 20,000 Hz and power-handling capacity of 40 watts (peak), the LS-One measures only about 7 x 4 x 4 inches.

For use with their minicomponents, Aiwa has the SC-61R two-way reflex system with a frequency range of 50 to 18,000 Hz. It’s an 8-ohm unit able to handle up to 40 watts.

A new line being imported from West Germany by Osawa bears the name Heco. There were four systems, the top of the line being the Precision 400 ($599.95) made up of a 12-inch woofer, a 2-inch midrange, and a ¾-inch tweeter. It’s an acoustic-suspension system with a frequency response of 20 to 25,000 Hz, and it can handle up to 120 watts. Onkyo has added a new unit to the line they refer to as “Phase Aligned Array” speakers. The F-3000 incorporates an 11-inch planar woofer, a 4-inch planar midrange, and a membrane tweeter. An acoustic-suspension system, its frequency range is 35 to 20,000 Hz. A minimum power of 40 watts is needed, maximum 80.

In its latest addition to a growing line, Mesa Electronics has brought out the Mini-Mesa 75 ($175), a three-way system made up of a 6½-inch woofer, a 3½-inch midrange, and a 1-inch soft, hemispherical dome tweeter. Capable of handling up to 75 watts, the Mini-Mesa 75 measures about 9 x 12½ x 6½ inches. Jensen showed a smaller version of their System B; the System C is reviewed in this issue. At the top of Dynaco’s speaker line is the Model A 350, a four-way, floor-standing system. A passive-radiator design, the A 350 includes a 10-inch low-frequency driver, a 3-inch midrange, and a ¾-inch tweeter, and a vertically mounted supertweeter. With a nominal impedance of 8 ohms, the system will accept up to 110 watts; frequency range, 35 to 25,000 Hz.

Among the Equation series of speakers from American Acoustics Labs (AAL) is the EQ 21. A floor-standing unit, it has two 10-inch woofers, a 5¼-inch midrange, and a 2-inch phenolic-rim tweeter. With a frequency range of 25 to 22,000 Hz, the system, nominally rated at 4 ohms, will accept up to 75 watts of program material.
NEW PRODUCTS

Accessories

The most important "accessories" in any component system are the recordings it plays back. At the WCES there were quite a few manufacturers of what have come to be known as "high-technology" or "audiophile" discs. They not only exhibited their wares but also started talking about forming their own trade association. Such an association could help assure the availability of high-quality vinyl, lacquers, and better disc processing and pressing for this growing market.

Should your high (or low) technology discs have slight pops and scratches (heaven forbid), there were several accessories shown at the WCES which could alleviate the problem. Keith Monks showed a home version of his $700 CR500 record-cleaning machine. Like the professional version, the CR500 employs a scrubbing action utilizing a nylon brush and a mixture of alcohol and distilled water. A vacuum arm traveling above the surface of the record sucks off the liquid and dirt. The liquid also neutralizes static charges. A similar unit was shown in prototype by TMA enterprises of New Canaan, Conn. They claim that their $695 unit is more effective than others because it blows clean air into the grooves to dry the record.

A new record preservative called LAST (liquid archival sound treatment) was shown by Gamma Omega Associates of Livermore, California. Metrocine of England had their M105A turntable-mounted antistatic record cleaner on display. The cleaner uses a carbon-fiber brush and has a preset counterweight and a variable pivot-height adjustment. Other manufacturers such as Discwasher and Audio-Technica showed previously released products. Empire, now importing the Cecil Watts disc-cleaning products from England, had a "Record and Stylus Care Kit" containing several of the Watts devices. Osaka is bringing in several accessories made by Nagaoka. In addition to the "standard" disc brushes, Nagaoka has several static-charge-removing products. The N103 Killvotar sprays "positive ions" generated by a battery-powered circuit at the disc surface and is claimed to leave a disc totally free of static electricity. Nagaoka's N101 Stat issue will remove dust and static charges from turntable dust covers, TV face plates, photographic slides, and movie film.

For those ticks and pops that have still escaped all this attention, SAE has announced a second generation of their "Click and Pop" machine, the SAE 5000A. It is claimed that the $225 unit will electronically excise pops and clicks even smaller than those its predecessor dealt with while maintaining THD and IM values of less than 0.1 per cent and a signal-to-noise ratio greater than 90 dB.

Other electronic accessories include a cordless cassette-head demagnetizer from Recoton, the RBM37, $21.95; it is powered by a 1.5-volt cell and is shaped like a cassette for insertion into a tape machine. Aiwa had the MT-22 electronic digital audio timer for making unattended recordings or for standard clock-radio functions ($120). Both Koss and Bose introduced signal-delay units. The Koss K/4DS ($500) has several environmental settings (small club, theater, concert hall, auditorium) and includes isolated headphone amplifiers and a 15-watt-per-channel ambiance-speaker amplifier. Bose's Spatial Expander operates only with the company's Spatial Control receiver, a pair of 901 speakers, and a second pair of direct/reflecting units. It is priced under $600. Marantz had a ten-band equalizer (the EQ-10, $200) on display, as did Rotel (the RE-1910). Rotel also showed their RY-1010, a ten-band spectrum analyzer.

Several new headphones were shown, the most interesting being Sony's MDR-3: they weigh only 1.8 ounces. An open-air design, they have a frequency response of 20 to 20,000 Hz and a sensitivity of 96 dB/milliwatt. The cord is of "oxygent-free litz wire" ($50). Mura demonstrated two units incorporating a stereo-separation control claimed to eliminate the "inside-the-head" sound so many headset users find annoying. Both a high-velocity version (the HV-300, $50) and an isolation-style model (the SP-805, $80) were shown. JVC also showed lightweight headphones, including the 7-ounce HP-1100 ($80), the 6-ounce HP-880 ($65), and the 5.8-ounce HP-550 ($40), the last designed specifically for monitoring recording sessions. Supercord had a 4-ounce model, the TRL-88 ($50). Finally, Squel presented their HV/X series with variable-density, contoured ear cushions. They are said to combine the hear-through transparency of the open-air units with the full bass impact of a closed type.

Microphones also received some attention, manufacturers realizing that an amateur recordist can often make recordings far superior to those he can buy. Recoton had their MM-660 dual-cardioid electrostatic stereo microphone on display. Sony introduced four cardioid dynamic microphones for professional and semi-professional use. The $100 F-520 is meant for vocal and instrumental reinforcement, and the F-400A (for pop and rock vocals) comes in a charcoal-colored, non-reflective housing ($50). Beyer had a lavaliere mike, the M-111, designed to have a flat frequency response when worn over the chest ($169). The Beyer M-130 is a bidirectional (figure-eight) ribbon mike engineered for professional use under extremes of temperature and humidity ($389). Lastly, Crown International announced its entry into the microphone field with its pressure-zone microphones. These units place the mike diaphragm very close to a "boundary surface," usually a metal or plastic plate on the floor or stage, in order to eliminate directional discrimination characteristics.

A great deal of the new equipment mentioned here is already in your local store or will be appearing there shortly. And if you're prepared to wait until autumn for your audio shopping, the SAA and CES show holds the promise of even more exciting new products. Finally, if you missed coverage here of car-stereo equipment, watch for next month's issue; it will be a special devoted to that subject.
Mozart's Symphonies as Mozart Heard Them

Recordings of Baroque music featuring original instruments (or modern reproductions of them) are nothing new, and there are many elegant examples in the catalog by ensembles that use such instruments, the Concentus Musicus of Vienna, Germany's Collegium Aureum, England's Academy of Ancient Music and the English Concert, and the Aston Magna Academy of Ancient Music and Smithsonian Chamber Players in the United States being some of the better-known ones. As far as the music of the later eighteenth century is concerned, however, such idiomatic excursions have been relatively rare. Now, with one blockbuster presentation—nothing less than all the sixty-one symphonies (yes, sixty-one) of Mozart—the performance of post-Baroque music on period instruments has decisively come into its own.

The first release in L'Oiseau-Lyre's Florilegium Series of the Mozart symphonies is actually Volume 3, and it contains eleven works that date from the Salzburg period, 1772-1773. Altogether, there will be seven albums containing not only the usual forty-one symphonies but all the extra works as well—symphonies, three-movement overtures, movements from serenades—those not included in the symphony category in Köchel's original catalog of 1862. There will even be two versions each of Symphonies Nos. 31, 35, and 40, plus any extra movements (such as, for example, the second slow movement for Symphony No. 19, K. 132, contained in the present volume) that may exist. This kind of completeness is a significant scholarly plus for the series.

Equally significant is the evident care devoted to matters of performance practice and musicalological background. The conducting duties are shared, as they would have been in Mozart's time, by the concertmaster (Jaap Schroeder) and the keyboard continuo player (Christopher Hogwood), and comprehensive research and program notes have been supplied by Prof. Neal Zaslaw of Cornell University. The use of period instruments has already been mentioned, and that means a more transparent and articulated sound. First and second violins have been separated so that one can more easily hear Mozart's antiphonal intentions. Ornamentation is handled according to the latest scholarship (appoggiaturas, for instance, are played for expressive values rather than as short, blipped grace notes, and trills start clearly on the upper note). When there are trumpets in the score, timpani parts have been added (if they were not there already). Bassoons double the bass line, and a harpsichord is used (discretely) for continuo; it is mainly a rhythmic effect—a time-keeper, if you will—rather than a harmonic one. Finally, repeats are observed in the da capo sections of the minuets and, when indicated, in most (if not all) of the other movements as well. In other words, just about every scholarly "i" has been dotted, every "t" crossed.

If that were all, one might be able to summon up no more than a respectful salute for this project at best. Fortunately, there is more: the performances themselves are all first-class musical ones, with the emphasis very much on sparkle and galant entertainment. In many of his letters Mozart talks about the way his music should be played. He always wanted it to make a grand "effect," and in describing the Haffner Symphony in particular he emphasized that the first allegro must be played "with great fire." The Haffner is not among the symphonies in this first-released volume, but that is precisely the way the performances in it strike me: they have tremendous vivacity, they are filled with fiery energy.

Those listeners who are put off by the sound of, say, an "under-strength" orchestra or the absence of string vibrato will, I think, be rather surprised by these recordings. In the first place, the size of the orchestra is commensurate with Mozart's own forces at the times the symphonies were performed: nine first violins, eight second violins, four violas, three cellos, two double basses, the usual winds (including three bassoons), brass, and timpani, plus harpsichord—this is hardly the dreaded "one person per part!" Second, string vibrato is not entirely absent; rather, it is used only (with discretion) for expressive... that is precisely the way the performances strike me: they have tremendous vivacity, they are filled with fiery energy.

MOZART: The Symphonies, Volume 3. No. 18, in F Major (K. 130); No. 19, in E-flat Major (K. 132); No. 20, in D Major (K. 133); No. 21, in A Major (K. 134); Symphony in D Major ("Lucio Silla," K. 135); No. 22, in C Major (K. 162); No. 23, in D Major (K. 181, K. 162b); No. 24, in B-flat Major (K. 182, K. 173dA); Symphony in D Major ("Il Sogno di Scipione," K. 161f, K. 141a); No. 26, in E-flat Major ("Leneda," K. 184, K. 161a); No. 27, in G Major (K. 199, K. 161b). Academy of Ancient Music, Jaap Schroeder (concertmaster) and Christopher Hogwood (harpsichord continuo), co-conductors. L'OISEAU-LYRE D169D3 three discs $29.94, © K169K33 $29.94.
The Academy of Ancient Music
at Kedleston Hall, Derbyshire

courtesy BBC TV
purposes—on longer-held notes, for example. No, there is nothing in any way anemic about the sound here, only great clarity and transparency, and the period instruments supply an extra in the particularly piquant coloristic effects that cannot be had from their modern counterparts.

The overall sonic picture is very bright and resonant, though not as sensuously rich as, for example, what Telefunken manages with its Concentus Musicus recordings. One might wish for a little closer microphoning too: the harpsichord is too discreet, and the timpani sound just a little woolly. But these are minor reservations. How does the album compare with the recorded competition in this repertoire, Bohm or Marriner, for instance? Most favorably, even on points of polished ensemble. I look forward to whatever symphonies the next volume will contain with great pleasure.

—Igor Kipnis

Scott Ross: Some of The Best Scarlatti Playing Available On Disc Today

LOVERS of the keyboard works of Domenico Scarlatti should not be put off by the term “Essercizi” on the jacket of Telefunken’s new two-disc album, for these are actually sonatas which Scarlatti very modestly presented as exercises. And don’t be fooled by the low Kirkpatrick numbers either; K. 1-30 are not the first thirty sonatas he wrote, but rather his first printed collection (it appeared in 1737 when Scarlatti was fifty-two). The music has great variety, ranging from extrovert pieces to more personal, inward-looking ones and including some old favorites such as the D Minor Pastoral Sonata. If Scarlatti had written only this collection, he would still have to be considered one of the major keyboard composers of all times.

Harpist Scott Ross plays a magnificent 1968 copy (by Jean-Pierre Batt) of an instrument built by Antonio Baffo in 1569. Although it is limited in its registral possibilities, its sonority is so rich and full that one is completely satisfied with the sound throughout the length of the four sides. Besides, good harpsichord playing depends on phrasing, articulation, and a sense of timing, not on clever registration. Ross has a superb grasp of what these ingredients are and in what proportions they should be mixed. Basically, his approach is strong and straightforward; there is no fussing over early mannerisms. They are all there, but they are kept in their proper perspective so that the larger design is emphasized rather than obscured. The same kind of balance is to be found in his rhythmic approach; rubato is used to shape phrases and underscore melodic and harmonic niceties, but the overall drive is never lost in the fluctuations. Brilliance, too, is under control because it is the result of musical thought rather than unbridled technical excess.

This is some of the best Scarlatti playing available on discs today. Let us hope that it is the first album of a series; for this promising start suggests what might eventually be a monumental collection. —Stoddard Lincoln


The Searchers: Pushing Forty, but Aggressive, Ambitious, And Up-to-date

THOSE for whom the advent of secondary sex characteristics coincided with the British Invasion of the early Sixties probably have fond memories of the Searchers, and for good reason: in some ways they were the quintessential band of the period, at least in terms of influence. After those of the Beatles, the group’s superb singles (rock-and-roll with one foot in folk and one in pop) are still among the most consistently impressive artifacts of the whole Merseybeat explosion, and to
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.

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.

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Step into a world of advanced engineering in the Dodge Challenger, built by Mitsubishi.

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this day you can hear echoes of their sound in people as superficially dissimilar as Bruce Springsteen, the Eagles, and Elvis Costello. Had they been better produced (their hits still sound great in punchy mono, but the stereo album versions are pretty limp) or songwriters themselves, they probably would have avoided the career decline that set in around 1966, but since then they've recorded only sporadically, done the occasional nostalgia show, and in general attracted very little attention.

But now the times have finally caught up with these doyens of what has come to be known as power pop, and the result—their first album in almost a decade—is something of a small miracle: a thoroughly modern, utterly captivating record that rocks like mad, retains the essence of their original sound, and in general is as fully (if not more) satisfying as anything churned out recently by the group's younger heirs. The album's high points include the hard-edged twelve-string chiming of Hearts in Her Eyes, an exquisite song given to the group by the Records' Will Birch and John Wicks; an appealingly bluesy performance of Mickey Jupp's oft-covered Switchboard Susan that may, as the liner notes suggest, be superior to the Nick Lowe version; and some excellent unfamiliar stuff from the likes of Bob Dylan and Tom Petty.

The Big Knockout, fittingly, is the single It's Too Late, which has "Jukebox Classic" written all over it. Glorious and densely textured, it has the goosebump-raising impact of all your favorite teen records of the Sixties rolled into one. Once you've heard it, you'll think you've known it all your life.

In short, this is amazing stuff, not least because it offers conclusive proof that, despite conventional wisdom, rock-and-roll is not the exclusive province of the very young. In fact, if the Searchers (pushing forty hard) can make an album as aggressive, ambitious, and up-to-date as any being done by kids half their age, then there's hope for the rest of us. This has to qualify as the greatest comeback since Buddy Holly's.

