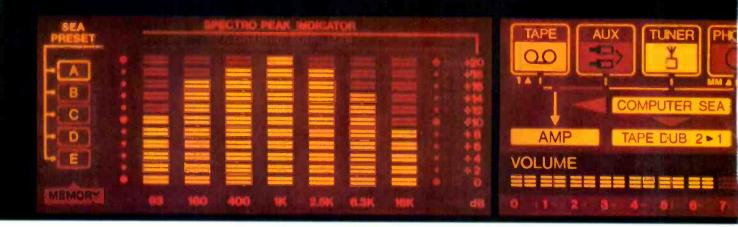


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THE SCAPE SERVE SE





# THE ULTIMATE MACHINE

JVC'S NEW R-X500B RECEIVER IS A SUPERB EXAMPLE OF HOW FAR JVC WILL GO TO BRING YOU THE ULTIMATE IN SOUND.

Some hi-fi equipment delivers slightly higher fidelity. Especially when it's designed by JVC. In fact, JVC's entire line

remote equalization and unheard-of-refinements, it is virtually without equal.

ADVANTAGE: A POWER AMP WITH INCREDIBLE



**POWERS** 

The R-X500B boasts two of the highest refinements in power amp technology available today—Dynamic Super A and Gm Driver. Dynamic Super A improves

performance in two significant ways. One, it renders music reproduction silky and pure by eliminating offensive switching distortion. Two, it capably controls speaker motion by forming an ideal interface between the amplifer and the speaker.

of high fidelity components is known throughout the world for technological brilliance and painstaking craftsmanship.

The R-X500B receiver is a case in point. With the technology of JVC's power amp, equalizer and tuner, plus

HIGH FIDELITY





JVC's newest technology, Gm Driver, improves actual in-use performance at all listening levels, high and low, by driv-

ing the power stage at a constant voltage.

#### ADVANTAGE: AN EQUALIZER WITH A GRAPHIC DIFFERENCE

Since 1966, when JVC pioneered equalizers for home use, we have remained in the very forefront of equalizer technology.

The computer controlled graphic equalizer in the R-X500B is a superb example of engineering to achieve an end. It combines unequalled versatility with automatic capabilities, while maintaining sonic integrity.

Five equalized responses can be memorized for instant recall at a touch.



And an infrared wireless remote control makes it possible to adjust equalization from your armchair without sacrificing sound quality.

In a further refinement, JVC engineers opted for an LSI to handle electronic switching for both channels at

seven different control frequencies. The result—electrical loss and tonal

## degradation never enter the picture. ADVANTAGE: A TUNER AS SMART AS A COMPUTER

AMPLIFIER SECTION Output Power 100 Watts per channel, min. RMS, both channels driven into 8 ohms, from 20Hz to 20kHz, with no more than 0.007% total harmonic distortion. Signal-to-Noise Ratio ('661HF/DIN) Phono-80dB/66dB Video/Aux/DAD/Tape—100dB/67dB RIAA Phono Equalization ± 0.5dB (20Hz -20kHz) S.E.A. SECTION Centre Frequencies-63, 160, 400, 1k, 2.5k, 6.3k, 16kHz Control Range + 10dB FM TUNER SECTION ('78 IHF)

**SPECIFICATIONS** 

FM TUNER SECTION ('78 IHF) 50dB Quieting Sensitivity Mono—14.8dBf Stereo—38.3 dBf

Signal to Noise Ratio (IHF-A Weighted)
Mono/Stereo—82dB/73dB

The R-X500B puts an advanced microcomputer in charge of the digital synthesizer tuner and references it to the accuracy of a quartz oscillator, making it highly versatile and easy to use. The micro-

computer lets you pre-

frequencies, scan them

all for 5 seconds each.

read out aerial signal

strength in 5dB incre-

ments, plus much

set 15 AM and 15 FM

#### ADVANTAGE: JVC

It is the attention to engineering detail and craftsmanship evident in the R-X500B which separates every JVC hi-fi component from all others. JVC makes changes in design for the sake of improvement. Not just for the sake of change. And the result is the difference between excellent and average. See, and hear, this difference at your nearest JVC dealer.

more.



# Sherwood announces the latest thing in second generation CD audio technology: Affordability



The compact disc just may be the most heart-stopping concept in sound since stereo. But the most heart-stopping feature of compact disc players has been their price. Now, with Sherwood's new CDP-100, you can relax about money and really get excited about sound.

#### A tradition of affordable excellence.

Sherwood is well-known for high-quality audio products at affordable prices. And our new CD player is no exception. While others were still on first generation models, we combined advanced second-generation performance with a no-nonsense array of useful, features. And we did it in a way that not only makes sense, but saves you dollars as well.

Three laser beams for better tracking. Most CD players use only one laser beam. Sherwood put a **three-beam** laser into the CDP-100, because a three-beam system virtually eliminates distortion caused by spurious data from adjacent tracks.

#### Two filters, not one.

All CD's require filters, because the decoding of digital

sound generates a sampling frequency which must be filtered out, or distortions will be heard.

Other CD players use one very steep analog filter; this can cause phase distortion. Sherwood's answer is to use a digital filter to double the sampling frequency, then use a more gentle type of analog filter for reduced phase distortion. The result: better sound at less cost.

#### Easy-to-use functional controls.

Inserting a disc is easy, thanks to a "smart" motor zed drawer under microprocessor operation. (It even knows if you accidentally put the disc in upside down.)

You can easily access any selection, and there's a twospeed fast forward and backward, so you can listen while you quickly locate the spot you want to hear. You can even set the CDP-100 to repeat the entire disc for continuous music.

Find out how advanced, easy to use, and affordable Sherwood's new CDP-100 really is at your nearest Sherwood dealer. To find him, call (800) 841-1412 during west coast business hours.



Quality and Innovation You Can Afford

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SEPTEMBER 1984

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#### **About This Issue**

I KNOW. THERE STILL are four months left before 1985, but September somehow signifies the "new year" in terms of product introductions. About now you'll be seeing the first of the 1985 audio and video components arrive on your dealer's shelves. Most of them were revealed in June at the Summer Consumer Electronics Show in Chicago.

Coverage of the SCES, as it is known, is contained in a special 14-page section. As our report details, the focus this year is not so much on any startling new products as it is on making existing technologies more accessible and easier to use. Part 2 of our SCES coverage will appear next month, with reports on car stereo and digital Compact Disc players.

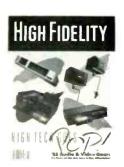
Fall is also the time when record companies issue their lists of planned releases for the coming season. This year, HIGH FIDELITY's preview will appear in three parts—beginning in these pages, continuing with a special survey of Compact Discs in October, and concluding in November. More than 1,000 releases will make 1985 a very musical year, indeed,

Featured in September's classical music section is an overview of ten Artur Rubinstein reissues, which represent virtually every period of the pianist's long and distinguished career. And our MUSICAL AMERICA edition includes more than a dozen record reviews and a roundup of Barton Wimble's latest cassette transfers of historical 78s, a superb group that contains some long-buried treasures.

Our pop music interview takes a look at ironic twists of fate faced by songwriter T-Bone Burnett. We also consider the pros and cons of jazz reissues as illustrated in a two-record set of late-Fifties Max Roach bands.

Before closing, a little commercial for a couple of special magazines HIGH FIDELITY is publishing this year. VIDEO & SOUND will be on newsstands from now through late September. It covers topics found each month in HF's NEW TECHNOLOGIES section, emphasizing digital Compact Discs and home video.

Due on the newsstands in mid-September is the tenth edition of HIGH FIDEL ITY'S TEST REPORTS. This is the first is-



COVER DESIGN: Skip Johnston

Cover Photo: Grant Roberts

ON THE COVER (clockwise from top left): Akai VS-603 VHS Hi-Fi vid-occassette recorder. Bose Room-Mate speakers. Sansui PCV-1000 Compact Disc player. Technics SL-P15 Compact Disc changer

sue in four years, and its contents have been completely revised to include more than 100 products: Compact Disc players, home video components, and car stereo gear, as well as speakers, cassette decks, blank tape, and representatives of all the other traditional audio component categories.—w.t.

#### **Letters**

#### **Hale and Hearty**



We are very happy to report that Frank McIntosh, cofounder of McIntosh Laboratory, is not dead, as was erroneously stated in "Audio Electronics: American Style" (July). A hale and hearty seventy-eight, he is pursuing an active retirement in Arizona.

#### A Bum Rap?

Regarding J. Gordon Holt's article, "Audio Electronics: American Style!" [July], it is good to see some attention paid to the very deserving efforts of these small manufacturers.

However, I feel that the article exaggerates the risk involved in buying equipment made by these companies. Over the past ten years, I have owned electronics from Acoustat. Audible Illusions, DB Systems, Precision Fidelity, Conrad-Johnson, PS Audio, Bedini, and Threshold. Most of these companies have been in business for at least six years and guarantee their products for far longer than the 90 days commonly given mass-market goods. (Typical warranties run two to five years, and they usually are transferable.) Many models are manufactured for several years-with refinements and updates in some cases, usually offered as upgrades to older units at modest cost. When service has been required on any of the components I have owned, it has been prompt, and there always has been someone to phone for help with any questions regarding installation or operation of the equipment. The parts used in most of this gear are of high quality (close-tolerance metal-film resistors, mil-spec circuit boards, polypropylene capacitors, etc.), and there is much use of discrete components instead of integrated circuits.

I believe that the "cottage industry" American audio electronics companies offer great value for the money (the prices of many of their products are surprisingly affordable) and that their reliability and service records are mostly exemplary.

George Dickinson

New York, N.Y.

Warranties for high fidelity audio components are varely shorter than one year.—Ed.

#### **Pinnock and Brendel**

Thank you very much for the glowing review of Trevor Pinnock's performance of the Four Seasons [May]. I have heard the CD version on my brother's Magnavox FD-1000SL player, and it sounds great, especially the clarity of the harpsichord. And regarding Alfred Brendel's plea to record music in a "live" situation ("In Favor of Live Records"), there is a better way: Record in the way that Telarc does, with a minimum number of microphones (one boo-boo and it's start from the beginning again) and in a concert hall with no audience. I prefer this method because audience sounds distract me from concentrating on the music (as Mr. Brendel mentioned). Also, the minimal-mike setup is less intimidating to many musicians

Raymond Chuang Sacramento, Calif.

#### **Misguided Review?**

Your review of the Counterpoint SA-7 as a budget preamp [July] is misleading. The SA-7 is a specialized preamplifier for the moving-coil cartridge enthusiast. The hallmark of the design—its high gain—gets buried in irrelevant remarks about low headroom, and the sonics are completely ignored. It's hard to believe that the report was written by anyone who cares about high fidelity or, for that matter, even listened to the thing.

HIGH FIDELITY's stamp of approval, at least in this instance, bespeaks an insensitivity to





# New Technics Cassette Decks. With dbx and Auto-Reverse. They eliminate tape noise completely. And play both sides automatically.

A remarkable achievement: developing a line of stereo cassette cecks that give you more than the total noise elimination of dbx. They also give you the luxury of auto-reverse. So with Technics, your music is more than dramatically clean. It's also beautifully continuous. And Technics goes on from there.

Direct Music Search (DMS) allows you to program the deck. To play any selection on either side of the tape. Automatically.

And no matter which noise reduction system your tapes are encoded with, Technics can handle them.

Because in addition to dbx, you get Dolby\* B and C.

You get the stability and accuracy only a two-motor drive system can provide. Microprocessor feather-touch control buttons g ve you fast, easy switching between functions such as play, stop, rewind. Bias and EQ levels are automatically set for any type of tape. From normal to chrome to metal. There are three-color, wide-range FL meters for precision sound monitoring. And more.

So before you buy any cassette deck, make sure it measures up to Technics.

Technics
The science of sound

dbx is a registered trademark of dbx, Inc.Dolby is a trademark of Dolby Laboratories.

#### Sansui's all-new Midi System.

Fantastic! That's the word for Sansui's Midi ensemble. Never before has a music system offered so much pleasure in so little space—with so much ease of operation.

With explusive One-touch Simulswitching that automatically stops one component and starts another, you can go from purntable-to tuner-to tape deck at the touch of a button.

The most intriguing component is our dual tome arm turntable that lets you play both sides of a record—without flipping tower

And because man does not live by records alone, there's a dual cassette deck, AM/FM tuner, and a high-powered integrated amplifier with 5-band graphic equalize for tailoring sound that's flat out beautiful.

Of ccurse, all this sensational sound must come out somewhere. And



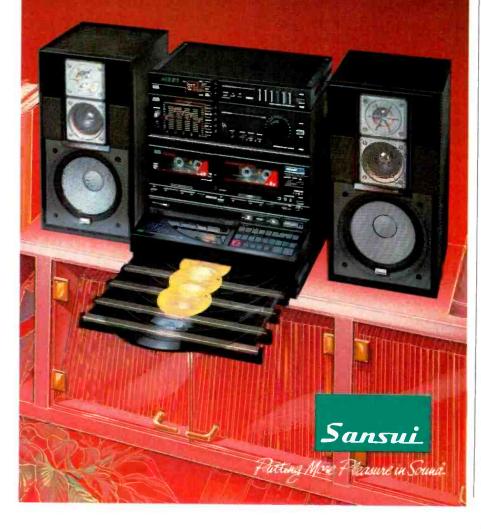
there's no better outlet than a pair of super sounding Sansui speakers.

There's also more to Sansui's M di system than meets the ears. With exquis te looks to complement its incredable sound and features, it adds pleasure to your room on both levels.

Ycu can choose from 3 magnificent Mici systems, and maximize your pleasure in a minimum of space. See your Sansui dealer today. SANS JI ELECTRONICS CORPORATION, Lynchurst, NJ 07071; Carson, CA 90°46 Sansu Electric Co., Ltd., Tokyo, Japan

#### OVERWHELMING.

Undersized.



#### Letters

product and listener and a willingness to misinform. The SA-7 deserves to be heard and reviewed in its intended light.

Jim Goulding Chicago, Ill.

Counterpoint's description to us of the thinking behind the SA-7 reads as follows: "The purpose behind the design and manufacture of the SA-7 was to offer a preamplifier at a price point typically reserved for solid-state preamps, thus giving audiophiles on a budget a choice." Nothing in Counterpoint's literature or in the SA-7 owner's manual suggests that the preamp is intended solely or even primarily for use with moving-coil cartridges, although one might infer (as we did) that the point of its unusually high gain is to cater to such pickups. However, the gain is still about 10 dB lower than usually is provided by movingcoil inputs and may not be enough for some very low-output cartridges. Moreover, the input impedance clearly is intended to accommodate fixed-coil pickups, and the specified overload margin (as opposed to what we measured) is more than adequate for that purpose. Thus, our

comments on headroom are quite pertinent.

Everyone here who writes about audio cares a great deal about high fidelity, and we listen to everything that we review. But in the case of electronics, there seldom is anything to say about the sound unless the component is misdesigned, defective, or operated beyond its intended limits: What goes in usually is what comes out. When verifiable sonic oddities emerge in our listening tests, we note them in the report.

Finally, our test reports should not be construed as stamps of approval or disapproval. Their purpose is to detail the operation and performance of the product being reviewed, with commentary, where appropriate, on the significance of our findings to potential users. Decisions regarding what you should or should not buy are your own—as they should be.—Ed.

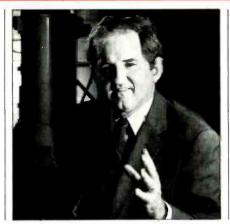
#### "TAMI" Whammy

I saw the theatrical release of *The TAMI Show* some 12 years ago and enjoyed it enormously. It had always been my faint hope that someday this vintage material would be made available on videotape. I was afraid that with the trendy razzledazzle of MTV, no one would regard its rerelease as worthwhile. Imagine my joy when Media Home Entertainment issued "That Was Rock (The TAMI/TNT Show)." Imagine my profound disappointment when I discovered the producers had eviscerated the heart and soul of a magic live concert by hacking up two very different concerts, grafting them together, and then splicing in a bored and irrelevant narrative by Chuck Berry!

Billy Altman's review of "That Was Rock" [July] insightfully exposes this thick-headed blunder. I only wish I had read it sooner, before I invited a group of friends over for dinner and the "treat" of seeing what I thought was the original, legendary tape. Apparently some video companies feel they can go around blithely tearing the hearts out of authentic performances, and I applaud Mr. Altman and High Fidelity for being willing to scold the ones that do so.

Andrew Teton Santa Barbara, Calif.

Letters should be addressed to The Editor, High Fidelity, 825 7th Ave., New York, N.Y. 10019. All letters are subject to editing for brevity and clarity.



## The Future of Audio.

The Cornerstone of Home Entertainment. by John Geheran
Vice President, Sales and Marketing



Imagine yourself over the last 50 years. In the 1930s you listened to the radio. In the 1950s you began watching TV. In the 1970s

you listened with pride to your component stereo

Now it's 1984. The growth and development of video has provided an enormous increase in the number of choices

available to you in both equipment and programming. You probably ask yourself questions like: "Do I want VHS or Beta?" "Should I watch my favorite program now, or videotape it while I watch the playoffs?" But maybe the question you really should ask first is: "How does my audio equipment fit into all this?" You can find the answer by turning down the volume on the nearest TV set.

While video brings new programs onto your TV screen, it's audio that pulls them off the screen and brings them to life in your home. Whether it's a bass drum beating through a classic rock concert, or a space ship whizzing through the latest movie, it's audio that creates the mood, generates the excitement, and sets the pace for what you see. The introduction of new technologies and products such as stereo TV and hi-fi VCRs emphasizes this fact.

The key to exciting, powerful home entertainment then, is an integrated audio-video system. But how can you logically start building a system which lets you enjoy all these new developments?

You know that the cornerstone of your system is the sound. You also know that millions of dollars to develop and manufacture speaker systems which deliver the impact and excitement of live performance. That investment can now bring movies, concerts, and specials to life in your own living room.

Experience the excitement available from a combined audio-video system. Ask your local Bose dealer to show you the Bose Music Video. Your dealer can also help you decide which components and formats offer you the enjoyment and convenience which best match your lifestyle.

Bose wants to help you learn more about the future of audio, and its contribution to home entertainment. To do so,

we're using this year's advertising space to discuss and explain key issues. Knowledgeable experts will share information which helps you get maximum enjoyment from your home entertainment investment.

For more information on Bose products and a list of authorized Bose dealers, write: Bose Corporation, 10 Speen St., Dept. HF, Framingham, MA 01701.



your speakers, more than any other component, determine the quality of the sound you hear. The right speakers, then, represent the logical base upon which to build a modern home entertainment system.

At Bose® we've invested 20 years and



#### **CrossTalk**

Practical answers to your audio and video questions by Robert Long

#### **Best Solution**

I use an Allsop Orbitrac record cleaner for my records and isopropyl alcohol (91 percent) for cleaning the heads and so on of my cassette deck. The Allsop solution smells similar to the alcohol, but possibly more dilute. Can I use isopropyl alcohol instead, since it's considerably cheaper, without harming my records?—J. Tordeich, Auckland, New Zealand

It all depends on who you talk to. Bruce Maier, the founder of Discwasher (and, as far as I can tell, the world's most exhaustive researcher of such matters), says that alcohol can leach plasticisers from the vinyl, ultimately making it less resilient and more subject to damage than it would otherwise be. On the other hand, the Keith Monks record-washing machine-widely used by libraries and other archives, and hands down the most expensive record-care device around—is said to use alcohol in its cleaning solution. At minimum, you should dilute the alcohol with distilled water and take care to use no more than necessary. But I'd rather stick with solutions specially concocted for the purpose by experts who know more about vinyl chemistry than I ever hope to. The elixirs may cost more than drugstore alcohol, but they cost a lot less than new records.

#### What Noise Annoys?

I have read that what is thought to be tape hiss in decks incorporating DBX or Dolby C noise reduction often is modulation noise or scrape flutter. If this is such an important characteristic in these decks, why isn't it measured and included in test reports?—Charles Arvin, Austin, Texas

A little background is necessary to understand why we don't break these effects out separately. Modulation noise is a sort of random dither of the signal, occasioned by nonuniformities of the magnetic particles in the tape coating and very roughly comparable to the halo that can be created around bright objects by interaction between halide crystals in photographic emulsions. Scrape flutter is created by friction between the tape and fixed guides, causing the tape to alternately stick and slip. It is a very high-frequency effect and therefore is not picked up in conventional flutter measurements.

Except for the squeal that can result

from extreme scrape flutter, neither is audible without an input signal and to that extent they can't be compared to tape hiss, which is constant. And because there's no agreed method of isolating either one from other forms of noise and distortion—let alone of quantifying it—you won't see measurements of them in reviews. But without the masking hiss that DBX and Dolby C have banished from normal audibility, perhaps the impetus to develop testing standards for these factors will increase.

#### A Big Hiss

I own an Optonica SA-5207 receiver. With my turntable off, the selector set on phono, and the volume turned all the way up, my speakers put out an annoying hiss. Is this because of the relatively low S/N ratio through the phono input (73 dB) or the THD of the amp (0.05 percent at 40 watts per channel)? Or maybe my speakers are at fault. What would help, short of buying a new amp?—L. Yamada, Cambridge, Mass.

You tempt me to the only half-jocular recommendation that you turn down the volume to listening level, start your turntable. put on some music, and forget about sophistries: The same thing will happen with any audio system. A signal-to-noise ratio of 73 dB isn't at all bad for a phono input, and the noise it represents normally will be masked by the music even with the volume turned up as loud as you can stand it. The distortion is even more likely to be masked, because it can occur only when a signal is present. A speaker with a rough top end will tend to exaggerate the hiss, and switching models could conceivably help-if, indeed, your system needs help under normal listening conditions. From your description, I doubt that it does.

#### Better Beta

I bought a Beta Hi-Fi videocassette recorder, which puts my friend's stereo VHS deck to shame. But I can't find tapes recorded in the Beta Hi-Fi format. Where can you get them?—Douglas Knight, Worms, West Germany

They keep coming along, little by little—usually on new releases (almost all of which have Hi-Fi soundtracks, even when they're not so labeled), with only occasional upgradings of old titles. And even then it

takes a while for the new version to filter down to the retail level, where the earlier one tends to remain until stocks are exhausted. If you're concerned about staying one jump ahead of your VHS buddy, don't worry. VHS Hi-Fi tapes are coming out even more slowly, I'm told, because some duplicators insist there are unsolved technical problems with the format.

#### Weight Loss?

I've been told that tonearm/cartridge matching is unimportant with equipment the quality of my Sansui XR-Q7 turntable. No figure for arm mass appears in its specifications. When I contacted the local agents, they referred me to their spare-parts department, which thought tonearm mass was a part of the turntable and asked me how I had lost it. My guess is that matching is important. Do you know the mass of the Sansui's arm?—A. N. Firth, GPO, Singapore

You're right: Arm/cartridge matching is important, regardless of the quality of the equipment. Unfortunately, we never tested the XR-Q7, so I'm unable to help you avoid trouble except to suggest that when you're considering a new cartridge you might try it out in your arm with a warped record. If it has a tendency to hop about on the warps, the arm is too massive for the cartridge. In that case, you need a pickup that is lighter, lower in compliance, or both.

#### Obsolete?

With all of the new supertuners at seemingly reasonable prices, is there any reason I should consider upgrading my SAE Mk. 6 tuner? It cost \$1,200 when I bought it new in 1973, and it still works well and is dependable.—Bill Gross, Santa Barbara, Calif.

The only reason for upgrading, as far as I'm concerned, is dissatisfaction of some sort with what you've got. If you're dissatisfied with the Mk. 6 simply because it's not new, so be it. But the "supertuner" with which you replace it could be measurably superior in all respects except one that is critical to reception in your particular area or to best results with a favorite station.

We regret that the volume of reader mail is too great for us to answer all questions individually.

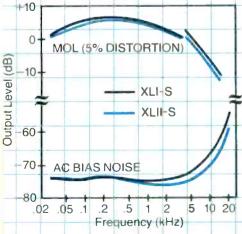
## COMPACT DISC COMPATIBLE

Maxell introduces the new XL-S audio cassettes; a series of ferric oxide tapes which deliver a level of performance that can capture the sound nuances found on Compact Discs more faithfully than other ferric oxide cassettes on the market.

There are a number of areas where this achieve ment is apparent.

#### GREATER DYNAMIC RANGE.

Through a new formulation of our magnetic particles, we were able to reduce the perceived residual AC bias noise level by 1 dB in the critical 2 kHz to 10 kHz mid-frequency range. And simultaneously increase sensitivity and maximum output levels by as much as 2 dB.

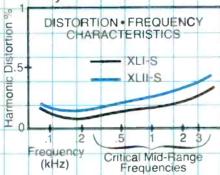


As a result, the dynamic range of each tape has been significantly expanded. So you get a

better signal to noise ratio and a fuller impact of the dynamic transients exclusively inherent to digital CD recordings.

#### **LOWER DISTORTION.**

The newly formulated particles also contribute considerably to XL-S's low output fluctuation, as well as its virtual distortion-free reproduction, especially in the critical mid-range frequencies. This, in turn, accounts for our XL-S tape's enhanced sound clarity.



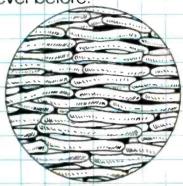
### IMPROVED MAGNETIC PARTICLES.

Our refined particle crystallization process is the basis for all of these accomplishments. Maxell engineers are now able to produce a more compact needle-shaped Epitaxial magnetic particle of extremely high uniformity.

This allows us to create a greater ratio of total surface area to unit weight of magnetic particles.

As a result, our XL-S

tapes now have the ability to record more information per unit area than ever before.



PACKING DENSITY OF UNIFORM PARTICLES.

Which is why Maxell high bias XLII-S and normal bias XLII-S are unsurpassed at reproducing the sound qualities found on today's finest recordings. Regardless of whether your frame of reference is analog or digital audio discs.

For technical specifications on the XL-S series, write to: Audiophile File, Maxell Corp. of America, 60 Oxford Drive, Moonachie, New Jersey 07074:



IT'S WORTH IT.

### The Autophile

Going on the road with stereo

by Ralph Hodges

#### A Skinflint's Guide to Good Sound

IF YOU DON'T LIKE the sound of your car stereo setup, there are two remedies: Rip out the whole thing and start from scratch, or remove the weakest links in the chain, hoping that the addition of a new set of speakers or a better front end will result in a superior system. The latter option, of course, seems preferable, but be forewarned: Unless you're prepared to do some planning, the scheme that you hoped would save time and cash may cost more money and aggravation than if you had started from ground zero.

Fortunately, aftermarket suppliers have been keeping an eye on the situation, and they've worked out a few ways to upgrade systems of at least marginal quality with a minimum amount of hassle. I spoke with several of them recently, and here are their recommendations.

Speakers. Professionals unanimously consider new loudspeakers the first and easiest step in the quest for improved sound. The people at Audiomobile/American Antenna say it's best to install all new drivers instead of simply adding a couple of woofers and tweeters to your present setup. A good speaker system is carefully integrated. Ask a novice to "design" his own by adding a driver here and a driver there and you are asking for trouble. Audiomobile also recommends triaxial systems, if you have the space for them. An alternative would be powered loudspeakers (i.e., self-enclosed systems with built-in amplifiers).

Front Ends. Most of the aftermarket suppliers I spoke with think the radio/tape players that car makers offer as factory-installed options have few limitations in tape and tuner performance, though niceties such as noise reduction and switchable tape EQ may be omitted. However, older front ends may suffer from poor FM reception, noisy electronics, and high wow and flutter during tape play. If you don't trust your own ears to identify and assess these faults,

Ralph Hodges, a frequent contributor to these pages, is filling in for regular "Autophile" columnist Gary Stock, who is busy compiling next month's report on the new car-stereo gear introduced at the Summer Consumer Electronics Show. let someone whose hearing is attuned to such things make the judgment. According to Rich Coe of Alpine, the front end in a \$300-plus factory-installed system probably is good enough to serve as the heart of a high-quality setup.

Amplifiers. Here is where your existing front end will probably be weakest. Its little amp is underpowered to begin with, and any speakers you add are bound to require more juice. Additional power can be obtained with a booster amplifier or, as I said earlier, powered speakers, but both require some complicated rewiring. Audiomobile offers a trunk-mounted amp that derives adequate DC from the wire feeding the trunk light and that is turned on and off automatically by a signal-sensing circuit. Such an approach is easy, but not cheap.

Alternatively, if you can afford only new loudspeakers at present, ask the installer to wire a couple of capacitors into the speaker lines. Provided they are of the appropriate value (which he should be able to figure out), the capacitors will prevent the speakers from drawing too much lowrelatively quick and straightforward). The company remains quiet about what the additional electronics actually do, but a guess based on a half day of listening is that the "black box" synthesizes some high and low frequencies that are not actually present in the source material. This "extra" signal is then amplified and fed to the new speakers. Before you get too excited about the concept, however, take a drive in a Contra-Tech-equipped car. The ensemble can sound very good, but if the basic system in the demo car is much better than your own, there's no way of knowing whether you'll achieve similar results.

Summing up: If you're in the mood to do something about the sound system in your car and don't want to rip it all out and start anew, you should approach the problem in a logical fashion. First, determine where your system's problems lie: limited frequency response (the speakers), high distortion (the amplifier), audible noise or wow and flutter (the front end). Second, check typical prices for the components you'd like to replace and establish a budget,



ContraTech's System 97 lets you add punch and sizzle to your present car system.

frequency energy, thus lessening the demands on your amplifier. When you have the money for an outboard amp, just clip out the capacitors.

System Add-ons. Factory-installed speakers are reasonable reproducers of midrange frequencies: it's in the highs and lows that they fall flat. Acting on that premise, a new company called ContraTech has designed an add-on ensemble that uses everything you already have in your system. It consists of three additional loudspeakers, some proprietary electronics, and a bill in the neighborhood of \$300 (plus installation, which is

making sure to factor in an additional \$100 or so for the help of a good installer. Third, approach several dealers with an organized accounting of your needs and means. Look for definite signs of understanding and willingness on their part to deal with your problems. If a dealer seems bored or confused by what you're proposing, walk out and find someone else. And fourth, unless you've served as an apprentice to a master mechanic, don't even consider installing the equipment yourself. Getting good sound is one thing, but scarring the interior of a car to achieve it is hardly a trade-off I'd like to make.

# 4 out of 5 Sony car stereo owners would go down the same road again.

It seems there is one road that most Sony owners would gladly travel again.

The road to a Sony car stereo.

In a recent survey, an overwhelming majority of Sony car stereo owners contacted gave Sony the ultimate testimonial. They said they would be more than willing to buy a Sony again. As one Sony owner, Ronald Dokken of Minneapolis, Minnesota, volunteered, "When there's a car stereo that sounds as good and works as well as a Sony, why would you want another one?"

In fact, most Sony car stereo owners when asked went so far as to say that they would keep their car stereos longer than they'd keep their cars. Or, in the words of Valerie Roussel of New Orleans, Louisiana: "My car was in the shop for a few weeks. I missed my car stereo a lot more than my car." And Mark Share of Tempe, Arizona, added, "I have two cars and two kinds of car stereos. I find myself driving the car with the better sounding one—the Sony."

Which is not at all surprising, considering the fact that Sony car stereos are not just engineered to perform reliably. They are also engineered to deliver brilliant high-fidelity stereo sound. Because they take advantage of the same experience and innovative technology that goes into Sony's home stereos.