In their new identity, Ray, Goodman, and Brown are already making a name(s) for themselves with their solid hit single Special Lady, which boasts the kind of tune you find yourself singing snippets of on your way to work. The medley Thrill/Friends starts out up-tempo, talking about sexual excitement, and then segues into a sentimental, who'd-ever-think-pals-would-be-planning-their-own-wedding-day finish, complete with a spoken interlude by Goodman in the seminal style of the Ink Spots. Puppy-love excess—the hallmark of Fifties doo-wop—is gone from the current style, and it will probably be missed only by archivists. In its place is a romantic yet realistic attitude toward sex more palatable to grownups than the juvenile carnality of ubiquitous disco. RG&B's ability to mix past and present is evident not only in their singing—which is just wonderful—but in the disarming programming of the album as well. Side one opens with spoken dialogue not meant to be heard so much as overheard. Although this material has almost certainly been carefully rehearsed, the listener gets the impression that the mike was left open during the recording session between takes and studio chatter somehow wound up on the master tape. As side one progresses, it becomes clear that
this “accidental” intimacy was indeed no accident, since the rhythm track is deliberately faded out to bring up more of the conversation. The effect is convincing and the sentiments are real: “You got your note?” “Yeah, I got my note.” “You got your note?” “I’m straight—I been doing this for a long time.” “Get down, Billy Brown.” “Put some of that pretty tenor in there!” And so on.

After more than a decade together, RG&B obviously think of themselves as something more than just a vocal group; they seem more a kind of family firm with a rock-steady sense of tradition. This is not unusual among old established r- & b groups. After Curtis Mayfield left the Impressions, the remaining two members told me that they hoped there would always be an Impressions group playing somewhere after they’d retired, and the present Drifters, which contains only one original member, say that they are carrying on a tradition and keeping an honored name alive.

The production here (by Vincent Castellano) is excellent, and the arrangements (by Lou Toby) are constructed so that the rhythm and orchestral tracks defer to the singers—just as they should in the case of Ray, Goodman, and Brown. These guys know what they’re doing, and what they know and do is pure pleasure to hear.

—Joel Vance

RAY, GOODMAN & BROWN. Harry Ray, Al Goodman, Billy Brown (vocals); instrumental accompaniment. Inside of You; Special Lady; Slipped Away; The Way It Should Be; Treat Her Right; Thrill/Friends; Déjà Vu; Another Day. POLYDOR PD-1-6240 $7.98, © 8T1-6240 $7.98, © CT1-6240 $7.98.

The Melodies of Gene Parsons: Emotional Honesty Without Solemnity

try to keep reminding myself that life is desperate but not serious. Considering how I live, you’d think I’d remember it every time I look in a mirror, but in fact I forget it for months at a stretch. Gene Parsons’ new album “Melodies” on the Sierra/Briar label was the latest reminder, so I appreciate it for that as well as for other reasons. If you’d like an album that is emotionally honest and has no truck with cheap tricks or gimmickry—not to mention pumped-up solemnity—you might appreciate it too.

Parsons, a former Byrd, has a serviceable plain voice, but he sings with feeling, and in this case he sings only songs he obviously cares about. He also knows his way around; ordinary as his voice may be, when he overdubs harmonies he does it right. He and his helpers (I love Roger Bush’s way with the string bass) play with the same attitude—that the feeling the song is trying to express comes first—and I don’t have to tell you how rare that is.

The songs are a mix of unremarkable but sturdy new ones and a wacky and delightful selection of old ones, including Phil Ochs’ late and little-known My Kingdom for a Car, Bob Nolan’s classic tumbleweed yodeler, Way Out There, and Mickey Newbury’s 1969 throwaway that refuses to fade away, Why You Been Gone So Long. There are even a couple of instrumentals, in part to break up patterns (which they do beautifully) but also in part, I suspect, to further celebrate how nicely the instrumentals were going.

Throughout the thing, people like Greg Harris, Bush, and Parsons himself (especially on drums and the “string-bender” electric guitar he and the late Clarence White patented) repeatedly are right there. Again, look for the intangibles of mood and attitude behind...
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GENE PARSONS: Melodies. Gene Parsons (vocals, drums, guitar, bass, banjo); Albert Lee (guitar); Greg Harris (guitar, mandolin); Roger Bush (acoustic bass); other musicians. My Kingdom for a Car; Melodies from a Bird in Flyght; Won’t Last Long; Way Out There; Mama, Papa; Pastime; Hot Burrito #1; No Fire Tonight; Little Jewels; Why You Been Gone So Long. SIERRA/BRIAR SRS-8703 $7.98.

The Panocha Quartet: Another String Ensemble to Be Reckoned With

In the last dozen years or so we have come to know several important quartets made up of young string players in our own country and England—the Cleveland, Tokyo, Concord, Fitzwilliam, and others. Thus alerted, it seems incredible that we could have been unaware of so fine a foursome as the Panocha Quartet formed in Prague in 1968. First violinist Jiří Panocha and his three associates—Pavel Zejfart, second violin; Miroslav Sehnoutka, viola; Jaroslav Kulhan, cello—were students then. Even now they may not have reached the age of thirty, but they have been performing together for a dozen years and have developed an ensemble to be reckoned with, according to those who heard them during their little-publicized and so little-noticed American debut visit last fall. Now Supraphon has sent us a striking debut record, on which they perform Haydn’s Lark Quartet, Schubert’s Quartettsatz in C Minor, and Dvořák’s so-called “American” Quartet in F Major. The assortment may strike some discophiles as odd, for we are accustomed to having sets of complete Haydn opus groups, Schubert coupled with Schubert, etc. This, however, is the sort of mix we find in actual recital programs, and it serves to demonstrate the group’s proficiency in different areas of the repertoire.

These are all ingratiating, highly competitive performances—least surprising, perhaps, in the Dvořák, which is illumined by an individual and collective sweetness of tone as well as the seeming spontaneity born of idiomatic acquaintance. The Haydn is hardly less idiomatic, the sweetness in this case balanced by a wit and warmth of heart that are the more affecting for their subtlety and restraint. Balance, indeed, is evident in every sense—balance of moods, balance of the four voices in the actual playing—and to a degree possible only among musicians who have worked together so intimately that they have learned to breathe together. The Schubert is marginally less successful than the two longer works: here the fast passages go splendidly, but the slower ones tend to come off as just a little matter-of-fact, as if the performers were concerned about overdoing the sweetness. Still, the rhythmic firmness and the sheer lusciousness of the sound (the cello’s pizzicato in particular) make me eager to hear this group in Schubert’s full-length quartets and the big Quintet in C Major.

The recording, one of the best-sounding I’ve come across from Supraphon, was taped back in the spring of 1974. I can only wonder why it has taken so long to reach our shores and hope we shall not have to wait quite so long for the next one from this really first-rate ensemble. —Richard Freed

BEESON: Dr. Heidegger's Fountain of Youth. Carol Wilcox (soprano), Rachel Lockhart; Judith Christin (mezzo-soprano), Hannah Mooby; Grayson Hirst (tenor), Reuben Waterford; Robert Shiesley (bass-baritone), Dr. Heidegger; chamber orchestra, Thomas Martin cond. CRI SD 406 $7.95.

Performance: Very good
Recording: Very good

Jack Beeson is one of the most prolific and successful American opera composers, and no less than five of his seven operas have now been recorded. Sheldon Harnick, the librettist for this one, is a famous figure in the Broadway musical theater (Fiddler on the Roof, Fiorello, The Rothschilds). Dr. Heidegger's Fountain of Youth is based on a Hawthorne story about a flask of water from the Fountain of Youth. Old Dr. Heidegger tries the stuff out on some of his elderly friends, who not only instantly become fisticuffs. The precious elixir is knocked over and spilled, and the four friends lose their recovered youth and decide to go to Brazil in search of the Fountain of Youth. Carol Wilcox (soprano), Rachel Sanzova (soprano), Madeleine, Joachim Havard de la Montagne (organ); Elisabeth Havard de la Montagne (organ); Jacqueline Bender (harp); Chorus and Instrumental Ensemble of the Church of the Redeemer, New York City; conducted by the composer. Recorded with the Preservation Society of New Jersey and the Concert Artists Guild, Inc. STODDARD LINCOLN 07724).

Beeson's music is organized on a simple, effective premise: the music is twelve-tone until the elixir is quaffed, and then everything falls back into a youthful C Major. This has the effect of creating a rather dry and uninspiring first part succeeded by an engaging and extended musico-dramatic second part. Even after the four friends grow old again, the sound of C Major hangs on like a distant hope.

The cast here is excellent. There are some of the usual problems of American English vs. the high-class elocation of well-schooled opera singers, but in this case the discrepancy is perfectly suitable for these somewhat pretentious characters.

GOUNOD: Requiem. Claude Saneca, Eliane Durand, Françoise Laurent (sopranos); Nadine Ruthembourg (alto); Michel Martin (tenor); Michel Marret (bass); Elisabeth Havad de la Montagne (organ); Jacqueline Bender (harp); Chorus and Instrumental Ensemble of the Church of the Madeleine, Joachim Havad de la Montagne (organ). Kubelik's Deutsche Grammophon disc remains for me the best of the Czech-oriented readings, while Karajan's is among the best of those in a more cosmopolitan tradition.

These two performances represent the polar opposites of Dvořák interpretation. I wonder if Rostropovich has not confused the New World's opening pages with those of Tchaikovsky's Pathétique, so lugubrious and slow-paced is his treatment. In the allegro, he makes the Swing Low, Sweet Chariot tune a reverie rather than emphasizing its buoyant tunefulness. The same deliberateness prevails in the largo, which here runs a full three minutes longer than in Zdeněk Kolle's reading and almost five minutes more than in Toscanini's. Things are more normally paced in the two final movements, though Rostropovich adopts an unusually elongated phrasing for the finale's main theme. The recorded sound is expansive and brilliant.

Following Rostropovich's exaggerated handling of the music, Kolle's seems a stiff antidote. The reading is no-nonsense, straightforward, and sinewy, without the first-movement exposition great that Rostropovich favors. The sons—1973 vintage—are unusually fine in richness, felicity of detail, and agreeable ambiance. The Slovak Philharmonic is not quite the equal of the world-class orchestras that have recorded this music, however, nor is Kolle's conducting any great shakes when it comes to the score's poetic nuances.

Explanation of symbols:
- open-reel stereo tape
- eight-track stereo cartridge
- stereo cassette
- quadraphonic disc
- digital-master recording
- direct-to-disc

Monophonic recordings are indicated by the symbol ®

The first listing is the one reviewed; other formats, if available, follow it.
with the Church of the Madeleine in Paris—it was performed there on the first anniversary of the composer’s death—and it was thus appropriately chosen for revival there. But even the best efforts of these schooled performers cannot lift this music out of its intense gloom.

F.S.

**HANDEL: Alexander’s Feast.** Helen Donath, Sally Burgess (sopranos); Robert Tear (tenor); Thomas Allen (bass); Choir of King’s College, Cambridge; English Chamber Orchestra, Philip Ledger cond. ANGEL SZB-3874 two discs $17.96.

Performance: Brave
Recording: Resonant

Although Alexander’s Feast has moments of supreme beauty, the work as a whole seems to be more of a grand gesture than one of consistent musical depth. It’s effective, yes, but there is a great deal of bustling formula writing. Philip Ledger’s reading fits the music very well: brave and full of heroic thrashing. Both chorus and orchestra make for splendid effects, but there is nothing remarkable about this performance.

The soloists, too, fit into this scheme. Helen Donath’s voice is well focused and her coloratura agile; Robert Tear sings with dramatic intent; Thomas Allen’s lusty voice brings rage to the battle music; and Sally Burgess’ small bit at the end is well done. But again, there is nothing really remarkable, no moments of great subtlety or inspiration. What would undoubtedly come off in public as an exciting performance of an exciting work does not quite make the same impression when it is heard at home through loudspeakers.

S.Z.

**HAYDN: The Creation.** Heather Harper (soprano); Robert Tear (tenor); John Shirley-Quirk (bass); Choir of King’s College, Cambridge; Academy of St. Martin-in-the-Fields, Sir David Willcocks cond. ARABESQUE 8039-2 two discs $13.96.

Performance: Fine
Recording: Too reverberant

This recording, issued in England by HMV about six years ago but just now appearing here, is one of only two Creations currently available that are sung in English by being Frederic Waldman’s (with Judith Raskin, John McCollum, Chester Watson, and the Musica Aeterna Chorus and Orchestra, on MCA 2-10001). Both are really fine performances, but Wilcock’s has a stronger trio of soloists—conspicuously stronger in the case of his bass, John Shirley-Quirk—to offset the slightly more persuasive choral singing in the Waldman set. What may prove to be a more decisive factor for many listeners is sound quality. The Waldman set, originally released on U.S. Decca about fifteen years ago, sounds clean and well balanced, if a little dryish, but the new set is afflicted with a reverberance that works against the performance. While one may enjoy cavernous effects in massive early choral works designed for such acoustic settings, such as the Charpentier Te Deum, the space of King’s College Chapel serve to muddy things here, and this apparently has affected the pacing as well, for the conductor has to wait for a sound to die away before he can proceed (or else allow sounds to overlap). If I were determined to have The Creation in English, I think I might be a little happier with the older recording, but one of the German versions is a safer bet all around. With Münchinger’s London set gone now, my choice among the remaining ones would have to be Karajan’s (Deutsche Grammophon 2707 044).

R.F.

**HAYDN: String Quartet in D Major, Op. 64, No. 5** (see Best of the Month, page 81)

**RECORDING OF SPECIAL MERIT**

**LISZT: Two Concert Studies (G. 145): Waldsraschaffen; Gnomenreigen.** Three Concert Studies (G. 144); II Lamento; La Leggierezza; Un Sospiro; Rémiscences de Don Juan; Mozart (G. 418). Jorge Bolet (piano), L’OISEAU-LYRE DSLO 41 $8.98, © KDSLIC 41 $8.98.

Performance: Marvelous
Recording: Realistic

About a dozen years ago Vanguard issued a Liszt record (VCS-10041) on which Earl Wild plays the longest and shortest of the pieces in Jorge Bolet’s new collection—the Don Juan Fantasy and Gnomenreigen. It is a marvellous record (Wild’s program is filled out with the Mephisto Polka, the Mephisto Waltz, and paraphrases on themes from Gounod’s Faust and Donizetti’s Rob e rt le Diable), but so is this new one. Surely Wild’s flair for this material is matched only by Bolet’s, and Bolet’s is matched only by Wild’s. If I had to choose between the two records, though, I would choose Bolet’s, for his is the more substantial program. It is a great advantage to have the two sets of concert studies intact, especially when all five pieces are played with such sensitive regard for the composer’s every wish (including, it need hardly be said, all the brilliance one could imagine). The seamless dramatic flow of the Don Juan Fantasy, the delicacy of the coloring in Waldsraschaffen, the awesome mystery in II Lamento, the all but incredible combination of spontaneity and polish which enables Bolet to leave us aware, throughout both sides, of Liszt’s inventiveness rather than the challenges he created for latter-day pianists—all these make this a record to treasure, no matter how many duplications it may represent.

R.F.

**RECORDING OF SPECIAL MERIT**

**MAHLER: Symphony No. 4, in G Major.** Edith Mathis (soprano); Berlin Philharmonic Orchestra, Sir Georg Solti cond. ANGEL ANL 9030-2 two discs $13.96.

Performance: Excellent
Recording: Plump

This recording, made in London’s Festival Hall in 1966, is a major contribution to the Mahler repertory. The balance is excellent, the clarity admirable, the musicianship virtuoso, and the recording itself has the grandeur befitting Mahler’s opus. The performances of the soloists are distinguished as are those of the orchestra. One should not overlook the contribution to the recording of the late conductor Sir Georg Solti, who had helped Mahler to mature as a composer and who more than any other conductor has fostered the idea that Mahler’s music is a symphony of the spirit.

F.S.

The text of Blaues Gras, for which an English translation credited to Ursula Eastman is supplied, is by an unknown author who was obviously well versed not only in the German of his own land but in the vernacular of the eighteenth-century Southland as well. Such passages as the journey up Cripple Creek (“Go I now up Cripple Creek”) and the intermittent motif of hankering—for the old Kentucky home, for the charm of Savannah, Georgia, for “blue grass and green sky”—inspired the composer to heights of Baroque invention that must be heard in order to be disbelieved. And that is not all. P. D. Q.’s No-Nonette, “one of the earliest pieces written during the Soused Period,” makes remarkable use of a doggie pull toy, a crying doll, an ice pick, two inflated balloons, and the jawbone of an ass as well as conventional instruments of the period. The concert concludes with a Baroque singing commercial for a dishpan-hands cure that was peddled by P. D. Q. when he was traveling over much of Europe “in search of a fast pfennig.” The ornamentation of the treasure-house of music that has suffered through these discoveries is beyond calculation, and the performances are no less incredible.

—Paul Kresh
In the setting forth of the line, texture, nuance, and detail of Mahler’s delectable Fourth Symphony, this latest in Herbert von Karajan’s Mahler cycle for DG approaches perfection. From the very opening pages, there is no doubt that every element is under total control. The end result may lack the humanity and spontaneity of Previn’s remarkable realization with the Pittsburgh Symphony for Angel, but the polish and effortless agility displayed by Karajan’s Philharmonikers are enthralling. Still, I think Previn has the interpretive edge in the second movement, with its scordatura solo violin, for Karajan tends to gloss over the sinister undertones and the special harmonic ambiance.

Like Previn, Karajan excels in the great slow movement, but in a very different way. Where Previn searches out the special character of each variation, Karajan, adopting a very jazz-like approach, makes big leaps and an extraordinarily wide dynamic range. Only in the 1946 Bruno Walter recording, still available on Odyssey, have I heard the mighty outburst toward the close sound forth with such apocalyptic intensity. And Karajan’s closing niente is almost literally breath-taking, a modern-day, too, with the Berlin Philharmonic string playing of a quality that brings back memories of the Philadelphia and Boston orchestras of the Thirties. Karajan’s reading of the “Himmelsfreuden” finale with its soprano solo is more than usually fascinating in that he takes a meditative, even nostalgic approach rather than giving it the open, child-like naiveté one usually expects. Edith Mathis, in purest voice, achieves an almost disembodied quality here, and the final stanza of the song takes on the feeling of epilogue rather than fulfillment—oddly moving and provocative, if not quite as rich as those on Previn’s London-recorded disc, very fine for myself, I would want both recordings.

RECORDER OF SPECIAL MERIT

MENDELSOHN: Die Erste Walpurgisnacht, Op. 60, Horst Laubenthal (tenor); Tom Krause (baritone); Alfred Shramek (bass); Margarita Lilowa (contralto); Chorus of the Vienna Singverein; Vienna Philharmonic Orchestra, Christoph von Dohnányi cond. Symphony No. 2, In B-flat Major, Op. 52 (“Losbegasen”), Sona Ghazarshian (soprano); Werner Krenn (tenor); Chorus of the Vienna State Opera; Vienna Philharmonic Orchestra, Christoph von Dohnányi cond. LONDON CSA 2250 two discs $17.98.

Performance: Revelatory

Recording: Splendid

As I suspected after hearing the recent digitally mastered recording of the Italian Symphony on London, we have in conductor Christoph von Dohnányi someone with a real flair for Mendelssohn. From the most magical fairy scenes to the grandest Victorian ceremony, Dohnányi brings this music to life.

Mendelssohn was in his early twenties when he set Goethe’s ballad evoking the survival of Druid rites amid an atmosphere of Christian hegemony. For Die Erste Walpurgisnacht he produced a marvelously fresh Spring Chorus, a stirring episode full of choral antiphony in which the Druids vow to hold their ceremony, and some enchanting, dramatic witch-goblin music—a sinister quickstep merging into a diabolic dance—all magnificently scored. If the rather conventional closing chorus is a bit of a letdown, everything that comes before it is topnotch.

The Symphony No. 2 is actually a symphony-cantata that Mendelssohn completed, almost a decade after he composed Die Erste Walpurgisnacht, for the four hundredth anniversary of printer Johannes Gutenberg. The sinfonia proper is in three connected movements, beginning with a proclamatory trombone motto that threads its way in varying guises and fragmentation through much of what follows. For me the high point of the orchestral section is the exquisite Allegretto intermezzo episode. But the greater part of the Lobgesang (Hymn of Praise) is the cantata section, composed on Biblical texts. It contains a
wealth of fine writing for both chorus and soloists, individually and in duet, and the music is grandly ceremonial. The most effective moment in this part is the dramatic tenor recitative, "We cried in the darkness and said: Watchman, is the night nigh spent?", which leads into the stirring "Let us put on the armor of light" chorus. Brahms must have had Mendelssohn's use of timpani pedal in mind when he set down the "Souls of the Righteous" episode in the German Requiem.

The Lobgesang is a little less than a perfect masterpiece, but Dohnányi, with the help of first-rate soloists, fine choruses, a superb orchestra, and rich, spacious recorded sound, makes this and its youthful companion piece convincing and often stirring experiences. London's production team deserves extra credit for the effective handling of the all-important organ timbre in the cantata section of the Lobgesang. All told, a most recommendable album. D.H.

MOZART: La Clemenza di Tito. Peter Schreier (tenor), Titus Vespasianus; Julia Varady (soprano), Vitella; Edith Mathis (soprano), Servilia; Teresa Berganza (mezzo-soprano), Sextus; Marga Schimpl (mezzo-soprano), Annius; Theo Adam (bass), Publius. Leipzig Radio Chorus; Dresden State Orchestra, Karl Böhm cond. Deutsche Grammophon 2709 092 three discs $29.94, © 3371 049 $29.94.

Performance: Good
Recording: Excellent

Mozart's last opera has come in for a thorough re-examination during the past two decades with results for which we can all be grateful. The formulas of the old-fashioned opera seria no longer blind us to the magnificent sweep of this music, the rich melodic wealth and adventurous harmonic imagination of this final burst of Mozart's operatic genius. In the right hands, La Clemenza di Tito emerges as a vital and exciting masterpiece.

Fortunately, its recordings do the opera eminent justice. The earlier London OSA 1387 (István Kertész conducting, 1968) and Philips 6703 079 (Colin Davis, 1978) are highly recommended, and so is DG's new version under Karl Böhm, though I have more reservations about this one than about its predecessors. Böhm conducts with his customary vigor and involvement at comfortable and logically related (if at times too deliberate) tempos. His performance is rather generalized, however, not always alert enough to reflect the emotional ups and downs of the action.

The singing is good, at times exceptionally so. The role of Vitella, with its spectacular extension from low G to high D, demands almost too much from its interpreter. As a rule, it lies more comfortably for mezzos, and it was sung extremely well by Maria Casula (London) and Janet Baker (Philips). Although DG's Julia Varady is a soprano, she has no trouble encompassing all the notes; moreover, she is an intelligent and musical singer who knows how to emphasize Vitella's driven, neurotic character with her tense, at times breathless delivery. Teresa Berganza is the Sextus, repeating her performance on the London version. Her tones are less sumptuous now, but she

(Continued on page 88)
According to my Irish great-grandmother, who emigrated to the New World at the age of sixteen, "If Ireland gave no more to the world than Jack McCormack, that is quite enough." Quite enough indeed, for it is a fact that since John McCormack died in 1945 we have not had any singer, "Irish tenor" or otherwise, with his power to inspire, unmixed, the admiration of the entire musical world.

The McCormack mantle was trimmed down and recut in an effort to make fit his pupil Christie Lynch, but it soon slipped from those shoulders. Dennis Morgan was only four or five and later appearing with such singers as Bea Lillie (!) and Bing Crosby on the shows of Fred Allen and Paul Whiteman.

After getting his B.A. from New York's Hunter College and his M.A. from Juilliard, he taught at the Manhattan School of Music and at Hunter, continued to study voice, continued to perform (sometimes as a countertenor). His solo recording career was launched in 1976 with "When You and I Were Young, Maggie" (RCA ARL-1698, reviewed in November 1976 Stereo Review), followed by "I Hear You Calling clear, high tenor voice, precise diction, an innate musicality, a talent for producing full, open vowels that gives the lie to any claim that English is not a singable language, just a hint of a brogue (mostly around the "r"), a faithful of idiomatic appoggiaturas and other musical ornaments, and, especially, an instinctive realization that behind the music, beyond the words, lies another music altogether, that of the ancient Gaelic language.

I suggested this to White recently, and he agreed that it is indeed true, that some inner atavistic impulse often dictates a subtle shift of tonal emphasis, an imperceptible quickening of a rhythm, a slight alteration of a phrase. The album is full of examples, but a particularly good one is the reading given the word "scattered" in the line "the children are scattered/The old folk are gone" in the song The Old House. The proper reading cannot be garnered from the music as written, for it places the two syllables on two equal notes; White compresses them and seems almost to pile them on one—a small thing, but crucial.

The Old House is a typically melancholy Irish song bound to pluck at the heartstrings, especially in those disposed to remember, with a pang, a happy childhood. But it is more too, for the "old house" is a metaphor for Ireland itself, which practical-minded emigrants in the last half of the nineteenth century, probably as many as five million of her children being scattered across the globe from Canada to Argentina and beyond. Little wonder that the country's songs are so haunted by farewells ("'tis you must go/And I must bide"). That may also be why it is so difficult to resist the persuasive tug of sympathetic patriotism that some of these songs inspire—Balfie's Killarney, Loughborough's Ireland, Mother Ireland, and Claribel's Come Back to Erin being particularly potent examples here.

Perhaps the most impressive song, both in its composition and its performance, is My Lagan Love. It is described in the notes as an "Ulster Air," with words by Seosamh MacCathmhoil. Its modal strains sound old as its name ("Lagan" is probably Christian in origin) and seem to bear a message from the other side of the beyond. McCormack did not sing in Gaelic, but I would like to hear White, for my grandmother's sake, try it again some time in the future, with a more authentic arrangement.

It is something of a mystery why the Irish genius for song no longer produces world-class tenors in the McCormack mold—something to do with great suffering being needed to produce great art, perhaps, though the Battle of the Boyne does seem to be going on still some three hundred years later. At any rate, Ireland is not too foolishly proud to import a colonial boy to do the job. According to the Irish Examiner, commenting on a concert in February at Cork's Connolly Hall, "Robert White is probably the finest living example of a traditional Irish tenor." Who would know better?

What it takes to make a traditional Irish tenor is, I think, no mystery at all: a sweet, American-born and classically trained, White is the son of Joseph White, the "Silver-masked Tenor" of mid-Twenties radio (and Victor records—be is listed in my 1930 catalog singing The Harp That Once Through Tara's Halls, Kathleen Mavourneen, Little Bit of Heaven, and Mother Machree). Young White therefore came to show-biz early, singing on the radio when

Irish Tenor Robert White: The Colonial Boy Returns

played around for a while with the idea of being a singer (we have the film My Wild Irish Rose and others to prove it), but the opportunity to be a lightly comic (Cary Grant did it better) Hollywood leading man was too tempting, and he was lost to music. Dennis Day had a slender lyric instrument that might have been bent to the require-ments of the repertoire, but he was really a pop singer with hardly enough Hibemian feeling to stretch over the length of Danny Boy. And so we've been out of truly accomplished Irish tenors for some time now—until Robert White came along, that is.

American-born and classically trained, White is the son of Joseph White, the "Silver-masked Tenor" of mid-Twenties radio (and Victor records—he is listed in my 1930 catalog singing The Harp That Once Through Tara's Halls, Kathleen Mavourneen, Little Bit of Heaven, and Mother Machree). Young White therefore came to show-biz early, singing on the radio when

Irish Tenor Robert White: The Colonial Boy Returns
ple, in Smetana's *Two Widows*). But he can be heard also in rather more accessible material, a collection of Irish, English, Scottish, and Welsh ballads arranged by that popular chart-master Ludwig van Beethoven. I knew that I was fond of this repertoire, but I didn't know just how fond until I went to my shelves and came up with three more: Dietrich Fischer-Dieskau and Victoria de los Angeles in an album of duets (Angel 35963), Fischer-Dieskau with Edith Mathis and Alexander Young (Deutsche Grammophon 2530 262), and Fischer-Dieskau by himself (DG 138 706). I promptly wallowed in them all, then returned to White's album to compare a couple of songs: *Come Draw We Round a Cheerful Ring* and *The Pulse of an Irishman*. I have concluded (from *The Pulse*) that baritone Fischer-Dieskau will never make an Irish tenor; you wouldn't even know he was singing in English, though diction is but part of the problem—the song is simply taken much too fast, at a flagrantly virtuosic clip. The same is true of *Come Draw We*, too fast not only for Fischer-Dieskau (he sings in German) but for wizard accompanist Gerald Moore (though the strings manage well enough).

The larger difference, however, is an idiomatic one: White sings with a straightforward folk (Irish, of course) charm, uninhibited by the shade of Beethoven and confident that the strength and beauty of the songs can make their points without virtuosic emphasis. Which is not to say that the Fischer-Dieskau versions do not have their own recommendations, but if I had to choose (I don't) between favoring Beethoven and favoring the folk, the folk would win. White is splendidly accompanied on the album; I was particularly taken with the playing of Yo-Yo Ma (I'm a sucker for the cel-lo) and pianist Samuel Sanders—who, speaking as we were of mantles, may have inherited that of Gerald Moore.

—William Anderson

ROBERT WHITE: *Danny Boy*. Robert White (tenor); National Philharmonic, Charles Gerhardt cond. *The Old House*; *Trottin' to the Fair*; *The Harp That Once Thro' Tara's Halls*; *She Moved Through the Fair*; *The Bard of Armagh*; *The Fairy Tree*; *Ireland, Mother Ireland*; *Danny Boy*; *The Next Market Day*; *Believe Me, if All Those Endearing Young Charms*; *My Lagan Love*; *Killarney*; *The Irish Emigrant*; *Come Back to Erin*. RCA ARL1-3442 $8.98, © ARKI-3442 $8.98.

BEETHOVEN: *Scottish, English, Irish, and Welsh Songs*. Robert White (tenor); Ani Kavafian (violin); Yo-Yo Ma (cello); Samuel Sanders (piano). *When Mortals All to Rest Retire*; *Tis Sunshine at Last*; *The Kiss, Dear Maid, Thy Lip Has Left*; *Cease Your Funning*; *The Return to Ulster, O Mary, at Thy Window Be, Sally in Our Alley, Cupid's Kindness*; *The Pulse of an Irishman*; *On the Massacre of Glencoe*; *Our Harp of Erin*; *Come Draw We Round the Cheerful Ring*; *The Soldier*; *The British Light Dragoons*; *The Vale of Clywd*; *Good Night*. RCA ARL1-3417 $8.98.

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CIRCLE NO. 8 ON READER SERVICE CARD
is always dramatically apt and her technique is virtuosic. Edith Mathis shines in Servilia's relatively small role; Marga Schiml is a bit too Germanic in her recitatives but does her aria ("Torna di Tito al lato") very well.

As the Emperor Titus, Peter Schreier combines solid technique with regal authority in the arias, but, alas, this opera abounds in recitatives, where his Italian is simply too grating for aural comfort. I therefore prefer the smoother overall achievements of Stuart Burrows (Philips) and Werner Krenn (London). Though Theo Adam is authoritative in the small role of Publius, his sound is un-Mozartian and it is evident that he must have learned his Italian from the same coach Schreier did.

DG's recorded sound is excellent, the album presentation once again exemplary. As for textual fidelity, Böhm permits a liberal approach to appoggiaturas and makes several cuts in the recitatives—not to the detriment of the overall result.

G.J.

MOZART: Piano Concertos Nos. 18-27
(see Going on Record, page 54)

MOZART: Symphonies
(see Speaking of Music, page 6; Best of the Month, page 72)

RECORDING OF SPECIAL MERIT

MOZART: Violin Concerto No. 1, in B-flat Major (K. 207); Serenade No. 3, in D Major (K. 185). Thomas Zehetmair (violin); Salzburg Mozarteum Orchestra, Leopold Hager cond. TELEFUNKEN 6.42537 AW $8.98, © 4.42537 CX $8.98.

Performance: Stylish Recording: Very good

Last year Deutsche Grammophon introduced us to Anne-Sophie Mutter, the young German violinist who recorded Mozart's Third and Fifth Concertos with Karajan and the Berlin Philharmonic (2531) (49) at the age of fourteen and subsequently confirmed the fine impression she made in that recording with appearances in New York and Washington. Now Telefunken brings us the debut record of another exceptional young violinist, also playing Mozart. Thomas Zehetmair, born in Salzburg in 1961, made his home-town debut three years ago in the Salzburg Festival and has since performed in several other European centers and received support from numerous state and private foundations, among them the Mozarteum International Foundation, which bought him a Guadagnini and sponsored this recording. From the sound of it, he, like Mutter, is not merely a youngster who can play well, but a musician with mature insights as well as fine technical equipment and a big, pure tone (if not quite as ripe as Mutter's). He plays with style, spirit, and an all-around persuasive feeling for the Mozart idiom—at about the same age as Mozart's at the time these works were composed. He performs in only three of the seven movements of the big D Major Serenade—the two that constitute a miniature concerto (II and III) and the second minuet (VI)—but has supplied his own tasteful cadenza for the first of these, as he has for the concerto. Hager sets off the seldom-heard serenade a little less brightly than Willi Boskovsky (London STS-15171), but in an agreeably warmhearted frame; in the concerto he provides impeccable partnership, and Telefunken has come through with very good sound, also characterized more by warmth than by brightness. R.F.