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## **New Equipment Reports**

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



#### Sansui's First CD Player

Sansui PC-V1000 Compact Disc player, with wireless remote control. Dimensions: 17 by 4 Inches (front panel), 1134 Inches deep plus clearance for connections. AC convenience outlet: one unswitched (100 watts max.). Price: \$850. Warranty: "Ilmited," two years parts and labor. Manufacturer: Sansui Electric Co., Ltd., Japan; U.S. distributor: Sansui Electronics Corp., 1250 Valley Brook Ave., Lyndhurst, N.J. 07071.

AMONG THE KEY ELEMENTS you must consider when buying a Compact Disc player are its programming and cueing features. The reason they are so important is the total absence of any one-on-one manual control of CD playback comparable to the finger lift that owners of simple turntables use to cue (and scratch) their LPs. CD cueing is (like everything else about the medium) all by the numbers: band numbers, index numbers (if the disc was indexed in mastering), elapsed-time numbers, time-remaining numbers. And much of what determines whether a given model is a joy or a chore to use centers on how the features that manipulate these numbers are conceived and exe-

We were disappointed at first to find that Sansui's PC-V1000 is not among those increasingly rare players that support index cueing—a potentially powerful random-access tool that now appears to be atrophying because of record-company apathy. Sansui can hardly be faulted: If the discs aren't indexed, the cost of the cueing feature can't be justified.

The random-access features on the player's front panel (as distinct from the additional ones on its remote control) constitute a spare but workable system. There are the usual steppers, forward and back,

that enable you to cue to the beginnings of bands and to skip a specific number of bands in either direction according to the number of times you tap the appropriate control. You can program a sequence by cueing in this fashion and then pressing SET to memorize each selection in the sequence. If you're not sure which you want to hear, you can press INTRO SKIP, as Sansui calls it, which samples about ten seconds from the start of each band.

If the cue point you're looking for isn't at the beginning of a band, you can use the search buttons (one for each direction). When you press one of them, the playback level drops somewhat and you get a quick succession of short musical samples as the laser pickup traverses the disc at about twice its normal speed. If you keep your finger on either button for more than a few seconds, the pace quickens, speeding the search but presenting the samples at too dizzying a rate to permit easy identification in some music. (It sounds a little like the output of a conventional pickup that has been sent skipping across an LP.) We soon learned how to control the process by removing and resuming pressure on the button, which switches to PLAY, then back to the slower scan speed.

There's one additional front-panel

The key is Kyocera ceramics technology a superior new way to virtually eliminate The new Kyocera A-910

It starts with a handsome ceramic-compound resin base (actually the chassis) that supports ferrous, there are no eddy currents-so there's stability immune from volume and frequency rigid and inert, they provide vibration-free irregularities. Because ceramics are nonmechanical and electrical vibrations that no electrical hum. Result: a chassis with all camponents. Because ceramics are practically no mechanical and electrical impede dynamic performance. mourifies. Integrated Amplifler.

In addition, fine ceramics encapsulate and improve voltage regulation.

There are many other features that

- Rated a full 150 watts per channel into 8
  - and input impedance transistors.

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Fluorescent digital display (low noise type).

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 New MM/MC equalizer with ultra low noise OHMS at 0.02% THD from 20-20,000 HZ.

push pull final stages with MOS FET drivers. Single stage push pull amplifier circuitry for improved signal to noise ratio and wide band frequency response.

Kyocera's matching PLL Quartz synthesized AM/FM Stereo T-910 Tuner.

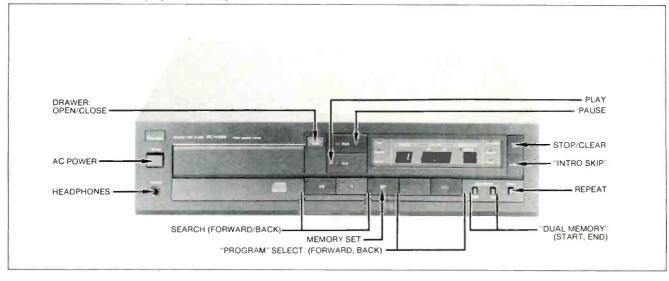
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amplifier design incorporating parallel triple

Performance says it all. Put it to the test at a selected Kyocera audio dealer now.

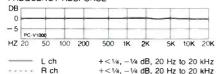
Kyocera International, Inc., 7 Powder Horn Drive, Warren New Jersey 07060, (201) 560-0060





All data obtained using the Sony YEDS-7, Technics SH-CD001, Philips 410 055-2, and Philips 410 056-2 test discs.

#### FREQUENCY RESPONSE



**DE-EMPHASIS ERROR** 

left channel +0, -< 1/4 dB, 1 to 16 kHz right channel +0. -< 1/4 dB, 1 to 16 kHz

CHANNEL SEPARATION (at 1 kHz) 881/4 dB

CHANNEL BALANCE (at 1 kHz) ±<1/4 dB

S/N RATIO (re 0 dB: A-weighted)

without de-emphasis 105 dB with de-emphasis 107 dB

HARMONIC DISTORTION (THD+N; 40 Hz to 20 kHz) at 0 dB <0.012%

at 0 dB ≤0.012% at −24 dB ≤0.049%

at −24 dB ≤0.049%

IM DISTORTION (70-Hz difference frequency;

300 Hz to 20 kHz)
at 0 dB ≤0.011%
at −10 dB <0.01%
at −20 dB ≤0.028%
at −30 dB ≤0.22%

LINEARITY (at 1 kHz)

0 to -50 dB no measurable error at -60 dB + ½ dB at -70 dB +1 dB at -80 dB +4¾ dB at -90 dB +11½ dB

TRACKING & ERROR CORRECTION

maxlmum signal-layer gap >900 μm maxlmum surface obstruction >800 μm' simulated-fingerprint test pass

MAXIMUM OUTPUT LEVEL

line output 2.08 volts headphone output 7.67 volts

OUTPUT IMPEDANCE

line output 65 ohms headphone output 230 ohms

\*See text.

cueing option: the so-called dual memory. It will remember a start and an end, each set by pressing the respective button when you're cued to the appropriate spot. This feature can be used for a single run-through of a particular section or in conjunction with the REPEAT (which also can be used on whole discs or conventionally programmed sequences). In one of our standard listening tests, we program the Bach E major Violin Concerto (the second of three on Oiseau-Lyre 400 080-2) for self-contained playback. With the dual memory, this means stepping to Band 4 (the first movement). pressing START, stepping to Band 6 (the last movement), and pressing END and then PLAY. (Though the pickup is cued to the beginning of the last movement at "6," the logic knows enough to continue playback to the end of the band.) This is easier than the alternative: stepping to Band 4, pressing SET, stepping to Band 5, pressing SET, stepping to Band 6, and pressing SET and then PLAY

And it becomes even easier when you use the wireless remote control (powered by two AA cells that come with it), which contains all of the controls we've mentioned so far plus STOP/CLEAR and a numeric keypad. The STOP/CLEAR appears on the front panel as well; the keypad doesn't. To play our "problem" concerto, we simply press 4, START, 6, END, and PLAY. The concerto then begins at the first note, plays straight through as though it were one continuous performance occupying a whole disc, and stops after the last cadence has died away.

When we tried the same thing with the programming controls (which also are aided by the presence of the keypad), there was a momentary loss of "air" and a very slight click between movements—presumably as the logic registered the fact that it had finished one task and checked to see what the next might be. Such artifacts are not at all unusual in programmed playback with other models and seldom are really intrusive (though they do notify the intent

listener that the musical continuity is only an illusion), but we were delighted to find that we could avoid them altogether by using the dual memory instead.

Further promoting ease of operation are the convenience outlet and the so-called Compu-Edit jack on the back panel. The latter synchronizes an appropriately equipped cassette deck to the player for simultaneous start when you dub from CD to tape. Unfortunately, the PC-V1000's disc drawer doesn't continue the theme: The fingerwell at the front forces you either to poke the disc up from below with one hand so that you can remove it with the other or to place one finger (if yours are skinny enough) in the center hole while you grip the rim with another. (Would that the CD's inventors had thought to make the hole bigger—more like that in a 45.)

The PC-V1000's measured performance ranges from excellent to undistinguished. For example, frequency response, channel balance and separation, and signalto-noise (S/N) ratio are all top-notch. Converter linearity is not as good as usual, however, with the data showing substantial compression at very low levels, and distortion is somewhat higher than we are accustomed to seeing. Still, the harmonic and intermodulation products are a couple of orders of magnitude lower than can be obtained from even the finest analog gear. And when we tried to hear a difference between this player and one that tested better in these respects, we were stymied. A little muddiness here, a slight edginess there-whatever we examined came out substantially the same on both players, leaving the studio mikes and our monitor speakers as the likeliest culprits.

Of more concern are the differences we *could* spot. If you like headphone listening, you should plan on using the jack in your main stereo system. The one in the PC-V1000 clips before a CD's full 0-dB level is reached with all but headsets of exceptionally high impedance—at least 950 ohms. And the players we received for

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Kyocera's solution: It starts with ceramics.

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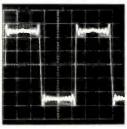
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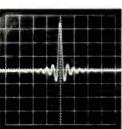
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SQUARE-WAVE RESPONSE (1 kHz)



IMPULSE RESPONSE



test were quite sensitive to external shock and vibration. However, when one of our staffers tried to cudgel a store's demo sample into skipping, he failed, which suggests that Sansui may already have solved this problem.

The tracking and error-correction tests also raised a question. The player cleared all the hurdles on the Philips evaluation disc without skipping or clicking—as we might have anticipated, given the triple-beam pickup system Sansui uses. But Diversified Science Laboratories noted some subtle signs of discomfort on the 600- and 800micrometer black dots, and when we applied a more severe test (a paper "wedge" stuck on the surface of a disc), the results were different for each trial. In general, though, the PC-V1000 was somewhat more plagued by loud clicks, skips, and so on in this test than was one of the best-tracking players we have reviewed. This is a rather severe comparison, however, and the Sansui's tracking is as good as that of most models we have examined and

better than that of a fair number.

The PC-V1000's square-wave and impulse responses suggest that it employs oversampling and digital filtering (applied before digital-to-analog conversion), thereby allowing the use of a relatively gentle analog filter at the output, minimizing phase shift and ringing in the audio signal. As with other players we have tested that use this approach, there is some very slight rippling at the upper end of the response curve, but again, the effect is tiny by comparison to the peaks and other perturbations we have come to expect from phono pickups and utterly negligible from a listening point of view.

The PC-V1000's most memorable quality is its handling of disc programming. The infrared remote control is handy and attractive, and the relationship between its controls and those on the player itself has been subtly worked out for optimum compromise between flexibility and simplicity. In particular, we expect to see more of its "dual memory" approach.

#### Big Sound From a Small Superamp

Soundcraftsmen PCR-800 power amplifier. Dimensions: 8½ by 5 inches (front panel), 13 inches deep plus clearance for connections. Price: \$450. Warranty: "limited," 90 days parts and labor, automatically extended to two years if warranty registration card is returned within ten days of purchase. Manufacturer: Soundcraftsmen, Inc., 2200 S. Ritchey St., Santa Ana, Calif. 92705.



ALTHOUGH SOUNDCRAFTSMEN made its name in signal processing (introducing the first really popular consumer graphic equalizer just over a decade ago), one could argue that the company's most interesting products in recent years have been its power amplifiers. The last of these that we reviewed was the MA-5002A Class H amp (November 1981). "Class H" is Soundcraftsmen's designation for a type of signaltracking power supply that improves amplifier efficiency by matching the supply voltage to the input signal. When the input is small—as it is most of the time—the supply voltage is maintained at a constant low level, minimizing power consumption and heat dissipation. If the signal rises to a level that demands an output greater than the base voltage can support, the power supply follows it up, returning to the low-voltage mode when the peak has passed.

The PCR-800 also aims at increasing efficiency, and again by means of a smart power supply, but the path taken is the other way around. Called "phase control regulation," it strives to use as little power as possible from the AC line to maintain a constant power-supply voltage. This is achieved with a servo loop that senses the supply voltage and feeds that information back to the silicon controlled rectifiers (SCRs), which convert the alternating current (AC) from the power transformer into direct current (DC) for modulation by the amplifier circuitry. Unlike the rectifiers in conventional amps, which are always on, those in the PCR-800 conduct only for as much of each AC cycle as is necessary to

#### **AUDIO**

#### **New Equipment Reports**

RATED POWER 8-ohm load 4-ohm load 2-ohm load

23 dBW (205 watts)/channel 2434 dBW (300 watts)/channel 241/4 dBW (275 watts)/channel

 OUTPUT AT CLIPPING (at 1 kHz; both channels driven)

 8-ohm load
 23¼ dBW (215 watts)/channel

 4-ohm load
 25 dBW (325 watts)/channel

 2-ohm load
 24½ dBW (290 watts)/channel

DYNAMIC POWER

8-ohm load 231/4 dBW 4-ohm load 25 dBW 2-ohm load 25 dBW

DYNAMIC HEADROOM (re rated power)

8-ohm load + 1/4 dB 4-ohm load + 1/4 dB 2-ohm load + 3/4 dB

HARMONIC DISTORTION (THD; 20 Hz to 20 kHz) at 23 dBW (205 watts)  $\leq$  0.068% at 0 dBW (1 watt)  $\leq$  0.015%

FREQUENCY RESPONSE

+0, -1/4 dB, <10 Hz to 29.7 kHz; +0, -3 dB, <10 Hz to 130 kHz

S N RATIO (re 0 dBW; A-weighted) 8034 dB

SENSITIVITY (re 0 dBW)

110 mV 23.8k ohms

INPUT IMPEDANCE

201011

DAMPING FACTOR (at 50 Hz) 260

CHANNEL SEPARATION (at 1 kHz) 88 dB

#### About the dBW ...

We currently are expressing power in terms of dBW—meaning power in dB with a reference (0 dBW) of 1 watt. The conversion table will enable you to use the advantages of dBW in comparing these products to others for which you have no dBW figures.

WATTS 1.00 1.25 1.6 2.0 2.5 3.2 4.0 5.0 6.3 8.0 10.0	0 1 2 3 4 5 6 7 8 9 10	32 40 50 63 80 100 125 160 200 250 320	dBW 15 16 17 18 19 20 21 22 23 24 25
	-		
	-		
6.3	8		
8.0	9	250	24
10.0	10	320	25
12.5	11	400	26
16	12	500	27
20	13	630	28
25	14	800	29

maintain the desired supply voltage. Thus, the amplifier normally uses just a small amount of the power available from the AC line. Only when full output is demanded does the power supply open up and use the full swing.

The payoff is higher operating efficiency and reduced size and cost. A single PCR-800 sells for \$450, weighs slightly less than 25 pounds, and can be mounted beside another PCR-800 in a standard 19inch rack-a remarkable achievement for an amplifier rated at more than 200 watts per channel. Cooling is provided by a twospeed fan that forces air through the chassis, from the back (where the fan is mounted) through the front grille. At its low speed, the fan is silent enough to be inaudible when music is being played, although it can be heard faintly from several feet away in a quiet room. Diversified Science Laboratories reports that the only time the fan kicked into its high-speed mode was during the measurement of continuous power into a 2-ohm load. It remained at the lower speed throughout our listening trials, even at high volume, and the amp never became more than slightly warm to the touch

If the amp does somehow begin to overheat, the power supply automatically reduces its output until the temperature drops to a safe level. And because the output devices are MOS FETs, there is no danger of the self-destructive thermal runaway to which conventional bipolar transistors are prone when asked to deliver too much current. Thus, there is no need for current-limiting protection circuits, with their attendant problems.

When the PCR-800 is turned on, a green pilot LED at the bottom of the front panel begins blinking slowly (a characteristic that some may find distracting); if the fan shifts to its high speed, the LED blinks more rapidly. In addition, each channel has a red clipping LED that flickers on whenever the amp is overloaded. On the back panel are standard pin-jack inputs and color-coded banana-jack output binding posts. The PCR-800 can be strapped for mono operation (with a rated output of 600 watts, or 27¾ dBW, into 8 ohms) by means of an external bridging adapter, such as the one built into Sounderaftsmen preamps.

The PCR-800 is one of the few amplifiers available that is rated not only into 8 ohms but also into 4 and even 2 ohms, so DSL measured its maximum output before clipping continuously as well as dynamically into all three loads. As you can see from

the data, the results are impressive. Output is quite high into 8 ohms (slightly exceeding Soundcraftsmen's specification) and increases by almost another 2 dB into 4 ohms. Continuous power into 2 ohms is about ½ dB less than into 4, but the amp's dynamic power (which more nearly reflects performance on music) is the same into both. The small difference between the dynamic and continuous power figures (and the correspondingly low dynamic headroom) is a result of the power supply's very tight regulation.

Although the PCR-800 clearly is capable of delivering plenty of current into lowimpedance loads, a slight loss of extreme treble response will occur because of a rapid rise in the amp's output impedance at high frequencies. As reflected in the very high damping factor, the output impedance at 50 Hz is a mere 30 milliohms; at 1 kHz it is still only 48 milliohms, but by 10 kHz it is up to 310 milliohms, and at 20 kHz the output impedance is 460 milliohms (almost half an ohm). With a 2-ohm load, this will cause a loss of 11/4 dB at 10 kHz and 2 dB at 20 kHz, which is enough to be audible on some material. The rolloff is not great, however, and it will disappear with more typical, higher-impedance loads.

The only other less-than-outstanding measurement is the signal-to-noise (S/N) ratio, which is lower than we are used to seeing. This is attributable mainly to 60-Hz power-line hum and its harmonics. No noise was apparent in listening, however. The remaining data are uniformly excellent, showing perfectly flat frequency response across the audio band, distortion levels well below the threshold of audibility, wider than necessary channel separation, and an appropriate input impedance and sensitivity.

Performance in the listening room is no less satisfying. The weight of the amplifier is distributed heavily toward the front, making it somewhat more unwieldy than its size alone would suggest, and the 41/2-foot power cord may be a little short for some installations, but aside from those minor points, setup is a breeze. We were able to drive our loudspeakers to very high volumes without overload, and when the amp does clip, it does so very gracefully. At levels below clipping, it makes no contribution of its own to the sound, which is exactly what one would expect of a fine power amplifier. That, together with compact dimensions, exceptional current capability, and an attractively low price, makes the PCR-800 an excellent value.

Report Policy: Equipment reports are based on laboratory measurements and controlled listenling tests. Unless otherwise noted, test data and measurements are obtained by Diversified Science Laboratories. The choice of equipment to be tested rests with the editors of High FIDELITY. Samples normally are supplied on loan from the manufacturer. Manufacturers are not permitted to read

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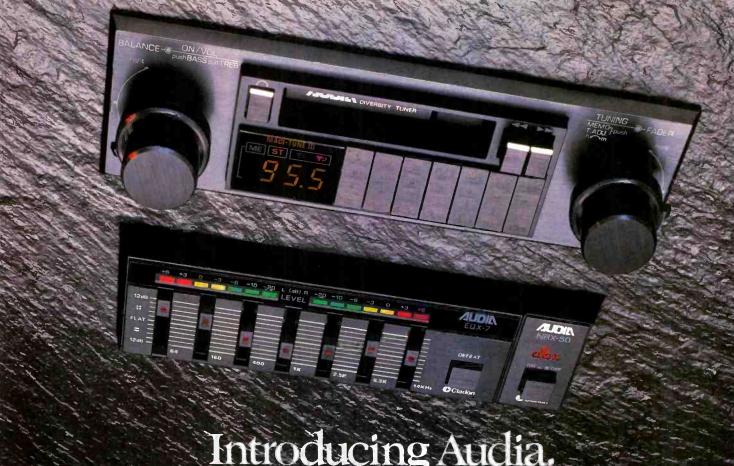
And at \$350\* for the C-40 and \$400\* for the M-40, affordable.

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Yamaha Electronics Corporation, USA, P.O. Box 6660, Buena Park,





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Absolute performance is not just an attitude that can be created overnight. Audia was born out of 40 years of Clarion's expertise and success.

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Typically, automobile interiors

create an undesirable harmonic response in the low frequency ranges. The 180 Hz. Acoustic Compensation Control returns the bass to

its original deep, clean sound, while it allows the amplifier to run cooler.

The Auto Reverse Deck with Dual-Direction Automatic Azimuth Adjustment is more than just a convenience feature. It precisely adjusts the tapehead to achieve zeroazimuth in both directions so you won't sacrifice high end frequency response.

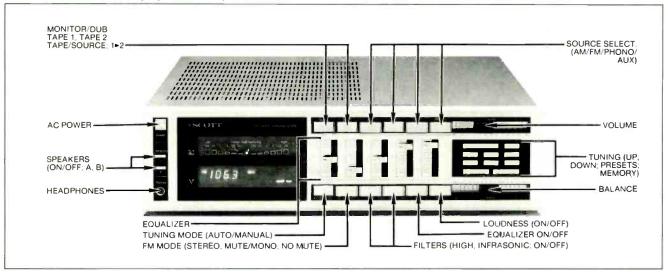
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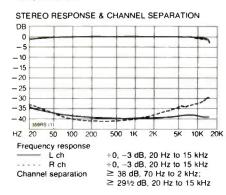
The Art of Sound in Motion.

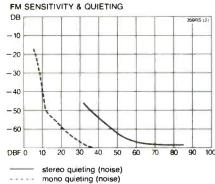


### Top Specs at A Scott's Price

Scott Model 359RS AM/FM receiver. Dimensions: 17 by 4¼ inches (front panel), 12½ inches deep plus clearance for controls and connections. AC convenience outlets: one switched, one unswitched (100 watts max. each). Price: \$400. Warranty: "limited," three years parts and labor. Manufacturer: made in Korea for H. H. Scott, Inc., 20 Commerce Way, Woburn, Mass. 01888.

FM tuner section





HERMAN HOSMER SCOTT, who gave his name to the company, would hardly recognize today's international enterprise—a European-owned American corporation that manufactures its wares in the Orient. But he would recognize the good value represented by the Scott products we've tested recently: the 558T tuner (November 1982) and now the 359RS receiver, which combines medium power and moderate price with a five-band equalizer and performance that in some respects rivals that of the headiest models around.

Also traditional with Scott is a thoughtfully prepared owner's manual. The one for the 359RS is very simple, especially in its language, which enhances the pamphlet's directness. No lavish graphics or slick paper or extra colors, just useful explanation. Only the listing of specifications has been carelessly produced: In particular, "IHF sensitivity . . . . 10.3/ 1.8dBf" is both equivocal as to the relevant standard and confused in its units (it should read "10.3 dBf/1.8  $\mu$ V"). But for neophytes—the only ones who will really need the manual and for whom it obviously was prepared—this minor shortcoming is perhaps a nonissue.

The front panel is anything but traditional. Its most striking feature is a bank of five equalizer sliders near the center. Input selectors are ranged above this section, with further pushbutton controls below it. The readout area near the left end contains a power "meter" (nondefeatable, unfortunately) and a lower panel devoted to tuner indicators. The one for signal strength consists of six segments, the lowest of which lights whenever either tuner band is selected. This leaves five segments for registering progressively higher signal strengths over a well-chosen range: somewhat more sensitive than average for such indicators (which are rare, in any event, for the AM band) so that they concentrate, appropriately, on solving the problems of receiving relatively weak stations.

Tuning proceeds in full-channel steps: 200 kHz on FM and 10 kHz on AM. A tap on UP or DOWN advances one step; if you hold the button in, the channels race by. The automatic tuning mode seeks the next receivable station in the chosen direction and locks onto it. When you come to one end of the dial, the tuning automatically continues from the other. The presets provide for seven stations from each band. A ferrite bar AM antenna is attached to the back panel, where there also are the usual screw terminals for external AM and FM antennas-including 75-ohm coaxial FM lead-in, though the manual discusses only the 300-ohm twinlead options.

The tuner section's performance is mostly very fine. Among Diversified Science Laboratories' measurements, the most striking probably is the capture ratio, which is remarkably low—as good as the best we can recall seeing. Pilot and subcarrier suppression also are exceptionally good. Least encouraging is the selectivity, which is no better than acceptable. We found that a moderately strong station with a stronger one on the adjacent lower channel had to be tuned manually, because the automatic tuning would lock onto it only on the adjacent channel above (resulting in severe distortion) or onto the stronger station below. And when the weaker station was correctly tuned, interference from the stronger one was clearly audible. This is not a situation that will confront most urban or even suburban listeners, however, so it isn't a major concern

Overall, FM reception is clean in sound and convenient in operation. The same is true of AM, except that its freedom from noise seems to have been obtained with a sharper than usual high-frequency rolloff. Incidentally, if you do nonetheless encounter a noisy AM station, the high filter will not help because the AM response effectively cuts off before the filter action begins, at 7.5 kHz.

For sources that really contain high-

#### **AUDIO**

#### **New Equipment Reports**

Stereo sensitivity (for 50-dB noise suppression) 35½ dBf at 98 MHz, with 0.46% THD+N (36½ dBf at 90 MHz; 37 dBf at 106 MHz) Mono sensitivity (for 50-dB noise suppression) 11¾ dBf at 98 MHz

Muting threshold 311½ dBf
Stereo threshold 311½ dBf
Stereo S/N ratio (at 65 dBf) 68 dB
Mono S/N ratio (at 65 dBf) 71½ dB

CAPTURE RATIO 3/4 dB

SELECTIVITY

alternate-channel 52½ dB adjacent-channel 2¼ dB

HARMONIC DISTORTION (THD+N)

 stereo
 mono

 at 100 Hz
 0.20%
 0.070%

 at 1 kHz
 0.08%
 0.072%

 at 6 kHz
 0.20%
 0.12%

STEREO PILOT INTERMODULATION 0.15%

 IM DISTORTION (mono)
 0.026%

 AM SUPPRESSION
 531/4 dB

PILOT (19 kHz) SUPPRESSION >80 dB

SUBCARRIER (38 kHz) SUPPR. >80 dB

Amplifier section

RATED POWER 161/2 dBW (45 watts)/channel

OUTPUT AT CLIPPING (at 1 kHz; both channels driven) 8-ohm load 1734 dBW (60 watts)/channel 4-ohm load 181/2 dBW (71 watts)/channel

DYNAMIC POWER (at 1 kHz)

8-ohm load 18½ dBW 4-ohm load 19¼ dBW 2-ohm load 18¼ dBW

DYNAMIC HEADROOM (re rated power, 8-ohm load)

+2 dB

HARMONIC DISTORTION (THD; 20 Hz to 20 kHz) at 16½ dBW (45 watts)  $\leq$  0.032% at 0 dBW (1 watt) <0.01%

FREQUENCY RESPONSE

+0, -1/2 dB, 11 Hz to 18.1 kHz; +0, -3 dB, <10 Hz to 61 kHz

RIAA EQUALIZATION +0, -21/2 dB, 20 Hz to 20 kHz;

-123/4 dB at 5 Hz

SENSITIVITY & NOISE (re 0 dBW; A-weighting) sensitivity S/N ratio

aux input 24 mV 82 dB phono input 0.40 mV 771/2 dB

PHONO OVERLOAD (1-kHz clipplng) 180 mV

INFRASONIC FILTER -3 dB at 17 kHz; =15 dB/octave

HIGH FILTER -3 dB at 7.5 kHz; 12 dB/octave

frequency noise, the high filter is reasonably effective. The infrasonic filter also does its job efficiently, with little effect at 20 Hz or above and a steep rolloff below. When records are played, its influence adds to that of a low-frequency rolloff built into the phono preamp. Phono response is down 1/2 dB at 55 Hz and is still only 21/2 dB down at 20 Hz, but the slope increases to 6 dB or so per octave in the infrasonic range. Thus, the total warp-control factor, so to speak, amounts to a very effective 20 dB or more per octave. The phono response also shelves slightly in the treble, going from flat at 1 kHz to  $-\frac{1}{4}$  dB at 2 kHz and  $-\frac{3}{4}$  dB from 10 kHz up.

The loudness compensation strikes us as distinctly heavy-handed. In our listening room, it begins to kick in at what we consider to be fairly loud listening levels. By the time we're down to moderate levels, where we would expect little compensation, the bass is boosted considerably (about 10 dB at 50 Hz) and the extreme treble is up as well (6 dB at 20 kHz). And the boost continues to increase at lower volume settings.

Fortunately, the five-band equalizer makes it easy to roll your own loudness compensation. The indicated center frequencies—marked 60 and 250 Hz and 1, 4, and 16 kHz—are reasonably accurate in the two bottom bands, very accurate in the remaining three. Also quite reliable is the spec for the total adjustment range in each band: ±12 dB. The intermediate markings are not so dependable. In the 1-kHz band,

for instance, the "+6" setting barely ekes out a 3-dB boost. But because such controls are set by ear, rather than by eye, the disparity is of no real practical importance. And if you mistrust all tone controls in your search for sonic purity on signals that don't need them, you can cut them out of the circuit altogether.

The 45-watt power rating, which is quite impressive for a \$400 receiver with this many features, actually is quite conservative. Midband sine-wave clipping occurs at a level 3/4 dB higher, and the pulsed waveform used for the dynamic test clips 3/4 dB higher still. Thus, on most music, the 359RS is capable of the equivalent of about 70 watts into 8-ohm loads and even more into 4 ohms. The receiver isn't rated for operation into 2 ohms, but the lab ran it through the dynamic power test with that load, too. The waveform doesn't hold up as well as it does into 8 ohms, but it's very close, indicating that the 359RS doesn't go into severe current limiting under such circumstances, as some other receivers

If you spend your audio dollar carefully, this Scott receiver must be among the models to consider, particularly if you prefer a simple equalizer to conventional tone controls. All of its sections are well designed, and though the FM reception stands out, there are no substandard sections that must be put up with in "compensation." It is, simply stated, a well-balanced, practical receiver that offers good value.

INPUT IMPEDANCE

aux Input phono input 160k ohms 50.8k ohms; 115 pF

120

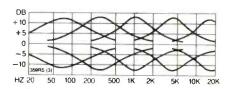
OUTPUT IMPEDANCE (to tape)

from aux input 1,000 ohms from tuner section 820 ohms from phono input 560 ohms

DAMPING FACTOR (at 50 Hz)

CHANNEL SEPARATION (at 1 kHz) 55 dB

**EQUALIZER ADJUSTMENT RANGE** 



individual sliders set at max, and min.

## An "Optimum Match," from Ortofon

Ortofon OM-30 fixed-coil (moving-iron) phono cartridge, with multiradial diamond stylus. Price: \$225. Warranty: "limited," one year replacement. Manufacturer: Ortofon Manufacturing A/S, Denmark; U.S. distributor: Ortofon, Inc., 122 Dupont St., Plainview, N.Y. 11803.

NO COMPANY HAS A PROUDER history, where phonographic transducers are concerned, than Ortofon. Since shortly after World War II, it has been making professional cutterheads and state-of-the-art pick-ups—including moving-coil models, with which its name was virtually synonymous at one time. Its work on the Variable Magnetic Shunt principle (a type of moving-iron design) sought to create fixed-coil cartridges whose reproduction quality would rival that of the company's moving-coil models without their hand assembly and therefore increasingly prohibitive manufacturing costs. The current legatee of this

effort is what Ortofon calls its Optimum Match (OM) cartridges—so named because they are designed to reproduce optimally the behavior of modern record-cutting styli.

The series consists of six pickups: three "OM" models with conventional screw mounts and three otherwise almost identical "OMP" models with plug-in P-Mounts. The progression of stylus options in each group is one of decreasing tip mass and increasing compliance and sophistication of construction. Model numbers ending with "10" denote a conventional elliptical diamond tip, those with "20" a nude

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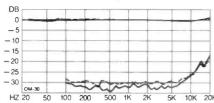
So when you're in the market for a tape deck, just think: When the engineers wanted muscles for their brains, they picked Teac.