PUCCINI: Suor Angelica. Joan Sutherland (soprano), Suor Angelica; Christa Ludwig (mezzo-soprano), the Princess; Anne Collins (mezzo-soprano), Mother Superior; Elizabeth Connell (mezzo-soprano), Sister Monica; Enid Hartle (mezzo-soprano), Mistress of the Novices; Isobel Buchanan (soprano), Suor Genovia; Marie McLaughlin (soprano), Suor Osmina; others. London Opera Chorus; Finchley Children's Music Group; National Philharmonic Orchestra, Richard Bonynge cond. LONDON OSA-1173 $8.98, © OSA5-1173 $8.98.

Performance: Well conducted Recording: Good

Suor Angelica is not my favorite Puccini opera, and, judging from the paucity of performances and recordings, it is not other people's favorite either. Actually, the wonder is that it is done at all. Not only is this an opera about a convent full of unbearably cute nuns, but it ends with the most mawkish moment in all of opera: Suor Angelica's dead infant son surrounded by the hosts of

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heaven welcoming his mother who has just killed herself and ought to be on her way to eternal damnation. Well, that’s what it says in the libretto, that’s what Puccini wrote music for, and I’ve actually seen it done on the stage.

Puccini, of course, was a high-living, liberal free-thinker who no more believed in this claptrap than in Shintoism. So there is inevitably an air of insincerity and hokiness about Suor Angelica. But Puccini wasn’t the only good theater man to exploit the drama of the Catholic church for effect. Nineteenth-century and turn-of-the-century opera composers and impresarios, beginning with Meyerbeer and including Massenet, loved to put religious spectacles on the stage in a manner that seems to us entirely sacrilegious.

But Joan Sutherland as Suor Angelica? And Christa Ludwig as the terrible Auntie? What are they doing here? This is an odd, very un-Italian recording with fresh, young, vibrato-less English female voices in sharp contrast to the mature, high-culture sound of Sutherland and Ludwig. In the case of Auntie Princess, the one character from outside the convent and definitely the heavy, the contrast is appropriate. But most of the time I am happier with the innocent and pure tone of Isobel Buchanan than with Sutherland’s pushed sound. She catches fire, but she is not really the mistress of the long, rising, passionate verismo line. It is understandable that, as the highs and the technical control begin to go, she would choose a lower, “easier” repertoire. But the verismo repertoire is easy only in a superficial sense. I do not mean to imply that Sutherland’s singing is without merit—her fans will probably enjoy her in these new and melodramatic surroundings—but only that a unified conception of a role, a difficult one for contemporary audiences, is not present.

A feature of this recording that surprised me was Richard Bonynge’s conducting. The shaping of this work is controlled almost entirely by the conductor, and without sensitivity and skill the delicate balance between dramatic dialogue and impassioned line (much of the latter is in the orchestra anyhow) falls apart. Not here. Bonynge’s success with a work in which larger musical issues—not just a subservience to one or more singing superstars—count for so much is an indication of how he has developed over the years.

The sound is excellent, but the English translation in the libretto is notably inaccurate and misleading.

E.S.

D. SCARLATTI: Thirty Essercizi per Cembalo (see Best of the Month, page 74)

SCHUBERT: Quartettssatz in C Minor (see Best of the Month, page 81)

SCHUBERT/LISZT: Der Leiermann; Täuschung; Die Junge Nonne; Ave Maria; Der Erlkönig; Wohin? (see SCHUMANN)

RECORDING OF SPECIAL MERIT

SCHUMANN: Piano Sonata No. 2, in G Minor, Op. 22; Fantasiestücke, Op. 12, Nos. 3 (Warum?) and 4 (Grillen). SCHUBERT/LISZT: Der Leiermann; Täuschung; Die

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CIRCLE NO. 12 ON READER SERVICE CARD

89
Beethoven: The Original "Leonore"

Vienna, 1801

Beethoven's Leonore? Surely somebody has got that wrong, haven't they?

Beethoven wrote his opera Leonore between January 1804 and the summer of the following year. It opened in the fall of 1805 at the Theater an der Wien—and flopped. An attempt was made to revise and revise it the next season, but the revised version also failed. Finally, a new edition was prepared in 1814, and it is that version which passed acceptance lightly, and revisions abound, even for many of the standards. But who is to say whether a composer's revisions represent his final thoughts on the subject—merely the exigencies of working under pressure in the theater?

Perhaps it is some kind of extravagance to record discarded ideas on a subject—even by so great a master as Beethoven. Or perhaps this is the "authentic" opera before commercial interests intervened. Well, not quite either. Leonore is, for anyone already familiar with Fidelio, an extraordinary document that throws light on the thinking processes of a great musical mind. In comparing Leonore with Fidelio, it becomes perfectly clear that Beethoven, never one to accept criticism lightly, took the revision quite seriously, transforming a stock eighteenth-century melodrama into a work of music theater.

It is important to realize that this work was written by Beethoven not as a grand opera but in the form of a popular musical play; there is no doubt that he wanted to reach a popular audience rather than just the sophisticated musical public. With this in mind we can understand why he started out in the vein of a Viennese musical comedy and why he kept revising the work in the direction of tightness and dramatic thrust.

At first the changes don't seem all that dramatic, but the old eighteenth-century symmetries altered in favor of something more dramatic, less balanced, more directional. In Leonore the Prisoners' Chorus is followed by an old-fashioned thud-and-blunder scene for villain with chorus. The big arias of Leonore and Florestan are relatively modest in dimension compared with their later transformations. But Beethoven made the biggest changes at the end. On Leonore the ecstatic duet between the lovers has not yet achieved the tremendous impetus that it has in Fidelio; with its conventional recitative and endless repetitions, it is not yet the entirely original and breathless moment that it was to become. Instead of switching scenes at the end, Don Fernando, his entire retinue, and all the minor characters crowd right into the dungeon to sing a number mostly different from the one with which we are familiar. There is a lot to be said for this continuity of scene. For one thing, it does not offer meddling conductors any chances to insert Leonore Overtures in between (the overture at the top here is the Leonore No. 2). For another, it avoids that awkward tacked-on feeling that is, for me, the greatest weakness of the final version.

Certainly I would not put this recording on anybody's required list. The performances are solid without being especially inspired. These singers—all well known—exemplify the strengths of German opera production, which only occasionally reaches vocal, musical, and dramatic heights but nearly always embodies the solid, middle-class values of German culture. Yet the presence of an American—Richard Cassilly—in the cast is characteristic of Central European operatic performance.

But what this recording provides is, above all, insight—a series of insights, really—into the creative process, something only available in music only to scholars studying sketches. We are so used to thinking of the music of the classical masters as immutable, inevitable, made in heaven, that it comes as a shock to hear it another way—to realize that it was conceived differently and might actually have turned into another kind of artistic inevitability than the one we know. Fascinating.

—Eric Salzman

Beethoven: Leonore. Edda Moser (soprano), Leonore; Helen Donath (soprano), Marzelline; Richard Cassilly (tenor), Florestan; Karl Ridderbusch (bass), Rocco; Theo Adam (baritone), Don Pizarro; Eberhard Büchner (tenor), Jacquinio; Hermann-Christian Pollster (bass), Don Fernando; Rainer Goldberg (tenor), First Prisoner; Siegfried Lorenz (bass), Second Prisoner. Leipzig Radio Chorus, Staatskapelle Dresden, Herbert Blomstedt cond. Arabesque 8043-3L three discs $20.94.
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Strange as it may seem, this is the first Tennstedt moves to light-handed exuberance in a performance of the finale that ranks among the best I have heard. The Konzertstück, as I noted in my review of the Barenboim/Chicago Symphony recording, provides a real workout for any orchestral horn section, and the Berliners, like their Chicago counterparts, are gloriously equal to it. The final pages have a terrific zest. The sound throughout is just fine, and there is an admirable balance between the horns and orchestra in Op. 86. D.H.


Performance: Needs more verve
Recording: Excellent
There are nine or so recordings of each of these works is lacking much of the time. Michael Tilson Thomas with the Boston Symphony has more to offer in No. 1. Dzidzio’s remains my favorite “Little Russian,” but it is unavailable as a separate disc. I like Maazel’s vital and gutsy reading of the Polish Symphony for London with the Vienna Philharmonic, even though the otherwise excellent sound is troubled by obtrusive low-level hum. I would definitely recommend consideration of the Igor Markevitch cycle to become separately available, with the Marche Slave, recorded at a later session, thrown in by way of bonus. Mehta’s way with the music is dynamic, even a bit brusque, thereby depriving the score of some of its innate poetic element. The finale has a nice rhythmic “spring” here, but the percussion is a bit on the slam-bang side. The recording is not a personal favorite, like many of Mehta’s other Los Angeles discs. Marche Slave gets an excellent reading and also fares better sonically: there is more air around the full-orchestra episodes and the overall balance gains accordingly.

The Deutsche Grammophon package marks the completion by Herbert von Karajan and the Berlin Philharmonic of their current traversal of the six Tchaikovsky symphonies. I wish I could summon up more enthusiasm for Karajan’s readings of the early symphonies. The lyrical parts come off beautifully, with all the refinements of balance and color that we have come to expect from this maestro and his marvelous orchestra, but the rhythmic verve inherent in the balletic movements of these works is lacking much of the time.

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D.H.

RECORDING OF SPECIAL MERIT

TCHAIKOVSKY: Symphony No. 4, in F Minor, Op. 36. Philharmonia Orchestra, Vladimir Ashkenazy cond. LONDON CS 7144 $8.98, © CS5 7144 $8.98.

Performance: Passionately committed
Recording: Very good

Vladimir Ashkenazy’s reading of the Tchaikovsky Fourth Symphony follows hard upon the heels of the one by Bernard Haitink. Both readings are outstanding, but they differ sharply in character: Haitink is more architecturally minded but does not in any way slight the drama inherent in the music—indeed, the drama gains, if anything, from his approach. Ashkenazy by no means ignores the architecture, but he is keenly attuned to the special kind of nervousity in Tchaikovsky’s musical speech, and this is what gives his recorded performance its special character. The Fate motive, as it should, blares mercilessly at the opening, and the subsequent ebb and flow in the first movement reflect unerringly the polarities of blissful escapism and uncontrollable terror. Like Haitink, Ashkenazy does wonderfully different things with the slow movement—I don’t think I’ve ever heard such pathos in the second strain of the main theme—but it’s all in perfect taste. The famous pizzicato movement sails along brilliantly, with an extra dash of color in the drunken-muzhik central episode. The finale is properly wild, yet firmly controlled. Special plaudits should go to the first-chair clarinet of the Philharmonia for exquisitely sensitive work in the opening movement.

As with earlier recordings in Ashkenazy’s Tchaikovsky cycle, London’s sound is impressively spacious in both depth and breadth, if not as remarkably well focused or quite as full-bodied as that accorded Haitink by Philips. In any event, I’m keeping both records.

D.H.

RECORDING OF SPECIAL MERIT


Performance: Rich, extroverted
Recording: Very good

Three of the two dozen recordings of the Tchaikovsky violin concerto currently listed in Schwan happen to feature Itzhak Perlman—he recorded it in 1963, 1968, and 1979—and it is fascinating to compare them, particularly his 1963 “whiz kid” performance with this latest one. The exuberant, extroverted character is constant in both, as is the unerring violinistic technique, but, as the slower timings for the 1979 recording imply, Perlman has developed a more imaginative fantasy in working with the concerto’s elaborative elements. The result is a reading that offers maximum contrast between the virtuosic elements on the one hand and lyrical fantasy on the other. In the slow movement and in the rather slight Sérénade Mélancolique that comes as

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Tracey’s instrument is the most interesting, being a double virginal made by John Koster after a 1591 original by Hans Rückers. The “mother” instrument houses a “child” pitched an octave higher, with the smaller keyboard placed above the larger; they can be played either separately or together, affording a variety of registrations. Even more variety is introduced by a stop smaller keyboard placed above the larger; they can be played either separately or together, affording a variety of registrations. Even more variety is introduced by a stop

William Randall’s transcription of one of Dowland’s Lachrimae are also brought out. Indeed, each piece is individually interpreted in readings unencumbered by the almost mechanical mannerisms of what often passes for “authentic performance practice” today. And the recording itself is superb.

For his “The English Virginalists, Volume I,” Joseph Payne uses two harpsichords built by Frank Hubbard, one a rather nasal-sounding affair after an original by Hans Moermons and the other a mid-eighteenth-century-style instrument after one by the obscure Baker Harris. The performances display an arresting musical freedom as Payne lingers on the passage work and savors the harmonic piquancies of Gibbons’ compositions. Unfortunately, the approach is so similar for each piece that they all come out sounding the same. A work such as The Woods So Wild cries out for brilliance in its many figurations, and to caress them all equally leads only to listener frustration. The several pavans and fantasias, however, come off very well indeed.

The Second Quartet has been generally considered his masterpiece. It was dedicated to Schoenberg and was obviously influenced by Schoenberg’s First Quartet—a remarkable case of the pupil influencing the master (but they were only three years apart in age). Like Schoenberg’s quartet, Zemlinsky’s is a one-movement work that incorporates all the elements of the symphonic cycle while creating unity out of thematic transformation. It is, in spite of its connections and influences, an extremely original and deeply felt work, full of ideas and inventions, skillful, highly expressive, and, to tell the truth, easier to listen to than a filler on this disc, Perlman plays an almost Elmanesque tonal lusciousness. The splendid success of this performance is due in no small measure to the very solid and vital backing of Eugene Ormandy and the Philadelphia Orchestra.

**Recording of Special Merit**

**ZEMLINSKY: String Quartet No. 2, Op. 15. LaSalle Quartet. Deutsche Grammophon 2530 982 $9.95.**

Performance: Superb

Recording: Good

Alexander von Zemlinsky was Arnold Schoenberg’s brother-in-law and only teacher. He was a protégé of Mahler, a successful opera conductor, and one of the leading members of that extraordinary circle of fin-de-siècle Viennese musicians. Zemlinsky’s posthumous fame was a casualty of World War II. He made it to America in 1938 but died, a forgotten man, four years later.

There is no doubt that Zemlinsky was a very important and influential composer in the first couple of decades of the century. Working in the post-Wagnerian, post-Mahlerian vein—that is, in an intense, expanded, contrapuntal tonality—he was in the forefront of the younger composers pushing out to the frontiers of the known tonal world. But he did not follow Schoenberg & Co. over the edge to atonality, and his later music is said to be conservative.
the Schoenberg. The high aims, techniques, and styles are similar, but Zemlinsky has more chiaroscuro, more color fantasy. In any case, this is a post-Romantic work that is very much worth rediscovering, especially in this first-rate and stylistically perfect performance.

E.S.

COLLECTIONS

HARP OF JOY. Anon.: March; A Prayer for the Captive; Supplication; Love Is Light.

March.

Masonic


Performance: Pleasant

Recording: Okay

The principal interest of this recording derives from the collection of Shaker hymns on side one. The best-known of course, Simple Gifts, and it is sung here in its original, typical form; a cappella, unison, lively tempo. The Shakers made — make — song and dance an integral part of their life and worship. The dance/song/song used movement and song to express and create a mood of ecstasy. Naturally, the Shaker repertoire was dominated by tunes of a lively, joyful character.

Side two holds a more solemn variety of music, with settings from the seventeenth and eighteenth centuries. As on side one, most of these are unaccompanied, but a few of the later ones are part songs and fuguing tunes. The material is more interesting than its presentation. Shaker Heights near Cleveland was indeed an old Shaker settlement, but local music making seems to have settled down into a more conventional mode. This is good suburban church-choir singing without the fervor and open, deep feeling that this music must have had. Listen to the Word of Mouth Chorus on None-to-the Word of Mouth Chorus on None-to the Word of Mouth Chorus on None-to the Word of Mouth Chorus on None-

Tinton Falls, N.J. 07724).

Musical Heritage Society, 14 Park Road, Tinton Falls, N.J. 07724).

Performance: Noble

Recording: Very good

Freemasonry started as a guild of stonemasons but grew into one of the most important intellectual forces in seventeenth-century Europe. Today it claims some six million members all over the world. Freemasons were always expected to be persons of high moral character, and in the eighteenth century they also had to have some social standing. Many a successful composer was among them; Haydn, Mozart, and Beethoven were all Masons. The symbolism and rituals of the secret society have always been involved with the acceptance of death and belief in a realm of light beyond our material world, preoccupations reflected in the music written by Freemasons in the eighteenth century, of which a generous sampling is included on this fascinating record. A Masonic funeral rite by François Giroust, with a French text declaimed against a solemn instrumental background, is followed by three Masonic songs by Mozart plus an aria he wrote in praise of the sun as the giver of "warmth, fertility, and light." Beethoven is represented by a Masonic March and an Opferlied (Sacrificial Song) in praise of freedom. There are also funeral marches by W. F. Himmel and H. J. Taskin that reflect resignation without grief. In all an unusually interesting concert, well sung and well played.

F.


Performance: Fluent

Recording: Excellent

A solo harp might seem an improbable instrument for showing off on a digital recording, but the point of improving sound reproduction, after all, is not merely to ac-commodate decibels but to preserve every musical sound as naturally and cleanly as possible. The fine Soundstream recording on this Delos disc does this admirably well, and the JVC pressing is all we have been accustomed to from that source. Susann McDonald, whom I've admired ever since I encountered her fine performance of the Castellnuovo-Tedesco concertino on Klavier KS-515 a few years back, performs all these pieces with ingratiating fluency, openness, and closing her program with endearing tributes to two distinguished harpists of the recent past and including demonstrations of the sonorities of the Paraguayan and Irish harps. It is all beautifully done, but the na-ture of the program and the price would suggest that this is something for a rather special audience.
### Popular Discs and Tapes

**DAVID ALLYN: I Only Have Eyes for You.**
David Allyn (vocals); orchestra, David Terry cond. *Get Out of Town; Just As Though You Were Here; You Go to My Head; You’re Laughing at Me; I Only Have Eyes for You*; and five others. DISCOVERY DS-803 $8.98.

**THE BABYS: Union Jacks.** The Babys (vocals and instrumentals). *Back on My Feet Again; True Love, True Confession; Midnight Rendezvous; Union Jack; In Your Eyes;* and four others. CHRYSALIS CHR 1267 $7.98, © SCHR 1267 $7.98, © CCHR 1267 $7.98.

**DAVID BROMBERG: You Should See the Rest of the Band.** David Bromberg (vocals, guitar, fiddle); Peter Ecklund, Curtis Linberg, John Firman (horns); Dick Fegy (guitar, mandolin, fiddle); Hugh McDonald (bass); Lance Dickerson (drums). *Key to the Highway: Helpless Blues; Sharon;* and three others. FANTASY F-9590 $7.98.

**D. L. BYRON: This Day and Age.** D. L. Byron (vocals, guitar); instrumental accompaniment. *Listen to the Heartbeat; Love in Motion; Lorryanne; Today; Big Boys;* and five others. ARISTA AB 4258 $7.98, © A8T 4258 $7.98, © ACT 4258 $7.98.

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**Explanation of symbols:**
- @ = open-reel stereo tape
- © = eight-track stereo cartridge
- ® = stereo cassette
- ◊ = quadraphonic disc
- = digital-master recording
- ◊ = direct-to-disc

Monophonic recordings are indicated by the symbol ©.

The first listing is the one reviewed; other formats, if available, follow it.

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Chances are you've got a lot of records that sound better overall, and, if you like Bromberg as much as I do, you've got several more satisfying Bromberg records. The only real gaffe is it the rambling, ten-minute, twenty-one-second length of *Sharon*. Otherwise, there's a definite average-program/average-night feel to it. N.C.

**THE BUGGLES: The Age of Plastic.** The Buggles (vocals and instrumentals); other musicians. *Living in the Plastic Age; Video Killed the Radio Star; Kid Dynamo; I Love You (Miss Robot);* and four others. ISLAND ILPS 9585 $7.98, © M8-9585 $7.98, © MS-9585 $7.98.

Well, the Buggies' single, *Video Killed the Radio Star*, really is cute: a catchy, intelligent mating of melodic and instrumental ideas out of late-Sixties "progressive" rock with up-to-date lyrics about VTRs and a vaguely futuristic New Wave pose. It's impeccably produced, a great radio record (deservedly a hit in England), and if I prefer the rawer version by the song's co-composer Bruce Woolley, that's my problem.

The Buggies' problems show up on the rest of the album. They can't sing worth a lick, their technological obsessions are already clichés, and for all their studio tinkering, they finally come off as modernist as, say, the Electric Prunes. In short, if your local record store has a New Wave bargain bin, "The Age of Plastic" will be there in about three weeks. S.S.

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**Recorded live in Minneapolis, Denver, and San Francisco, this will serve as a reasonably good sampler if you've never heard David Bromberg and his band. It touches such bases as urban blues, put-on Dixieland, and pre-Bluegrass acoustic mountain music, but it does not, as they say, add to the literature.**
the Brothers Four, years ago, was an imitation Kingston Trio. It is now and was then a situation in which every label has to have one of those. Byron's songs are mostly the expected nonsense about scrounging around in the streets—him and his version of Wendy, they were born to run, you can bet your tee-shirt on that—and his singing is projected from the same physical spot as Springsteen's, the voice gathered up in the top of the throat and squeezed out at ya. If you've never heard it done before, you'd probably be impressed with this album; it has several of the moves down pretty well and a tight little combo doing the back-up. If you've never heard it done before and would like to invest in something more substantial than record albums, I've got a nice selection of bridges you ought to see. N.C.

FELIX CAVALLIERE: Castles in the Air. Felix Cavaliere (vocals; keyboards); instrumental accompaniment. Good to Have Love Back; Only a Lonely Heart Sees; All or Nothing; Castles in the Air; People Got to Be Free, Man; People; Only a Lonely Heart Sees; Back; Only a Lonely Heart Sees; People Got to Be Free, Man; and four others. EPIC JE 35990 $7.98.

Performance: Too shiny
Recording: Ditto

Felix Cavaliere was a prominent voice in the Rascals, the semi-official blue-eyed-soul group of the late-Sixties anti-establishment establishment. I guess what bothers me about this comeback attempt, remembering the late Sixties as I do, is the lack of anything radical about it. Cavaliere seems to picture himself coming back the way a male Dionne Warwick would, "modernizing" the sound left and right with intermittent blasts of orchestration borrowed from disco, allowing engineers and producers to run amuck technologically, and correspondingly bringing most of his singing to the top of the throat and squeezed out at ya. If you've never heard it done before and would like to invest in something more substantial than record albums, I've got a nice selection of bridges you ought to see. N.C.

RECORDING OF SPECIAL MERIT

BLOSSOM DEARIE: Needlepoint Magic Volume V. Blossom Dearie (vocals; piano); Bill Takus (bass). The Ballad of the Shape of Things; Lush Life; I'm Hip; Sweet Surprise; Peel Me a Grape; Two Sleepy People; and five others. DAFFODIL BMD 105 $7.98 (from Daffodil Records, Box 21, East Durham, N.Y. 12423).

Performance: No one does it better
Recording: Good

Here's another addition to the Dearie canon, this one recorded live at Reno Sweetney's. For a long time now, Blossom Dearie has been one of our most uniquely valuable artists. Unselfconsciously, superbly, imper turbably, she sings and plays pop songs as if she were working within a recognized art form. Even her own material—she's included four of her songs here, the best of which is probably I'm Shadowing You, which she did with Johnny Mercer—is given that extra edge of definition that separates everything she touches from the average—fill-your-ears-with-pretty-sounds approach that plagues so many performers of standards. Not that her worldly-wise, whispery vocal style is any way unpleasing, only that it is used in the service of the material and she doesn't hesitate to run short of breath or off pitch if it increases the communication. To listen to her performance here of Sheldon Harnick's The Ballad of the Shape of Things or Billy Strayhorn's classic Lush Life, or even to hear her doodling through Baby It's Cold Outside with Bob Dorough, is to be given a painless lesson in how very fine popular singing can be when it is practiced by a real artist. When you add to it Dearie's wit, style, musicianship, and shrewd whimsy you have one of-a-kind listening experience. No one does it better than Blossom Dearie. P.R.

THE DUKES. The Dukes (vocals and instruments); instrumental accompaniment. Hearts in Trou ble; Leaving It All Behind; All in a Game; Billy Niles; Crazy Fool; Who's Gonna Tell You; and four others. WARNER BROS. BSK 3376 $7.98, © M8 3376 $7.98, © M5 3376 $7.98.

Performance: So-so
Recording: Average

One lousy good line once in a while isn't too much to ask, is it? I mean, if you're going to have lyrics anyway. Here's a sort of middle ground rock album that suggests—as such sometimes do—that its perpetrators may have a little something to say but see no reason, at, ahem, this point in time, to bother. In fact, the album keeps reminding me of Fountains of Wayne. Like that album, the Dukes are a bunch of experienced musicians who have had ties with other groups. Guitarist Jimmy McCulloch, for instance, was fresh from Paul McCartney's Wings. (This was McCulloch's last effort before his death last
The Flying Burrito Brothers: Live from Tokyo. The Flying Burrito Brothers (vocals and instrumentals). Big Bayou; White Line Fever; Dim Lights, Thick Smoke; Six Days on the Road; and six others. Regency REG79001 $7.98.

Performance: Variable
Recording: Variable

This is a good cross section of Burritos-type songs, and the boys seem energetic enough, but it comes off rough for my taste. Through continuous personnel changes (Sneaky Pete Kleinow is the only original member left), the Burritos have aspired to a rakish way with a country repertoire. I appreciate their dedication to being not-slick, but if you listen to the various hard-country originals of these songs you'll find them a lot smoother and just as soulful. Often it sounds as if the band doesn't quite have a center. It's hard to fault many of the solos the various members play—especially those on steel guitar by Kleinow, who's as smooth as they come, and Gib Guilbeau, who's stretching out on the fiddle these days—but there seems to be no catalyst holding it all together. A full-time rhythm guitar would help, and it would help more if they'd do some radical surgery on the vocals. Again, individually they aren't bad, but the so-called harmonies are terrible. The live recording, in addition to giving everything a slightly metallic sound, doesn't do anything to make the vocal harmonies sound any better than they are, which can be done in a studio. The thing has some charm when you listen to what a particular instrument's doing here or there, but if you back off it sounds slapdash. Without needing to.

N.C.

Janie Fricke: From the Heart. Janie Fricke (vocals); Chalmers Davis (keyboards); Ralph Ezell (bass); Roger Clark (drums); other musicians. But Love Me; A Cool September; Pass Me By (If You're Only Passing Through); This Ain't Tennessee and He Ain't You; and five others. Columbia JC 36268 $7.98, © JCA 36268 $7.98, © JCT 36268 $7.98.

Performance: Still unfocused
Recording: Very good

It isn't that producer Billy Sherrill is doing something to Janie Fricke but that he's doing too much for her. Sherrill does what he does with consummate skill, but here's another album that tells us too much about Sherrill and not enough about Fricke. She's presented as an all-purpose warbler somewhere in the grey area around Anne Murray and Rita Coolidge; in this particular instance, side one is strictly pop and side two is country-flavored, but on neither side does anything to come from Fricke herself. What I think she should do is get away from Nash-ville and put her own sound together—her own whole sound, her own band, her own taste in songs—and tinker with that until it feels right and then record it. Janie's reluctant to do that, as she still identifies with the studios and back-up singing and still seems to regard (or half regard) a solo career as something to do on the side. And of course it is a drag, having an organization, with all those hirings and firings and logistics. But the present method is not working.

Even if I did want Janie Fricke to be the next Anne Murray, this particular album wouldn't work. With all the good songs that are going unsung, it ought to be against the law to waste a voice like this on such inconsequential junk as you mostly find here—But Love Me, Fallin' for You, My World Begins and Ends with You. They should've called it "Lightweights Anonymous." Too bad, but Fricke herself is going to have to show us, as we said in the Seventies, where she's coming from. Sherrill, no matter how skilled he is, can't really know that.

N.C.

Recording of Special Merit

Robert Gordon: Bad Boy. Robert Gordon (vocals); Chris Spedding (guitar); Rob Stoner (bass); Howie Wyeth (drums); other musicians. Sweet Love on My Mind; The Worrying Kind; Bad Boy; A Picture of You; Torture; Crazy Man Crazy; and five others. RCA AFL1-3523 $7.98, © AFK1-3523 $7.98.

Performance: Coming of age
Recording: Excellent

It's easy to dismiss Robert Gordon as some kind of sappy nostalgia merchant along the
lines of Sha-Na-Na, aping the style of vintage rockabilly without apprehending its spirit, but I think that’s wrongheaded. Fact is, Gordon knows this stuff cold, comes to it naturally, and sings it because it really moves him. The original Southern rebels who created the genre by and large either died (Elvis) or became country stars (Jerry Lee Lewis, Conway Twitty), so I see no reason why this upset with the big ears can’t carry on the tradition if he wants to. 

“Bad Boy” is probably the best album Gordon’s done, a near flawless mix of period re-creation (Sweet Love on My Mind) and rockabilly/New Wave fusion (Born to Lose). It proves that what he has been saying all along is true, that this stuff is as vital now as it ever was and that within its admittedly narrow stylistic restrictions there is still room for innovation and growth. The band is the most sympathetic he’s ever used (guitarist Chris Spedding is nothing short of awe-inspiring), the song selection is terrific, and Gordon’s singing is more assured and convincing than ever. The result is catchy, intelligent, danceable rock-and-roll. If it’s also mindless nostalgia, I can live with it without guilt.

S.S.

HEART: Bebe le Strange. Heart (vocals and instrumental). Down on Me; Silver Wheels; Break; Rockin’ Heaven Down; Even It Up; Strange Night; and four others. Epic FE 36371 $8.98, ® FEA 36371 $8.98, © FET 36371 $8.98. 

Performance: Variable 
Recording: Good 

There are three basic subjects for rock lyrics: sex and love, the search for personal identity, and the music itself. The quality of writing and performance may vary among successful groups, but you can count on those three subjects. The rest is packaging and merchandising. Heart’s package of these basics is sure-fire. Two attractive, talented young women (Ann and Nancy Wilson) with capable backing musicians—the kind of packaging that has been sure-fire since the days of the Ronettes.

All the material on Heart’s new album is written by the Wilson sisters, with assists from others, and it is uneven. The title tune, Bebe le Strange, has a mediocre melody line for the verses, but the interesting chorus is modulated and ends on a minor-key resolution. Down on Me has a guitar figure that conjures up George Harrison as he was in the late Beatles period. Its title (though not its content) is probably a deliberate duplicate of that of the Janis Joplin/Big Brother and the Holding Company standard; anyway, it gives the Wilsons an opportunity to indulge in some fancy hollering à la Joplin. Silver Wheels is a pleasing guitar solo written and played by Nancy Wilson, but when we are back with the hysterical folderol on Break, The song Raised on You, also written by Nancy and featuring her on piano, is an homage to Carole King, and Pilot sounds as if the Wilsons have been listening to Abba and getting some tips on song construction and arrangement.

Parts of the album are interesting, parts are dull, and parts are silly; some skill and talent do show through now and then. The subject matter and packaging can’t miss, though—Heart’s wrapped in gold paper and tied up with platinum twine.

J.V.

THELMA HOUSTON: Breakwater Cat. Thelma Houston (vocals); vocal and instrumental accompaniment. Suspicious Minds; Down the Backstairs of My Life; Something We May Never Know; Breakwater Cat; Long Lasting Love; Before There Could Be Me; and four others. RCA AFL-3500 $7.98, © AFSL3500 $7.98, ® AFK1-3500 $7.98. 

Performance: Looking up 
Recording: Good 

After being stuck in a mere of sound-alike records over the last few years, Thelma Houston has shifted labels and come up with an album that highlights her talents as a quality soul singer rather than trying to make her a roller-disco queen. While some of the songs on “Breakwater Cat” still aren’t as distinctive as they might have been, they are pleasant to hear and a few have lyrics that are almost intelligent.

The executive producer for this one was Jimmy Webb, the same Jimmy Webb who lifted the Fifth Dimension Up, Up and Away into the popular mainstream and sent Richard Harris strolling through MacArthur Park, though the music here bears no resemblance to Webb’s. The better numbers are Down the Backstairs of My Life, which sparkles with interjections of gospelish keyboards, and Something We May Never Know, a finely wrought and musical-

(Continued on page 102)
All together now, and not too loud:
The word is not the thing.
The word is not the thing:
Hi, ho the derry-o.
The word is not the thing.