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FREQUENCY RESPONSE & CHANNEL SEPARATION (test record: JVC TRS-1007 Mk. II)



Frequency response
L ch
R ch
Channel separation

+1½, -½ dB, 20 Hz to 20 kHz +¾, -½ dB, 20 Hz to 20 kHz ≥28 dB, 100 Hz to 7 kHz; ≥18 dB, 100 Hz to 18 kHz

SENSITIVITY (at 1 kHz)

1.09 mV/cm/sec

CHANNEL BALANCE (at 1 kHz)

±<1/4 dB

VERTICAL TRACKING ANGLE

19°

MAX. TRACKING LEVEL (re RIAA 0 VU; 1.25 grams) lateral ≥+18 dB

vertical ≥+12 dB

DYNAMIC COMPLIANCE (vertical) = 20 x 10<sup>-6</sup> cm/dyne

RECOMMENDED EFFECTIVE TONEARM MASS optimum acceptable

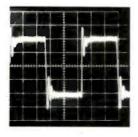
without weight with weight

10 grams 6 to 17 grams 8 grams 4 to 15 grams

WEIGHT\*
without weight
with weight

2.5 grams 4.85 grams

SQUARE-WAVE RESPONSE (1 kHz)



'See text.

diamond of smaller tip mass, and "30" a nude multiradial "fine line" diamond. Thus, the OM-30 is at the top of the standard-mount group.

Because the mass of P-Mount pickups is dictated by the Technics standard, the OMP models all carry some ballast to bring their weight up to the specified 6 grams. But standard-mount arms are a very mixed bag, and to accommodate their vagaries Ortofon has built a tiny weight into the top of the OM mounting bracket. If you want the full mass (a shade less than 5 grams), you simply leave the weight in place when you install the pickup; if you want less, you pop out the weight first and thereby cut the mass almost in half.

However, one might challenge on theoretical grounds Ortofon's instruction that you use the weight with heavy arms and omit it with low-mass models. If your tonearm's effective mass is greater than about 15 grams, the additional weight of the insert will drag the low-frequency arm/cartridge resonance down below 8 Hz, into the danger region where record warps (which cluster around 5 Hz) can disrupt tracking and send large, power-wasting infrasonic signals through the amplifier to the speakers. In the unlikely event that your arm's mass is less than 4 grams, removing the weight could pull the resonance too far up toward the audible range, causing a rise in the deep bass response and perhaps some tracking difficulty on passages that are heavily modulated at very low frequencies. If you're in doubt, we would suggest that you try the cartridge without the weight first.

But the deciding factor may not lie with theory. In both Diversified Science Laboratories' SME 3009 Series II Improved tonearm (whose effective mass is approximately 15 grams) and the SME-workalike we used for our listening tests, the counterweight adjustment range was not great enough to accommodate the OM-30 without the ballast insert. So we carried out all our evaluations with the weight, which put the resonance on the low side of the desired range but caused no hint of misbehavior.

The cartridge successfully negotiated the tracking-test bands of the CBS STR-100 and STR-120 test records at the Ortofon's minimum recommended vertical tracking force of 1 gram and the progressive levels of STR-112 at 1.25 grams (the median of the recommended VTF range). It also tracked without difficulty all of the music records we handed it, some with readily visible warps.

The vertical tracking angle (VTA) nieasures 19 degrees, using the low-frequency tones on the DIN test record. This is virtually spot-on the DIN standard of 20 degrees—an unusual feat, in our experience. Here, in particular, the lab data appear to corroborate Ortfon's claim to matching cutterhead behavior. However, the test tracks with the higher tones yielded a reading of 22 degrees, suggesting that the stylus rake angle (SRA) is very slightly off.

Perhaps the most impressive aspect of the OM-30's performance is its frequency response, which is extraordinarily flat. The very mild rise at the extreme top of the audible range (and the accompanying deterioration of channel separation) suggests the approach to high-frequency resonance somewhere in the near ultrasonics. (Some cartridges-moving-coils, most oftenhave resonances close enough to the audible range to cause severe high-frequency peaks, with sonic consequences that we're pleased to note don't apply here.) Separation is excellent up to very high frequencies, well beyond the range where it contributes materially to localization and, therefore, to stereo imaging.

Earlier we used the phrase "no hint of misbehavior." Those four words fully characterize our experience of the OM-30. Though that may seem faint praise, it actually is the highest of accolades for a phono pickup, which should be as transparent as mountain air on a fine fall day. Any emphasis—any special zing or growl or roar or whisper—though it may lend excitement to the sound, is by definition misbehavior. And no pickup we know minds its manners better than this cape.

better than this one.

#### A Good Combination, From Yamaha

MANY AUDIO MANUFACTURERS have a specialty that lends them a sense of identity, even though they may offer products that fall well outside that realm. Yamaha seems to have two such areas of specialization: receivers that concentrate on fine music reproduction first and electronic virtuosity only as a means to that end, and perfectionist separates—of which we've tested several superb examples over the years. As an integrated amplifier, the A-1000 might appear to fall nearer the first category, but it actually is more like a combination of

Yamaha separates at their very best. Indeed, its control section is very similar to the C-70 preamp (test report, April 1983), while the power-amp stage harks back to past Yamaha Class A designs.

A totally Class A amplifier rated at 120 watts per side would be a real monster—as would your electric bill if you used one. (Although, the heat generated might save a little on the oil bill.) This is because Class A circuitry confines the signal swing to the transistors' linear operating region, placing the average (and therefore the no-

THE NEW AIWA AD-F990 3-HEAD CASSETTE DECK: PERFORMANCE READY FOR THE DIGITAL AGE.

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FREQUENCY RESPONSE!
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Our new line of nine different computer-designed speakers, ranging from the economical, space-saving AR8B bookshelf model to the awesome AR9LS with its Dual Dome<sup>TM</sup> mid-high range driver and thunderous Bass Contour Chamber.

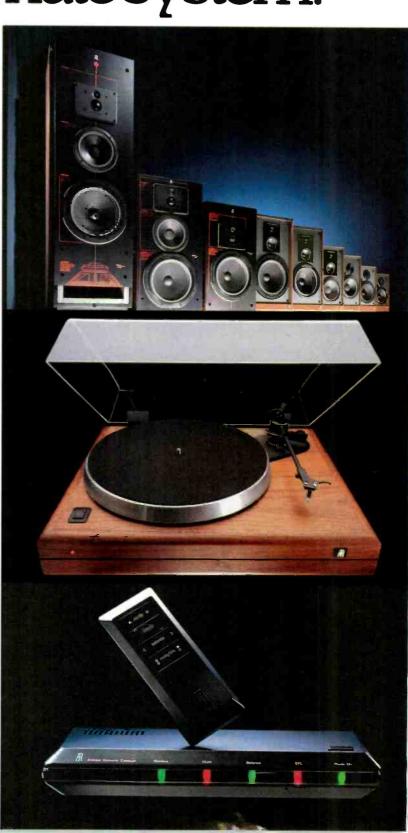
A new three-point suspension turntable whose predecessor was a legend among audiophiles ten years ago. So much of a legend we decided to bring it back in a totally updated version—re-designed from the dustcover on down. With your choice of universal tone arm mounting platform, or AR's own new medium mass straight arm.

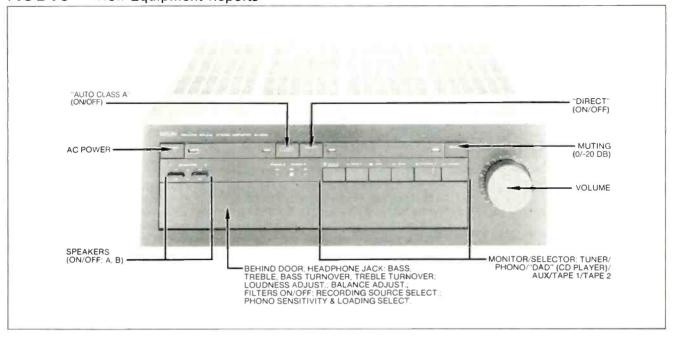
Our new AR compact remote control unit employing ultrasophisticated microcircuitry. From wherever you sit or stand, you can control stereo balance and work a wide range of functions on your amp for maximum convenience and ideal sonic performance.

Hear what you've been missing.

TELEDYNE ACOUSTIC RESEARCH

10 American Drive, Norwood, MA 02062, USA.





Yamaha A-1000 integrated amplifier. Dimensions: 17 by 5 inches (front panel), 151/4 inches deep plus clearance for controls and connections. AC convenience outlets: two switched (200 watts max total), one unswitched (200 watts max.). Price: \$590. Warranty: "Ilmited," two years parts and labor. Manufacturer: Nippon Gakki Co., Ltd., Japan; U.S. distributor: Yamaha Electronics Corp., 6660 Orangethorpe Ave., Buena Park, Calif. 90620

RATED POWER

203/4 dBW (120 watts)/channe

OUTPUT AT CLIPPING (at 1 kHz; both channels driven) 22 dBW (160 watts)/channel 8-ohm load 22¾ dBW (190 watts)/channel

DYNAMIC POWER

231/4 dBW 8-ohm load 24 dBW 4-ohm load 213/4 dBW 2-ohm load

DYNAMIC HEADROOM (re rated power, 8-ohm load) +21/2 dB

HARMONIC DISTORTION (THD; 20 Hz to 20 kHz) at 2034 dBW (120 watts) ≤ 0.026% at 0 dBW (1 watt) < 0.01%

FREQUENCY RESPONSE

+0, -1/4 dB, <10 Hz to 31.2 kHz: +0, -3 dB, <10 Hz to 126 kHz

RIAA FOLIALIZATION

+1/4, -0 dB, 20 Hz to 20 kHz;

moving-coil phono

fixed-coil phono

-1/4 dB at 5 Hz

±3/4 dB, 20 Hz to 20 kHz;

-834 dB at 5 Hz

SENSITIVITY & NOISE (re 0 dBW; A-weighting)

S/N ratio sensitivity 87 dB aux input fixed-coil phono 0.21 mV 79 dB 78 dB moving-coil phono 13 uV

signal condition) at the midpoint of the range so that the transistors are always conducting no matter what the signal is up to. The more efficient Class B circuits allow each transistor in a push-pull pair to remain quiescent much of the time, conducting only when presented with its half of the waveform

This avoids the major problem inherent in high-power Class A amps: dissipating all the extra heat generated in the output stage. But there's a catch. At the moment of turning on or off, the Class B transistors aren't in their linear operating range. And the smaller the audio signal, the more time they spend outside it and the higher the distortion in the output. Class AB circuitrywhich by far dominates audio-patches up Class B by raising the bias to turn on the idling transistors just a little, so that the amplifier behaves like Class A for very small signal values. It therefore isn't as efficient as Class B (though it's far more so than A), and it doesn't achieve the ultralow distortion of Class A (though it comes far closer than B).

Several companies have devised clever ways of building large quasi-Class A amps that vary the bias current according to the signal level, thereby minimizing the inefficiency associated with keeping the transistors operating constantly in their linear region. Yamaha has taken a somewhat different approach in the A-1000. With the Class A option engaged, only the first 10 watts of the output are pure Class A. When the signal requires more output (which is very seldom in most listening) the amp automatically changes to Class AB operation. When the signal descends to lower levels, the amp reverts to Class A.

In effect, Yamaha appears to be raising the amplifier's bias point so that the idling transistors conduct more than "just a little"—a kind of super Class AB. This increases the heat that must be dissipated and, as the owner's manual points out (though its intelligibility here and elsewhere falls short of Yamaha's usual high standard), makes good ventilation imperative. Should this pose a problem, a frontpanel switch gives you the option of cutting back the bias point to a more conventional value for Class AB operation.

Diversified Science Laboratories made most of its measurements in the "auto Class A' mode. The distortion figures shown in our data column therefore theoretically represent Class AB operation at rated power and Class A at 0 dBW (1 watt). As you can see, they are exceedingly low at 0 dBW, only very low at full power. When the lab checked the distortion with the amp in the AB mode, it detected only marginal increases, and in just a few of the figures. Those for 0 dBW remained below our 0.01percent reporting threshold—that is, so low as to be of absolutely no significance.

In listening, we likewise could discern no unequivocal difference between the two operating modes, both sounding equally excellent. This observation also applies to the DIRECT option, which bypasses the tonecontrol, loudness-compensation, and highfilter circuitry altogether for ultrapure listening. (The infrasonic filter, whose use the manual recommends whenever you're playing LPs, remains active in DIRECT.)

The infrasonic filter has very little influence on the audible frequency range. Its response is down less than 1 dB at 20 Hz, and there is some rise (no more than about ½ dB) in the very deep bass. Below the 15-Hz inflection point, the filter's initial slope is about 14 dB per octave. It delivers effective warp-signal suppression with fixed-coil phono cartridges (and high-level sources) and adds substantially to the infraPHONO OVERLOAD (1-kHz clippling)

fixed-coll phono moving-coil phono 165 mV

INPUT IMPEDANCE

aux înput fixed-coil phono moving-coil phono 46k ohms 47k ohms; 290 or 390 pF 10k or 100 ohms

OUTPUT IMPEDANCE (to tape)

from aux input from phono inputs direct 450 ohms

DAMPING FACTOR (at 50 Hz)

200

CHANNEL SEPARATION (at 1 kHz)

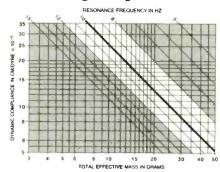
631/4 dB

HIGH FILTER

-3 dB at 10.8 kHz: 12 dB/octave

INFRASONIC FILTER -3 dB at 15 Hz; 12 dB/octave

Tonearm/Cartridge Matching Graph



By means of this nomograph, you can quickly and easily determine the compatibility of any cartridge and tonearm we have tested. Ideally, the arm/cartridge resonance frequency (indicated by the diagonal lines) should fall at 10 Hz, but anywhere between 8 and 12 Hz will assure good warp tracking and accurate bass response. (It is usually okay to let the resonance rise as high as 15 Hz, although we don't normally recommend this.)

Begin by looking up the weight and dynamic complance shown in the cartridge report and the effective mass listed in the turntable or tonearm report. Add the weight of the cartridge to the effective mass of the tonearm to get the total effective mass. Then find the point on the graph where the vertical line for the total effective mass Intersects the horizontal line for the cartridge's dynamic compliance. For a good match, this point should fall in the white region, between the 8- and 12-Hz diagonal lines.

When necessary, you can back-figure compliances and effective masses for cartridges and tonearms tested before we began reporting these figures directly (in January 1983). For cartridges, look up the vertical resonance frequency (measured in the SME 3009 Series II Improved tonearm) and the cartridge's weight. Add 15 grams (the SME's effective mass) to the cartridge weight to get the total effective mass. Then find the intersection of the vertical line representing that mass with the diagonal line representing the measured resonance frequency. Now you can read off the compliance from the horizontal line passing through the point of intersection.

For tonearms, look up the vertical resonance frequency as measured with the Shure V-15 Type III cartridge. Find the intersection of the diagonal line for that frequency with the horizontal line representing the Shure's dynamic compliance of 22.5 × 10-6 cm/dyne. Reading down the vertical line on which the point of intersection lies will give you the total effective mass of the arm with the Shure V-15 Type III mounted in it. Then subtract 6.3 grams (the weight of the V-15 Type III) to get the tonearm's effective mass.

Because of differences in measurement techniques, manufacturers' specifications for compliance and effective mass often differ from our findings and may therefore yield inconsistent results if used with this graph.

sonic attenuation (almost 9 dB at 5 Hz) built into the moving-coil head amp. The high filter has very little effect because its inflection point is unusually far up (near 11 kHz) and its slope only moderate (initially, 8 dB per octave). It evidently is intended only to take some of the edge off very high hiss, which it does.

The tone controls have dual, switchable inflection points, which are marked in terms of the ±3-dB points with the boost/ cut knobs at maximum rotation. The bass shelves at about ±10 dB below 100 Hz in its 500-Hz setting and below 20 Hz in its 125-Hz setting. The treble appears to shelve in the ultrasonic region; in the 2.5-kHz position, it just reaches  $\pm 10 \text{ dB}$  at 20 kHz. while it manages only about ±7 dB at that frequency in the 8-kHz setting. The calibration of the knobs (-5 to +5) refers to their clickstops, each of which represents roughly 2 dB of additional boost or cut within the shelving portions of the various curvesbehavior that is somewhat more symmetrical and predictable than usual.

The loudness compensation is quite out of the ordinary. It has its own knob, so it can be "calibrated" to your room, listening habits, and speakers. With it set to "flat," you advance the VOLUME until you have full listening level. For reduced levels without compensation, you lower the VOLUME once again; for compensation, you use the LOUD-NESS, which attenuates the midrange more than the extremes, following a complex formula. Over the first five or so of its ten attenuation settings, maximum cut is at around 500 Hz; as you rotate the knob farther from "flat," the maximum attenuation shifts to about 1 kHz and amounts to almost 22 dB for the ultimate setting (10). Meanwhile, attenuation in the extreme bass has been inching upward—by a total of only 6 dB at maximum: The highs above 15 kHz are cut by similarly tiny steps at first, then drop down 3 dB for each of the last two clickstops, yielding a total maximum attenuation of about 13 dB.

Viewed with respect to 1 kHz, this amounts to whopping boosts of 15 dB in the extreme bass and almost 10 dB in the extreme treble for the lowest setting of the LOUDNESS. Particularly in light of current research, which suggests that no treble boost whatever is in order, this looks downright gross on paper. We were startled to discover, therefore, that the aural effect is unusually convincing. Why this should be, we're not sure; perhaps Yamaha has done some psychoacoustic homework of which the conventional wisdom is as yet uninformed.

Also distinctive (though quite similar to that of the C-70) is the phono-input setup. Phono 2 is just for fixed-coil (movingmagnet and moving-iron) pickups that need to be loaded by 47 kilohms and about 230 picofarads. Phono I (on which the measurements shown in the data column were made) is adjustable. For fixed-coil pickups, there is a second, somewhat higher, capacitance option; for high-output moving-coil models, there is a setting that introduces no additional gain but provides a load of about 100 ohms; and for low-output moving-coils, there's approximately 25 dB more gain and two terminations—100 and 10,000 (10k) ohms. Except for the shunt capacitances, which are marginally higher than the ratings, these numbers are confirmed exactly by the lab measurements.

Yamaha preamps regularly have two input selectors: one for the source to be monitored and another for the recording source. This arrangement enables you to listen to one while you dub another. One difference, however, is that the A-1000's taping switch has no off position to prevent a recorder that's not in use from loading down the circuit, even though the tape output is unbuffered. Most recorders won't pose any problem in this respect, but the omission is surprising in so perfectionist a product. The switch does make possible dubbing in either direction between the two decks for which switching is provided. And among the source options are both aux and "DAD" (the latter specifically for a Compact Disc player), so you have somewhere to plug in the audio from a videodisc or Hi-Fi VCR-or an audio-video switchbox—without unplugging something else.

Yamaha says that the "less used" controls normally are hidden behind the flipdown door along the lower portion of the front panel. Perhaps Yamaha's segregation criteria are reasonable, but some of the hidden controls are not unimportant, and we wish they were more easily visible. The tiny lettering in gray against a black background might require squinting even if it weren't recessed into the panel-which also prevents reading of some lettering altogether unless you have the amp at something approaching eye level. The functions of the controls ("bass," "balance," and so on) are marked along the inner surface of the door, however, and are thus visible from above. And as you learn your way around the A-1000, you have decreasing need of the fine print.

For a "Class A" amplifier of any description, the power figures are impressive. The luxurious dynamic headroom (2½ dB) means that the equivalent of more than 200 watts per channel is available on music. Output is somewhat less into 2-ohm loads, but not by enough to pose difficulty in driving simultaneously the two speaker pairs for which there is parallel switching. Indeed, in this respect the Yamaha is distinctly better than average.

We are heartily impressed by the A-1000—as we have been by many of Yamaha's essays in very high-performance audio. And we think it an excellent value, as well, considering the quantity and quality of the sound it makes available and the flexibility and attention to detail with which it does so.

# 

#### MOST PEOPLE WOULD CALL IT OVERKILL.

The new ULTRX™ R100 receiver isn't for everybody.

You don't really need 100 watts per channel\* of virtually distortionless power. Unless you like listening to today's ultra-high quality recordings at "live concert" sound evels.

And a remote-controlled digital tuner with 20-station memory is probably more than enough—unless you're a dedicated FM listener with wide-ranging tastes.

Likewise, most people could get along without the built-in dbx and DNR noise reduction systems. Except those few who've become spoiled by the almost eerie absence

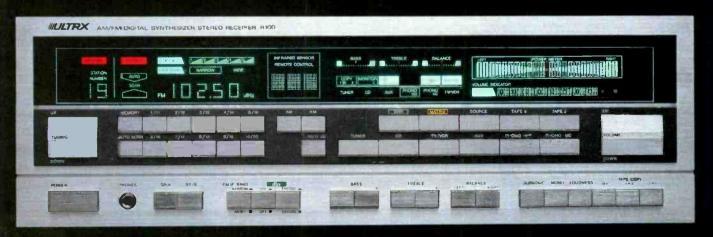
of noise in CD digital recordings. With the dbx, any cassette deck can make virtually noise-free recordings, while the DNR "cleans up" existing noisy signals.

Unless you're a nut about video sound quality, too, you won't have much use for the TV/VCR inputs and stereo synthesizer circuit.

The R100 is packed with features that are best appreciated by an audio perfectionist. It may be the best-equipped receiver ever built.

Get an ULTRX dealer to put an R100 (or one of our other new receivers) through its paces for you. Some people might call it over-

kill. But you'll call it overwhelming.



Beyond the Ordinary.



If you ever become dissatisfied with Memorex High Bias II, for any reason, simply mail the tape back and we'll replace it free.

# HIGHTECHGOES



MORE THAN 200 HOT NEW AUDIO AND VIDEO COMPONENTS
FROM THE SUMMER CONSUMER ELECTRONICS SHOW



DOBBIN



LONG



MEYER

"A couple of years ago I read that most people own at least six or seven cassette tape transports—an absurdly high number, until you count the phone answerer, car deck, home recorder, headphone-based portable, and so on. After this SCES, I'm comvinced that people will soon own an even larger number of microprocessors—but they won't be aware of them. The era of the 'smart' component is upon us, with microprocessors cropping up in almost every electronic entertainment product. Perhaps that's the real direction of the home computer revolution: appliances with the 'brains' to get the job done."

Peter Dobbin, Electronics Features Editor

"The current wave of audio-video receivers may look as antediturian in five years as the first, tubed stereo models do today. Then, as now, the first consideration was simulcast reception—independent AM and FM tuners with switching to feed each to its own channel. But until the dust starts to settle, the destiny of network and direct-broadcast stereo TV and the equipment to receive it remain cloudy."

**Robert Long, Consulting Technical Editor** 

"The expansion of the audio business into new places in our lives—the car, the jogging track, the TV room—has until recently entailed the sacrifice of sound quality for convenience and small size. The Compact Disc broke this pattern. And now, as experienced audio designers tackle these now markets, even the smallest speakers are sounding good."

E. Brad Meyer, Recording Engineer and Consultant



#### ELECTRONICS

IT WAS ONLY ABOUT four years ago that the first microprocessor-equipped audio receiver appeared. Poorly accepted at the time, its manufacturer (Eumig



Onkyo's TX-85 receiver represents a continuing trend in audio electronics. A "smart" component, it uses a microprocessor to assess FM signal conditions and to modify tuning parameters for best reception. And, in addition to offering just about every "standard" receiver feature, it has built-in DBX circuitry that enables you to make and decode DBX recordings as well as play DBX discs.

of Germany) eventually retired it and a similarly equipped cassette deck. In retrospect, one might say that Eumig (which has since abandoned the consumer audio business entirely) was a couple of years ahead of its time, for the number of receivers displayed at the Summer Consumer Electronics Show that depend on microprocessors for their convenience features and basic functions is staggering.

Surprisingly absent from even the top models of many lines are separate CD-player inputs, separate TV audio inputs (for videodisc players or Hi-Fi VCRs), and stereo AM decoders. Manufacturers, it appears, are waiting for consumer demand to grow before building such "extras" into their products. On the other hand, a few companies are jumping into audio-video equipment with both feet.

Sansui's blockbusters, for instance, are two receivers that incorporate the company's new X-Balanced DC amplifier circuitry and include provision for stereo AM and TV audio as well as conventional audio sources. The S-X1130 (\$950), rated at 130 watts per channel, has presets for eight radio stations on each band, an FM IF-bandwidth selector, a built-in moving-coil head amp, and line/ mike mixing—this last, in part, to fill out an extensive array of video dubbing facilities. The somewhat less elaborate S-X1100 (\$800) is rated at 100 watts. Sansui is also selling the 55-watt S-X1070 (\$380), with decoding for all four stereo AM systems.

Onkvo's TX-85 (\$620. rated at 80 watts per side) and TX-65 (\$485, 60 watts) are the first receivers in the company's Integra Series of "affordable high-end components." Both include Automatic Precision Reception (APR), which controls key tuning parameters: high blend, RF sensitivity, selectivity, reception mode, and DNR (dynamic noise reduction). The TX-85 has built-in DBX encode/decode circuitry that enables you to play DBXencoded discs and that converts any recorder attached to the tape jacks into a DBX model.

Perhaps the most thorough audio-video receiver announced at the show is the Technics SA-850, which incorporates a VHF TV tuner with built-in multichannel TV audio decoding. Its Computer Drive New Class A power circuitry is rated at 100 watts per channel. The SA-850 shares "stereoplex" stereo simulation for mono TV soundtracks with two other receivers, the \$450 SA-550 (rated at 70 watts) and the \$320 SA-350 (40 watts), each with a mono VHF-TV tuner and a New Class A power amp. (Multiplex TV decoders for these models are available as options.) The SA-150 (\$180, 25 watts, with digital tuning) and the mechanically tuned SA-120 (\$160, 35 watts) are audioonly units.

The two top receivers from JVC have SEA equalizer circuitry based on the digital signal-processing and memory capabilities of the separate SEA-M9 equalizer. (For details on the SEA-M9, see "Signal Processors," page 37.) Both the R-X500B (\$650, 100 watts per channel) and the R-X400 (\$500, 70 watts) include sevenband versions with five memories, inverse-response switching, and multiband signal-analysis metering. Both also incorporate presets for 15 stations on each tuning band and Quieting



Akai AA-A35 receiver



Sansui S-X1100 receiver



Yamaha R-90B receiver

Slope Control, which automatically adjusts the receiver as signal strength varies. The R-X350VB (\$370) and R-X350 (\$330) are 55-watt units with five-band equalizers; the VB model adds three video inputs and switching to receive or record simulcasts in stereo.

Marantz's flagship, the \$640 SR-940, is rated at 100 watts per channel and has built-in decoding for Motorola-format stereo AM broadcasts. It and the \$500 SR-840 (70 watts) come with wireless remote controls and include eight presets per tuning band; the latter achieves stereo-AM decoding with an optional plug-in module.

Akai offers what it calls "direct access" volume controls in three models: AA-A45 (\$450, rated at 65 watts per channel), AA-A35 (\$350, 48 watts), and AA-A25 (\$260, 32 watts). The system is touch-sensitive, switching directly to the appropriate volume level, and incorporates a maximum-level memory that prevents turning it higher than the preset volume.

Adding to its "01" line of "computer-based" compo-

nents, SAE has introduced the R-102 (\$500) receiver, rated at 50 watts per side. It has two tone-control memories and alphanumeric readouts for all functions. NAD checks in with three new models: the 55-watt 7155, 40-watt 7140, and 25watt 7125, each rated for 3 dB of dynamic headroom and fitted with an impedance switch to help you make the most of your speakers. Hitachi's entries are the 60-watt HTA-6F (\$470) and 40-watt HTA-4F (\$340), both with ten presets per band.

Proton is offering the Model 930 (\$360), a 30-watt receiver said to be stable with 2-ohm loads and provided with memory for five stations on each band and a moving-coil phono-input option. And Sanyo's new premium Ultrx line consists of five models, headed by the R-100 (\$550), which is rated at 100 watts. It has DBX encode/decode noise reduction circuitry and a stereo synthesizer for mono TV, plus a moving-coil head amp.

**Robert Long** 

# **Amplifiers**

PREAMPS AND OTHER high-end audio separates are usually the province of small specialty companies, but at this SCES it was the large, mainline compa-



Luxman M-05 power amp: Class A and more than 100 watts per side

nies that generated most of the action. Luxman's C-05 (\$1,800) is about as purist as you can get, handcrafted with oxygen-free copper wiring throughout and relatively devoid of convenience features. If you need a bit more control flexibility, Luxman also sells the CX-100 (\$500). It has a

healthy complement of standard preamp features (including tone controls, tape dubbing facilities, and fixed- and moving-coil phono inputs), plus a subwoofer output. Kenwood has expanded its Basic Series preamp line with the C-2 (\$295). The new model is designed to match the rest of the Basic Series in appearance and offers a full raft of control functions.

Yamaha applies its Zero Distortion Rule circuitry to three new preamps. The C-80 (\$750) is its top-of-the-line model and comes equipped with a two-band parametric equalizer, normal and inverting outputs, and a low-noise moving-coil input stage. The less costly C-60 (\$500) omits the parametric equalizer and inverting outputs, but is otherwise similar in design and performance. Even less expensive is the C-40 (\$350), a unit intended for the first-time audio separates buyer. Kyocera's C-910 (\$1,200) reflects the parent company's long history as a manufacturer of fine industrial ceramics. A ceramic compound resin base, a cutless-core ceramic power transformer, and a full complement of controls make the new Kyocera unit a truly unique item.

The original Apt/Holman preamp and power amp set new benchmarks in audio design.

but financial problems forced the company to halt production of these fine products and the more recently introduced Apt 2 preamp. Wayne Friedrichs, Apt's new president, told me that production on the entire line

had started up again and demonstrated a prototype phonoonly preamp that he plans to introduce shortly. Intended for people who are displeased with the phono sections of their receivers or integrated amps, the device delivers a line-level signal to an unused set of aux inputs. Built-in calibration meters and controls enable you to adjust input impedance to the exact requirements of the pick-up. It will come with a test record and should cost about \$250.

According to reports from several manufacturers, integrated amplifiers are getting more popular in the U.S. market, where receivers have traditionally dominated. Interestingly, the shift in preference seems to have little to do with increased flexibility or performance; rather, say manufacturers, the high visibility of one-brand rack systems (the majority of which contain an integrated amp and separate tuner) is raising the "component consciousness" of a huge segment of the market. Be that as it may, if you are shopping for an integrated amp this year, you'll have lots to choose from.

Onkyo's Integra Series of "affordable high-end" components is joined by the 100-watt A-8019 (\$495). Sansui seems very intent this year on gaining more visibility in high-end electronics. Its AU-G99X integrated amp pumps out a heady 160 watts and contains an impedance-matching step-up transformer for moving-coil pickups. Unusual for amplifiers these days, the AU-G99X (\$800) and the less expensive AU-G77X (\$500, 110 watts) have back-panel switching that enables you to match them to either 8- or 4-ohm speaker loads. Sony has brought its audio signal processor (ASP) concept to a new line of fairly inexpensive integrated amps. The ASP, which contains circuitry for microprocessor control of all preamp and switching functions, including tone-control memory and LCD display functions, is responsible for the sleek, knobless faceplates of the TA-AX360 (\$210, 50 watts) and the TA-AX410 (\$290, 50 watts, plus optional remote).