Or, as somebody else said, the map is not the territory. But, as Kin Hubbard said about poverty not being a disgrace, it might as well be. Consider the ramifications of the words "New Wave" as opposed to those of "punk." Deferring to the British—as we tend to do, especially in matters rock-and-roll—we let them have "punk," which left us having to shoulder the more pretentious and more broadly influential (in the word-molding-thought sense) "New Wave." When, in fact, our Iggy Pop and our Bruce Springsteen were punks, pure and simple, in strict-constructionist street language.

Since wearing a label means trying to live up (or down) to it, thinking of themselves as members of the New Wave has already gotten our American practitioners into all sorts of silliness, with art-school "intellectuals" threatening to become as theatrical—and as musically irrelevant—as the glitter rockers they make sound vaguely New Wavish as Iggy is punk), three by Mark Goldenberg and one by Billy Steinberg (both of the Cretones), a couple of 1965 rockers she makes sound vaguely New Wave, and a Neil Young song that fits here because she has almost an institution herself—has hastened this process by going all the way (more or less) with the New Wave in her new pink-and-black-jacketed album "Mad Love." Ronstadt is popular not only across party lines, but across regional frontiers, color barriers, and age brackets as well. To a huge crowd from age nine to the age of the youngest members of the Streisand mob, Ronstadt is thought of as Ms. Pop Music. And so, whatever she does, she institutionalizes it to some degree. What she does in this case includes three Elvis Costello songs (Elvis, who is British, is as New Wavish as Iggy is punk), three by Mark Goldenberg and one by Billy Steinberg (both of the Cretones), a couple of 1965 rockers she makes sound vaguely New Wave, and a Neil Young song that fits here because it has the grace to fit most anywhere. How she does them ranges from expertly to not quite convincingly, although my strongest impression is that the program—and maybe the subgenre or whatever it is—wastes too much of her uniqueness. To put it in easy pop terms, Ronstadt's a melody singer and what this music needs is a beat singer.

I don't question her sincerity. I remember a few years ago how enthusiastic she was about reggae and at that time I was able to satisfy myself that these enthusiasms are genuine. And here she's gone and got one of those New Wave affectations (from a blind barber using hedge clippers, from the look of it). That's a commitment of sorts. True, her dislike for disco could have nudged her toward its alleged opposite, a reactionary move, but she sounds genuinely attracted to some things about this music—its vitality among them.

But New Wave's main attraction may be its romanticism. She is romantic, and so is the process of adolescent rebellion. Scratch either and you find idealism. But Ronstadt does not have your basic punk attitude, as I insist on calling it; she is a softer, warmer person than that, and simply not that angry. This shows most vividly when she isn't quite able to fake the toughness called for in Goldenberg's "Cost of Love" (which is catchy but sounds basically like a Springsteen out-take). In other places, such as Costello's "Talking in the Dark" (an odd way to end an album), she seems to identify with the words but to be indecisive about how seriously to take them. And a time or two she subtly teases a punkwave song into one of the farther reaches of her own musical attitude.

RONSTADT and producer Peter Asher are such pros that many a nuance is picked up and embellished by a new (read: different) array of back-up musicians (including only Dan Fogelberg from her regular band) with a better feel for how it's done than most outsiders could hope to muster. Russ Kunkel gets an interesting snap-boom effect that anchors much of the beat, which gets a pretty energetic pounding from all hands. Still, the romantic connection, Ronstadt's reason for being there, stretches a mile thin over this attitude gulf, and the thing sounds like something Ronstadt did just this once rather than what she does regularly. The does in this case also the simple aesthetic problem of getting mileage out of talent: when you have a voice this good, you want to hear it hold notes for some length of time, and this program doesn't often allow that.

So, although it seems sincere enough (I wouldn't bet my life she's taking it too seriously), it also seems like a project or an exercise. In lesser hands such a venture would have gone belly-up on the New Wave, but this—to the degree anyone can take it on its own terms—is a well-intended, spirited, almost plucky little album. The thing is, Linda Ronstadt can go back to being Linda Ronstadt any time she wants to, and the rest of the New Wave can't.

—Noel Coppage

LINDA RONSTADT: Mad Love. Linda Ronstadt (vocals); Dan Fogelberg (guitar); Bob Glaug (bass); Russ Kunkel (drums); Bill Payne (keyboards); other musicians. Mad Love; Party Girl; How Do I Make You; I Can't Let Go; Hurt So Bad; Look Out for My Love; Cost of Love; Justine; Girls Talk; Talking in the Dark. ASYLUM SE-510 $8.98, ET8-510 $8.98, TC5-510 $8.98.
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ly interesting ballad that does justice to Ms. Houston's stylistic abilities. She is moving in the right direction now, and maybe next time she'll hit the mark.

P.G.

CON HUNLEY: I Don't Want to Lose You. Con Hunley (vocals, keyboards); instrumental accompaniment. You Lay a Whole Lot of Love on Me; Fire in the Morning: Lover's Lullaby; Take It Easy; and six others. WARNER BROS. BSK 3378 $7.98, © M5 3378 $7.98.

Performance: Moony-Juney
Recording: Good

There are several New Breeds of country at any given time. At the same time you have your Rodney Crowells and Billy Joe Shawers and Roseanne Cashes, you also have your Jacky Wards, Eddie Rabbitts, R. C. Bannons, and other softies who would be old-time MOR pop singers if that category weren't officially deemed commercially dead. Con Hunley, basically a crooner, is one of this latter breed, but he's head and shoulders above the aforementioned members of it. He does sing with some feeling, and he does have a lot more voice to work with than most. If this album were a little less overproduced and if three or four of the songs weren't so grizzingly dull and if Norro Wilson's production weren't so buttoned-down in what few uncrowded moments it has—if, in short, they'd take advantage of the fact that the guy can sing instead of covering it up, we might have something here. You get a sample of what it could be in the simplified beginning of the very last song, Delbert McClinton's Take It Easy, in which Hunley shows that a good singer, most of the time, just needs Production to leave him the hell alone. Well, good singers, needing it and getting it are two different things, right?

N.C.

RECORDING OF SPECIAL MERIT

J. GEILS BAND: Love Stinks. J. Geils Band (vocals and instrumentals). Just Can't Wait; Come Back; Takin' You Down; Night Time; No Anchovies, Please; and four others. EMI/AMERICA 17016 $8.98, © 8X00-17016 $8.98. 4X00-17016 $8.98.

Performance: Excellent
Recording: Excellent

J. Geils is probably the ultimate in blues-derived rock bands. Few other groups manage to embellish the two simple and limited forms without overloading them. Their last few albums for Atlantic were pretentious, but they went back to basics for EMI/America with their original energy completely restored.

A good portion of the credit for the group's ability to put meat on the bones of blues and rock goes to keyboardist-aranger-producer-writer Seth Justman. His "frames" for the tunes (co-written with vocalist Peter Wolf) set them up nicely and clue the listener what to expect in a given song. For instance, the frame for Desire, a semi-balled, has some light jazz flavoring, while the setup for Till the Walls Come Tumblin' Down swaggers and swings.

Among Justman's most valuable assets is his sense of humor, as in his arrangement of the title cut, an affectionate parody of Edie Cochran's original Summertime Blues complete with spoken insertions of the title. The lyrics are generally literate—which they need to be for either blues or rock—and it's evident that Justman and Wolf have had the advantages of a college education. Their post-graduate perspective is displayed on No Anchovies, Please, a comic narrative seemingly inspired by memory of the Dada-ist efforts of the now defunct Firesign Theatre. It's about a housewife who discovers a phone number at the bottom of a can of anchovies and as a result is whisked away to suffer a fate worse than death and not as good as sex; the punch line works only once, so I won't reveal it. You'd better go hear it yourself. Singing, playing, or talking, the J. Geils Band is good to hear.

The Jam topped last year's fans' polls in Britain. That in itself is not sufficient cause for criticizing the band. But I agree with a friend of mine who accuses the Jam of singlehandedly reviving the "mod" scene—as
EDDIE KENDRICKS: Something More.

Eddie Kendricks (vocals): vocal and instrumental accompaniment. I Just Want To Be In Your Life; I Never Used To Dance: Pleasure Man: Something More; and three others. AristA AB 4250 $7.98, ® AT& 4250 $7.98, ® ATC 4250 $7.98.

Performance: Mellow

Recording: Good

Over the years, Eddie Kendricks has managed to hold down a comfortable but distant third place, trailing behind Michael Jackson, in the triumvirate of high-voiced male soul singers headed by Smokey Robinson, the champ on any accounting. That's pretty sweet for a career in which to travel. Kendricks has maintained his identity by adhering to the funky and basic r&b lane of the road, swerving only slightly from time to time to accommodate a passing fad. On this album he moves with confidence through territory quite familiar to him and his fans. Though one up-tempo track, Pleasure Man, may appeal most to those who like his "truckin" side, my favorite is Something More, which focuses on his mellowness of interpretation. Modest, but good listening. P.G.

THE KNACK: ... but the little girls understand. The Knack (vocals and instruments). Baby Talks Dirty, I Want Ya, Tell Me You're Mine; Mr. Handleman; Can't Stand. The Knack (vocals and instrumentation). Modest, but good listening.

But it is their fault that they've achieved all that by being charmless and cynical. If you don't believe that's the case, then I suggest you check out their new LP, which consists largely of versions of My Sharona played sideways—a move, I submit, that says less about their collective inspiration's drying up than it does about their wanting to make a good fast buck. Great composers steal, said Stravinsky, while mediocre ones borrow. Well, the Knack borrows like crazy here (The Feeling I Get gets 1980's Lamest Rip-off award, for example), and the recorded results prove that Igor was right on the money. There isn't a note here that suggests an original idea. None of that matter if either the band or its currently considerable audience realized that Knack music is merely a better-marketed version of Shaun Cassidy teenage schlock. Or maybe they do. S.S.

COUNTRY JOE Mc Donald: Leisure Suite. Joe McDonald (vocals, guitar, harmonica); the Persuasions (vocals); other musicians. Private Paris; Take Time Out; La Di Da; Sure Cure for the Blues; and three others. Fantasy F-9586 $7.98.

Performance: Still plucky

Recording: Clear

I don't know. I kind of like having Country Joe McDonald around. Maybe his time has 

(Continued on page 105)
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Encore: Mireille Mathieu

Mireille Mathieu is, and has been for the last couple of years, the top-selling female recording artist in the world. Mireille who? Mireille Mathieu, dummy, the same Mireille Mathieu over whom I—moi-même—flipped in these pages over a decade ago, that's who ("A Bright New Star Is Born," March 1967, page 77). At that time she was a very young girl from one of those humble, gritty Zolaesque backgrounds the French seem to prefer for their female celebrities (think of Madame du Barry, Chanel, or Piaf). She had already electrified audiences at Paris' Olympia, attracted the attention and patronage of the great Maurice Chevalier, and made a series of recordings that hit me like a coup d'assommoir. I raved on about her, but, America, you didn't listen to me. And you didn't listen much to little Mireille, either. Your loss, for little Mireille is now big, smooth, glossy, rich Mireille Mathieu, and she has enough awards, critical acclaim, and sales reports de rose to permit her to ignore us comfortably for another ten years.

However, in a burst of untypical Gallic generosity, Mathieu has decided to give us another chance, so let's not muff it again. She is just as wonderfully exciting as she was years ago, and, though she may not have refined her art or fancied up her technique all that much, there really wasn't much need to: she's one of those rare performers who come on like gangbusters, work you over whether or not you are particularly willing or ready, and then leave you limp, happy, and smiling into the sunset after she's gone. Like Piaf, like Garland, like Streisand, her combination of torrential emotion and fierce conviction can singe the ears of anyone willing to give her a listen. "Mireille Mathieu Sings Paul Anka" is a somewhat mixed blessing, though. Anka has provided a gorgeous production with a variety of full-size orchestras so beautifully recorded that they would make the Berlin Philharmonic sound woolly. He has thoughtfully provided English words for some good songs by Eddie Marnay (Mathieu has obviously worked hard on her English, and she's now comfortable enough with it to let 'er rip just the way she's always done in French). And as producer he has given the whole album the kind of glittering velocity and super-professional glamour (oh, them strings!) a superstar deserves. It all works gloriously on a couple of tracks, notably Paris. Is Something Wrong? and the truly virtuoso Closing Doors.

On the debit side is Anka's apparent conviction that Mathieu needed his actual performing presence on the recording, so we get far too many duets here as Paul does it his way on second choruses. Does Wonder Woman need Tweetie Pie to keep her out of trouble? Even so, this is an album well worth having. Mireille Mathieu will eventually, I believe, be as great a star in the United States as she is in the rest of the world whether or not this particular release makes it. But please, let's not have another ten-year wait before we get the next one.

-Peter Reilly

Mireille Mathieu: Mireille Mathieu Sings Paul Anka. Mireille Mathieu, Paul Anka (vocals); various orchestras. You and I; A Man and a Woman; After You; Life Song; Bring the Wine; Paris. Is Something Wrong? And: Closing Doors; Leave It All to Me. Ariola SW 50073 $7.98.
can’t be certain whether a banal first album fore he decides how he is going to do what

WILLIAM

his lyrics typical juvenile stuff about the fu-

far has figured out how to use the synthesiz-

ating the listener; the antis dismiss him as

views, pro and con. The pros claim his dehy-

though, as if he might even last long enough

McDonald albums don’t have much of a

don’t want bullshit detected—they want to

Monday night. That is, ABC might train a camera on them on

the Bear but will labor all weekend making

ing to make albums at a time when people

whose strong suit is bullshit detection, try-

whatever, but what he really has going is a

straightforward,

singer, and he can write a reasonably good,

trying to shock the younger members of the

context a Joe McDonald song really needs.

(Carried on page 107)
If you bought only one album of modern jazz this year, you could not go wrong with “Spirit Sensitive.” Here is music even the lady from Dubuque could love, yet it is current jazz of the highest order. Throughout this superb album, Freeman gently delivers a full-throated tenor sound with reverence for the material, which is of a kind not usually associated with him. His authoritative, deep-rooted treatment of such familiar ballads as Autumn in New York and It Never Entered My Mind should prove to go-are-the-days-of-mellow-reeds skeptics not only that the tradition is still alive, but that it is possible to keep it alive without resorting to imitation of past performances and styles. In his own kind of neo-Classicism, Freeman here does precisely what Prokofiev set out to do with his Classical Symphony in 1916: create music that is at once classical and contemporary. And, lest there be those among you who believe good ballads emanate only from the pens of Brill Building habitues or Stephen Sondheim, there is Cecil McBee’s Close to You Alone; it is a hauntingly beautiful melody that inspires appropriate performances from all concerned.

Unlike the quartet featured on the Italian album, this group generates a truly cohesive sound. Pianist John Hicks—whom I remember best for having helped Cecil McBee save an unfortunate Lester Bowie album (“Fast Last!” Muse 5055) from becoming a complete disaster—seems to be quite comfortable in this contrasting ballad milieu; McBee is of course completely at home with Freeman, and drummer Billy Hart continues to fit in wherever quality and good taste abound. Hart is replaced by Freeman regular Don Moye on Ellington’s Don’t Get Around Much Anymore, the track that brings “Spirit Sensitive” to a stunning and seemingly premature close. Enough said? You say—have I not mentioned anything about the album? Of course I do. So will you when you hear it. —Charles Albertson

CECIL McBEE: Music from the Source. Cecil McBee (bass); Joe Gardner (trumpet, flugelhorn); Chico Freeman (flute, tenor saxophone); Dennis Moorman (piano); John Hicks (piano); Steve McCall (drums); Don Moye (conga drum). Agnez; First Song in the Day; God Don’t Get Around Much Anymore, the Italian import on the Inner City label, was recorded in Milan last June by a Chico Freeman quartet featuring vibist Jay Hoggard, bassist Rick Rozie, and Don Moye. This set so strongly emphasizes Freeman’s performances that the rest of his quartet tends to become mere accompaniment; only Don Moye seems able to approach Freeman’s music with parity. The two long-time associates display their mutual rapport on Uhmla and, to some extent, the title selection, but this is not as satisfying an album as one might hope for, even if it does contain some excellent work by Freeman, especially on tenor. Because of his work and the short final track, Circle—a slightly fragmented abstraction—I rather like “No Time Left,” and I have a feeling that I could grow even fonder of it, but I will never love it the way I do “Spirit Sensitive.”

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CHICO FREEMAN: No Time Left. Chico Freeman (bassist and tenor saxophone); Jay Hoggard (vibraphone); Rick Rozie (bass); Famoudou Don Moye (drums). No Time Left; Uhmia; Circle. BLACK SAINT BSR 0036 $8.98.