Two new integrated amps make their debut from Technics this year. Both the 65-watt SU-V4X (\$300) and the 100-watt SU-V6X (\$390) contain the company's Computer Drive

New Class A circuitry and a special circuit that Technics says ensures flat frequency response into even demanding low-impedance loads. Last in our discussion of integrated amps, but certainly standouts in features and performance, are JVC's three new units: the A-X900B (\$550, 120 watts), the A-X500VB with TV audio inputs and switching (\$500, 100 watts), and the A-X400 (\$300, 70 watts).

It's amazing how often Bob Carver steals the show at a CES. His hastily called press



Yamaha C-40 preamp



Kenwood C-2 preamp



Kyocera A-910 integrated

conferences have editors dashing off to crowded hotel suites to see the fruits of his fecund imagination. This time it's a 180-watt power amp measuring less than 4 inches wide by 4½ inches deep and weighing only 2½ pounds. Carver says the "Cubelet" actually will pump out 250 watts per side into 2-ohm loads, but don't run down to your local hi-fi store just yet: It's still just a prototype and will eventually wind up as the power-amp section in a new receiver.

Also extraordinary (though presented with a lot less razzle-dazzle) is Luxman's M-05 (built to complement the C-05 preamp mentioned earlier). If you think it's easy to build a Class A power amp capable of producing 105 watts per chan-



nel, then you also might think that the \$2,800 price is excessive. A bit much in our view would be to run a pair of these amps in a bridged mode, but Luxman says it can be done, for a power output of 300 watts per side. Sansui's contribution to basic power amps this season is the B-2101. Said to embody everything the company knows about amplifier technology, this behemoth is rated at 200 watts and seems rather modestly priced at \$800. Yamaha has extended the reach of its poweramp line with three new unitsthe M-80 (\$950, 250 watts), the M-60 (\$650, 160 watts), and the M-40 (\$400, 120 watts). Each uses Yamaha's Zero Distortion Rule design and Auto Class A circuits. Technics's latest brute is the SE-A5 Mk. 2 (\$800). Rated at 150 watts per side, it has separate power supplies for each channel, two pairs of switchable speaker terminals, and power meters.

Peter Dobbin

## Tuners

THE CONTINUING improvements in tuner design still surprise me. A few years ago, it seemed that tuners had reached a plateau of sorts; frequency-synthesis circuits, adjustable IF bandwidth, and high-blend circuits that could rescue noisy stereo recep-



A high-blend noise reducer that "listens" in NAD's 4155 AM/FM tuner

tion by reducing the "stereoness" of the signal were the state of the art. Then came Bob Carver's novel signal-processing approach that "reconstructed" the signal, cutting noise while preserving the ambience of stereo.

Larry Schotz's interesting sensitivity-enhancing circuit also shook things up for a while, but problems in aligning

THE LOGIC OF POWER

Receiver and amplifier manufacturers continue to rate (and price) their products on the basis of power output, expressed in watts. Though there is nothing inherently wrong about this (such ratings are mandated by the Federal Trade Com-

mission), HF believes that a more useful measure of power is the dBW (decibel-watt)—a unit based on a logarithmic scale, with 0 dBW equaling 1 watt. Keep in mind that a 10-dB increase in loudness is heard as a doubling of volume; a 1-dB change in loudness is about the smallest perceptible increment. Thus, choosing a 125-watt amp instead of a 100-watter simply on the basis of the former's higher power rating is wasteful: A glance at this conversion table will tell you that you'd be netting a mere 1 dB of additional loudness from your speakers.

WATTS	dBW	WATTS	dBW
1.00	0	32	15
1.25	1	40	16
1.6	2	50	17
2.0	3	63	18
2.5	4	80	19
3.2	5	100	20
4.0	6	125	21
5.0	7	160	22
6.3	8	200	23
8.0	9	250	24
10.0	10	320	25
12.5	11	400	26
16	12	500	27
20	13	630	28
25	14	800	29

the circuit at the factory finally forced NAD and Proton (two Schotz licensees) to abandon it. Instead, the tireless Mr. S has come up with a dynamic highblend circuit that responds not just to the signal strength, but also to the modulation level of the broadcast. Thus, with the new Dynamic Separation circuit, NAD's Model 4155 (\$350) and Proton's Model 440 (\$270) tuners should reduce noise (and stereo separation) only during quiet musical passages and pauses between se-

lections—the places where noise is most bothersome. Less "intelligent" dynamic blend circuits simply "monoize" the high frequencies of any broadcast

that comes in at less than a preset signal strength.

I'm also looking forward to the first consumer incarnation of a tuner subassembly designed by Magnum Electronics of Canada. Built to extraordinarily high standards (preliminary specs give it an alternate-channel selectivity of 70 dB), Magnum is offering it to a number of American electronics



Harman Kardon TU-910



Yamaha T-80



JVC T-X900B



Proton 440

companies that lack the facilities to design their own tuners. (By the way, if you're in a weak-signal area and you're looking for an RF amplifier, I heartily recommend Magnum's new FM Power Sleuth. In New York City, the extra 70 dB of selectivity I get with it makes a big difference.)

Other tuners that look interesting this year include Ya-

maha's T-80 (\$400), which contains a fine-tuning circuit that lets you do what other frequency-synthesis models don't-deliberately mistune in 0.01-MHz steps to help eliminate certain types of interference. Harman Kardon has two new slim-line tuners, the TU-915 with digital readout for \$365 and the TU-910 with an analog tuning scale for \$235. Onkyo's T-9090 tuner takes pride of place in the Integra series. The \$600 unit has an automatic reception system that analyzes an incoming signal and adjusts the tuner to the appropriate settings for five reception parameters: local/DX. IF bandwidth, FM feedback level, stereo/mono, and high blend. JVC's T-X900B (\$350) also offers computer control of several tuning characteristics. Luxman's T-240 (\$230) differs from most AM/FM units with memory presets, allocating 16 memory locations for FM frequencies and eight for AM. Sansui's TU-D99X (\$350) uses a newly designed digital decoder that is said to make it audibly superior in weak-signal areas. And Technics continues to broaden its offerings with two new tuners-the \$400 ST-G7 and the \$220 ST-G5.

Peter Dobbin

# **Signal Processors**

JVC STANDS OUT among signalprocessor manufacturers this year for its \$1,200 graphic equalizer. The SEA-M9 uses a National Semiconductor digital

±12 dB. JVC's more conventional ten-band SEA-66 (\$300) also has a built-in pink-noise generator and supports three tape decks with dubbing (the SEA-M9 accepts two).

AudioSource has improved a popular model, now

called the EQ-One Series II (\$430). It has ten octave-band controls per channel and includes a built-in pink-noise generator and a calibration microphone for use as a real-time analyzer. A similar

sors in a single unit. It enables you to dub in either direction between two VCRs or to tape from a videodisc or camera, for which a ten-pin connector and equalizer, with-



JVC SEA-M9 equalizer: spectral analysis and automatic contouring

processor chip and offers 12 control bands per channel. It stores five sets of equalization data and, at the touch of a button, generates the reciprocal of any curve it is set for. Used with its built-in pink-noise generator, the SEA-M9 gives you realtime spectrum analysis (for which two decay times and freeze-display are available). It will display the inherent response of a tape deck or (with the supplied calibration microphone) a room, which can then be corrected by equalization with the reciprocal of the measured curve. The control range in each band is divided into 25 steps, which can be spread across a range of either ±6 or

out mike or generator, is available as the EQ-Seven (\$250), with dual inputs and an equalized-recording option. The RTA-One (\$200) drops the other shoe, so to speak, by supplying a real-time analyzer comparable to that of the EO-One but in a battery-portable package that contains a mike; optional accessories include the PNG-One pink-noise generator (\$45), the RTA-One remote mike (\$25), and an AC adapter (\$13).

The ten-band Pioneer SG-50M (\$260) includes a pinknoise generator, a mike, and a real-time analyzer. Similar in description, though with separate controls for each channel.

is the VO-130 (\$270) from Vec-

tor Research, which also offers

the ten-band VQ-110 at \$110.

Yamaha's GE-3 (\$150) controls

ten octave bands per channel

and incorporates tape monitor-

going courtship between audio

and video makes computer (or

computerlike) control of multi-

ple functions and processings

particularly attractive. Mean-

while, there's the Sansui AV-

77 (\$350), which offers several

kinds of switchers and proces-

The complexity of the on-

ing and equalization.

Akai EA-A7



AudioSource EQ-One/II



Pioneer SG-50M

## CD PLAYERS: SORTING OUT THE RICHES



The Technics SL-P15 (pictured here and on the cover) was the most novel Compact Disc player introduced at the SCES. A CD "record changer," the \$1,500 device can handle 50 discs with a degree of programmability that puts analog jukeboxes to shame. Though the SL-P15 was the only CD changer on display, there was no lack of intriguing new models to marvel at. In fact, so diverse is the new crop of players that

we decided to forgo a mere cursory description of them in favor of a full buying guide that will appear in these pages next month. Organized by price and features, our analysis of the burgeoning CD player market should prove an invaluable shopping companion.

microphone jack are provided. Duplicate VCR B jacks on the front panel simplify temporary connections. You can adjust processing to control sharpness. detail, hue, and "solarization" (edge emphasis with reduced detail within picture areas). Picture and sound can be faded in or out or crossfaded with vertical or horizontal wipes. Furthermore, stereo can be synthesized from mono audio, and DBX noise reduction can be applied to audio for recording. Whew!

DBX, too, is entering the video field with three TV-sound processors, each designed to sell for about \$150. The SX-10 Dynamics Enhancer is an expander that addresses the whole dynamic range-making crescendos louder and pianissimos softer. The SX-20 Impact Restorer expands attacks to refresh the punch squeezed out by broadcast limiters, and the SX-30 adds dynamic boost at low frequencies.

The company's regular audio line has a number of new products as well. The DBX 120X Subharmonic Synthesizer (\$250) includes a built-in crossover and level control for a subwoofer and is said to restore an octave in the deep bass that is normally sacrificed by recording processes. Updating previous dynamic-range expanders, the 1BX Series III (\$230) and 3BX Series III (\$600) both offer impact restoration on transients. For simultaneous DBX encoding and decoding plus disc decoding, there's the rackmount 224X (\$250). (Though not strictly signal processors, two new DBX Program-Route Selectors are available for recordists who have multiple processors: the 200X (\$130) and the 400X (\$230).

Technics, whose audiovideo receivers are documented elsewhere, has introduced an outboard stereo TV decoder, the SH-4090. Compatible with the Technics AV receivers or with TV receivers or tuners having pin-jack multiplex outputs, it is fitted with tape-monitor jacks.

**Robert Long** 



# TAPE EQUIPMENT

THE BYWORD IN cassette recorders this year is features—user conveniences that simplify everything from finding a musical selection to calibrating a deck



The Marantz PMD-430 is a standout in cassette decks this year. A battery-operable portable, it gives you three-head monitoring, DBX and Dolby B, plus a three-position mike attenuator control. Line-level inputs and outputs can make it part of your home system as well.

for a specific tape. Most decks. for example, now have some sort of SEEK function and a RECORDING MUTE to lay down the necessary blank interval. You'll also discover that many high-end models, particularly bidirectional ones, are equipped with BLANK SKIP (handy for going from the end of Side 1 to the beginning of Side 2 no matter how the tape is laid out) or BLANK CUE (to facilitate adding more material to a partially recorded tape). MEMORY RE-WIND and even MEMORY PLAY appear on all models in some lines, though you may not find them in rock-bottom budget decks. And REPEAT is only a little less commonplace.

Dolby B noise reduction appears in every deck that harbors any pretense to high fidelity status, and is assumed in all the product descriptions that follow. The majority of models also include Dolby C, and a growing number (usually at fairly high prices) have DBX instead of or in addition to Dolby C. Before the Summer Consumer Electronics Show, I would have bet on the Dolby HX Pro headroom-extension system as a hot feature for 1985, but it has attracted just a few adherents. Automatic tapetype selection (using the keyways in the cassette shell) seems to be supplanting manual selectors, except in models occupying the two price extremes—budget units and perfectionist decks (in which automatic selection is sometimes accompanied by a manual override to accommodate the increasingly rare cassettes that don't have the appropriate keyways).

Dual-transport dubbing decks continue to multiply. High-speed (usually 3<sup>3</sup>/<sub>4</sub>-ips) duplication is fairly established, though a few companies are going for the better performance of real-time dubbing. Performance has also become a hot topic with the bidirectional decks. Manufacturers seem increasingly concerned with mechanisms that assure correct (and therefore consistent) head azimuth in both directions of tape travel and with how quickly they turn the tape around (determining both how much music you'll lose in recording and how big a pause you'll experience in playback). The term 'quick reverse'' usually specifies that the deck senses the leader at the end of the cassette and changes direction while the heads are still in contact with the magnetic pigment.

Akai, hands down the most consistent innovator in the field of automatic-reverse decks, is adding three cassette models with quick reverse in both recording and playback, all with Dolby C. The GX-R66 (\$420) offers DBX noise reduction and Super GX twin-field glass-and-crystal-ferrite heads, plus a host of convenience features. The simpler GX-R55 (\$360) shares the Super GX heads, while the HX-44 (\$300) uses a high-density permalloy head material. For the budgetminded, there are the unidirectional HX-A2 (\$160), also with Dolby C, and the HX-A1 (\$140).

Teac has two new unidirectional lines. The Proprietary Series ranges from the V-518X (\$340), with Dolby C and DBX noise reduction, to the V-316 (\$235), with Dolby B only. In between are the V-515X (\$307), with DBX, and the V-

416C (\$270), with Dolby C. The same four noise-reduction combinations are represented in the Standard Series, which ranges from the V-530X (\$350) to the V-330 (\$200). There are two quick-reverse models in Teac's Audio Specialist Series-the R-999X (\$530), with dual direct-drive motors, and the R-777X (\$395). Joining them are two consumer openreel models. Both the X-2000 (\$850), with closed-loop dualcapstan drive, and the bidirectional X-2000R (\$900) are equipped with DBX I (the professional version, and therefore lacking disc decoding) as their only noise reduction system and with random-access and repeat functions.

Tandberg, which is expected to announce a professional open-reel model this fall, is offering two professional versions of the TCD-3014 cassette deck (see test report, August). Among other things, both have ultra-accurate time indexing and an optional serial computer-interface port for use in automated radio stations. The TCD-910 is the recording deck; the TCD-911 is its playback-only



Akai GX-R66



Proton 720



JVC VR9

counterpart.

Sony's top two introductions—the unidirectional TC-FX705 (\$360) and quick-reverse TC-FX707R (\$430)—include an audio signal processor with automatic attenuator and a level monitor that sets and



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Despite the fact that the Concord HPL-532 is ingeniously designed to fit everybody's car, it's definitely not for everybody. As Stereo Review said, Concord "... is truly an audiophile's car stereo."

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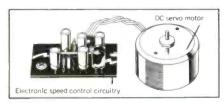
For extraordinarily clear FM reception, the Concord HPL-532 has an exclusive 4-gang digital tuner that provides exceptional station sensitivity & selectivity.

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But, as Concord's 22 years of innovative stereo design would lead you to expect, that is only the beginning.

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We've designed an exclusive electronically controlled DC servo tape transport drive.

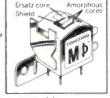


The result? Superior speed accuracy, lower wow and flutter, and over double the motor life.

# AMORPHOUS CORE TAPE HEAD

We've also engineered a new

match-phased amorphous core tape head design, which means a revolutionary improvement in tape frequency



response out to 20,000 Hz.
It's an improvement you'll have to hear to believe.

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And wait until you hear the authentic high fidelity sound reproduction of the HPL-532. It delivers an impressive 12 watts per channel into 4 ohms 30-20,000 Hz with less than 0.8% THD.

In addition, it can deliver 5 watts per channel into each speaker of a four speaker system, because of an ingenious two way/four way configuration and a front/rear low level fader.

All in all it's the greatest full bandwidth power at low distortion

you can get in a car stereo without add-on amplifiers.

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With its exclusive signal processor circuitry the HPL-532 will easily handle anything you want to plug into it.

Like Concord's Dolby\* C. Or dbx\*\* adaptors.

Even imagers or equalizers. And with lighted switches and function indicators the Concord HPL-532 is as easy to play at night as it is to play in the daytime.

And because of its front load mechanism, it's even easier to load.

All things considered the Concord HPL-532 is an extraordinary car stereo.

Of course at around \$600 it's not inexpensive.

But when you add up all its features you might say this.

The difference is worth the difference.

\*Dolby is the registered trademark of Dolby Labs.
\*\*dbx is the registered trademark of dbx.

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SPECIFICATIONS: Tuner Section Sensitivity: 30dB Quieting 1.0 Microvolts 11.2dBf, Stereo separations min. 35dB, Frequency responses: ±2dB, 30-16,000 Hz Tape Section Frequency responses: ±2dB, Standard tape: 30-15,000 Hz, Metal tape: 30-20,000 Hz, Wow & flutter: 0.08% WRMS Amplifier Section Maximum power: 25 watts/ch, Two-way power: 12 watts min. RMS per channel into 4 ohms, 30-20,000 Hz with 0.8 THD max, Four-way power: 5 watts min. RMS per channel into 4 ohms, 30-20,000 Hz with 0.8 THD max



displays the recording level in 1-dB steps. The Sony decks are also equipped with Dolby C and a memory system that will store two sets of data on five parameters for each of four tape types. Both Dolby circuits appear as well in the undirectional TC-F310 (\$190) and in two moderate-price bidirectional decks: the \$280 TC-FX510R, with a Laser Amorphous head, and the \$230 TC-FX410R, with automatic reverse in both recording and playback and switchable reversing before the end of the tape. All three are designed to work with any of several Sony remote controls.

Aiwa incorporates what it calls the "world's fastest" quick-reverse mechanism (0.2 second for turnaround) into the three-head AD-R650 (\$395) and the two-head AD-R550 (\$300), both with Dolby C and HX Pro headroom-extension circuits. Technics's new flagship is the \$850 RS-B100. It features a closed-loop dual-capstan drive, a separate monitoring playback head, and tape calibration with a built-in oscillator, plus Dolby C and DBX. Two inexpensive models also offer both noise reducers: the RS-B50 (\$230), with Technics's AX amorphous (noncrystalline) alloy heads, and the automatic-reverse RS-B48R (\$260). A dual-drive deck, the \$220 RS-B11W, can dub at twice the normal transport speed

JVC's introductions focus on its new U-Turn quick automatic-reverse system (rated for a turnaround time of less than half a second) and Flip Reverse head assembly. Ceramic-clad SA (Senalloy) heads are used in the top models-the DD-VR9 (\$800), equipped with the company's B.E.S.T. automatic tape-matching system, and the DD-VR7 (\$500). Both offer Dolby C; so do the KD-V6 (\$350), a three-head unidirectional deck, and two inexpensive U-Turn models-the KD-V300 (\$220) and KD-V200 (\$165). A \$130 deck (KD-V100) and the dual-transport KD-W110 (\$250), with doublespeed dubbing, complete the

new JVC line.

A feature I hadn't encountered before is "car equalization," designed to optimize the bass response of recordings for car acoustics. It's built into Yamaha's K-600 (\$380), along with bidirectional recording, the same sendust head used in the company's top decks, and Dolby C. Yamaha's two other entries are even more modestly priced. The K-520 (\$300) offers Dolby C, a sendust head, a real-time counter, and a number of convenience features. The simpler K-320 (\$220) has a hard permalloy head.

Onkyo includes Dolby C in all its new cassette decks The TA-2090 (\$800) in the Esoteric Separate Series also has DBX noise reduction and Dolby HX Pro headroom extension, plus a three-motor directdrive transport with dual capstans and the company's Automatic Accubias tape-matching circuit. Manual Accubias is built into the TA-2056 (\$395), a three-motor, three-head model. The automatic-reverse TA-R33 (\$315) is offered in both black and silver finishes, as are two unidirectional models-the TA-2036 (\$260) and TA-2026 (\$210).

Among the Computer Direct Line recorders from SAE is a rack-mount model, the C-101 (\$650), with three heads and a manual two-tone bias and EQ adjustment system. Luxman's two additions have both Dolby options. They are the K-240 (\$300), with various convenience features and a fine bias adjustment for tape matching, and the K-220 (\$200).

Head azimuth can be adjusted individually for each direction of tape travel in two Hitachi automatic-reverse decks. The D-X10 (\$660) includes an automatic tapematching system, a brushless, coreless, slotless DC directdrive motor, and separate, titanium-coated recording and playback head elements. It and the simpler D-X6 (\$290) have Dolby C. The unidirectional D-E4 (\$170) is equipped with Dolby C, too, and the D-E12 (\$170) is one of the few models

to sport large VU meters.

Marantz builds all three noise-reduction options into its top model, the automaticreverse SD-440 (\$330). The DS-340 (\$280) also is bidirectional but omits DBX, as does the SD-242 (\$190). A budget unit, the SD-142, costs \$130. 1 was most intrigued, however, by the latest in the Marantz series of AC/DC three-head stereo portables-the PMD-430 (\$495), with DBX and Dolby B, fine bias adjustment, and pitch control. It weighs 31/2 pounds and is about the size of a hardbound book. A NiCad battery pack, RB-430, is available for \$50.

Dolby Laboratories has been working with NAD on a user-adjustable equalizer to tweak the top two octaves of response before Dolby decoding in cassette playback. This deck-based tone control will enable you to compensate for a variety of things that can make a recording sound dull—from azimuth misalignment to what might be called "magnetic fatigue" of stressed tapes. In the meantime, NAD has introduced the Model 6050C deck (\$240).

with Dolby C and bias adjustment.

For a moderate-price dubbing deck, the Pioneer CT-1050W (\$300) is unusual in offering a pitch control in the playback transport. It and the CT-501 (\$160) have Dolby C. The simplest new Pioneer is the CT-

301 (\$135); Sherwood's budget entry is the S-90 (\$150). New models from Fisher are the automatic-reverse CR-277 (\$250) and the CR-27 (\$130), both with Dolby C.

Proton enters the cassette deck market this year with the Dolby C-equipped Model 720 (\$240). A totally revamped line from Vector Research includes the VCX-650 (\$450), a three-motor, three-head deck with a

built-in five-band recording/ playback equalizer. The automatic-reverse VCX-450 (\$330) and the VCX-250 (\$190) complete the line, which offers Dolby C throughout. Rotel is back, with the RD-860 (\$300) and RD-850 (\$200)—both with Dolby C. Sanyo's new premium line, Ultrx (yes, that's spelled right!), includes three bidirectional and four unidirectional models-the latter ranging from the RCD-61 (\$270) to the RDC-11 (\$150), all with Dolby C and all but the 11 with DBX as well. The top reversing deck is the RDR-81 (\$330), with Dolby C and DBX; the other two are the RDR-51 (\$220), with Dolby C, and the RDR-31 (\$170). A dual-transport Ultrx, the \$220 RDW-201. also has Dolby C.

**Robert Long** 

# Blank Tape

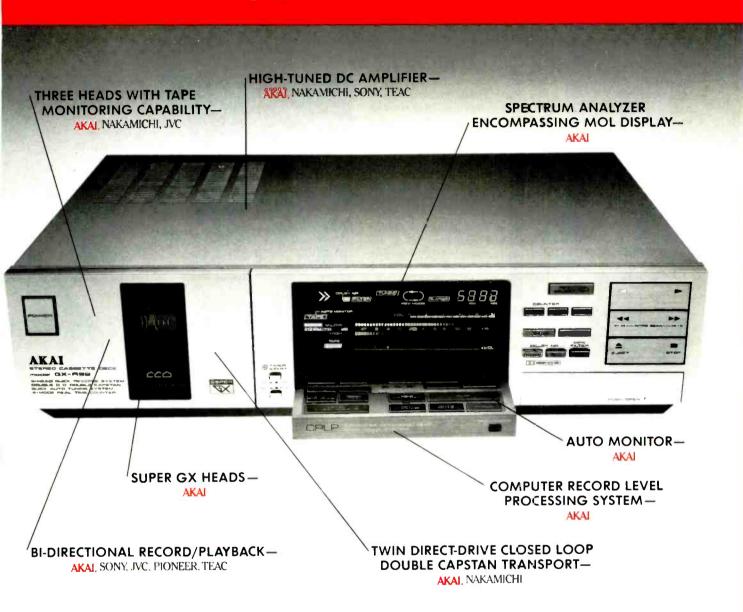
IN AUDIO CASSETTES, Sony's changes are the most sweeping. AHF is discontinued, leaving HF and HS-S (which replace LNX and BHF, respectively) as



Audio tapes for special situations are becoming popular. Fuji's Type 2 "chrome" follows last year's ferric.

Sony's Type 1 (ferric) offerings. In Type 2 ("chrome"), UCX and UCX-S have undergone minor reformulations, but remain basically unaltered. And metal C-90s, dropped some time ago, are again available. Fuji has reformulated FR-II, a Type 2 tape that uses the company's Beridox particle. Altogether new is GT-II, a Type 2 version of the GT cassettes that Fuji has designed specifically

# YOU'RE LOOKING AT THE SIX BEST AUTO-REVERSING DECKS YOU CAN BUY.



Staying ahead of the competition in autoreversing cassette decks has been an AKAI tradition for the past 14 years. Now we're introducing the all-new GX-R99, a deck that has so many advanced features you'd have to buy six other auto-reversing decks to get them all. Features like our Computer Record Level

Features like our Computer Record Level Processing System, that sets a tape's bias, equalization and tape sensitivity, measures a tape's MOL, then sets the optimum recording level. A Spectrum Analyzer encompassing MOL display, which displays frequency response with greater accuracy. AKAI's exclusive Auto Monitor. And our super GX heads. So super, they're guaranteed for 17½ years of continuous play.

It's easy to see why the GX-R99, just one of four great AKAI auto-reversing decks, is called the Dragon Slayer. And to find out why it's getting more praise than all the

other guys combined, write to AKAI, P.O. Box 6010, Dept. H9, Compton, CA 90224.





for car stereo use. Both the shells and the magnetic coating are engineered with high temperatures in mind.

TDK's Type 2 metal-a tape whose metal alloy "pigment" is formulated for use with chrome and ferricobalt bias and recording EQ, giving it exceptional headroom—has been renamed HX-S. This shift from its original HX designation avoids any confusion with Dolby's HX or HX Pro headroom-extension circuits.



Fuji's Super XG



TDK's Type 2 metal



Scotch's camera tape

Nomenclature is also proving problematic with videotapes. The increasing popularity of the HG (High-Grade) designation is making it more difficult than ever to sort out the differences among premium and superpremium formulations. In some instances, however, the new labeling has real meaning. Maxell has introduced HGX Pro half-inch videocassettes specifically to be sold through its Professional/Industrial Division for electronic news-gathering. HGX Pro takes advantage of the latest and best of Maxell's magnetic formulations, tape manufacturing techniques, and shell designs.

Another new group of cassettes is being offered for portable VCRs—separate recorders or integrated camcorders. These blanks presumably use high-quality oxide (so you can dub tapes with minimum picture-quality loss), long-life tape (so you can reuse the cassettes), and extra means to inhibit the accumulation of dust and grime (because you'll be taking the tapes into the field). The 3M people say they have addressed all of these factors in Scotch Camera Cassettes, which use the company's HGX Plus formulation, with an antistatic back-coating, wound into highimpact antistatic shells. The cassettes have red doors and hubs (to identify them as special) and are packed in a dustresistant plastic storage "album." (So far, only the most popular lengths-T-120s and L-750s-have been announced.) Sony is also taking this approach with its Betacam cassettes.

Many manufacturers are branding some tapes with the term "Hi-Fi" to suggest that they are engineered for VHS or Beta Hi-Fi recorders. JVC's newest Dynarec videotapes, for example, are called "VHS Hi-Fi" and use a titanium oxide surface coating that is said to act as an antistatic agent, to aid in keeping heads clean, and to improve overall durability of the tape. Five lengths are available, from T-30 to T-120. Similarly, 3M has Scotch HGX Plus Hi-Fi, Fuji has Super HG Hi-Fi, and Memtek has Memorex HG Master, which is being marketed as a Hi-Fi tape. As far as I know, the only major company to introduce a new superpremium videocassette not tied to a concept of professionalism, portability, or Hi-Fi performance is Fuji, with Super XG. Undoubtedly a high-performance formulation, its name at least bucks the trend.

Robert Long

# RECORD-PLAYING

FOR ALL THE EXCITEMENT it has generated, the Compact Disc does not yet pose a serious threat to the turntable market. Wisely, the manufacturers of



Though most Japanese companies continue to refine direct-drive turntables, Yamaha breaks with tradition in the PF-1000. A belt-drive design with a softly sprung suspension, the table comes with a twotube arm—one pipe each for the left- and right-channel signal leads.

analog reproduction gear (most of whom also produce CD players) are responding by making record players that are both quieter and cheaper than previous designs. Some of the same production techniques and economies of scale that contribute to \$500 CD players are helping bring down the prices of turntables with such niceties as quartz-locked drive motors, servo-driven linear-tracking tonearms, and infrared sensors for automated cueing and programmed play. Models with some or all of these features are now widely available for less than \$250.

At the very bottom of the price scale are turntables selling for \$100 or less-including cartridge—from Pioneer, ADC, and Parasound. The ADC LT-32 (\$100) even sports a straight-line-tracking tonearm. Panasonic's "Home 'n' Go" (\$80) is a portable beltdrive unit with a built-in RIAA phono preamp for connection to any small portable system.

But most of the turntable action at the Summer Consumer wi

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Albert ROUSSEL:Padmavati/Horne, Gedda; Toulouse Capitol Orch, Plasson 173 1773 (2 Digital LPs) 6 Epigraphs

**DEBUSSY:**Piano duets: 6 Epigretc./Michel Beroff, Jean-Phil. Collard 2C069 73132 (1 Digital LP) \$8 99 2C269 73132 (1 Cassette) Vincent D'INDY: \$8.99 Symphony/Toulouse Capitol Orchestra Michel Plasson. 2C069 73100 (1LP) \$8.99 2C269 73100 (1 Cassette) \$8.99

D'INDY: Jour d'éte; Foret enchantee; Tableaux/Or. Phil. P.de Loire, Dervaux 2C069 16301 (1 LP) POULENC: Intermezzi; Nazelles;

Villageoises; Valse; etc./Tacchino, piano 2C069 73101 (1 Digital LP) \$8.9 \$8.99 2C269 73101 (1 Cassette) POULENC: Novelets; Nocturnes; French

Suite; Presto; etc./Tacchino, piano 2C069 73134 (1 LP) \$8.99 \$8.99 2C269 73134 (1 Cassette)

# **HYPERION** - England

CRUSELL: Clarinet Concerti 1 & 3/Thea King; London Symphony, Alun Francis A 66055 (1 LP) KA 66055 (1 Cassette) \$8.99

Songs of Iona, Skye, Mull, Scots & Irish airs/Philh. Chamber Choir, Temple \$8.99

KA 66064 (1 Cassette) \$8.99 MUSSORGSKY: Pictures at an Exhibition/Arthur Wills, Ely Cathedral organ

\$8.99 A 66006 (1 LP) Echoes of a Waterfall: 19th c. romantic harp music/Susan Drake A 66038 (1 LP) \$8.99

Canticles, anthems, etc/Ely Cathed. Choir, Wills; S. lePrevost, organ A 66012 (1 Digital LP) \$8.99

Abbess Hildegard Abbess Hildegard of Bingen Hymns/Gothic Voices, E. Kirkby, C. Page A 66039 (1 Digital LP) \$8.99 A 66039 (1 Digital LP)

# **CHANDOS - England**

Hamilton HARTY: Irish Symphony; Comedy Overture/Ulster Orch, Thomson ABRD 1027 (1 Digital LP)

BAX: 4 Tone Poems/Ulster, Thomson ABRD 1066 (1 Digital LP)

ELGAR: Youth Wand Suites 1 & 2; Nursery Suite/Ulster Orch, Thomson ABRD 1079 (1 Digital LP)

TCHAIKOVSKY: Cello & orch. music/G. Simon; Eng. Chamb. Orch, Wallfisch ABRD 1080 (1 Digital LP) \$8.99

# CHANDOS - England

BARBER, SHOSTAKOVICH: Cello Crti/Simon; Eng. Cham. Or, Wallfisch ABRD 1085 (1 Digital LP) \$8 Valley of Song/Rossendale Male Voice Choir, Ernest Tomlinson ARR 1023 (1 LP) \$8.99 ABT 1023 (1 Cassette) SHOSTAKOVICH: Piano Trio 2;

Quintet/Borodin Trio, Mimi Zweig, Horne ABRD 1088 (1 Digital LP) \$8.99

BAX: Symph. 4; TINTAGEL/Ulster Or-chestra, Bryden Thomson ABRD 1091 (1 Digital LP)

## VOCE - U.S.A.

DONIZETTI: Emilia di Liverpool /Sutherland; Liverpool Ph, Pritchard VOCE 30 (1 Mono LP)

ROSSINI: La Donna del Lago/Horne, von Stade; Houston Opera, Scimone \$26.97 VOCE 64 (3 LPs)

SCHREKER: Die Gezeichneten/No. Ger. Radio, Zillig; Krebs, Lear, Crass VOCE 68 (3 LPs) \$26.97

# **CHRISTOPHORUS** -Germany

REUBKE: Psalm 94 Sonata in c; REGER: Op. 52,2/Hubert Meister, organ SCGLX 73957 (1 LP) \$8.99

Flute & Guitar/Hans Martin Linde fl. & recorder; Konrad Ragossnig, guitar SCGLX 73849 (1 LP)

Spanish Renaissance Music/Ancient Consort Singers & Instrumental Ensemble SCGLX 73919 (1 LP)

HAYDN: Lira Cncrti 2 in G, 4 in F; Organ Cncto in C/Hugo Ruf; Lehrndorder SCGLX 73894 (1 LP) \$8.99

# **SCHWANN - Germany**

MOZART: Magic Flute overture; Piano duet; Fantasia K608; MENDELSSOHN: 2-piano Sy. 1 in c/A. & J. Paravatore VMS 1031 (1 LP) \$8.99

John GAY: Beggar's Opera/Stevens, Acad. Monteverdi Cho. & Orch., soli VMS 2038 (3 LPs)

Music of the Bible in the tradition of Old

AMS 1508 (1 Mono LP) HAYDN: Time of Day Symphonies, H. 1, 6-8 Morn, Noon, Eve/period instr. \$8.99 VMS 2085 (1 LP)

# ACANTA - Germany

ORFF: Orpheus/Orff; Prey; Popp; Munch Radio Cho. & Orch, Eichhorn 40 23378 (1 LP)

WOLF-FERRARI: Sly/Bader, Hanover State Oper. Cho. & Orch. 40 23501 (3 Digital LPs) Reeh: \$26.97

# **WERGO - Germany**

LIGETI: Requiem; Lontano; Continuum/Poli, Bour, Bavar, Radio Choir,&c. WER 60045 (1 LP) \$8 99

**DEBUSSY:** 6 Epigraphes; Lindaraja; Blanc & Noir/ Kontarsky Piano Duo WER 60 008 (1 LP) Ravel, deFalla, Bartok, Bialas, Hiller

songs/Sakkas, barit; Bern Str. Qrt; WER 60 083 (1 LP)

# **ARIOLA - Germany**

R. STRAUSS: Songs/Rene Kollo, tenor; Hesse Radio Orchestra, Stalling 200 591 (1 LP) \$8.99 400 591 (1 Cassette)

J. BAYER: Die Puppenfee ballet/Sta. Philharmonie Rheinland, Eichhorn 203 387 (1 Digital LP)

SUPPE: Die schone Galathee/Moffo; Bavar, Radio Cho. & Orch, Eichhorn 87 583 (1 LP)

GLUCK: Ipnigenie in Aulis/Dietrich Fischer-Dieskau, Anna Moffo; Eichhorn 86 271 (2 LPs)

# **THOROFON - Germany**

RACHMANINOV: Elegiac Trios: 1 in g, 2 in d op. 9/Gobel Trio, Berlin MTH 252 (1 DMM LP)

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Electronics Show was in the \$100 to \$200 bracket. The Sony PS-LX55 Mk. II offers automatic disc-size selection for \$165. Many new models in this price range have linear-tracking arms set into the lid-the socalled "clam-shell" configuration first introduced by Technics in 1980. Of these, the Sherwood ST-900 (\$170) includes programmable track selection and infrared disc detection: the Akai AP-M33S (\$200) has a microprocessor-controlled direct-drive motor and automatic size/speed selection; and the Technics SL-J2 (\$200) is a 12inch-square linear tracker with a scan/search feature that plays the first few seconds of each cut until you find the one you want

The P-Mount cartridge body seems to be gradually taking over in all but the high end of the market. Most new integrated turntables, including units from Pioneer, Kenwood, Akai, and Yamaha, are either built for P-Mount cartridges or come with an adapter for them. And if the adapter isn't included with the turntable, it may be

supplied with the cartridge, as is the case with Stanton's new line of P-Mount pickups.

One of this year's popular features used to be available only as an aftermarket accessory—a clamp designed to keep the record in intimate contact with the turntable mat. Clamp-

ing the record is supposed to deaden both external acoustic feedback and any vibrations generated in the vinyl by the stylus itself as it traces the groove. Most clamps are simply cylindrical weights that sit on the label of the record. In the past, some heavy ones caused concern about the possibility of excessive platter bearing wear. But when the weight is supplied by the manufacturer, you can be

sure the turntable is built to take it

The most successful American turntables have always been belt-drive units equipped with a softly sprung subchassis carrying the platter and tonearm. The big Japanese companies, on the other hand, have tended to favor directdrive motors and rather stiff suspensions. Now from Yamaha comes a pair of softly sprung belt-drive models, the PF-800 (\$450) and PF-1000 (\$650). These are strictly manual units except for an end-of-side arm lift. Both include disc clamps, a cartridge-alignment grid molded into the underside of the turntable mat, and a twin-pipe tonearm in which each tube carries the signal leads from only one channel.

Harman Kardon's beltdrive models have been upgraded this year. The T-65C (\$575) comes with a disc clamp and has a new tapered tonearm with a weight-and-wire antiskating mechanism. A control knob enables you to add an additional 100 or 200 picofarads (pF) to the signal cables' 70-pF capaci-



The Sony PS-LX55 Mk.II: lateraltracking tonearm and automatic

tance. Kyocera is adding three belt-drive tables with softly sprung subchassis. The PL-910 has a solid ceramic platter and costs \$2,000 without arm; the others are the PL-701 and the PL-601 (\$450 and \$350, respectively, including tonearm). Micro-Seiki's BL-61, a belt-drive unit with a four-point floating suspension, sells for \$500. Walker's CJ-61 (\$180 without arm, \$330 with the

company's own arm) is a very compact table whose subchassis—except for the arm-mounting platform—is entirely contained within its 12-inch cylindrical base.

Some Japanese manufacturers are still refining directdrive designs. Denon's DP-61F (\$500) has a high-torque AC motor and a servo-controlled warp-fighting tonearm. Sansui's "synchrotor" technology, in which a separate rotor and motor cancel the inertia of the speed corrections applied to the main platter, once required an unusually deep turntable base. The company's new XP-99 offers the synchrotor feature in a table of normal depth at the reduced price of \$400. ADS's new Atelier Series model, the European-designed P-4 (\$500). is a direct-drive unit with three motors—one for the platter and one each for cueing and horizontal arm movement. All controls are outside the cover.

Cartridge introductions have definitely slowed down, though things are still bubbling along in the upper price bracket. Linn showed its Karma low-output moving-coil pickup (\$725). Audioquest has a new line, ranging in price from the AQM-1 (\$95), a moving-magnet model, to the AQT-7 (\$500), which has a solid sapphire cantilever. Mission's new Solitaire cartridge is a moving-magnet design with an elliptical stylus (\$99).

Dynavector has added the 17-D2MR (the "MR" denotes a Micro-Ridge stylus) with a diamond cantilever for \$480, as well as a high-output movingcoil model, the DV-10X4 (\$160). The new Alpha 2 lowoutput moving-coil pickup from Monster Cable (\$675) is also equipped with a Micro-Ridge stylus. ADC's latest is the TRX-3 (\$300), a fixed-coil design with tripole armature and tapered beryllium cantilever. And Audio-Technica is bringing out the 200 Universal Series of cartridges, which are compatible with either P-Mount or standard arms, at prices from \$50-\$135.

E. Brad Meyer



Marantz TT-240



JVC QL-Y66F



Harman Kardon T-65C



Kenwood KD-7700



Sansui XP-99



Kyocera PL-910

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Stylus model	Compatible with this Shure cartridge	Your rebate
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N97HE	Upgrade for M97EI) Replacement for M97HE	\$ 5
N95HE	Upgrade for M95ED Replacement for M95HE	\$ 5
N95ED	Replacement for M95ED	\$ 5
N91ED	Upgrade for M91E Replacement for M91ED	\$ 5

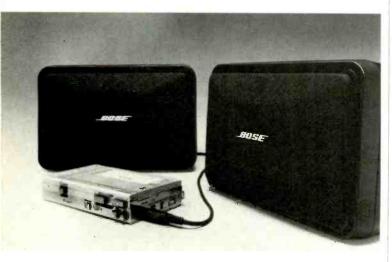
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# LOUDSPEAKERS

CHECKING OUT NEW loudspeakers at the Summer Consumer Electronics Show was both interesting and frustrating. The real surprise (as always) was



how many demonstrations actually sounded good despite the variable acoustics of hotel rooms and exhibit halls and the often appallingly high background noise from air conditioning equipment—not to mention other speaker manufacturers in the vicinity.

An obvious trend toward smaller models derives much of its impetus from the recent approval of stereo TV broadcasting. Because most people don't have a lot of extra space near their television sets, TV speakers must be small while maintaining reasonable bass extension, output, and sensitivity. Satellite/subwoofer systems are well suited to these requirements, and new ones are available from Desktop Systems and Bozak, whose three-piece MSS-1000 sells for \$950.

To overcome space limitations while producing a stereo image that's comparable in size to the picture, many people will want their TV speakers right next to their sets. But the magnets in many high-quality speakers are strong enough to smear the color in the picture. One way out of this problem that doesn't compromise performance is to install a supple-

mentary magnet assembly on each driver, thereby canceling its external field. Three companies have so far adopted this approach: Boston Acoustics, with a magnetically shielded version of its A-40; Polk Audio. whose VS models are built to complement the dimensions of 25-, 19-, and 12-inch video monitors; and B&W, which placed a monitor between a pair of its new VM-1s (\$150), one with compensating magnets and one without, to show the effectiveness of the shielding.

Many other companies introduced small speakers not directly oriented to video. Fourier Systems' Model 44 (\$350 per pair) is reported to deliver "an honest 67 Hz," a refreshingly conservative spec. The new 30B from Acoustic Research is available in bookshelf or floorstanding versions (\$215 and \$230, respectively). And Tannoy's smallest system carries an incongruous name, the Titan (\$260 per pair). But the prize for the most charmingly eccentric monikers goes to Tannoy's new line of larger speakers: the Surrey Series. Each model is named after a city from Surrey County in England-Esher, Dorking, Chertsey, Bradley, and Albury. Prices range from \$850 to \$2,000 per pair.

The nearly universal claim of "digital-readiness" in loudspeakers nowadays refers mostly to higher sensitivity ("efficiency") and greater powerhandling capability. To provide better heat dissipation. American Acoustic Laboratories, Sherwood, Mission, Infinity, and B&W-to name but a few-are using ferrofluid in tweeter or midrange magnet assemblies for the first time. Infinity's EMIM midrange drivers and EMIT tweeters have lighter diaphragms for greater efficiency, and the company's new woofer is equipped with a longer voice coil for greater control at long excursions.

Of course, you can always get additional output by making the cabinet bigger and the drivers more numerous. Such is the case with the B&W Model 808, which has a sensitivity of 91 dB

and is said to be capable of producing an undistorted output of more than 120 dB—a capability the company insisted, with only mild apology, on demonstrating to the press. The 180-pound system has two woofers, two midrange drivers, and one



**Boston Acoustics A-40V** 



Yamaha NS-500M



JBL J-350A (TLX Series)



Technics SB-M5

generate room-filling levels from the headphone output of a personal-portable. A built-in power amp plus EQ and distortion-limiting circuitry contribute to the sound of these little

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tweeter.

If your speakers are limited by your power amplifier, a separate amp for the woofer will help, but it need not be in a separate cabinet. ADS has a power amp module that fits inside its 1290 and 1590 tower speaker systems. And Revox includes three 100-watt (20-dBW) amplifiers and a motional-feedback woofer in its new Agora B system (\$1,200).

Exotic diaphragm materials that combine lightness with rigidity are also in evidence this year. The speakers in JBL's new TLX series (five models from \$100 to \$320) have midrange and low-frequency driver diaphragms constructed of a plasticized layer laminated to paper. For the tweeter, a layer of titanium replaces the plastic. Sansui's XL-900C has a tweeter diaphragm of solid titanium, a ceramic midrange dome, and a carbon-fiber woofer cone. Yamaha's NS-500M (\$385) also has a carbon-fiber woofer. but the midrange driver uses titanium with an additional layer of titanium carbide, while the tweeter diaphragm is beryllium. Pioneer uses ribbon tweeters that are inherently burnoutresistant in a new series of speakers, the largest of which is the \$300 CS-705.

Increasing numbers of Japanese speaker systems now sport flat woofers and midrange drivers, some of which are round—like those in the Technics SB-M3 (\$900) and the smaller SB-M5 (\$400)—while others are square, like those in the new models shown by Sony and Mitsubishi.

Vivid and precise stereo imaging is one of the hallmarks of a fine speaker system, and several manufacturers are promoting their designs on that basis. Chief among them is DBX, whose Soundfield One has 14 drivers per enclosure in an elaborate phased array. A separate signal-processing box controls both the frequency response and the imaging of the system, which maintains its tonal balance and stereo image almost regardless of where you sit in the listening room. The DRAMATICALLY DIFFERENT FROM KEF

The KEF 104/2 (\$800) is an entirely different speaker from its immediate predecessor, the 104aB. Frequencies above 150 Hz are handled by a vertical array consisting of a small dome tweeter mounted between two identical midrange cones. Their specially contoured and damped subenclosure is resiliently mounted to the front of the main cabinet, which contains two upward-facing bass drivers, each loaded by its own sealed subenclosure—one at the bottom of the cabinet, the other at the top. The woofers radiate into a central cavity connected to the outside world by a 5-inch tuned circular port, whose dispersion matches that of the midrange drivers. KEF says that this novel arrangement combines the advantages of acoustic suspension and bass reflex designs while avoiding their drawbacks, yielding extended bass response with low distortion and high efficiency.



The in-line configuration of the bass driv-

ers requires that they be driven out of phase with each other, so as to create a sort of bellows effect within the reflex chamber. (Otherwise, they would move in the same direction at the same time and there would be no change in air pressure within the enclosure and thus no output.) KEF has taken further advantage of this aspect of the design by connecting the magnet assemblies of the two woofers with a metal bar, so that inertial forces are canceled instead of being transferred to the cabinet and radiated into the room. The company contends that such spurious radiation is the source of the "boxy" sound associated with most conventional speakers. Another, less obvious innovation is embodied in the crossover, which is designed to present an almost pure, non-reactive 4-ohm load, making the 104/2 loudspeakers unusually easy for an amplifier to drive.

complete setup sells for \$2,500. At \$300, the new Ohm Walsh I offers the smallest and cheapest version of the company's omnidirectional Walsh driver technology, and Polk Audio now has a bookshelf model in its line of separation-enhancing SDA speakers, the Compact Reference System (\$400). Cerwin-Vega's new 2000 Series speakers (three models from \$400 to \$700) have vertical midrange arrays for wide horizontal and narrow vertical dispersion.

Some high-end companies are following the trend to smaller speakers, though in the case of Apogee Acoustics, "small" is strictly relative. Its all-ribbon Scintilla stands 57 inches high,

weighs 140 pounds, and costs \$1,750 a side. A new company called Dynam is importing a series of speakers using corrugated flat-panel magnetic drivers, named Dynapleats. Prices range from \$600 to \$5,000 for the pair.

Many speakers can use a little assistance in the deep bass, and you can add extra low-end capability with a variety of separate subwoofers. This season you can try the new Janis System 3 (\$500) or the Shahinian Acoustics Diapason (\$550) on up to the servo-controlled Velodyne (\$3,850, including a 350-watt power amp).

Dennesen combines bex-

trene bass and midrange drivers with an electrostatic tweeter in its DEI (\$1,850 per pair). Dahlquist has formally introduced the DQ-20 (about \$1,900 per pair), an upgraded version of its highly regarded DQ-10. Improvements in Infinity's drivers have been carried over into a new version of the \$30,000plus IRS system. But the show's most expensive speaker is from a newcomer—the Guss Monitor, which has 31 drivers in each main cabinet (including six 15-inch woofers) and two "satellite" cabinets for enhanced imaging, each with 20 drivers. The complete systems sells for an even \$50,000.

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# N E W T E C H N O L O G I E S

Digital Audio

Video

Computers

Software Review

# VIDEO FOR A NEW AGE

WHETHER YOU'RE A videophile or just a casual viewer, 1985 should prove a very good year. That's the inescapable conclusion from my inspection



With the success of music videos on tape and via cable and network broadcasts, it's not surprising that Pioneer would introduce a video jukebox.

of the video offerings presented by nearly 200 manufacturers at the Summer Consumer Electronics Show. It's impossible to mention, much less detail, all the goodies introduced at the McCormick Place convention center in Chicago, but here's a quick rundown of the most significant new products and trends for this year

and beyond.

Most of us covering the video scene were delighted at the number of VHS Hi-Fi videocassette recorders on display. Back when Beta Hi-Fi stole the headlines with PCMlike audio performance in what had been a decidedly low-fi medium, VHS suppliers churned out a profusion of announcements heralding the imminent appearance of a rival version. Well, it took more than a year and a half for JVC, Matsushita, et al., to catch up, but for VHS fans the wait was worth it. [For a complete buying guide to the new Hi-Fi VCRs, see "Super Stereo VCRs'' in last month's HIGH FIDELITY.]

However, none of this year's Hi-Fi VCRs (VHS or Beta) are equipped to decode multiplex TV audio broadcasts. The FCC's approval of the Zenith/DBX system (stereo plus a separate mono channel) came too late for manufacturers to incorporate the appropriate decoders in their designs. Some decks, however, are equipped with multiplex output jacks, so it should be possible to retrofit them for stereo reception. A newcomer to the VCR business, Harman Kardon, was the only manufacturer to announce that its VHS Hi-Fi deck (scheduled for delivery in November) will contain a multiplex decoder.

Unfortunately, prerecorded VHS Hi-Fi software is still scarce. As of this writing. CBS/Fox is the sole major supplier of VHS Hi-Fi films and concert programs. Rumors abound as to the reasons. Some contend that the original duplication equipment supplied by Matsushita was defective; others claim that duplicators resisted switching to the higher-quality tape that Hi-Fi recording demands. Not to worry, though: The software floodgates are bound to open with a torrent of new releases.

In fact, if you own a Beta Hi-Fi VCR (for which there is an abundance of soft-

ware), you'll be happy to learn that the prices of prerecorded cassettes may take a nose dive this year. The reason is Sprinter, a high-speed duplication system developed by Sony that enables a fulllength feature film to be copied in 11/2 minutes (compared to the current real-time dubbing process that forces duplicators to operate at numbingly inefficient rates). The system gains its speed from a contact 'printing' process in which a mirror-image master tape is drawn across a continuous reel of blank tape. The video information is transferred to the blank tape via magnetic induction. After the dubbing is complete, all that's left is to load the tape into shells. Will Sprinter work for VHS as well? Sony isn't pushing the idea, but the technology may be transportable.

Actually, video dubbing isn't the only thing that Sprinter could be used for. It's no secret that Sony is promoting the concept of rotaryhead digital audio cassette decks (as opposed to the multitrack fixed-head designs favored by some other Japanese companies). An adequate supply of prerecorded digital audio cassettes would be crucial to the success of the format. Sony's proposed system. which is based on a microcassette-size tape capable of storing three hours of digitally encoded music, would be a nightmare for duplicators forced to make copies in real time. Sprinter, however. might cut the dubbing process to a couple of minutes (maybe less).

But back to video—specifically, stereo broadcast TV, which has all the hallmarks of a typical chicken-and-egg situation. Consider the economic realities facing the broadcasting industry. Both ABC and NBC have announced their intention to begin multiplex broadcasts this year, mainly to take advantage of the third audio channel for second-language soundtracks. But all network fare is relayed to



your antenna from local affiliates—most of whom keep a close eye on expenses, especially in small markets. It's naive to assume that an affiliate would invest in the equipment to rebroadcast stereo TV programs unless he were sure there were enough stereoready sets out there to receive his signal.

But the stereo-ready sets introduced at the SCES are all top-of-the-line models—typically, 25-inch monitor/receivers, in which the additional expense of a built-in multiplex decoder accounts for just a small part of the total cost. Only when decoders start showing up in mass-market 19-inch receivers will the stage be set for wide-scale stereo-TV broadcasting.

Add-on decoders might become popular accessories next year, and so far General Electric, Zenith, and Sonv have introduced such devices (which can be used only with receivers equipped with multiplex output jacks). Larry Schotz, the FM tuner designer responsible for groundbreaking audio receivers from NAD and Proton, has an idea for an outboard decoder that would not need any direct electrical connection to a TV receiver. His plan is to make use of the stray IF radiation generated by a typical TV tuner. The decoder would just have to be placed close enough to your TV set to get a strong reradiated signal. Will it work? Schotz says that it does, but completion of his design will have to await the start of stereo broadcasts. Chicken and egg, did you say?

Portable camera-recorders (camcorders) using 8mm-wide tape were the big news at last January's Consumer Electronics Show. Kodak garnered the lion's share of publicity then for being the first to embrace the new format. RCA and GE were quick to follow suit, but by this CES the future of 8mm video seemed cloudy, indeed. GE and RCA publicly announced that they are temporarily shelving their plans to

market 8mm camcorders, while Hitachi repeated its oft-heard complaint that the format is confusing and point-less. Polaroid's demonstration of an 8mm system and Sony's post-CES statement of its plans to introduce an 8mm camcorder only muddy the waters further. I suspect the situation will be clarified if and when Kodak's camcorders come to market this fall.

One of the marvels of consumer electronics this fall was supposed to be DBS, or direct broadcasting to the home from high-power satellites. Home satellite reception has existed for the past five years, but it requires an investment of several thousand dollars for an antenna as much as 14 feet in diameter and complex receiving equipment. DBS, on the other hand, promised to provide subscribers with five or six satelliterelayed broadcasts receivable with roof-based dish antennas just 18 to 36 inches in diameter and costing \$200 to \$300.

A pilot project actually began last fall in Indiana, with Radio Shack stores selling small (in this case, four-foot) dishes to those subscribers who chose to buy them outright instead of renting equipment from the programmer, United Satellite Communicaions. USC had hoped to extend its DBS coverage to the entire Northeast by this fall. and last year Toshiba, Panasonic, General Electric, and Uniden demonstrated DBS receiving gear at the CES.

Alas, at this show only Toshiba included DBS equipment in its exhibit. Uniden, whose two satellite receivers were said to be capable of processing both DBS and conventional satellite signals, didn't mention the topic at all. And General Electric and Panasonic quietly dropped it from their high-tech product displays.

Less than two months before the SCES, RCA pulled the plug on its CED videodisc system. Though several software companies say they will continue to supply CED titles, CBS announced that it would no longer support the format. Laserdisc video, on the other hand, was very much in evidence.

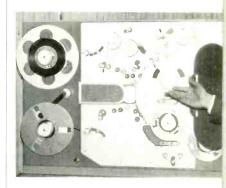
Pioneer introduced a series of eight-inch discs intended primarily for music video programs. The eight-inchers will be offered through traditional music outlets and as fodder for a new generation of video jukeboxes. And speculation is rampant that the next generation of optical videodisc hardware will be capable of handling both sizes of videodiscs, as well as audio-only Compact Discs. Such combo players may be available next year.

Still too early to speak of as a trend, but interesting nonetheless, is the appearance of one-brand audio-video systems. Among these are JVC's XM-900AV Crossmedia and Pioneer Video's Foresight 700, each containing a video monitor and associated video and audio components in a single rack setup. Prices for such integrated systems can be as high as \$2,500, depending on the ingredients. Fully loaded, Pioneer's Foresight 700 includes a 25-inch color monitor, a 50-watt stereo amplifier. a TV tuner, a pair of threeway loudspeakers, an AM/FM stereo tuner, a Laserdisc player, an audio cassette deck, a surround-sound processor, and a rack to hold the whole thing together. And it's all remote controllable.

Finally, as if to prove that bad ideas sometimes are the only constants, Pioneer has resurrected the Bodysonic concept. You may remember its earlier incarnation as a car stereo seat-and-back cushion equipped with little speakers that caused your bones to vibrate along with the music. Now it's in a lounge chair (with matching ottoman) that enables you to experience television viscerally as well as visually. Price is a not inconsiderable \$800

William Mowrer

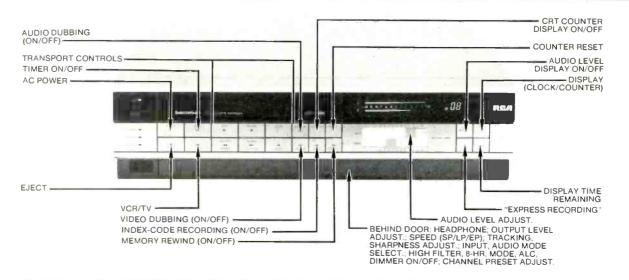
High-speed videotape duplication has been the holy grail of the video industry for years. Now Sony says that its Sprinter machine, which uses a magnetic version of contact printing, can copy a full-length movie in 1½ minutes. The production economies brought by such a system could mean lower prices for prerecorded fare in '85.



VIDEO
EQUIPMENT
REPORTS

# RCA VKT-650 VHS HI-FI VCR

RCA Selectavision VKT-650 VHS videocassette recorder, with one-year/eight-event tuner/timer, on-screen programming, wireless remote control, and VHS Hi-Fi stereo audio. Dimensions: 17 by 4½ inches (front panel), 14¾ inches deep plus clearance for connections. AC convenience outlets: one unswitched (300 watts max.). Price: \$1,295. Warranty: "limited," one year parts, 90 days labor. Manufacturer: made in Japan for RCA Consumer Electronics, 600 N. Sherman Dr., Indianapolis, Ind. 46201.



RCA'S TOP-OF-THE-LINE, front-loader is the most feature-laden VCR we've reviewed to date. To start with, there's VHS Hi-Fi recording (in stereo, of course) as well as edge-track (linear) recording for compatibility with older decks. Although the edge track records only in mono, RCA says that the VKT-650 reproduces stereo edge-track recordings in stereo, so nothing is lost if you have a library of Dolby-encoded VHS stereo tapes. It records and plays at all three

VHS speeds (SP, LP, and EP) with a full complement of special effects that work best in the EP mode but function reasonably well in SP and are by and large useful even in the intermediate LP mode (although RCA makes no claim to this virtue). Besides AUDIO DUB, which enables you to overlay the audio edge track with a new recording, there's VIDEO DUB, which permits you to rerecord the video without affecting the audio edge track. (Because the VHS Hi-Fi information is recorded on

the video track, it's not possible to rerecord video information without removing the Hi-Fi audio or to rerecord Hi-Fi audio without erasing the picture.)

OU CAN SEARCH forward or backward for a particular program by pressing FAST FORWARD or REWIND from PLAY, or, if you had the index feature on during recording, proceed to the beginning of the next (or current) program at even higher speed by pressing FAST FORWARD or REWIND from STOP. This feature works by recording a special cue signal at the start of each recording session. When the cue signal is detected, the deck enters FORWARD SEARCH for about ten seconds so you can check the program, then races to the next one. When you find the selection you want, you can stop the search by pressing PLAY. For the less adventurous, there's also a MEMORY REWIND that returns to counter "9999" and stops.

You'll search in vain for a conventional tape counter, however: the VKT-650 has its own microprocessor and video display system that presents such information on the monitor. There is a front-panel clock, but even this information is presented on the monitor as well. In fact, you set the clock and program timer with the infrared remote control rather than with front-panel buttons. (The VKT-650 comes with its own remote, but RCA says that the Digital Command Center included with its ColorTrak 2000 monitor/receivers can serve the same purpose, so if you have an all-RCA system, you need juggle only one controller.) Pressing PROGRAM displays a computer-like "menu" on the screen. It gives you five choices: clock set, normal program, daily program, weekly program, or program review. Press the appropriate number on the ten-key pad, and you're in business.

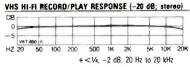
For example, pressing "1" (clock set) changes the display to "CLOCK SET TIME — —." Enter the current time via the keypad, and the display indicates the time and asks whether it is AM (1) or PM (2). Tell it, and it asks for "DATE -/-/-." Enter the month, day, and year in numeric fashion, and the VCR figures out what day of the week it is and displays that as well! To end the clock-setting sequence, you press PROGRAM again.

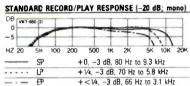
You program the VKT-650 for unattended recording in a similar manner, guided by a series of onscreen prompts. Selecting "2" from the main menu displays "NORMAL PROGRAM—PROGRAM 1 2 3 4 5 6 7 8" followed by the instruction "SELECT PROG NUMBER." When you have done this, the machine goes on to ask for the channel number, the start and end times, and finally the date of the program. It can store as many as eight selections over a period as great as a year. (If you program a date prior to the current date, the year will change automatically to the following one.) DAILY PROGRAM enables you to record the same program each day of the week (except Saturday and Sunday), while WEEKLY PROGRAM enables you to record the same program on a specific day of each week (including Saturday and Sunday) with a single entry. PROGRAM REVIEW displays each of your commands (starting with the lowest program number) for ten seconds, after which it steps on to the next. CLEAR enables you to correct an error or change the programming while TIMER sets the system for automatic turn-on; the system retains its memory for as long as 60 minutes in case of a power

Whenever you press DISPLAY, the mode, channel number, and tape position are superimposed on the top of the screen, while the date, day of the week, and time appear along the bottom for about ten seconds. In fact, whenever you press a major mode button, the new mode and tape position appear momentarily on the screen. You have several choices of how the tape position is displayed: by elapsed time from the beginning of the tape, time remaining, or counter number. Which will be displayed depends on how you've programmed the VCR. COUNTER switches the display from time to counter and vice versa. (MEMORY REWIND functions only in the counter mode.) TIME REMAIN puts up the time remaining on the tape. Topping off all this automation is a front-panel button labeled "XPR" that will turn off the VCR at a preselected time. Each press of the XPR button adds 30 minutes to the time remaining before turnoff, up to a maximum of four hours.

In addition to programming, the remote governs recording, playback,

Except where otherwise indicated, data are for all speeds—SP, LP and EP (SLP). All measurements were made at the direct audio and video outputs, with test signals applied to the direct audio and video inputs. For VHS Hi-Fi, the 0-dB reference input level is the voltage required to produce 3 percent third-harmonic distortion at 315 Hz. for the standard audio recording mode, it is 10 dB above the voltage at which the automatic level control (ALC) produces 3 dB compression at 315 Hz. The 0-dB reference output level is the output voltage from a 0-dB input.