CHICO FREEMAN: Spirit Sensitive. Chico Freeman (tenor saxophone); John Hicks (piano); Cecil McBee (bass); Billy Hart, Famoudou Don Moye (drums). Autumn in New York; A Child Is Born; Peace; It Never Entered My Mind; Close to You Alone; Don’t Get Around Much Anymore. INDIA NAVIGATION IN 1045 $8.98 (from India Navigation, 60 Hudson Street, New York, N.Y. 10013).

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is a complete definition of the inherent talent (or lack of it), or whether the new artist is merely going through an apprenticeship that will lead to individuality and better things. But I can assure you that at least this album doesn’t make it.

J.V.

GENE PARSONS: Melodies (see Best of the Month, page 78)

RAY, GOODMAN & BROWN (see Best of the Month, page 77)

RUSH: Permanent Waves. Rush (vocals and instruments). The Spirit of Radio; Freewill; Jacob’s Ladder; Entre Nous; and two others. MERCURY SRM-1-4001 $7.98, © MCS-1-4001 (D) $7.95, © MCR4-1-4001 (D) $7.95.

Performance: Good
Recording: Good

I don’t know why I have a soft spot for Rush. Loud groups that play overblown material at great length irritate me, but I’m inclined to be charitable with Rush. I suppose what I like about them is that they are personally modest, work hard for a living, and entertain rather than manipulate their audiences. Though I find their long cuts hard to take, they usually include one song that is relatively brief, to the point, and more subdued than their usual fare. This time it’s Different Strings, for which lead vocalist Geddy Lee wrote music and lyrics and which he sings in a mild manner. J.V.

THE SEARCHERS (see Best of the Month, page 74)

BOB SEGER AND THE SILVER BULLET BAND: Against the Wind. Bob Seger (vocals, guitar); Silver Bullet Band, Muscle Shoals Rhythm Section (instruments). The Horizontal Bop; No Man’s Land; Betty Lou’s Gettin’ Out Tonight; Against the Wind; Fire Lake; Good for Me; and four others. CAPITOL S00-12041 $8.98, © 8X00-12041 $8.98, © 4X00-12041 $8.98.

Performance: Convincing
Recording: Good

At the risk of sounding like a Philistine, I’ve always appreciated rock-and-roll artists who lump their songs onto “fast” sides and “slow” sides. Musicians generally write songs for one of two reasons: either they have some message to communicate or they want to raise a little hell. I bring this up only because Bob Seger may be many things to many people, but for me he is principally a hell-raiser. Listening to “Against the Wind,” I found myself too often on the sofa and not enough on the rug.

There are four knock-em-down-and-leave-em-for-dead rockers on this album, four soul-wrenching ballads, and two songs that fall somewhere in between. They are not arranged into “fast” and “slow” sides. The fast songs—honky-tonk boogies, red-hot boppers, sleazy struts, and Motor City rockers—celebrate a number of my favorite hobbies: dancing, drinking, and checking out the action. The ballads—at times stingingly soulful, at times just laid-back—are usually either love songs or reminiscences, as ballads tend to be.

(Continued on page 109)
Bonnie Pointer

Bonnie Pointer’s second album makes it quite clear that she would never have been content to remain just one of the Pointer Sisters, no matter how successful that group might have become. The highly stylized, almost life-size portraits that meet our eyes from the covers of both albums certainly suggest a rather hefty ego, as does her decision once again to use only her name as the title. Moreover, in trying to establish a separate identity she has severed all stylistic ties with the music she and her three sisters made in the Seventies, when their thick-soled platform shoes and flowered dresses with padded shoulders à la Cher were in vogue. At their most exciting, the Pointer Sisters fused pop singing with jazz scatting; their music stood out boldly against the blandness of that anticlimactic decade when popular music seemed to have exhausted the impetus of the late Sixties.

Having left the group she is credited with forming, Bonnie Pointer is assuming a new personal image and musical style. On the cover of her new album she looks like an Egyptian Dorothy Lamour, but the music inside is old-fashioned rhythm-and-blues that has nothing to do with the sarong set. Bonnie Pointer is, in fact, a very new-fangled r&B troubadour who uses the most up-to-date recording technology to multiply her presence, cloning her voice electronically so she can sing back-up to her own lead. She has become a one-woman group: the Shirelles in the first-person singular, the Supremes as a triplet Diana Ross. It’s a very ambitious procedure, for Bonnie Pointer does not have one of the best voices around today. However, she compensates for her vocal limitations with musical imagination and a keen sense of what works.

The album is cleverly programmed, consisting almost entirely of golden oldies from Motown (her current label) subjected to a spirited reworking. These well-worn hits, once vehicles for such Motown stalwarts as the Supremes and Martha & the Vandellas, are old enough to have been off the air for several years yet not so ancient as to be totally unfamiliar to anyone who’s had even a casual exposure to American popular music over the last eighteen years. For the really young, they may seem brand new, but for buffs in their early thirties and beyond tunes such as Come See About Me, Jimmy Mack, and Nowhere to Run should recall rumpus-room parties or stealthy “parking” in the years before the pill.

Bonnie Pointer, now twenty-five, was herself just a kid when these songs were new, but she pays them the respect of remaining largely faithful to the originals interpretively while extending their length. A disc jockey is used to spruce up Nowhere to Run and I Can’t Help Myself, and the instruments generally are sprightly, with Sly Stone sitting in on a couple of tracks as Arp-ist, guitarist, and foot-stomper.

As a collection of golden oldies, the album is a tribute to the songwriting gifts of Motown’s old Holland/Dozier/Holland team, but there is also one new song, and with it Bonnie Pointer really makes this record her own. This is the opener on side two, a haunting ballad called Deep Inside My Soul that she wrote with David Baldwin (who was responsible for much of the material on her first album). While the other selections are full of nostalgic charm, this one, with its more flexible structure and interesting chord changes, reflects some of the changes in popular music since those golden days in the mid-Sixties.

The new “Bonnie Pointer” album is based on a formula that is almost bound to work, since nearly everything in it went gold in the past, but it may well do more than just establish Bonnie Pointer’s credibility as a solo artist. It could also usher in a new r&B revival by sending other singers with vocal limitations in the same direction.

—Phyl Garland

BONNIE POINT’ER. Bonnie Pointer (vocals); instrumental accompaniment. I Can’t Help Myself (Sugar Pie, Honey Bunch); Jimmy Mack; When the Lovelight Starts Shining Through His Eyes; Deep Inside My Soul; Come See About Me; Nowhere to Run (Nowhere to Hide). MOTOWN M7-929R1 $7.98, © M8-929H $7.98, © M75-929H $7.98.
I am more sympathetic to Seger's reminiscences. At their most affecting—Seger is often a very affecting songwriter—they deal with the choices made, the friends left behind, the incidents of experience that must certainly weigh heavily on someone like Seger, now looking back down a long hard road. Songs like these permit a weary musician to pause and sift the litter from the memories, and I don't doubt for a minute that these are songs Seger felt had to be written. None of this mitigates my impatient fidgeting, however, while I wait for him to get back down to the dirty business of rock-'n'-roll.

Two songs don't fit neatly into the "fast hell-raising" and "slow-message" groups, and neither one sounds entirely like Bob Seger—not to say he didn't write them, only that his inspiration is thinly disguised. One, Fire Lake, is a canting narrative that was probably chosen for single release because it sounds so much like the Eagles (Don Henley and Glenn Frey sing backing harmonies). Like Seger's best ballads, it succeeds

"Why Can't We Fall in Love" and "Got to Have Groove." The male vocal quintet named Tavares has been moderately successful over the years in making the r-&-b charts, but they've never attained the level of stardom that has given birth to punk. Still, though, the Specials are expressing will be as influential as the Commodores, the Spinners, and the Comets; the Specials are expressing will be as influential as the Commodores, the Spinners, and the Comets.

This album is even better than Tavares' previous sets, which I have enjoyed without exception. One secret ingredient here might be the behind-the-scenes input of Bobby Colyenty and Benjamin Wright Jr. (who have produced Earth, Wind and Fire and Michael Jackson), working in concert with David Foster (who has performed similar chores for Hall & Oates and the Average White Band). At any rate, the ear-catching arrangements and instrumentals are deftly interwoven with the voices, which are employed with polished flexibility. The range of material is from the urban strut of "I Don't Want You Any More to the ethereal passages of "Paradise," though Bad Times is the best track out of many fine ones. Unreservedly recommended. P.G.

TAVARES: Supercharged. Tavare's vocals, instrumental accompaniment. Bad Times; We Both Tried; Can't Get Enough; Why Can't We Fall in Love; Got to Have Your Love; and three others. Capitol ST-12026 $7.98, © SXT-12026 $7.98, © 4XT-12026 $7.98.

Performance: First-rate Recording: Very good

From the opener, a rousing and imaginatively arranged medium-tempo number called Bad Times, it is evident that this album truly is "supercharged." Creative style and cohesion of performance exude every groove. The male vocal quintet named Tavares has been moderately successful over the years in making the r-&-b charts, but they've never attained the level of stardom that has given birth to punk. Still, though, the Specials are expressing will be as influential as the Commodores, the Spinners, and the Comets.

This album is even better than Tavares' previous sets, which I have enjoyed without exception. One secret ingredient here might be the behind-the-scenes input of Bobby Colyenty and Benjamin Wright Jr. (who have produced Earth, Wind and Fire and Michael Jackson), working in concert with David Foster (who has performed similar chores for Hall & Oates and the Average White Band). At any rate, the ear-catching arrangements and instrumentals are deftly interwoven with the voices, which are employed with polished flexibility. The range of material is from the urban strut of "I Don't Want You Any More to the ethereal passages of "Paradise," though Bad Times is the best track out of many fine ones. Unreservedly recommended. P.G.

BRUCE WOOLLEY & THE CAMERA CLUB. Bruce Woolley (vocals); instrumental and vocal accompaniment. English Garden; Video Killed the Video Star; No Surrender; You Got Class; Goodbye to Yesterday; Flying Man; and five others. Columbia NJC 36301 $7.98, © CT 36301 $7.98.

Performance: Poor Recording: Good

Too much is enough. I am tired of British bands who strike a New Wave pose when they are not New Wave, of lead singers who try to sound like computers, and of "songs" that have no merit or purpose except as excuses for anti-singing. I am weary to the bone of expedient, shallow, cynical crud that pretend to be "socially significant" to please the marketplace. Ah, Britannia! In the days of the Empire anybody who attempted such fraud would have been packed off to the colonies.

J.V.

(Continued on page 111)
Le Cube.

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Grace Slick

There is always a risk, when an artist associated with a group leaves a band for other than strictly musical considerations, that his or her solo work may lack the distinctiveness, the clearly forged personality, and especially the focused intent that are the sine qua non of the individual performer. In fact, unless a deliberate break is made to give expression to some area of the performer’s art that has been submerged or suppressed within a group, such solo efforts rarely rise to the level of the group’s work. As the record labels that have indulged one-man albums by members of Kiss, the Rolling Stones, the Who, the Grateful Dead, and a legion of other supergroups can attest, such albums tend to be comparatively slow-moving at the cash register. Yet they are as much a fixture in pop marketing strategies as greatest-hits packages.

As a member of the Jefferson Airplane and its later, more aerodynamically advanced incarnation the Starship, Grace Slick contributed a distinctive vocal instrument and a spaced-out sex-goddess side-show to a band whose identity has been undergoing any number of changes in recent years. Judging from her new solo album, however, it was not a repressed musical vision crying out for release that dictated her departure from the band. “Dreams,” in spite of Grace Slick’s unmistakable voice and five of her own compositions, is largely the creation of producer Ron Frangipane—a man whose arrangements are as rich and fattening as his name suggests—and a collection of skilled studio musicians whose repertoire embraces practically every lick, riff, and fill known to man; they manage to use them all on this album.

Naturally enough, when the creative reins are handed over to a record’s producer, the focus tends to shift away from musical ends toward musical means—the instrumentation, the arrangements, the “sound.” Indeed, the appeal of “Dreams” derives solely from its purely sensual elements—a lavish sixty-piece orchestra (several cuts, including the title track, are given an apocalyptic orchestral treatment usually reserved for the entrance of the gods in Wagnerian opera or the arrival of Elvis Presley on stage in Memphis), splendid studio musicianship (the precision and agility of the guitar playing give the up-tempo songs a remarkable momentum), and, of course, Ms. Slick’s voice (savage and seductive by turns). But these rich elements gallop grandy over sparse musical terrain. “Dreams” washes the listener in a Lethean bath; when it has passed, there is no lasting impression—save for the unfortunate one left by Seasons, the single embarrassingly bad song on this record, a daisy-chain of borrowed, alternatingly pastoral and tormented images that would not be out of place with the songs left out of The Sound of Music.

Listening to “Dreams,” I hear a dozen or more familiar bands—from Journey to the Eagles to Elton John—and songs whose styles range from War of the Worlds to Those Were the Days. I hear Grace Slick’s voice. What I do not hear is the Grace Slick who contributed to such Airplane successes as Greasy Heart and Somebody to Love and who, most important, contributed something that was, for better or for worse, recognizably and memorably hers.

—Mark Peel

GRACE SLICK: Dreams. Grace Slick (vocals); instrumental accompaniment. Dreams; El Diabio; Face to the Wind; Angel of the Night; Seasons; Do It the Hard Way; Full Moon Man; Let It Go; Garden of Man. RCA AFL1-3544 $8.98, © AFK1-3544 $8.98.
RECORDING OF SPECIAL MERIT

DON ARMANDO'S SECOND AVENUE RHUMBA BAND. Don Armando's Second Avenue Rhumba Band (vocals and instrumentals), Deputy of Love; I'm an Indian Too; Winter Love; Para Ti; and three others. ZE ZEA 33005 $7.98.

Performance: Captivating
Recording: Excellent

Deputy of Love is what will sell this album to dance enthusiasts. This version of that giant hit, while a disappointing abbreviation of the original release, is top-drawer disco music. Lead vocalist Fonda Rae gets into some effective Cory Daye stuff; there are at least three different melodic sections, one integrated into the other, to provide energy-producing excitement; and there’s a big orchestral arrangement with a solid beat. But there is much more to Don Armando's Band than this disco hit reveals. Most of the album's best is on side two. Do yourself a favor: before you dance your way through these songs, sit down and listen. Listen to the terrific disco of Goin' to a Showdown, with its jazzy “re-mem-ber, re-mem-ber” refrain. Listen to Para Ti, a romantic, middle-tempo dance production with a memorable tune and loads of charm. Listen to Irving Berlin’s I'm an Indian Too (yes, “a Sioux-oo-oo”), with its startling classical cello figure. And listen most of all to the totally danceable rhumba rendition of Lerner and Lowe’s How to Handle a Woman from Camelot. This is a mind-boggler. It is sung simply and with captivating warmth by Don Armando Bonilla himself, and it is pop music of a high order indeed.

E.B.

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E.B.

BEVERLEY JOHNSON: Don't Lose the Feeling. Beverly Johnson (vocals); orchestra. Don't Run for Cover; Under My Thumb; Can't You Feel It; Ain't Givin' Up No Love; and three others. BUDDAH BDS 5726 $7.98.

Performance: Confidently sexy
Recording: Disco de luxe

They keep trying to tell us that disco is fading away, so it’s something of a surprise to come across Beverly Johnson’s lavish new album. Scavuilo photos, two hairdressing credits, make-up man credit, wardrobe credit, six producing and arranging credits. Whew. Ms. Johnson survives all of the preening and the patent-leather production, however, and goes on to deliver a capable performance in a sexy, confident style. It is

CLAUDJA BARRY: Feel the Fire. Claudja Barry (vocals); vocal and instrumental accompaniment. Get Your Mind Made Up; One Night Queen; Everybody Needs Love; Wake Up and Make Love with Me; and four others. CHRYSALIS CHR 1251 $7.98.

Performance: Variable
Recording: Munich magnificent

This album by the Boogie Woogie Dancin’ Shoes lady starts out all wrong. The opening song, You Make Me Feel the Fire, is a ripper, with heavy bass chords and an almost metal-hard drive. But Claudja Barry can’t do this kind of thing. She strains with a discomfort that is all too audible, and her back-up ladies simply outings her. The “real” Ms. Barry shows up in the three-song set that follows. It’s sung in the old velve-tone style, not pushed beyond her natural limits by the need to go rocky. Fortunately, though, despite Jörg Evers’ superbly produced arrangements, only one of these

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that breathing-in-your-ear approach that sees her safely through such bombs as "Gonna Tell Your Momma on You" and leads her on to eventual mini-triumph in the title song and "Can't You Feel It." Beverly hardly needs all the glomp she's been surrounded with here, but then all things tend ineluctably to excess.