AUDIO S/N RATIO (re 0-dB output; R/P; A-weighted)			
	standard	VHS Hi-Fi	
SP	471/2 dB	843/4 dB	
LP	43 dB	841/4 dB	
EP	463/4 dB	81 dB	

INDICATOR CALIBRATION (315	i Hz; VHS Hi-Fi)
for 0-dB input	>+8 d8
for -10-dB input	+3 dB

DISTORTION (THD at -10-dB input; 50 Hz to !			
	standard	VHS Hi-Fi	
SP	≤ 2.10%	≤ 1.00%	
LP	≤ 2.70%°	≤ 0.98%	
CD	< 2.00%*	< n 0994	

CHANNEL SEPARATION (315 Hz; VHS Hi-Fi)

69 d8

Not reliably measurable above 3 kHz in LP or 1 kHz in FP

Laboratory data for HIGH FIDELITY's video equipment reports are supplied by Diversified Science Laboratories. Preparation is supervised by Michael Riggs, Peter Dobbin, and Edward J. Foster. All reports should be construed as applying to the specific samples tested. HIGH FIDELITY and Diversified Science Laboratories assume no responsibility for product performance or quality.

# NEW TECHNOLOGIES VIDEO

Decay time			4.2 msec
			≈190 msec
Overshoot			+3 dB
FLUTTER (ANSI W	eighted peal	c; R/P)	
	standard		VHS Hi-Fi
SP	±0.17%		<±0.01%
LP	±0.20%		< ±0.01%
EP	±0.25%	avg.	< ±0.01%
SENSITIVITY (for	0-dB output;	315 Hz)	
	mike		line
VHS Hi-Fi	NA		355 mV
standard	0.58 mV		1,600 mV
AUDIO OUTPUT L	EVEL (from 0-	dB input; 3	315 Hz)
VHS Hi-Fi			1.75 volts
standard			0.42 volt
AUDIO INPUT IMI	PEDANCE		
line (VHS Hi-Fi)			68k ohms
mike			3.4k ohms
MIKE INPUT OVER	RLOAD (1-kHz	clipping)	38 mV
VIOEO RECORO/P			
	SP	LP	EP
at 500 kHz	-11/4 dB	-11/4 dB	-1 dB
at 1.5 MHz	-53/4 dB	-6 dB	-53/4 dB
at 2.0 MHz	-8 dB	-8 dB	-73/4 dB
at 3.0 MHz	-13 dB	-16 dB	-14 dB
at 3.58 MHz	-20 dB	-21 dB	-31/2 dB1
at 4.2 MHz	††	11	††
SHARPNESS CON	TROL RANGE		
at 500 kHz	+13/4, -1		
	+334, -3	dB	
at 1.5 MHz			
at 2.0 MHz	+41/2, -9	¼ dB	
at 2.0 MHz	+41/2, -9	V4 dB able effect	
at 2.0 MHz 3.0 to 4.2 MHz	+41/2, -9 no measur		
et 2.0 MHz 3.0 to 4.2 MHz LUMINANCE LEVE	+41/2, -9 no measur		2% high
et 2.0 MHz 3.0 to 4.2 MHz LUMINANCE LEVE SP LP	+41/2, -9 no measur		2% high 3% high
et 2.0 MHz 3.0 to 4.2 MHz LUMINANCE LEVE SP LP	+41/2, -9 no measur		
at 2.0 MHz 3.0 to 4.2 MHz LUMINANCE LEVE SP LP EP	+4½, -\$ no measur	able effect	3% high 3% high
at 2.0 MHz 8.0 to 4.2 MHz LUMINANCE LEVE SP P P EP GRAY-SCALE NON	+4½, -\$ no measur	able effect	3% high 3% high
at 1.5 MHz at 2.0 MHz 3.0 to 4.2 MHz LUMINANCE LEVE SP LP EP GRAY-SCALE NON CHROMA LEVEL SP	+4½, -\$ no measur	able effect	3% high 3% high none
at 2.0 MHz 8.0 to 4.2 MHz LUMINANCE LEVE SP LP EP GRAY-SCALE NON CHROMA LEVEL SP	+4½, -\$ no measur	able effect	3% high 3% high
at 2.0 MHz 8.0 to 4.2 MHz LUMINANCE LEVE SP PP EP GRAY-SCALE NON CHROMA LEVEL	+4½, -\$ no measur	able effect	3% high 3% high none  =34 dB low =1 dB low
at 2.0 MHz 3.0 to 4.2 MHz LUMINANCE LEVE SP LP EP GRAY-SCALE NON CHROMA LEVEL SP P	+4½, -9 no measur L	able effect	3% high 3% high none =3/4 dB low =3/4 dB low
at 2.0 MHz 3.0 to 4.2 MHz LUMINANCE LEVE SP LP EP GRAY-SCALE NON CHROMA LEVEL SP P CHROMA DIFFERE	+41/2, -9 no measur L LINEARITY (	worst case	3% high 3% high none = 3/4 dB low = 1 dB low = 3/4 dB low = 10%
at 2.0 MHz 3.0 to 4.2 MHz LUMINANCE LEVE SP GRAY-SCALE NON CHROMA LEVEL SP CHROMA DIFFERE CHROMA DIFFERE	+41/2, -9 no measur  L LINEARITY (  NTIAL GAIN  NTIAL PHASE	worst case	3% high 3% high none  =3/4 dB low =3/4 dB low
BI 2.0 MHz BI 0 4.2 MHz LUMINANCE LEVE SP GRAY-SCALE NON CHROMA LEVEL SP CHROMA DIFFERE CHROMA DIFFERE CHROMA DIFFERE	+41/2, -9 no measur  L LINEARITY (  NTIAL GAIN  NTIAL PHASE	worst case	3% high 3% high none  ≈ 3/4 dB low ≈ 1 dB low ≈ 3/4 dB low ≈ 3/4 dB low ≈ 4/2
at 2.0 MHz 3.0 to 4.2 MHz LUMINANCE LEVE SP LP EP GRAY-SCALE NON CHROMA LEVEL SP	+41/2, -9 no measur  L LINEARITY (  NTIAL GAIN  NTIAL PHASE	worst case	3% high 3% high none = 3/4 dB low = 1 dB low = 3/4 dB low = 10%

\*Decay time for peak-hold cursor is approximately 1,000 milliseconds (one second).

1Unstable. This is a peak reading

tiToo low to measure





COLOR CONSISTENCY for the VKT-650's recorder section running at the SP speed (left) and for its TV tuner (right). (The results for the VCR in LP and EP are virtually identical to those in SP, so we have omitted the vectorscope photos for the slower speeds.) In each case, the ideal would be for the cluster of dots toward the left edge of the grid to be a single dot at the intersection of the nine-p'clock axis with the circumference. The radial spread of the dots indicates chroma differential gain, which is a measure of how much chroma level (color saturation) varies with changes in scene brightness (luminance). The angular spread shows the chroma differential phase, which tells how much chroma phase (hue) shifts with changes in brightness. Both the tuner and the VCR perform well in this test although the former shows a large differential gain at the highest luminance level.

pause, stop, fast-wind, and search. From PAUSE, you can advance the tape a frame at a time or enter slow motion, with up and down buttons to vary the speed. You can also view at double-speed or in reverse. There are even tracking control buttons on the remote, as well as a button that enables you to switch between antenna and VCR output to your TV tuner or receiver's VHF terminals.

The VKT-650's built-in tuner scans the VHF and UHF bands and as many as 63 cable channels. As many as 80 of them can be programmed into memory for sequential access via the up/down channel switch on the front panel or the remote. Or you can tune any channel directly via the remote's keypad.

Behind a front-panel door are a number of secondary controls and a headphone jack (with its own VOLUME) for private listening. Among these are a recording speed switch (which we would have preferred outside the door—a quibble considering that playback speed is selected automatically) and tracking and sharpness wheels. The latter accentuates or softens picture detail, but only in playback—not recording. A recording mode switch chooses the camera input, the built-in TV tuner, or a special mode in which the VKT-650

generates its own video synchronization signal, enabling you to take advantage of VHS Hi-Fi's wide dynamic range and smooth frequency response for audio-only recording. In playback, you can choose to listen to the VHS Hi-Fi track (FM), the edge track (line), or a mix of the two for sound-on-sound.

A novel and well-considered feature is a switchable high filter that works only on the edge track, to suppress tape hiss, and there is an ALC that sets recording level automatically on both the edge and VHS Hi-Fi soundtracks when it is invoked. Six buttons are used to program the desired channels into the 80-station tuner memory. A dimmer switch tones down (rather too much, in our opinion) the lighted displays.

The back panel is comparatively simple. There are the normal coax F connectors for VHF antenna input and output to a conventional TV, twinlead screw connectors for 300-ohm UHF input and output, pin jacks for direct audio and video inputs and outputs, a standard mono phone jack for microphone input, and a miniature phone jack for remote camera pause. Two switches select between the VKT-650's own remote unit and the unified RCA Digital Command Center remote-control system and between broadcast and cable RF input.

Considering the VKT-650's wide range of features, the owner's manual leaves something to be desired. Although it's well written and in good English, it fails to explain some of the unit's eccentricities. (But perhaps we're being unduly critical, for the peculiarities we found seem calculated to simplify operation for the average user.) Only by contacting RCA could we confirm some of Diversified Science Laboratories' findings: that the sharpness control affects only playback, that the microphone input is monophonic and always is controlled by the ALC independent of the ALC switch setting, that the microphone input records only on the edge track, that the high filter affects only edgetrack playback, that the recording level controls must be advanced to get signal from the direct audio outputs (unless the ALC is activated), and that cables must be connected to both left and right audio inputs and outputs if the system is to record and play in stereo. (If only one input cable is connected, the same information is recorded on both channels; if only one output cable is connected, the L+R sum is fed to the stereo system.)

HE VKT-650's measured performance is quite good. Tuner video response holds up within 23/4 dB to the color-burst frequency (3.58 MHz) and shows substantial dropoff only at the resolution limit of the NTSC system (4.2 MHz). Chroma differential gain and phase are negligible except for some loss of color saturation at the highest luminance (brightness) level. Chroma level (color saturation) is a trifle low to begin with, and chroma phase (hue) accuracy also is slightly off the mark, but both can be corrected with a monitor's tint and color controls, so that the final result is excellent. Luminance level is only a trifle high—again, easily corrected and gray-scale linearity is very good.

The tuner's audio performance is not quite up to its video prowess, but it's adequate. There's a gradual rolloff below 100 Hz, and though the signal-to-noise (S/N) ratio is good, it's certainly not in the "excellent" range. The horizontal-scan component is reasonably well suppressed, and distortion is a bit lower than average. Output impedance is low enough and the level high enough that there should be no problems mating the unit to other





VCR COLOR ACCURACY is very good and nearly the same at all three speeds. (The vectorscope photos shown here are for SP, which is the fastest.) The left-hand photo shows the uncorrected color. A ¾-dB increase in chroma gain and a 4-degree clockwise phase rotation puts all six color vectors (the small white blobs near the circumference of the grid) onto or very near their targets, as shown in the right-hand photo. This simulates the best results one could obtain using the color and tint controls on a monitor. The diffuseness of the color vectors is caused by chroma noise, which would show up in a video image as flecks of colored snow. Chroma noise is lowest in SP and considerably greater in EP, which is the slowest speed. This is the usual pattern, and in no case is the noise worse than average for a videocassette recorder.

components. One caution, however: If you turn the recording level controls all the way up when listening to a broadcast with ALC off, the output circuit will clip on fully modulated signals. Keep the recording level indicator on scale, and you'll have nothing to worry about.

The VCR's video performance is about par. Response holds up reasonably well to 2 MHz at all three speeds, implying a horizontal picture resolution of about 160 to 200 lines. In the EP (SLP) mode, response rises at 3.58 MHz, but the output at that frequency is too unstable to be reliable. The SHARPNESS has maximum effect at 2 MHz, although there is measurable effect at lower frequencies as well. In fact, advancing the SHARPNESS makes the response quite uniform all the way to 2 MHz, a feat few VCRs can match. This makes a noticeable improvement in picture detail, albeit at the cost of some increase in noise (snow). Grayscale linearity is perfect at all three speeds, chroma differential gain and phase are negligible, and chroma level and phase accuracy are notably good.

Except for some improvement in chroma noise, there's no reason to choose SP or LP recording over the tape-saving EP mode—especially since the VKT-650's special features work best at that speed. VHS Hi-Fi

# TV TUNER SECTION

All measurements were taken at the direct audio and video outputs.

# AUDIO FREQUENCY RESPONSE DB vkt.460 (3) HZ 20 50 100 200 500 1K 2K 5K 10K 20K

+0, -3 dB, 110 Hz to 20 kHz

AUDIO S/N RATIO (A-weighted)			
best case (no video signal)	49 dB		
worst case (luminance staircase)	33 4B		

RESIDUAL	HORIZONTAL	SCAN	COMPONENT	(15.7 kHz)
				37 dB

	-37 dB
MAXIMUM AUOIO OUTPUT (100% modula)	tion)
ALC off	1.78 volts
ALC on	0.41 volt
AUDIO OUTPUT IMPEDANCE	350 ohms
VIDEO FREQUENCY RESPONSE	
at 500 kHz	-1⁄4 dB
at 1.5 MHz	-1 dB
at 2.0 MHz	-11/2 dB
at 3.0 MHz	-2 dB
at 3.58 MHz	-23/4 dB
at 4.2 MHz	-153/4 dB
LUMINANCE LEVEL	17% high
GRAY-SCALE NONLINEARITY (worst case)	≈11%
CHROMA LEVEL	≈21/4 dB low
CHROMA DIFFERENTIAL GAIN	≈ <b>4</b> 0%
CHROMA DIFFERENTIAL PHASE	≈±5°
CHROMA PHASE ERROR	
red	+6°
magenta	+6°
blue	+4°
cyan	+9°
green	+7°
yellow	+6°

median error

+61/5

+21/2





TUNER COLOR ACCURACY is very good. The vectorscope photo at left indicates low color saturation (chroma level) and a small amount of hue (chroma phase) error. The photo at right—made with 2% dB additional chroma gain and approximately 6% degrees of clockwise phase rotation—simulates the best results one could obtain using the color and tint controls on a monitor. This adjustment brings all six color vectors (the small white dots near the circumference of the grid) onto or very near their targets, which is excellent performance. Indeed, the actual spread is  $\pm 2\%$  degrees or less.

performance is virtually identical in all three modes, with unmeasurably low flutter, almost perfectly flat frequency response across the audio band, signalto-noise ratios of more than 80 dB, and distortion that is quite low at our "standard" test level, remaining at or below 1 percent from 50 Hz to 6.3 kHz and only just nudging 2½ percent at 10 kHz. To check the tracking accuracy of the VHS Hi-Fi noise reduction system, DSL measured the frequency response at a number of recording levels, ranging from 10 to 40 dB below the midrange 3-percent THD (total harmonic distortion) point. Although not perfect, the tracking accuracy is well within the realm of acceptability.

DSL also measured the audio performance of the standard edge track, although it's rare that you'd resort to it with VHS Hi-Fi available. Compared with that of other VHS decks, the VKT-650's edge track audio is somewhat better than average, especially in the SP mode, where response holds up quite well to 10 kHz and the noise and flutter are not too high. The noise figures are almost as good for EP recording, but flutter is about 50 percent worse and the highfrequency response is cut in half. At both speeds, engaging the high filter (which is about 3 dB down at 6 kHz) improves the signal-to-noise ratio by 4 to 5 dB.

Inexplicably, LP recording

provides the least dynamic range, but it can be brought almost up to parity with the others with the high filter. Frequency response and flutter are only a trifle better in LP than in EP, and the special features work least well in the LP mode, so there's little reason to choose it.

Our hands-on evaluation confirmed the bench tests in all essentials. Audio performance with VHS Hi-Fi recording is about all you could ask for-a giant step above "linear" recording, which is better than average on this deck. The tuner proved to be reasonably sensitive in our fringe area, especially on the upper VHF channels. Chroma noise is lowest with SP recording, but except for this, we'd adopt the longer-running EP mode for all normal use. There's little discernible difference in picture resolution between EP and SP recording and none in sound quality with VHS Hi-Fi, yet EP is more economical and provides better (almost perfect) special effects. The VIDEO DUB worked well during our trials, but we found it somewhat difficult to use accurately. Undoubtedly, practice makes perfect, and if we'd had longer to work with the deck, it might have become second nature.

We're impressed with the RCA VKT-650, and in light of its vast array of features (the on-screen programming, especially), we think it's a steal. Certainly it deserves your careful scrutiny.

# REVIEWS

Pop and classical music releases on videodisc, videodisc, and digital Compact Disc

# POPULAR VIDEO

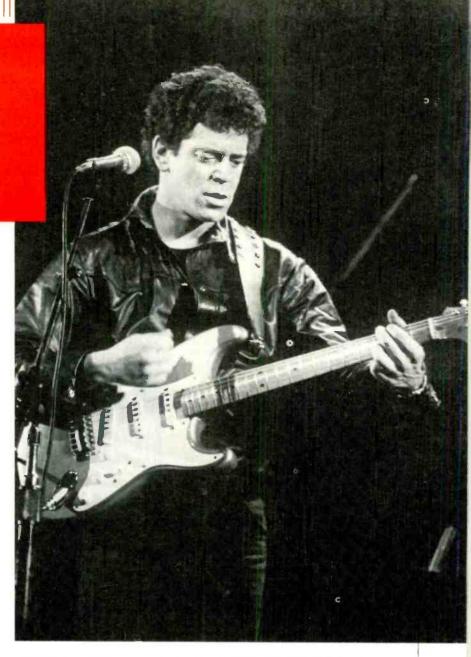
# A NIGHT WITH LOU REED.

Boggs/Baker Productions, Inc. RCA/COLUMBIA PICTURES HOME VIDEO BE 91090 (Beta). \$29.95; VH 91090 (VHS), \$29.95.

A Night with Lou Reed" is exactly that. A few dark shots down these mean streets support a two-sentence voiceover introduction claiming Reed is "the single most pervasive influence on the new wave and rock music of today." I certainly can't argue, though it's not my justification of choice for watching this videotape.

Almost immediately we are backstage in Manhattan's sold-out Bottom Line, April 1983. Reed, founder of the Velvet Underground and a rock and roll demilegend for nearly two decades, paces the mirrored dressing room blowing smoke. Not exactly the average guy of "The Blue Mask," but close. Lou heads for the door, and the tape cuts to the stage, where an enthusiastic crowd greets the best band Reed has ever assembled: Robert Quine, the only "scientific" guitarist I care about, wears a sport jacket, button-down shirt. shades, and no discernible expression; fretless bassist and fusion sessionman Fernando Saunders and Material drummer Fred Maher are cuter, though not exactly dressed to kill. Lou strides out in a short black-leather jacket and jeans, dressed for work, and kicks right into Sweet Jane. For the next hour, one of America's most important songwriters showcases much of his best music with a superb and sympathetic band. The legion of people he has influenced is entirely beside the point this night. Lou Reed is as vital, as commanding, as he has ever been.

And oh, the chords! Complex vocal phrasing and elisions compensate for Reed's loss of range and make *Sweet Jane* as lively and clear as I remember it from the Velvets' vaunted last stand at Max's Kansas



REED: His legendary status was beside the point at this historic 1983 concert.

City in the summer of 1970. Neither overly dramatic nor obviously self-conscious, he concentrates on presenting a great song as if it were just that, not a revered ruin, a fossil freighted with lurid imaginary history. And oh, the chords! I'm Waiting for My Man, also from the Velvets, follows, and I'm transfixed by my TV. Somehow singing heads are riveting after a year of dwarfs and garter belts, the false pregnancy of MTV. Quine's solo builds the tension as the band leaps from the mid-Sixties to the mid-Eighties on Martial Law, with expressive facial grimaces and string-bending solo-less drone, and a speedy Don't Talk to Me About Work (both from last year's "Legendary Hearts.") An internalized but palpable intensity continues to grow out of the material, the playing, and the singing.

And oh, the chords!

Women, sung for maximum suggestibility and graced by a slow, regal feedback solo from Reed, and Waves of Fear, with enormous chords and an extreme Quine-Reed exchange, precede a straightforward and respectful Walk on the Wild Side. Lou's postmodern blues guitar on Turn Out the Light surfaces from a crystalline place somewhere between Crazy Elephant (remember Gimme Gimme Good Lovin'?) and the Bobby Fuller Four. Then, in an exalted New Age. Reed demonstrates the extraordinary power and beauty of barely singing. I can see him thirty years on in a grand armchair on a stage somewhere. huskily talk-singing his way through his remarkable repertoire: the Mabel Mercer of rock and roll. Kill Your Sons, with an

appropriately threatening Quine-Reed drone duel, gives way to "Transformer" 's Satellite of Love taken as a tender ballad, which it actually is. The Velvets' finale. White Light/White Heat, and the anthemic Rock and Roll are prime examples of chord worship at its most transcendant. The crowd is exhausted. Lou is chipper. "I thought that was short and delicious," he crows at the dressing room camera. Me too.

"A Night with Lou Reed" is a remarkable tape. Consider it a companion piece to his import LP, "Lou Reed Live in Italy," recorded a few months after the Bottom Line shows. Add his latest, somewhat poppier studio product, "New Sensations," and a summer tour with his wonderful band, and you've got a major artist at mid-career, buoyed by the best of his earlier songs and building memorably from there. This is a great concert that comes home intact. No posture, just stature. See for yourself.

—JEFF NESIN

# READY, STEADY, GO! (Vol. 1).

Dave Clark, producer. DAVE CLARK INTERNATIONAL PRODUCTIONS/PICTURE THIS/THORN E.M.I. VIDEO TXF 2195 (Beta), \$29.95; TVF 2195 (VHS), \$29.95.

Ready, Steady, Go! (Vol. 1)" is a delightful hour-long collage of performances by 14 charter-member British Invasion bands who appeared on this mid-Sixties English teen television show modeled after *American Bandstand*. What's most striking about watching the program today is that the excitement these acts generate is barely diminished by the fact that almost all of them lip-synched their songs. Because most groups were presented that way on television 20 years ago, the performances seem perfectly natural for the time frame involved.

The video is expertly assembled by Dave Clark Productions (yes, as in the Dave Clark Five, who sneak into this tape for two non-Ready, Steady, Go! songs that are innocuous enough to be easily digested amidst the bountiful surroundings). It begins with 1964 carefree, fresh-faced Beatles, climaxes with 1966 borderline-psychedelic Rolling Stones, and rarely allows one room to breathe in between—what with appearances by Dusty Springfield, the Who, Georgie Fame, the Searchers, the Animals, Lulu, Van Morrison and Them, and even comedians Peter Cook and Dudley Moore.

Especially engaging are the show's often hysterical interviews: George Harrison deadpanning that his "favorite girl film star" is Margaret Rutherford ("A real Mod!" yells John Lennon), and Eric Burdon explaining that his band got its name because "we look like animals." All in all, "Ready. Steady. Go!" is a great treat, and well worth the money you'll be saving by not buying "That Was Rock (The TAMI/TNT Show)" [see review, July].

-BILLY ALTMAN

# POPULAR COMPACT DISC

# SHADOWFAX: Shadowdance.

Chuck Greenberg, producer. WINDHAM HILL WD 1029 (analog recording, digital Compact Disc). LP: WH 1022.

While this fusion sextet shares the reflective mood of most Windham Hill artists, its merger of folk and jazz is



STITT: ideal CD circumstances

quite a departure from the music of the acoustic soloists who dominate that roster. Coleaders Chuck Greenberg on lyricon. sax, and flute and G. E. Stinson on guitars give the group a lot of its charm.

The label's high-quality analog versions are already solidly produced, so this Compact Disc falls short of spectacular revelations. There are refinements, however: The exotic spectrum of percussion, played by Stuart Nevitt and four guests who appear on different songs, is even more delicately realized here, especially in quiet passages. Greenberg's piquant reeds and Jamii Szmadzinski's various acoustic and amplified violins are immaculately rendered; Stinson's chiming 12-string chords ring with added presence.

Analog tape hiss is moot, given both the superanalog quality of the master and

For additional reviews of Pop and Jazz recordings, see BACKBEAT.

the moderate volume levels dictated by the music, which is only slightly more forceful than the ambient Windham Hill standard.

-SAM SUTHERLAND

# SONNY STITT: Moonlight in Vermont.

K. Yoshimura, producer. DENON 38C38-7046 (fully digital Compact Disc), LP: YZ 135.

The most eloquent examples of early stereo recording were straightforward live performances—not, ironically enough, the spectacular demonstration pieces usually employed to dramatize stereo imaging. By reproducing a soloist or small ensemble with a realistic spatial perspective, producers offered a more practical and enduring argument for the new technology than their knob-twirling peers.

That's proving to be true of digital audio, too, if the first true digital CDs by jazz artists are any indication. This 1978 session by Sonny Stitt utilizes vivid presence, lifelike imaging, and immaculate detail: In short, "Moonlight in Vermont" is a best-case scenario for the format.

Although he's supported solidly by drummer Tony Williams, bassist Reggie Workman, and pianists Barry Harris and Walter Davis, Stitt doesn't carve out any new terrain stylistically here. The program of standards tends to emphasize his kinship with other pop-bop tenor saxophonists rather than distinguish him from them. But everyone's playing is enhanced by the nuances of digital sonics anyway. As with Denon's classical CDs, acoustic character retains warmth while gaining clarity, particularly in regard to Stitt's own rather dry timbre and his alternately angular and buoyant phrasing. Williams's drumming is predictably fluent, and the piano sound is open and well realized.

American labels may soon be changing their minds about offering jazz on Compact Disc. Programs such as this one can only encourage them to do so quickly.

—s.s.

# CLASSICAL COMPACT DISC

# PUCCINI: Turandot.

PRINCIPAL CAST

Turandot Katia Ricciarelli (s)
Liù Barbara Hendricks (s)
Calaf Placido Oomingo (t)

Vienna State Opera Chorus, Vienna Choir Boys, Vienna Philharmonic Orchestra, Herbert von Karajan, cond. [Michel Glotz and Günther Breest, prods.] Druische Grammophon CD 410 096-2 (fully digital Compact Disc). LP: 2741 013 (three discs): reviewed 6/83. Cassettes (3): 3382 013

erbert von Karajan's *Turandot* (as one is forced to call it), which reveled in the lush exoticism of Puccini's luxuriant orchestration (three kinds of gong!), would seem to be a natural for Compact Disc. So, more or less, it proves.

In his recent operatic efforts, Karajan has paid far less attention to the voices themselves. Singers have sometimes seemed euriously irrelevant to his palette: A showy profligacy in filling the minor roles-Agnes Baltsa as the Zauberflöte second lady, Katia Ricciarelli as the Aida priestess—is oddly matched by an undercasting of the leads. In an apparent attempt to escape stale opera house conventions, Karajan has often chosen to work with younger singers. unseasoned in a given role. Sometimes this leads to genuine discovery (Hildegard Behrens, his Salome), more often to stretching younger voices (José Carreras in Aïda) or lighter ones (Mirella Freni in the same) up to and even beyond their limits.

So it is with Ricciarelli, leaving Karajan's production as headless as most of the icy Turandot's other suitors. A temptingly lyrical opening to "In questa reggia" seduces, only to turn edgy, but never powerful, never thrilling, never terrifying. The final surrender is built-in: This voice encodes from the start its own lack of conviction at imperial utterance. But Ricciarelli's shortcomings have been anatomized superbly by Matthew Gurewitsch in the June '83 High Fidelity, so I will not belabor.

Elsewhere, better luck, down to the best (most Gozzi-like) trio of councillors on record. Placido Domingo, who has occasionally seemed like more tenor than is strictly necessary for Puccini, a Radames rather than a Rodolfo, trumpets a power far stronger than anything thrown in his path here. In this role the steel in his voice is welcome. There's genuine fury in his "Principessa di gela" response to Liù's death, but also a seductive warmth, almost teasing, in his challenge to Turandot to "Dimmi il mio nome," and an abundant lyrical energy in "Nessun dorma." Barbara Hendricks, she of the lambent highs, offers a Liù of tempting plangency and vulnerability. Her exchanges with Calaf are loving but deferential, her suicide a slave's pledge of a love otherwise unattainable.

That suicide is one of the production's finest moments, the shocked crowd more saddened than angered, its pianissimo grief (played off against solo violin) a surprise after its earlier unslakable thirst for blood. Perhaps that surprise is misplaced, however. for this is a score in which Puccini really seems to deny himself nothing: organ, boys' chorus, enough percussion to keep a whole union happy—you imagine the composer's disappointment at merely simulating that first-act choir of departed spirits. Sometimes the Orientalism does get a bit back-lot MGM, the effect more Chun-King than bone china, but isn't that the nature of musical impressionism? In intent, the canned Chinoiserie is really no different

For additional reviews of classical recordings, see Classical Reviews.



from the "fire music" that comes when Rodolfo burns his manuscript, merely more skillful.

Karajan and the Vienna Philharmonic really have a field day here, from gong and brass to the gauzy, muted strings and chimes. Seldom have delicacy and power been accorded such equal shares in so rich and pungent a tapestry. Karajan once again proves himself the finest colorist of the podium since Stokowski, and the orchestra plays with a precision reminiscent more of

the conductor's Berlin venue than of its own playing under more genial masters.

Deutsche Grammophon captures the orchestra's sonic splendors with cunning transparency. Between CD and LP the differences are subtle, and they could be obscured by the idiosyncrasies of an LP front end. As so often, the Compact Disc will seem like a more astonishing success when counterposed against a garden-variety turntable, arm, and cartridge, less so against better. The CD does offer an apparently

wider range of color, particularly on those ethereal choruses, but seems to lose a hair's worth of detail on the brass climaxes. As always, CD offers a rock-solid bass, while both formats have a hint of that edge the digit-bashers find unbearable (but less of it than in many previous Deutsche Grammophon releases). Overall, first-time purchasers would probably prefer the Compact Disc, while owners of the album might as well hang on to what they've got.

DG's fold-out plastic box, complete with legible CD-size libretto, is the most elegant solution I've seen to packaging the silver saucers.

—THOMAS W. RUSSELL III

## RACHMANINOFF:

Symphony No. 2, in E minor, Op. 27.

Amsterdam Concertgebouw Orchestra, Vladimir Ashkenazy, cond. [Andrew Cornall, prod.] LONDON 400 081 2 LH (fully digital Compact Disc). LP: LDR 71063.

Valadimir Ashkenazy is recording all of Rachmaninoff's orchestral works with the Concertgebouw Orchestra, and, with the exception of the concertos and Paganini Rhapsody, the task is virtually complete, with only a few of the relatively minor works not yet available. As of this writing, however, only the three numbered symphonies and the *Youth* Symphony fragment are available on Compact Disc.

This recording of the Second was the first to be issued on LP, and it has been generally well received in that format. While there are many admirable qualities to it, the engineers surely have not captured the true sound of the Concertgebouw Orchestra. Decca/London's old monophonic LPs of the orchestra with Eduard van Beinum conducting—particularly the discs of Sibelius's En Saga and Tapiola, Schubert's Rosamunde, and Mendelssohn's Midsummer Night's Dream-were far better balanced and sound superior to this new digital effort. (Of the later recordings in the present cycle, those of the First and Third Symphonies offer a more satisfactory sonic perspective of the orchestra, although they, too, are not all they could be.)

The digital mastering provides a very wide dynamic range, but the string tone is surprisingly thin, the distant pickup is unflattering to the woodwinds, and the brass lacks that unique Concertgebouw "bite" that distinguishes most of its recordings. There is also considerable evidence of "dial twiddling."

Unfortunately. Ashkenazy is a grunter, as Glenn Gould was, and his audible vocal contributions to this recording are annoying, particularly at the beginning of the Scherzo. There are many felicities of orchestral performance to enjoy here (curiously, a surprising trumpet mishap at the end of the Scherzo that should have been remade for the LP is barely noticeable on the CD), but this is hardly a definitive recording of Rachmaninoff's most romantic symphony.

-ROBERT E. BENSON





Polk Audio, Inc., 1915 Annapolis Rd. Baitimore, MD 21230

# **A Rubinstein Feast**

Reissues of recordings by this grandest of 20th-century pianists will delight you, whether you're a gourmet or a first-time sampler. Reviewed by Thomas L. Dixon

Life means living, not escaping. People go to doctors and ask, "What vitamins shall I take?" What good are vitamins, I ask you? Eat four lobsters and a pound of caviar. Live!

—Artur Rubinstein

WHAT A SPREAD! What a feast of Rubinstein in ten new reissues from virtually every period of his amazingly fertile career as a recording artist. But also, what a formidable subject for review. The solution? Why even bother to review (at least in the narrow sense of that term) these magnificent, gilt-edged musical securities? Why not provide what may be more suitable to the occasion . . . a joyous meditation on this portion of Rubinstein's great legacy.

Let us begin with the Chopin. The four Seraphim reissues have been available for quite some time as German Electrola imports. An examination of each record reveals little difference between the imports and the new domestic pressings; the transfers and surfaces sound extremely close in quality. (However, a comparison between this latest edition of the 1936-37 Nocturnes and an HMV reissue from the mid-1950s suggests that not as much progress has been made in 78 rpm transferring as is commonly supposed.) When one passes beyond such mundane matters to consider which Rubinstein performance of any work stands out most, one had better be prepared to write a book, not a review. Case in point: Rubinstein recorded the Chopin F minor Concerto four times. (There is yet a fifth version to come, a 1960 Polish performance of which Rubinstein himself was said to have been very fond.) Each of the four has its merits, but how can anyone really choose between Rubinstein and Sir John Barbirolli, or William Steinberg, or Alfred Wallenstein, or Eugene Ormandy?

With that much said, let us welcome these samples of pre—World War II Rubinstein as the fine recordings they all are, without exception. They may not be his greatest Chopin discs, but again, who is to decide which ones are? Unlike Samuel Lipman—who in a recent, warped assessment of Rubinstein's career in *Commentary* (in quite severe contrast to his normally acute sense of pianists) maintained that it was



It was hot work if you could get it; Rubinstein got it year after year.

almost all downhill after the 1930s—I would suggest that Rubinstein's career passed through several interesting phases, none of which I could place above the other. Curiously, listening to these earlier performances convinces me of the validity of Rubinstein's pioneering Chopin interpretations as against, say, the interpretations of Alfred Cortot and others. But the musical reactiomaries of those days apparently regarded Rubinstein's playing with much the same prissy horror as do the reactionaries of today when Chopin's music is played

as provocatively as it is by such a re-creative artist as Alexis Weissenberg.

RCA's digitally remastered recording of the Nocturnes and Waltzes, the first volume in a projected long series, presents any Rubinstein addict with two problems, one minor, the other quite major. First, the minor issue: Is the cost of this new digital version justified, especially to those collectors who already own the original mid-1960s discs? Absolutely! To my ears these newly remastered performances sound simply marvelous. If this volume is a faithful

preview of what we may expect, no true Rubinstein collector can possibly be without them.

However, this thought leads directly to the major problem: A recent statement from RCA suggested that the label plans to carry its Rubinstein series only as far back as 1950. One must take great exception to that and urge the powers-that-be to move their date yet further back, to 1940. Now that EMI Electrola has almost exhausted its holdings, RCA remains the only source for certain Rubinstein treasures, many of which have never seen the light of LP. For instance, what about the great 1942 Grieg Concerto with Ormandy? What about a prime Rubinstein rarity, namely the single 45 rpm disc entitled "[Artur] Rubinstein Plays [Anton] Rubinstein" (RCA 45 EP, ERA 205)? One might ask even more: Why not combine those two items with his uniquely flamboyant 1947 Liszt E flat Concerto, done in Dallas with Antal Doráti (long unavailable on LP)? What a special issue that would make! How about it, RCA ... as long as you're at it, in heaven's name, why not dig deeper?

While on the subject of such old gold, one may as well examine the EMI issues, beginning with the disc of Rubinstein encore performances and the two-record set of various piano works. Obviously, what appears on these German discs should also be made available in the U.S. on Seraphim; meanwhile, for those unafraid of import prices (actually quite reasonable), here is the story. The three records present the widest possible view of the expanse of Rubinstein's sympathies, yet something more: testimony to the fact that he, more than any other pianist who comes to mind, never made a dull record. The same observation might just as easily be made of the two-disc Electrola set of chamber music, which returns to active circulation (at last!) the Brahms Piano Quartet and Rubinstein's only collaboration with the lamented Paul Kochánski. Incidentally, the sound on all these EMI transfers is wonderful. They carry the same musical message to these ears that fine, restored antique furniture conveys to the hands and eyes; the honored past is once again made useful and vibrantly effective. The Brahms Cello Sonata certainly needs no further recommendation, and the incandescent Franck Sonata with Jascha Heifetz makes one regret that this was their only duo collaboration. (The reason why is revealed on page 541 of the second volume of Rubinstein's memoirs.)

The highlight among all these EMI reissues is the set of concertos. What delights await anyone buying this three-disc treasure trove—but first, a word of caution. The orchestral collaborations are not always what we assume these days; in fact, there is a rather rough-and-ready quality about some that may well annoy inexperienced collectors. The cooperation between Rubinstein and Albert Coates in the Brahms

B flat, for example, falls far short of perfection. Still, what vitality is present in this 1929 effort (and what a startling contrast to the recent Vladimir Ashkenazy/Bernard Haitink performance, so finished, so polished, so poetic, so dull).

Indeed, this set is welcome almost beyond measure because it finally restores the legendary Rubinstein/Barbirolli collaboration in the Tchaikovsky Concerto, perhaps the one major performance that bears out what Rubinstein himself said in his book about his recordings: "... I made several recordings of each, every time try-

ing to play them better. But the first versions remained the best (page 499 of My Many Years). The Beethoven Fourth is also a wonder, if for no other reason than because Rubinstein and Sir Thomas Beecham present us with a refreshing view of this refined work, so different from some ponderous Germanic efforts. One is almost tempted to second the conclusion of Lionel Salter, who first reviewed this performance in the October 1949 Gramophone: "... nobody need bother to record this concerto again"!

(Continued on page 87)

# **A Selection of Rubinstein Reissues**

Compiled by Mildred Camacho-Castillo

# CHOPIN: Polonaises (7) and Scherzos (4).

Artur Rubinstein, piano. [Recorded 1932–35.] SERAPHIM IB 6131 (two discs). Cassettes (2): 4X2G 6131. (Distributed by Angel Records, 1750 Vine St., Hollywood, Calif. 90028.)

Polonaises: Op. 26, in C sharp minor and E flat minor; Op. 40, in A and C minor; Op. 44, in F sharp minor; Op. 53, in A flat: Grande polonaise, Op. 22, in E flat. Scherzos; Op. 20, in B minor; Op. 31, in B flat minor; Op. 39, in C sharp minor; Op. 54, in E. Polonaise-fantasie, Op. 61, in A flat: Andante spianato, Op. 22, in G

# CHOPIN: Mazurkas (51).

Artur Rubinstein, piano. [Recorded 1938-39.] SERAPHIM IB 6132 (two discs). Cassettes (2): 4X2G 6132.

Op. 6, Nos. 1–4; Op. 7, Nos. 1–5; Op. 17, Nos. 1–4; Op. 24, Nos. 1–4; Op. 30, Nos. 1–4; Op. 33, Nos. 1–4; Op. 41, Nos. 1–4; Op. 50. Nos. 1–3; Op. 56, Nos. 1–3; Op. 59, Nos 1–3; Op. 63, Nos. 1–3; Op. 67, Nos. 1–4; Op. 68, Nos. 1–4; Mazurka in A minor. Op. Posth.; Mazurka in A minor ("Notre temps").

# CHOPIN: Nocturnes (19).

Artur Rubinstein, piano. [Recorded 1936-37.] SERAPHIM IB 6133 (two discs). Cassettes (2): 4X2G 6133.

Op. 9, Nos. 1–3; Op. 15, Nos. 1–3; Op. 27, Nos. 1, 2; Op. 32, Nos. 1, 2; Op. 37, Nos. 1, 2; Op. 48, Nos. 1, 2; Op. 55, Nos. 1, 2; Op. 62, Nos. 1, 2; Op. 72, No. 1 (Posth.).

# CHOPIN: Concertos for Piano and Orchestra: No. 1, in E minor, Op. 11; No. 2, in F minor, Op. 21.

Artur Rubinstein, piano; London Symphony Orchestra, John Barbirolli, cond. [Recorded 1937 and 1931.] SERAPHIM 60381. Cassette: 4XG 60381.

# CHOPIN: Nocturnes (19) and Waltzes (14).

Artur Rubinstein, piano. [Recorded 1965 and 1963; Max Wilcox, prod.] RCA RED SEAL ARL 3 5018 (three discs, digital remaster). Cassettes (2): CRK 5018.

Nocturnes: Op. 9, Nos. 1–3; Op. 15, Nos. 1–3; Op. 27, Nos. 1, 2; Op. 32, Nos. 1, 2; Op. 37, Nos. 1, 2; Op. 48, Nos. 1, 2; Op. 55, Nos. 1, 2; Op. 62, Nos. 1, 2; Op. 72, No. 1 (Posth.). Waltzes: Op. 18, in E flat: Op. 34, Nos. 1–3; Op. 42, in A flat; Op. 64, Nos. 1–3; Op. 69 (Posth.). Nos. 1, 2; Op. 70 (Posth.), Nos. 1–3; Waltz in E minor (Posth.).

# ARTUR RUBINSTEIN: Encores (11).

Artur Rubinstein, piano, [Recorded 1928-34,] EMI Electrola IC 027 1435551. (German News Co., 220 E. 86th St., New York, N.Y. 10028.)

ALBÉNIZ: Suite Iberia, Bk. 1: "Evocación"; Suite Iberia, Bk. 2: "Triana"; Cantos de España, Op. 232: "Córdoba." BACH: Toccata, Adagio, and Fugue, in C, B.W. V. 564. CHOPIN: Mazurkas: Op. 56. No. 3, in C minor: Op. 63, No. 1, in B; Op. 33, No. 2, in D; Berceuse in D flat, Op. 57, GRANADOS: Goyescas, No. 4 ("La Maya y el ruiseñor"). VILLA-LOBOS: Prole do bebê, No. 1: "Moreninha." "A Probesinha," "O Polichinello."

# ARTUR RUBINSTEIN: Piano Works (22),

Artur Rubinstein, piano. [Recorded 1928–47.] EMI ELECTROLA IC 151-03 244/45 M (two discs) (distributed by German News Co.).

ALBÉNIZ: Suite española, Op. 47, No. 3 ("Sevilla"); Navarra. BRAHMS: Capriccio in B minor. Op. 76, No. 2; Rhapsody in G minor, Op. 79, No. 2; Wiegenlied, Op. 49, No. 4, CHOPIN: Waltz in A flat. Op. 34. No. 1. DEBUSSY: Prelude, Bk. 1, No. 10 ("La Cathédrale engloutie"): Suite: Pour le piano: Prelude. FALLA: El amor brujo: "Danse rituelle du feu. "Danse de la frayeur." LISZT: Liebestraum in A. No. 3, Op. 62; Hungarian Rhapsody in E. No. 10; Consolation No. 3. in D. RACHMANINOFF: Morceaux de fantasie: Prelude in C sharp minor, Op. 3. RAVEL: Le Tombeau de Couperin: Forlanc. ANTON RUBIN-STEIN: Valse-caprice in E flat. SCHUBERT: Sonata in G, D. 894: Menuetto: Impromptu in A flat. D. 899, No. 4. SCHUMANN: Romanzen in F sharp, Op. 28, No. 2; Myrthen, Op. 25, No. 1 ("Widmung"); Kinderszenen, Op. 15, No. 7 ("Träumerei"); Arabeske in C. Op.

# BRAHMS; FRANCK: Chamber Music.

Artur Rubinstein, piano: members of the Pro Arte Quartet\*; Paul Kochánski, violin†; Gregor Piatigorsky, violoncello; Jascha Heifetz, violin \*\*. | Recorded 1932–37. | EMI ELECTROLA | IC | 137 | 1544553 (two discs).

BRAHMS: Quartet for Piano, Violin, Viola, and Violoncello, No. 1, in G minor, Op. 25\*; Sonata for Piano and Violin, No. 3, in D minor, Op. 108\*; Sonata for violoncello and piano, No. 1, in E minor, Op. 38°, FRANCK: Sonata for violin and piano, in A\*\*.

# ARTUR RUBINSTEIN: Concertos for Piano and Orchestra (5).

Artur Rubinstein, piano; London Symphony Orchestra, John Barbirolli\* and Albert Coates†, conds.; Royal Philharmonic Orchestra, Thomas Beecham, cond.\*; Philharmonia Orchestra, Walter Susskind, cond.\*\* [Recorded 1929–47.] EMI Electrola IC 137 1544273 (three discs).

BEETHOVEN: No. 4. in G major, Op. 58°. BRAHMS: No. 2. in B flat. Op. 83°. MOZART: No. 23. in A, K. 488°. RACHMANINOFF: Rhapsody on a Theme of Paganini, Op. 43°°. TCHAIKOVSKY: No. 1, in B flat minor, Op. 23°.

# RACHMANINOFF: Concerto for Piano and Orchestra, No. 2, in C minor, Op. 18; Rhapsody on a Theme of Paganini, Op. 43.

Artur Rubinstein, piano: Chicago Symphony Orchestra, Fritz Reiner, cond. [Recorded 1956; John Pfeiffer, remaster prod.] RCA ARP 1-4934 (half-speed remaster). Cassette: ARK 4934.

# Preview of the Forthcoming Year's Recordings, Part 1: LPs

Because of the enormous volume of Compact Discs slated for release during the coming year, HIGH FIDELITY has decided to spread its annual preview of forthcoming recordings over several issues beginning this month with the first of our LP listings. In October, we will devote this space to CDs.

As always, we have tried to be as accurate as our industry sources and our own good sense allow. The fact that a recording is listed here does not, however, guarantee that it will be released in the coming months—only that as of press time,

this was the intention of the issuing label or distributor. Nor can we claim that our preview is a complete accounting of all recordings to be released by the companies represented here. Plans change, and there will always be that very special album or CD that we weren't told about. (Beginning in November, HIGH FIDELITY lists new domestic CD releases as they appear.)

Please note the following use of abbreviations, alone or in combination. For performing forces: P (Philharmonic), R (Radio), S (Symphony), O (Orchestra), C (Chamber), Ch (Chorus, Choir). St (State), Op (Opera), Ac (Academy), E (Ensemble), Qr (Quartet), Qn (Quintet), Fest (Festival), or their foreign-language equivalents. For voice ranges: lower-case letters without parentheses. For production and packaging: Where known, number of records in multidisc sets is given in parentheses at end of listing; other parenthetical symbols include s (single disc rather than set), r (domestic reissue), h (historical), d (digital recording), m (mono), l (live recording). Initials and first names appear only as needed.

#### ACCENT (Belgium)

(distributed by AudioSource)

Bach: Complete Works for Lute. Junghanel (2).
Beethoven: Symphony No. 7 (arr. wind nonet).
Dombrecht. Octophoros.

Corelli: Violin Sonatas. S. Kuijken, W. Kuijken, Kohnen.

Leclair: Complete Sonatas for Transverse Flute and Continuo. B. Kuijken, W. Kuijken, Kohnen (2).

#### ANGEL

Auber: Fra Diavolo. Mesplé, Berbie, Gedda; Monte Carlo Op. Soustrot (\*).

Bach: Violin Concertos; Concerto for Violin and Oboe. Perlman, Still; Israel PO (\*).

Beethoven: Overtures. London PO, Tennstedt (\*). Brahms: Violin Sonatas. Perlman, Ashkenazy (\*). Donizetti: Lucia di Lammermoor. Gruberova, Kraus: Royal PO, Rescigno (\*).

Dvořák: Symphony No. 9. Berlin PO. Tennstedt

Gershwin: An American in Paris (world premiere).
K. and M. Labeque.

Gounod: Romeo and Juliet. Malfitano, Kraus; Toulouse O. Plasson (\*).

Gounod: Saint Cecilia Mass. Hendricks, Dale, Lafont; Nouvelle OP, Prêtre (\*).

Handel: Water Music. Linde Consort (\*).
Handel: Fireworks Music. Linde Consort (\*).

Khachaturian: Suites: Spartacus, Gayneh. Royal PO. Temirkanov (\*).

Mahler: Das klagende Lied. Hodgson, Tear, Doese, Rae; City of Birmingham SO&Ch, Rattle (\*).

Mendelssohn; Bruch: Violin Concertos. Perlman; Concertgebouw O, Haitink (\*).

Monteverdi: Vespers (1610). Taverner Consort. Parrott (\*).

Prokofiev: Peter and the Wolf. Perlman (narrator). Rachmaninoff: Piano Works. Gavrilov (\*).

Rachmaninoff: Piano Concerto No. 2; Rhapsody on a Theme of Paganini. Ousset; City of Birmingham SO, Rattle (\*).

Rachmaninoff: Symphony No. 2. Los Angeles P, Rattle (\*).

Ravel: Shéhérazade, Duparc: Songs with Orchestra. Te Kanawa: Brussels Op O, Pritchard (\*). Saint-Saens: Carnival of the Animals. K. and M. Labeque; Israel PO, Mehta.

Wagner: The Flying Dutchman. Van Dam, Moll,
 Vejzovic, Hoffman; Berlin PO, Karajan (\*).
 Walton: Shakespearean Film Scores. Royal Liver-

pool PO, Groves (\*).

Music of 16th Century Rome. King's College Ch.

Cambridge (\*).

Popular Schubert Lieder. Popp (\*).

Popular Mozart Arias. Allen; Scottish CO. Arm-

strong (\*).

Sousa Marches, Vol. II. Royal Marines Band, Hopkins.

Angel Records, 1750 North Vine Street, Hollywood, Calif. 90028

(\*) indicates that the recording uses Direct Metal Mastering (DMM) and is pressed in West Germany.



Trevor Pinnock conducts Handel organ concertos on Archiv.

# ARCHIV

(released by Deutsche Grammophon)

Bach: The Art of The Fugue; Goldberg Canons.

Musica Antiqua Köln (d).

Bach: Concertos (3): after BWV 1060, 1055, 1044. English Concert, Pinnock (d).

Bach: The Well-tempered Klavier. Gilbert (d). Handel: Concerti grossi, Op. 3. English Concert.

Pinnock (d). Handel: Organ Concertos, Opp. 4, 7. Preston: En-

glish Concert, Pinnock (d).

Mozart: Piano Concertos 12-15. Bilson. Gardiner:

Mozart: Piano Concertos 12-15. Bilson. Gardiner: English Baroque Soloists (d).

Vivaldi: Concertos. English Concert, Pinnock (d). Trevor Pinnock: The Harmonious Blacksmith and Other Harpsichord Works (d).

# ARGO

(released by London Records)

Franck: Organ Music. Hurford (d).

Mozart: Coronation Mass; Missa Solemnis. Marshall, Murray, Covey-Crump, Wilson-Johnson; King's College Ch, Cambridge: English CO, Cleobury (d).

Christmas at King's. King's College Ch, Cambridge; Cleobury (d).

#### ASTREE (France)

(distributed by AudioSource)

Schubert: Goethe Lieder. Söderström, Badura-Skoda (d).

#### AUDIOSOURCE

See Accent, Astree (France), Denon, TR Records, AudioSource, 1185 Chess Dr., Foster City, Calif 94404

## CAMBRIA

The Crown Years: The Historical Recordings of Concert Pianist John Crown, 1940-1953. The Songs of Mary Carr Moore. De La Rosa. Ru-

the Songs of Mary Carr Moore. De La Rosa, Ru dat, Lenz.

Cambria Records and Publishing, Box 2163, Palos Verdes, Calif. 90274.

# CONSORTIUM RECORDINGS

See GSC Recordings and Laurel Record. Consortium Recordings, 2451 Nichols Canyon, Los Angeles, Calif. 90046-1798.

# DENON (Japan)

(distributed by AudioSource)

Strauss, R.: Ein Heldenleben. Dresden StO, Blomstedt (d).

## DEUTSCHE GRAMMOPHON

Bach: Lute Suites. Söllscher (d).

Bach: Mass in B minor. Monteverdi Ch; English Baroque Soloists, Gardiner (d).

Bach: Violin Sonatas and Partitas. Mintz (d). Beethoven: Piano Sonatas, Vols. 1, 2. Barenboim

(d). Beethoven: Violin Sonatas, Nos. 4, 5. Kremer, Ar-

gerich (d).

Bernstein: West Side Story. Cast to be announced (d).

Brahms: Double Concerto; Academic Festival Overture. Kremer, Maisky; Vienna PO, Bernstein (d).

Brahms: Lieder. Norman, Barenboim (d).

Brahms: Piano Concerto No. 2. Zimerman; Vienna PO. Bernstein (d).

Bruckmer: Symphony No. 8. Vienna PO, Giulini (d).

Haydn: Symphonies Nos. 88, 92. Vienna PO, Bernstein (d).

Mahler: Symphony No. 7. Chicago SO, Abbado (d).

Mahler: Das klagende Lied. Popp, Fassbaender, Araiza, Allen; London Philharmonia, Sinopoli (d).

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Strauss: Sinfonia Domestica. Vienna PO, Maazel (d).

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Verdi: Don Carlos. Domingo, Ricciarelli, Nucci, Raimondi, Valentini-Terrani; Ch&O of La Scala, Abbado (d).

Verdi: *Il Trovatore*. Plowright, Fassbaender, Domingo; Santa Cecilia, Giulini (d).

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#### DISCOCORP

Bruckner: Symphony No. 9. Berlin PO, Knappertsbusch (l. 1950).

Chopin: Piano Sonatas Nos. 2, 3; Encores. Cortot (h).

Schubert: Lieder Recital. Hotter. Raucheisen (2: h, 1942-44).

Wagner: Götterdämmerung excerpts. Flagstad. Melchior, Janssen, Thorborg. Weber: Covent Garden Royal OpCh&O, Furtwängler (2, 1, 1937).

Wagner: Die Walküre, Act III. Flagstad, Bockelmann, Müller: Covent Garden Royal OpCh&O. Furtwängler (I. 1937).



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Chopin: Sonatas Nos. 2, 3. Duchable (d).

Corelli: Christmas Concerto. I Solisti Veneti, Scimone (d).

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Handel: Organ Concertos (complete). Koopman (5, d).Handel: Messiah. Amsterdam Baroque O, Koop-

man (3, d). Haydn: Symphonies Nos. 94, 98. Scottish ChO, Leppard (d).

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Mahler; Strauss; Quatuors avec Piano. Quatuor Ivaldi (d).

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Mozart: Arias. Baker; Scottish ChO, Leppard (d). Mozart: Symphonies Nos. 25, 40. Scottish ChO, Conlon (d).

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 Alain, Koopman; Rotterdam PO, Conlon (2, d).
 Purcell: King Arthur. Smith, Fisher, Priday, Stafford, Elliott, Varcoe; Monteverdi Ch: English

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Tosti: Songs. Raimondi; I Solisti Veneti, Scimone (d).

Vivaldi: Catone in Utica. Gasdia, Zimmermann; 1 Solisti Veneti, Scimone (2, d).

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Van Dieren: String Quartets Nos. 1, 2 (world premiere). Pro Arte Qr.

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Ravel: Ma Mère L'Oye: Pavane pour une infante défunte; Le Tombeau de Couperin; Valses Nobles et Sentimentales. Montreal SO, Dutoit (d).

Ravel: Gaspard de la Nuit: Valses Nobles et Sentimentales; Pavane pour une infante défunte. Ashkenazy (d).

Rodrigo: Concierto de Aranjuez. Moreno-Buendia: Harp Concerto. Robles; Philharmonia O, Dutoit

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Schubert: "Trout" Quintet. Schiff; members of Hagen Qr (d).

Schumann: Piano Concerto. Chopin: Piano Concerto No. 2. Schiff; Concertgebouw O, Dorati

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Sibelius: Symphonies Nos. 3, 6. Philharmonia O, Ashkenazy (d).

Strauss, R.: Rosenkavalier Suite; Die Frau Ohne Schatten Fantasie. Detroit SO, Dorati (d).

Stravinsky: The Rake's Progress. Dean, Pope, Langridge, Ramey, Walker, Dobson; London Sinfonietta, Chailly (3, d).

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Tchaikovsky: Romeo and Juliet; Francesca da Rimini, Cleveland O, Chailly (d).

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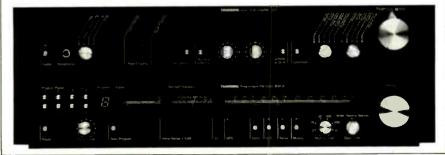
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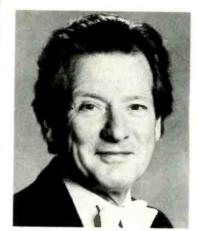
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Mussorgsky: Boris Godunov. Vedernikov, Matorin, Piavko, Arkhipova, Masurok, Sokolov; USSR TV&Radio Large SO, Fedoseyev (4).

Ravel: Daphnis et Chloé. Netherlands CCh. Netherlands Vocal E, Concertgebouw O, Kondrashin (1).

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Schubert: Winterreise; Lieder (8). Fischer-Dieskau, Brendel (2, d).

Schubert: Rosamunde. Ameling; Gewandhaus O. Masur (d).

Schumann: Fantasiestücke, Op. 12; Liederkreis, Op. 39. Anders, Gulda (d).

Strauss, R.: Horn Concertos Nos. 1, 2. Weber: Concertino for Horn. Baumann; Gewandhaus O.

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Bach: Suites for Unaccompanied Cello. Bylsma (3,

Barber: Violin Concerto; Overture to The School for Scandal; Essay for Orchestra No. 2; Prelude and Intermezzo from Vanessa. Utah SO, Silverstein (d).

Bax: Fantasy on Five Polish Carols. Holst: Four Carols. Rutter: Carols. Vaughan Williams: Fantasia on Greensleeves. Bel Canto Voices; Plymouth Fest O&CH, Brunelle (d).

Beethoven: Symphony No. 3. Collegium Aureum

Beethoven; Ries: Sonatas for Horn. Baumann, Sanders (d).

Beethoven: Piano Concertos (5). Sherman: Czech

P. Neumann (5, d).

Beethoven: Piano Sonata, Op. 106. P. Serkin (d). Beethoven: Piano Sonatas, Opp. 109, 110. P. Serkin (d).

Beethoven: Piano Sonata, Op. 111; Bagatelles. P. Serkin (d).

Chahrier; Dehussy; Satie: Piano Works. Varsano

Chopin: Preludes: Barcarolle. Sherman (d).

Chopin: Piano Works. P. Serkin (d).

Dvořák: Bagatelles (arr. D.R. Davies)\*; Bagatelles (original version for 2 vln, vc, harmonium). St. Paul Chamber O, Davies\*; Suk, Pavlík, Chuchro, Hála (d).

Janáček: Glagolitic Mass. Söderström, Drobková, Livora, Novák; Prague P Ch; Czech P, Mackerras (d).

Mahler: Symphony No. 6. Cologne RSO, Bertini (2, d).

Mozart; Vanhal: Concertos for Bassoon. Miller; St. Mary's Chamber Players, Marriner (d).

Prokofiev: Peter and the Wolf. L. Mozart: Toy Symphony. Buckley; Luxembourg RTO, Hager (d).

Schuhert: Dances, Vol. 2. P. Serkin (d).

Stravinsky: Petrouchka. Cologne Radio SO, Bertini (d).

Suk: Asrael Symphony; Fantasy for Violin. Suk; Czech P, Neumann (2, d).

Vivaldi: Four Seasons. La Petite Bande, Kuijken (r).

Argentine Tangos, I Salonisti (d).

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Dances for Guitar. Isbin (d).

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Bach: Great Organ Works. Fox (r).

Beethoven: 'Eroica' Symphony. London SO, Stokowski (r).

Bizet: Carmen Suites 1,2; L'Arlésienne Suite No. 2. Philadelphia O, Ormandy (r).

Brahms: Piano Concerto No. 1. Rubinstein; Chicago SO, Reiner (r).

Enesco; Liszt; Smetana: RCA SO, Stokowski (r).
Orff: Carmina Burana. Mandac, Kolk, Milnes;
Boston SO,Ozawa (r).

Mahler: Symphony No. 4. Della Casa; Chicago SO, Reiner (r).

Mahler: Das Lied Von Der Erde. Forrester, Lewis; Chicago SO, Reiner (r).

Mozart: Violin Concertos Nos. 4, 5. Heifetz (r). Schubert: Symphony No. 9. NBC S, Toscanini (r, m).

Strauss: Also Sprach Zarathustra. Chicago SO, Reiner (r).

Tchaikovsky: 'Pathetique' Symphony. Chicago SO, Reiner (r).

Tchaikovsky: Symphony No. 4. Boston SO, Monteux (r).

Heifetz: Violin Showpieces. RCA SO (r, m).

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# RCA RED SEAL

Beethoven: Sonata in F minor, Op. 57; Sonata, Op. 31 No.3. Adelman.

Brahms: Sonatas for Cello and Piano. Ma, Ax (d).

Brahms: Violin Concerto. Ughi; Philharmonia O, Sawallisch (d).

Chopin: Piano Works. Adelman,

Dvorák: Symphony No. 7. Chicago SO, Levine (d).
Mozart: Six Viola Quintets. 1. Kavafian, Tenenbom, Kashkashian; Guarneri Or (d).

Prokofiev: Cinderella (excerpts). Saint Louis SO, Slatkin (d).

Prokofiev: Love for Three Oranges Suite; Lieutenant Kijé Suite. Stravinsky: Suites Nos. 1, 2 for Small Orchestra. Dallas SO, Mata (d).

Schubert: Schwanengesang. Hagegård, Ax (d). Schubert: Trout Quintet. Mozart: Eine Kleine Nachtmusik, Ax, J. Levine, Guarneri Qr (d).

Sondheim: Selections from his collected works. Strauss, R.: Death and Transfiguration; Metamorphosen. Philadelphia O, Ormandy.

Tchaikovsky: Symphony No. 6. Chicago SO, Le-



Eva Marton sings scenes and arias from works of Wagner on Sefel.

vine (d).

Verdi; Tchaikovsky: String Quartets. Guarneri Qr. Wolf; Strauss, R.: Songs. Hagegård, Schuback (d). A Hundred Artists at the Met—A Centennial Celebration (8, h, m).

Artur Rubinstein: The Chopin Collection, Vol. 2: Mazurkas; Vol. 3: Scherzos, Ballades. Sonatas; Vol. 4: Polonaises, Impromptus, Barcarolle; Vol. 5: Works for Piano and Orchestra. New SO of London, Skrowaczewski; S of the Air, Wallenstein; Philadelphia O, Ormandy. (12, r). Digitally remastered.