LIPPS INC.: Mouth to Mouth. Lipps Inc. (vocals and instruments). Funkytown, All Night Dancing; Rock It; Power. CASABLANCA NBLP 7197 $7.98, © NBL5 7197 $7.98.

Performance: Potentially hot. Recording: Wearingly imbalanced. Talk about movin'! There may not be much real funk in Lipps Inc.'s "lip-synch-get it?" Funkytown, a deservedly successful single that opens this album, but it certainly does move. It is a true novelty, too, characterized by a weird sound created by setting voices and electronic synthesizers one atop the other. Yet, lead singer Cynthia Johnson delivers some high-powered, soulful vocal work, and the arrangement contrasts the hypnotic rhythm with a lightning-like intrusion of violins.

But in the album's second song, you begin to wonder if producer Steven Greenberg is too enamored of sound effects. That have a lot to do with the music. All Night Dancing has tremendous potential: a good, trite, "All night dancing/Think about you all day long:" an imaginative mid-section with a wonderful jazz piano solo (bravo Ivan Rafowitz); and an exciting two-part back-up vocal refrain that comes out like a Three Blind Mice round. But it doesn't build. It's like a good skit that needs a punch line.

Side two, which includes a souped-up rock-'n'-roller called Power, is marred by the same ill-advised arrangements. It's a shame, because Johnson has the power to put this kind of heavy energy across, and she's got the right intensity. Somebody's got to get in there and pull the back-up vocals have the right intensity. Somebody's got to get in there and pull the back-up vocals in, and it's too bad that the recording is marred by some trite, lyric and boring ending.

RECORDING OF SPECIAL MERIT

CHERYL LYNN: In Love. Cheryl Lynn (vocals); instrumental accompaniment. I've Got Faith in You; Hide It Away; Feel It; In Love; I've Got Just What You Need; and Can't help It. COLUMBIA JC 36145 $7.98, © JCT 36145 $7.98.

Performance: Incendiary. Recording: Excellent. That Cheryl Lynn is the new Cinderella of the disco world is now generally known among those who follow the music. They eagerly recount her tale, from her debut in a road production of The Wiz to her appearance on the Gong Show. But those who avoid disco at all costs are missing out on a good thing, for this young singer has talent that extends beyond categorized genres.

Her splendid new album, the second of her short career, is enough to propel even the stodgiest soul to his feet; it explodes with volcanic force, generating enough energy that's sure to move you.

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energy to fuel a cross-country bus. But the power comes not so much from the expertly conceived and driving instrumental background as from Cheryl Lynn's spectacular voice and musical thrust. There is an unusual clarity to her attack, and she can soar through the vocal stratosphere with thrilling ease. The incendiary songs to be heard here, especially "Feel It and I've Got Just What You Need," are certainly the best disco numbers I've heard lately, but Lynn is more than just another pop singer: she is an excellent technician. To demonstrate that she can be just as exciting at slower tempos, the producers have included a quality ballad, "In Love," which showcases her softer side.

Disco may be on the way to foudering, but I'm betting that Cheryl Lynn will be around for a long time.

P.G.

PARADISE EXPRESS: Let's Fly, Paradise Express (vocals and instrumentals); vocal and instrumental accompaniment. Let's Fly; Nowhere to Run; You Set Me on Fire; and three others. Fantasy F-9589 $7.98.

Performance: Promising
Recording: Fine

Herb Jimmerson, who is listed as arranger and co-producer for Paradise Express and as composer or co-composer of most of the songs on this album, may be his own worst enemy. As arranger and producer, he's a talent to be watched. There is a wonderfully heavy, sexy texture to these fast-paced disco songs—a solid carpet of bass embroidered with Jimmerson's own flickering keyboards and with beautifully mixed string and horn sections. And featured vocalist Vi Ann is set into these arrangements perfectly.

But the songs! The only ones that work at all are "Nowhere to Run and Love Is A Flame (It Won't Burn)—which happen to be the two songs Jimmerson didn't write—and You Set Me on Fire, the album's best number. The last uses Vi Ann to advantage. Here's not the typical disco voice: it's a rich chest voice, almost husky, with echoes of Carmen McRae. With excellent support from a group of back-up vocalists, she rides this galloping arrangement perfectly.

So the raw material is there; the arrangements are full of goodies, and the lead vocalist has a distinctive memorable sound. Next time, let's have some better songs.

E.B.

RECOMMENDED DISCO HITS

• BROTHERS JOHNSON: Light Up the Night. A&M SP-3716 $7.98, © 8T-3716 $7.98, © CS-3716 $7.98.

• CROWN HEIGHTS AFFAIR: Sure Shot. Delite DSR-9517 $7.98, © DC8-9517 $7.98, © DCR4-9517 $7.98.


• ALTON MCCLAINDE & DESTINY: More of You. Polydor PD-1-6268 $7.98, © 8T-1-6268 $7.98, © CT-1-6268 $7.98.


(List compiled by John Harrison.)

(Continued on page 117)
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.

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And, the unique telescoped styli
JAZZ

RECORDING OF SPECIAL MERIT
JACK DEJOHNETTE: Special Edition.
Jack DeJohnette (drums, piano, melodica); David Murray (tenor saxophone, bass clarinet); Arthur Blythe (alto saxophone); Peter Warren (bass, cello). One for Eric; Zoot Suite; India; and two others. ECM ECM-1-1152 $8.98, © M5E-1152 $8.98.
Performance: Special Indeed
Recording: Very good

Inconsistency has plagued Jack DeJohnette's recorded output in recent years; each album has contained aesthetically pleasing or downright brilliant moments, but none has measured up to what many of us expected of the drummer who helped put Miles Davis into a new orbit ten years ago. Before joining Miles, DeJohnette's working experience had taken him from the earthy blues of T-Bone Walker's band to the innovative Chicago free-form arena and on to the New York scene where he allied himself musically with outstanding colleagues ranging from the well-established John Coltrane and Thelonious Monk to the up-and-coming Keith Jarrett and Chick Corea. Caught up in the fusion fever that followed in the wake of Miles' "Bitches Brew" album, DeJohnette set out to produce these 1976 sessions, she has given us a wonderful surrealistic portrait of jazz itself. I predict that this album will be around for a long time. Its release at the start of a new decade is most appropriate. C.A.

RECORDING OF SPECIAL MERIT
CHARLIE HADEN/JAN GARBEREK/EGBERTO GISMONTI. Magic. Jan Garber (saxophones); Egberto Gismonti (guitars, piano); Charlie Haden (bass). Balarina; Silence; Spor; and two others. ECM ECM-1-1151 $8.98, © M5E-1151 $8.98.
Performance: Excellent
Recording: Good

I'm happy to report that DeJohnette's latest ECM release, "Special Edition," is indeed special. Qualitatively, this is the fulfillment of DeJohnette's promise in previous albums, but I think it goes even beyond that; it is like a mirrored globe reflecting the many facets of his eclectic background and wide listening experience.

Sinfully rich in textures, DeJohnette's music captures the essence of jazz past, twists it around whimsically, and hurls it deep into the Eighties. His bold arrangements make full use of saxophonists David Murray and Arthur Blythe, men whose considerable talents have often been obscured by ill-advised associations and neglected by misguided music-industry decisionmakers. Blythe, of course, has been signed by Columbia, but, welcome as that is, it continues to smack of tokenism, and his most interesting work is still to be found on such side trips as this. Here, he and Murray reverently and skillfully translate for the Eighties the reed language that once echoed through Storyville streets and Chicago speakeasies. There is exquisite cello and bass support from Peter Warren, a player new to me, but one whose talent certainly deserves more exposure. As for Jack DeJohnette himself, he has long ranked high on my list of favorite drummers, and his performances here enhance that standing. But my regard for him as a writer has been given a considerable boost with this release. His own three compositions are impressively structured and original, and he has also taken two Coltrane pieces, Central Park West and India, and turned them into personal statements without obscuring the flavor of the originals.

In this "Special Edition," Jack DeJohnette has given us a wonderful surrealistic portrait of jazz itself. I predict that this album will be around for a long time. Its release at the start of a new decade is most appropriate. C.A.

RECORDING OF SPECIAL MERIT
WARNE MARSH/LEW TABACKIN: Tenor Gladness. Warne Marsh, Lew Tabackin (tenor saxophones); John Heard (bass). Basic #2: Hangin' Loose; Easy; and three others. INNER CIRCLE IC 6048 $7.98.
Performance: Excellent
Recording: Good

When pianist/bandleader Toshiko Akiyoshi set out to produce these 1976 sessions, she had in mind giving the old, tried-and-true two-tenor concept a new twist. Popular teams of the past have included Dexter Gordon and Wardell Gray, Al Cohn and Eddie "Lockjaw" Davis and Johnny Griffin, but all these represented the same school of tenor playing as their partners. Warne Marsh and Lew Tabackin, on the other hand, are tenors of disparate tonal

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shadings and style, which is why Akiyoshi thought combining them might be both interesting and fruitful. She was right.

"Tenor Gladness" is a superb amalgam of saxophone expressions from two jazz temperature zones once considered to be incommensurable. Tabackin's is the warm, raspy, mellifluous sound of the Coleman Hawkins school; Marsh's the frostier, more ethereal sound associated with Lester Tristano's music. The contrast is obvious only if one is looking for it, though, for otherwise the blend seems as natural as a shower in April.

Bassist John Heard and drummer Larry Bunker are heard to everybody's advantage on all but one track, New-ance—a lovely ballad that bears more than a casual resemblance to What's New and is played by Tabackin alone—and an unidentified pianist (presumably Akiyoshi) appears on Easy. Marsh's ballad track, which is actually a thinly veiled variation on Easy Living. The remaining four selections feature the two-tenor/two-rhythm balance to What's New and is played by Tabackin alone—and an unidentified pianist (artistically, at least) musical career. "Straight Life" is a fine album, but, like Pepper's last Galaxy release, it's got its problems. His descriptions of his ten-year ordeal in San Quentin almost make even his being in the tight grip of heroin bearable. One wonders how any human can survive such torment, and one cannot but admire Art Pepper for not only surviving but also bouncing back into a successful (artistically, at least) musical career. Fortunately, Pepper surmounted his problems. His descriptions of his ten-year ordeal in San Quentin almost make even his being in the tight grip of heroin bearable. One wonders how any human can survive such torment, and one cannot but admire Art Pepper for not only surviving but also bouncing back into a successful (artistically, at least) musical career. "Straight Life" is a fine album, but, like Pepper's last Galaxy release, it's got its problems. His
totallyearth and
disintegr ation, and high entertai ning pianist who's been active for close to fifty years. These solos are taken from the same two-day session in 1978 that also yielded the tracks used in the earlier "tribute to Fats Waller" album for Sackville. Two months later McShann cut the "Big Apple Bash" session for Atlantic, about which I raved when it first appeared. My recent look at the album in light of what followed has me now concerning myself with the not-so-fine hand of producer Ed Michel as much as with the pianist's recent work. The basic problem is that the albums on the Contemporary label are, on the whole, more thoroughly satisfying. C.A.

Judith Roberts, Judy Roberts (vocals, keyboards); Phil Gratteau (drums; percussion); Tony Carpenter (congas, percussion); Neal Seroka (guitar); Sean Silverman (bass). Never Was Love; Thumbs; Yes Indeed; Dandelion; Watercolors; and four others. Inner City 1C1078 $7.98

Performance: Good but unvaried Recording: Excellent Judy Roberts and her band make an impressive showing here. For at least one side, anyway. But then Roberts' distinctive voice, the band's silvery accompaniments, and her dramatic and moody keyboard work begin to sink slowly into a prettyness of their own. Roberts' voice bears a striking and warming resemblance to that of an old idol of mine, Jeri Southern, and her treatment of even such substandard material as "Thumbs" and Dandelion leaves no doubt that she's a serious and well-trained musician. What's lacking here is any real risk-taking, anything beyond what she has obviously found to be a formula that works. Too bad, because the album shows glimmers of a major talent. I'd like to hear more from Ms. Roberts. P.R.
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By Steve Simels

The Young Rascals, the Way They Were: left to right, Felix Cavaliere, Gene Cornish, Eddie Brigati, and Dino Danelli

RETURN OF THE COVER BAND

O ne of the most telling indications that disco is now distinctly unfashionable is that the live cover bands playing the stuff can’t find much work these days. All across the country, professional musicians are now being told by cigar-smoking club owners that they’ve got to buy some skinny ties, add My Sharona to their repertoire, and start rocking. Meanwhile, on Manhattan’s fashionable Upper East Side, the number of live music clubs featuring that kind of nouveau nouveau is that the live cover bands playing the stuff that kind of nouveau is that the live cover bands playing the stuff back in the Sixties they were the Band Most Likely to Be Imitated by your local cover band is making a comeback of major proportions. I bring all this up because the other band is making a comeback of major proportions. I bring all this up because the other band is making a comeback of major proportions. I bring all this up because the other band is making a comeback of major proportions.

If I may digress for a moment, I happen to be old enough to remember the Young Rascals in the days when they were wearing knickers and newsboy caps, and if you are too, you will recall that for quite a while back in the Sixties they were the Band Most Likely to Be Imitated by your local cover band is making a comeback of major proportions. I bring all this up because the other band is making a comeback of major proportions. I bring all this up because the other band is making a comeback of major proportions. I bring all this up because the other band is making a comeback of major proportions. I bring all this up because the other band is making a comeback of major proportions. I bring all this up because the other band is making a comeback of major proportions. I bring all this up because the other band is making a comeback of major proportions. I bring all this up because the other band is making a comeback of major proportions. I bring all this up because the other band is making a comeback of major proportions. I bring all this up because the other band is making a comeback of major proportions. I bring all this up because the other band is making a comeback of major proportions.

When was not altogether a bad thing, because at their peak the Rascals were one of the most exciting rock acts ever to tread a stage, and, though the hippies didn’t like them particularly, even a cursory listen reveals that their records hold up far better than those of most of the groups you might have seen in Monterey Pop or Woodstock. The reasons for that are twofold: gut-level street smarts and really exceptional musicianship. You might recall that (pace the Blues Project and Paul Butterfield) they were the first American rockers to really flaut their instrumental skill, and, while Felix Cavaliere, the singer and keyboard player, was the nominal star (in many ways he was the real Stevie Winwood, for which he has never gotten credit), we knew that the secret genius of the outfit was drummer Dino Danelli.

Danelli was an absolute powerhouse, and in those days there wasn’t anybody who could kick a song along like him; in fact, for combining prodigious technique and showmanship, the only other drummer in the world worth speaking of in the same breath was the Who’s Keith Moon. So it’s not surprising that an entire generation of musicians cut their teeth imitating the Rascals for $250 a night at teen clubs from Maine to California. Face it: they were great.

I imagine my surprise, then, when I caught Frozen, a new band featuring Danelli and Gene Cornish (the Rascals’ guitarist), and the music they were playing and the look they were affecting was exactly what you’d expect from a typical 1980 cover band sneaking in their own originals between currently fashionable hits: a flawlessly executed pastiche of the Cars (!) with a hint of Devo and Talking Heads thrown in for good measure. Not an r-b influence within hearing range, and Dino Danelli playing with such self-effacement as to be almost invisible.

Actually, underneath the usual tick-tock rhythms and lyrics about androids on TV there were some clever little songs in the set. Calculated as it all was, it was certainly a vast improvement over the pop mush of Fotomaker, the last group featuring Cornish and Danelli. In fact, I wouldn’t be at all surprised if the band has a solid commercial shot, and I wish them luck; on the basis of their past achievements they certainly deserve it. But I can’t help wishing they would cudgel some sense into Cavaliere (currently diddling with bland disco and an infatuation with Alice Coltrane’s music), go back to doing what they do best, and proceed to serve it. But I can’t help wishing they would cudgel some sense into Cavaliere (currently diddling with bland disco and an infatuation with Alice Coltrane’s music), go back to doing what they do best, and proceed to serve it. But I can’t help wishing they would cudgel some sense into Cavaliere (currently diddling with bland disco and an infatuation with Alice Coltrane’s music), go back to doing what they do best, and proceed to serve it. But I can’t help wishing they would cudgel some sense into Cavaliere (currently diddling with bland disco and an infatuation with Alice Coltrane’s music), go back to doing what they do best, and proceed to serve it.
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