Enrico Caruso: The Complete Caruso, Vol. 16 (r).
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Isao Tomita: two releases: one an adaptation of Stravinsky's Rite of Spring.

James Galway: two releases: works by Schubert, and a classic pop LP with Henry Mancini.

Julian Bream: Music of Spain, Vol. 7: The Spirit of Segovia. Two more volumes to be issued in 1985. Richard Stolzman: Clarinet Concerto by Copland;

Richard Stotzman: Clarinet Concerto by Copiana;

Bach Chromatic Fantasy. Also, a jazz LP with

Eddie Gomez.

William Kapell: Works by Khachaturian, Prokofiev, Liszt, Chopin (r).

## SEFEL (Canada)

Bach: Suites for Unaccompanied Cello. Starker (3,

Bach (arr. Busoni); Scarlatti; Brahms: Piano Works. Saarinen (d).

Beethoven: Middle Quartets. Orford Qr (2, d). Brahms: Double Concerto. Starker, Verhey; Amsterdam PO, Joo (d).

Brahms; Chopin: Piano Works. Hai-Kyung Suh (d). Dvořák: Symphonies Nos. 7, 9. Amsterdam PO, Joo (2, d).

Joo (2, d). **Dvořák:** Violin Concerto. Verhey; Amsterdam PO, Joo (d)

Elgar: Cello Concerto. Saint-Saëns: Cello Concerto in A minor. Rolston; Philharmonia O, Joo (d).

Handel: Water Music. English CO, Malcom (d). Liszt: The Legend of St. Elizabeth. Marton; Buda-

Liszt: The Legend of St. Elizabeth. Marton; Buda pest SO, Joo (d).

Mahler: Symphony No. 1. Amsterdam PO, Joo (d). Mahler: Symphony No. 8. Budapest SO, Joo (2, d). Mendelssohn: A Midsummer Night's Dream—incidental music. King's College Junior School Ch, Philharmonia O, Joo (d).

Mozart: Piano Concertos. Nemecz; Budapest SO, Joo (d).

Mozart: Piano Concertos. Nemecz; Budapest SO, Vasary (d).

Rachmaninoff: Piano Concerto No. 3. Hai-Kyung Suh; Philharmonia O, Joo (d)

Respighi: The Birds. Liu; Mao: Dance of the Yao People. Huang: The Sword. Fort Worth ChO, Giordano (d).

Schuhert: Piano Works. Nemecz (d). Schumann: Piano Works. Nemecz (d).

Strauss, R.: Ein Heldenleben. Philharmonia O, Joo (d).

Strauss, R.: Die Frau Ohne Schatten Fantasie; Der Rosenkavalier Suite. Philharmonia O. Joo (d).

Wagner: Scenes and Arias. Marton; Philharmonia O, Joo (d).

Early Cello Concertos. Starker; Santa Fe O. Kirschke (2, d).

Gloria Saurinen: Piano Recital. (d). Italian Operatic Arias. Marton (d). The Romantic Cello. Rolston, Moore (d).

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#### SINFONIA

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Bach: Organ Works. Brunelle (d).

Beethoven: Symphony No. 4; Leonore Overture No. 2. Dresden PO, Kegel (d).

Beethoven: Symphony No. 9 ('Choral'). Hargan, Walther. Buchner, Kovats; Berlin Ch; Leipzig RCh; Dresden PO, Kegel (2, d).

Brahms: Symphony No. 2; Tragic Overture. North German RSO, Wand (d).

Brahms: Symphony No. 3. North German RSO, Wand (d).

Brahms: Symphony No. 4. North German RSO, Wand (d).

Gabrieli: Renaissance Music for Brass. Chicago C Brass (d).

Gershwin: Rhapsody in Blue; 3 Preludes; Songs. Schoenfield, piano (d).

College Fight Songs and Military Themes. U of Minnesota S Band, Bencriscutto (d).

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Beethoven: Piano Concerto No. 1, Op. 15; Sonata No. 14, Op. 27, No. 2. Kameníková, Prague CO (d).

Bruckner, A.: String Quintet. Malý, Kocian Qr (d). Dvořák: String Quartet Opp. 106, 108. Panocha Qr (d).

Dvořák: Requiem. Czech PO&Ch, Sawallisch (d).
Fibich: Symphony No. 1. St Philharmony, Vronsky (d).

Janáček: Amarus. Martinů: Field Mass. Czech PO&Ch, Sawallisch (d).
Janáček: Operatic Suites. Czech PO, Jilek (d).

Martinú: Czech Rhapsody. Prague SO, Bělohlávek (d).

Martinú: Halftime; La Bagarre; The Rock. Brno StP, Jilek (d).

Martinu: Piano Concerto No. 4. Leichner, Czech PO, Neumann (d).

Martinů: Piano Quintet. Palenicek, Smetana Qr (d).

Mysliveček; Stamitz, A.K.: Sonatas. Ars Redivia,
Munclinger (d).

Mysliveček; Benda: Harpsichord Sonatas and Divertimenti. Hála (d).

Mysliveček: Violin Concertos in C, E, F. Dvořák CO, Pešek (d).

Novak: Slovak Suite; South Bohemian Suite. Czech PO, Vajnar (d).

Poulenc: Stabat Mater. Honegger: Christmas Cantata. Czech Ch&O, Pešek (d).

Rejcha: Grand Quintet for French Horn and String Quartet. Klásnká, Panocha Qr (d).

Suk; Dvořák: String Serenades. Czech PO, Pešek (d).

Suk: Summer Tale. Czech PO, Neumann (d). Suk: Ripening. Czech PO, Neumann (d).

Tomášek: Sacred Works. Prague CO, Sawallisch

Vent: Trans. Marriage of Figaro. Collegium Musicum Praguense, Vajnar (d).

Zelenka: Works for Chorus and Orchestra. Mátl; Czech PO&Ch, Neumann (d).

Zemlinsky: String Quartet. Webern: Five Movements for String Quartet. Berg: String Quartet. Kroft Or (d).

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#### TELDEC

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Bach: Vol 35: Cantatas BWV 140, 143-145. Vol. 6: Cantatas BWV 21-24. Concentus Musicus Wien, Harnoncourt; Leonhardt Consort, Leonhardt

Bach: Magnificat in D, BWV 243. Handel: Te Deum. Concentus Musicus Wien, Harnoncourt (d).

Bach: Overtures Nos. 1, 2. Concentus Musicus Wien, Harnoncourt (d).

Bach: Violin and Cello Suites Nos. 5, 6. Baumann

Bartók: String Quartets Nos. 2, 3. Eder Quartet

Beethoven: Piano Sonatas Opp. 109, 110, 111.

Buchbinder (d).

Beethoven: Piano Trios Opp. 97, 121a. Haydn Trio of Vienna (d).

Beethoven: Quartet, Op. 130; Grosse Fugue, Op.

Bruckner: Symphony No. 8. Frankfurt RSO, Inbal

Chopin: 4 Ballads; 4 Scherzos. Katsaris (d). Haydn: Quartets Opp. 75-80, Op. 76, No. 1, 3. Eder Quartet (d).

Mendelssohn: Concertos: For Violin and Strings in D minor; For Piano and Strings in A minor. Zehetmair, Katsaris, Franz Liszt CO (d).

Monteverdi: Il Combattimento di Tancredi e Clorinda; Madrigals, Hollweg, Schmidt; Concentus Musicus, Harnoncourt (d).

Mozart: Clarinet Quintet. Klocker; Eder Quartet

Mozart: Piano Concertos Nos. 23, 26. Gulda; Concertgebouw O, Harnoncourt (d).

Mozart: Serenade No. 9, KV 320. Dresden StO, Harnoncourt (d).

Mozart: Symphonies: Nos. 39, 32. Concertgebouw O, Harnoncourt (d).

Mozart: Symphonies: Nos. 40, 41. Concertgebouw O, Harnoncourt (d). Rossini: String Sonatas and Serenades. Franz

Liszt CO (d). Pachebel Canon and Gigue, et. al. Franz Liszt CO

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Britten: Song Cycles. Michael Sells, tenor; Evan Solomon, piano (d).

Piano Trios. David Ashley White, Henry Cowell, Paul Reale (d).

#### VOX/TURNABOUT

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Bach: Brandenburg Concertos, performed on original instruments. Mainz CO, Kehr (2).

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Beethoven: Sonata No. 27 in E minor, Op. 90. Brahms: Intermezzi, Opp. 117, 118, No. 2. Franck: Prelude, Chorale and Fugue. Moravec. Chopin: Nocturnes. Simon.

Handel: Orlando (highlights). Solists, Ch&O of Vienna Volksoper, S. Simon.

Mozart: Songs. Fischer-Dieskau, Barenboim.

Verdi: Arias. Tomova-Sintow; Sofia St Philharmonia, Raychev.

Jussi Björling alias Erik Odde. Popular songs recorded 1932-33.

La Guerre Comme à la Guerre. Battle music by Byrd, Dandrieu, F. Couperin, Balbastre. Prefontaine, harpsichord.

Love's Old Sweet Songs. Arrangements of love songs from Rennaisance to modern times. New York Vocal Arts E, Beegle.

# VOX CUM LAUDE

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Bach, J.C.; Graupner; Vivaldi: Bassoon Concertos. Smith; English CO, Ledger.

Beethoven: "Archduke" Trio. Zukerman, Du Pré, Barenboim (r).

Beethoven: String Quartet in A minor, Op. 132. Concord Or.

Beethoven: Symphony No. 6. Cincinnati SO, Gielen

Brahms: Sonata No. 3 for Violin and Piano. Bloch: Baal Shem. Bartók: Romanian Folk Dances. Oliveira, McDonald (d).

Brahms: Secular Choral Works. Indiana University Singers, Harrington.

Brahms: Piano Trios. Kalichstein-Laredo-Robinson Tr (2, d).

Brahms: String Quartets. Tokyo Qr (2).

Brahms: Variations on a Theme by Haydn. Elgar: Enigma Variations. London SO, Mata (d).

Busoni: Turandot Suite; Sarabande and Cortege from "Doktor Faustus". Cincinnati SO, Gielen

Chopin: Scherzos (4). Moravec (d).

Dvořák: Symphony No. 7. London SO, Mata (d). Kodály: Háry János Suite. Enescu: Romanian Rhapsody No. 2. Alfven: Swedish Rhapsody.

Baltimore SO, Comissiona (d). Liszt: Transcendental Etudes. J. Rose (d). Schubert: Songs. Opalach, Vallecillo.

Schubert; Mendelssohn; Chopin: Piano Fantasies.

Schub (d). Strauss, R.: Metamorphosen; Death and Transfig-

uration. Cincinnati SO, Gielen (d).

Vaughan Williams: Mass in G. Kodály: Missa Brevis. New York Ch Society, De Cormier.

Vivaldi: Sonatas for Cello and Harpsichord. Robinson, Newman.

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SM 275

# CLASSICAL



Haitink: His concert performances of Mahler's Seventh had more intensity (page 70).

# BACH: The French Suites (6), B.W.V. 812-817.

Ton Koopman, harpsichord. [Hans H. Tillmanns, prod.] CALIG VERLAG CAL 30 442/43 (digital recording: two discs) (distributed by Organ Literature Foundation, 45 Norfolk Rd., Braintree, Mass. 02184).

In recent years the Dutch harpsichordist Ton Koopman has emerged as one of Europe's most authoritative early music specialists, and his position will only be strengthened by his readings of Bach's French Suites. For this superbly produced German album he uses a copy (by Martin Sassmann) of a 1728 Christian Zell instrument currently housed at the Museum of Art and Industry in Hamburg. Its crisp sound complements the articulate playing, and its tuning system (based on one of Werckmeister's unequal but nonetheless well-tempered formulas) is ideally suited to the open sonorities that characterize the left-hand figures of so many of the Suites' dance movements. There's a wonderful feeling of spontaneity in this recording; Koopman's flawless technique and elegant flair for ornamentation are accompanied by a bounty of rhythmic energy, and because the silences between movements are so pure, one gets the impression that he tossed off these tasteful virtuoso performances in JAMES WIERZBICKI single takes.

# BRAHMS: A German Requiem, Op. 45; Variations on a Theme by Haydn, Op. 56a.

Margaret Price, soprano; Thomas Allen, baritone; Munich Hochschule für Musik Chamber Chorus; Bavarian Radio Symphony Orchestra and Chorus, Wolfgang Sawallisch, cond. [F.

For additional reviews of classical music on Compact Disc and videodisc, see New Technologies.

Axel Nehrle, Dieter Sinn, and Diether G. Warneck, prods.] ORFEO S 039842 H (digital recording, two discs) (distributed by Harmonia Mundi, U.S.A.. 2351 Westwood Blvd., Los Angeles, Calif. 90064).

# BRAHMS: A German Requiem, Op. 45; Songs (8).

Kathleen Battle, soprano\*: Håkan Hagegård, baritone†; James Levine, piano°: Chicago Symphony Orchestra and Chorus, James Levine, cond. [Thomas Z. Shepard, and J. David Saks, prods.] RCA ARC 2-5002 (digital recording, two discs). Cassettes (2): ARE 2-5002.

Songs: Op. 6, No. 4\*°; Op. 107, No. 3\*°; Op. 63, No. 5\*°; Op. 96, No. 2\*°; Op. 49, No. 4\*°, Op. 63, No. 8\*°; Op. 43, No. 1\*°; Op. 86, No. 3\*°

A comparison of these two quite different interpretations requires consideration from the standpoint not only of music but also of semantics, psycholinguistics, and phenomenology. It all starts with the word as spoken—or, in this case, sung. Brahms designated this work as "German" not for any nationalistic reasons (he told Karl Rheinthaler, director of music at the cathedral in Bremen, that he would have gladly dispensed with "German" and called it simply A Human Requiem), but to make it clear he had turned away from the petrified, alien Latin liturgy in favor of the vernacular.

Little has changed in spoken German since Martin Luther made the translation of the Bible that is still standard today; for German ears, Brahms's text, selected from that translation, has an immediacy—an unaffected folksiness, if you will—for which we Anglo-Saxons, accustomed for generations to all those thee, thou, ye, dost, and canst archaisms, have no real Biblical equivalent. German-speaking audiences hear, in this work, the same language they hear in the Supermarkt; other audiences—and musicians—have to deal with a foreign idiom that, imperfectly mastered, inevita-

bly affects performance. I believe all this explains the disparities between these two sets. The Munichers perform it *en famille*; the Chicagoans approach it as they might New York's outsized Cathedral of St. John the Divine

Anyone familiar with James Levine's work knows that, for all his manifold brilliance, some sort of black spell seems to descend upon him whenever tempo markings drop below andante; the last movement of his Mahler Third, for instance, marked simply "slowly," gets unnervingly close to stationary, and a visitor to Bayreuth reports that Levine's Parsifal there lasted even longer than Hans Knappertsbusch's, which hardly seems humanly possible. This same misfortune touches, and sometimes afflicts. five of the seven Requiem movementsparticularly the second ("All flesh is grass"), which he turns into a dirge, a dead march, with two climaxes so melodramatically overwrought that one expects, next, nothing less than the crack of doom. (The last trump—in Luther's German, "the last trombone"-does in fact turn up, but not until four movements later.)

Wolfgang Sawallisch, for valid musical reasons, takes his opening and closing movements somewhat slower than Levine, but nowhere even in them does the music lapse into the lugubrious; his pacing in all the other five movements adheres to a much more vital tempo, which lends the entire work a cohesive strength the Chicago set lacks. In all important details Sawallisch shows respect for the score. However, at bar 172 in the third movement (where that endless pedal-point on D begins), Solomon's statement that "The souls of the righteous are in the hands of God" suddenly, from one bar to the next and with no indication whatsoever in the score, gooses him into a wildly accelerated tempo. In spite of this single, truly inexcusable lapse, Sawallisch keeps more closely than Levine to Brahms's explicit published intentions, winning his interpretation preference here. In addition, the Munich acoustics make the choral voice-leading more pronounced and transparent, and—an important point—the recorded level of the Munich chorus never swamps the orchestra, as frequently happens in the Chicago set.

As for the soloists, Kathleen Battle and Margaret Price both have heavenly voices, the former light and ethereal, the latter more substantial without ever becoming heavy. Between the two admirable baritones, it seems to me a toss-up.

In both sets, the fourth side offers unusual attractions. With Levine a prodigious (at times almost authoritarian) partner at the piano, Battle and Håkan Hagegård each sing four Brahms Lieder in a manner close to perfection. In the other set, Sawallisch and his hometown band provide about as good a performance of the (we now know) misnamed Haydn Variations as you can expect to hear.

PAUL MOOR

HAYDN: String Quartets: in F, Op. 3, No. 5; in D minor, Op. 76, No. 2; in C, Op. 76, No. 3.

Philharmonia Quartet Berlin. [Toru Yuki, prod.] DENON OF 7094 ND (digital recording) (distributed by Audio Source, 1185 Chess Dr., Foster City, Calif. 94404).

For years authorities have agreed that the famous "Haydn Serenade," and the quartet in which it's imbedded, is the work not of Haydn but of his neighbor and admirer Roman Hoffstetter (1742–1815), and in *The New Grove Dictionary of Music and Musicians* the beloved F major Quartet—once known as Haydn's Op. 3. No. 5, H. III:7—is consigned to the appendix of

spurious compositions. Its curious genesis notwithstanding, the quartet is still a charming piece, and since there is no other convenient pigeonhole in which to drop it, performers as well as record companies continue to group it with certified Haydn products.

Here it shares vinyl space with the Op. 76. No. 2 *Quinten* Quartet (so called because of the prominent descending fifths in the first movement) and the Op. 76. No. 3 *Kaiser* Quartet (so called because its second movement is a set of variations on Haydn's *Gott erhalte Franz den Kaiser*, a hymn that 20th-century listeners know as the German national anthem). Perhaps

that's all explained in the liner notes—they're in Japanese, which is Greek to me. In any case, these are dashing performances that hold firmly to the mainstream interpretive tradition, with most of the grace notes played before the beat and most of the well-blended sonorities coated with a moderate veneer of vibrato. The Philharmonia Quartet has a rich bottom sound, excellently projected on this very clean pressing.

JAMES WIERZBICKI

# MAHLER: Symphony No. 7, in E minor.

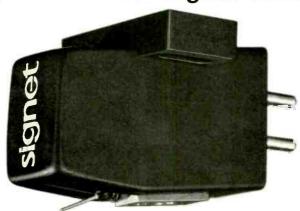
Amsterdam Concertgebouw Orchestra, Bernard Haitink, cond. Phillips 410 398-1 (digital recording, two discs). Cassettes (2): 410 398-4. CDs (2): 410 398-2.

The Mahler tradition in Amsterdam is long and lustrous. Willem Mengelberg and the Concertgebouw Orchestra eagerly championed Mahler's music, playing every new symphony as it appeared, scheduling regular Mahler festivals. There was even one occasion in October 1904 when Symphony No. 4 was presented twice on the same program, with Mahler himself conducting, the better to acquaint the Dutch audience with the wonderful "new" music. Some collectors may have heard the incredible Mengelberg-led concert recording of this symphony made in 1939, once available on Philips (PHM 500 040).

The Mahler tradition was carried on by Eduard van Beinum, and by Bernard Haitink, who has recorded all of the symphonies except the last, apparently never accepting the Deryck Cooke or other versions of the incomplete Tenth. With the exception of Symphony No. 8, those earlier Philips recordings were generally of excellent sonic quality, fairly well capturing the rich sounds of this orchestra playing in its own hall. Now, with the advent of the digital age, there is talk of Haitink and the Concertgebouw rerecording many or all of the Mahler symphonies.

This first release in what may become a digital cycle offers the Symphony No. 7, in E minor. In the fall of 1982, Haitink and the Concertgebouw toured the United States with the Seventh as one of their featured works. Those who were fortunate enough to attend the Kennedy Center concert in Washington or the one at Carnegie Hall in New York heard a positively stunning, incandescent performance of this rather mysterious symphony, impeccably played, with a quiet kind of orchestral bravura that one seldom encounters in the concert hall. I wish I could say that the new Philips release conveys the magic of those performances, but it does not. Haitink is always at his best in live concerts; his Dutch reserve usually appears when microphones are present with no audience, which is what has happened here. That is not to suggest that this is not a fine performance. It is noteperfect, but that extra touch of concert-hall excitement just isn't there.

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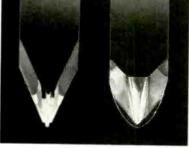
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Philips's digital recording is disappointing. The dynamic range is wide, but the famed Concertgebouw strings sound thin here (they surely didn't that night in Washington!), and the bells at the conclusion of the symphony, which in the hall were the tintinnabulation of heavy metal. sound tinny. My dissatisfaction with this recording does not diminish my admiration for Haitink's earlier analog account, which to me remains the finest recorded statement of the work. The reproduction of the earlier set is highly acceptable and conveys the Concertgebouw sound more accurately than the new digital version. Fortunately, even though most of Haitink's first Mahler cycle has been deleted, that earlier recording of the symphony is still in the catalog (Philips 6700 0036, two discs). It is worth ROBERT E. BENSON searching for.

## MOZART: Divertimento in D, K. 334; March in D, K. 445.

Academy of St. Martin-in-the-Fields Chamber Ensemble. Phillips 411-102-1 (digital recording). Cassette: 411-102-4.

In the Divertimento in D, K. 334 (1779–80), recorded on this disc together with its introductory March, the first violin carries the melodic weight of almost the entire work and is entrusted with concerto-like pyrotechnics, from arpeggios and rapid scales to the use of high positions. Yet, Mozart being Mozart, even this "light"

music is infused with countless moments of great originality and poignancy. The second movement, a gorgeous set of variations in D minor, is especially startling, being unusual for a divertimento both in its mode and in its sinuous chromaticism.

It is hard to imagine a better performance than this one by the Academy of St. Martin-in-the-Fields Chamber Ensemble, unless you insist on an original-instrument approach. The listener is immediately captivated by the spirit of the playing—vivacious, energetic, never imposing a trace of undue Romanticism. But there is more than mere spirit here. The ensemble is precise, the intonation perfect, and the performance studded with jewel-like interpretive touches: once a slight cadential hesitation, another time an added dynamic inflection or a spontaneous manipulation of the phrasing.

Obviously, in a work of this sort the success of the performance depends to a great extent on the talent of the principal violinist. Kenneth Sillito proves to be an excellent player, ably handling the concertante elements, avoiding sentimental slides and shifts, and possessing great interpretive insight.

Philips has outdone itself yet again: This is one of the most silent pressings I have ever encountered on a conventional disc, and the digital sound is both faithful and crystal-clear. There is simply no finer performance available of this sparkling, sunny music. K. ROBERT SCHWARZ

#### STRAUSS, R.: Orchestral Songs (12).

Siegfried Jerusalem, tenor. Leipzig Gewandhaus Orchestra, Kurt Masur, cond. PHILIPS 6514 321. Cassette: 7337 321.

Heimliche Aufforderung; Traum durch die Dämmerung; Liebeshymnus; Freundliche Vision: Waldseligkeit; Verführung; Ständehen; Morgen!; Zueignung: Ich trage meine Minne; Das Rosenband; Des Dichters Abendgang.

Some famous, case-hardened English critic (Ernest Newman?) summed up one aspect of a long, taxing life of concert- and operagoing tribulation with the melancholy theorem, "The higher the voice, the smaller the brain." In mentioning it in connection with this impressive recording, let me stress that it definitely does not apply to the German tenor Siegfried Jerusalem. The jacket tells us nothing about him at all, but I once read in a Berlin concert program that he had begun a successful career as a bassoonist before musical colleagues encouraged him to risk the professional plunge as a singer. In these admirable interpretations, the solid musicianship so necessary for the symphonic instrumentalist completely displaces the aural narcissism that makes many singers with a beautiful organ and little else so much of a bore. Jerusalem does indeed have a rich, vibrant voice, but he also shows uncommon musicality and intelligence. In



### **Critics' Choice**

The most noteworthy releases reviewed recently

BARBER: Concerto for Cello and Orchestra. SHOSTAKOVICH: Concerto for Cello and Orchestra. Wallfisch; English Chamber Orchestra, Simon. CHANDOS ABRD 1085, June.

BLOCH: String Quartet No. 1\*. String Quartet No. 2; Prelude; Night; Two Pieces for String Quartet\*. Pro Arte Quartet. LAUREL LR 120\*, LR 126\*, Aug.

BRAHMS: Liebestieder Waltzes (18), Op. 52; Neue Liebeslieder Waltzes (15), Op. 65; Three Quartets, Op. 64\*. Sixteen Waltzes, Op. 39; Variations on a Theme by Schumann in E flata Op. 23; Souvenir de Russie†. Mathis, Fassbaender, Schreier, Fischer-Dieskau, Engel, Sawallisch\*. Alfons Kontarsky. Aloys Kontarsky†. DG 2532 094\*. 410 714-1†, Aug.

BRAHMS: Songs and Romances. Musica Sacra, Westenberg, RCA RED SEAL ARC 1-4916. Aug

BUSONI: Fantasia contrappuntistica for Two Pianos. BEETHOVEN: Grosse Fuge for Piano, Four Hands, Op. 134. MOZART: Fantasia for a Musical Clock, K. 608. Jacobs, Oppens. Nonesucit 79061-1, July.

CHAUSSON: Songs, Norman, Dalberto; Monte

Carlo Philharmonic, Jordan. ERATO NUM 75059, June.

CHOPIN: Mazurkas, Waltzes, and Polonaises. Moravec. Vox Cum Laude D-VCL 9059, July.

**DUNSTABLE:** Motets. Hilliard Ensemble. Hillier. ANGEL S 38082, Aug.

HAYDN: Symphonies: No. 91, in E flat, Hob. 1:91; No. 92, in G, Hob. 1:92. Concertgebouw Orchestra. Davis. Phillips 410 390-1, July. HAYDN, M.: Symphonies: No. 19 in C, No. 23 in D\*; No. 21 in C, No. 37 in B flat, No. 41 in F†. Bournemouth Sinfonietta, Farberman. TURNABOUT D-TV 34902\*; D-TV 34903†, June.

LUTOSLAWSKI: Variations on a Theme by Paganini. RACHMANINOFF: Suite No. 2, Op. 17. RAVEL: La Valse (arr. two pianos). Argerich, Freire. Phillips 6514 369. July. MOZART: Concertos for Violin and Orchestra: No. 1, in B flat, K. 207; No. 5, in A, K. 219. Brown; Academy of St. Martin-in-the-Fields. London Jubilies 411 707-1, July. RENAISSANCE MUSIC IN NAPLES. Hespèrion XX, Savall. ANGEL S 38083, Aug.

conjunction with Kurt Masur and Leipzig's great old Gewandhaus Orchestra, he provides us with some memorable Strauss.

He runs quite a gamut. In the almost too familiar *Serenade*, he sidles in close to the mike, mezza, almost sotto voce, convincingly evoking (for once) the pickle of the glandularly ardent midnight swain trying to wake up his girl but not her old man. He easily encompasses the ecstatic excitement of the *Secret Invitation*, the exaltation of the *Hymn of Love*, and the quiet, survivor's will to pick up the pieces and go on that so movingly infuses *Tomorrow*.

This recorded selection strikes me as a judicious balance between more and less familiar songs. Among the latter, I particularly call your attention to the forthrightly entitled Seduction, Op. 33, No. 1—at 7:02 the longest on this record. Ever since hearing Evelyn Lear, some years ago, sing the spots off the demanding, imposing Song of the Apollo Priestess (Op. 33, No. 2) with the Hannover Radio Symphony, I have longed for some label to excavate, revive. and record all four big songs comprising that opus number-conceived for large orchestra, unperformable with piano, and as a result virtually unknown today. One inconvenience: The poems make two of them women's songs, the other two men's. I herewith nominate, in collaboration with Masur and the Leipzigers, Jessye Norman and Siegfried Jerusalem, all of them Philips artists. Well? PAUL MOOR

STRAVINSKY: Symphony in E flat, Op. 1.

Royal Philharmonic Orchestra, Dalia At-

las. cond. [Brian Culverhouse, prod.] JERUSA-LEM ATD 8306 (digital recording).

This clearly compelling performance is the third and newest recording of a work that Stravinsky undertook in 1905 yet did not finish until 1907—and then overhauled seven years later. His own indifferent, even dessicated recording of 1966 with a CBS session-orchestra has been missing from SCHWANN for some time; but no loss. Sir. Alexander Gibson's of 1981 with the Scottish National Orchestra is part of a Chandos album issued in honor of the Stravinsky centenary that year, which also includes the Ode, Symphony in C, and the Symphony in Three Movements. SCHWANN continues to ignore its existence, as well as a domestic counterpart from Musical Heritage Society. But again, no loss-especially now. Although Gibson goes everywhere faster than Dalia Atlas, with a five-minute difference in the Largo movement alone, he doesn't make Stravinsky's Opus I sound any better than scraps from Tchaikovsky's table with crumbs from Glazunov's mixed in.

Atlas not only has the best orchestra, but a respect for the work far beyond the composer's own at age eighty. If nothing in the piece is preparation for *The Firebird* just two years later, its timid conservatism and trivial invention don't deter the Israeli maestra from imprinting her strong personality on the Royal Philharmonic musicians. They play passionately in response. While the recording, technically, sounds a shade less vivid than its recent date of 1982 (or its digital encoding) prepares one to hear, this could very well be remedied on a Compact Disc in the future.

# Recitals and Miscellany

BENNETT LERNER: American Piano Music.

Bennett Lerner, piano. [Klaas A. Posthuma, prod.] ETCETERA ETC 1019 (digital recording). Cassette: XTC 1019. (Distributed by Qualiton Imports, 3928 Crescent St., Long Island City, N.Y. 11101.)

BARBER: Ballade for Piano, Op. 46. BERNSTEIN: Touches. BOWLES: Six Preludes for Piano; Six Latin-American Pieces: Huapango No. 1, El Bejuco, Tierra Mojada, Orosi, La Cuelga, Huapango No. 2. COPLAND: Proclamation for Piano: Midday Thoughts. RAMEY: Piano Fantasy. THOMSON: Two Sentimental Tangos; Two Portraits: Bennett Lerner (Senza espressione). Phillip Ramey Thinking.

Barber's 1977 Ballade and Bernstein's 1980 Touches were written for the fifth and sixth installments of the Van Cliburn International Piano Competition, respectively, but almost everything else on this Dutch recording owes either its creation or its resuscitation to Bennett Lerner. Copland. for example, completed the sketches for both the Proclamation (begun in 1973) and Midday Thoughts (begun in 1944) in 1982 at Lerner's urging. Thomson's Two Sentimental Tangos (1923) had gathered dust for decades before Lerner discovered them. and shortly after he performed them in Carnegie Hall in September of 1983, the pianist posed for one of Thomson's ongoing series of musical portraits. At least four of Paul Bowles's Six Latin-American Pieces (1937-48) were given their world premieres by Lerner last year; one of Lerner's 1983 recitals also featured the first performance of the Piano Fantasy (1969-72) of Phillip Ramey, the composer-critic who sat for a Thomson portrait just a few days before Lerner's recording sessions took

Thomson's portrait of Lerner is subtitled "Senza espressione." That may describe the pianist's personality, but it hardly applies to his musicianship. These are very colorful performances: engagingly jaunty and jazzy in the Bernstein Touches and the dance pieces by Bowles and Thomson. expansively lyrical in the Copland works and the Bowles Preludes (1934-45), elegant and wistful in the Barber Ballade, forcefully declamatory in the Ramey Fantasy. The last-mentioned is the only one of these pieces that comes close to profundity, and that's more because of the music's bracing harmonic language and aggressive gestures than because of its structure or working-out of materials. For the most part this is deliberately charming repertoire, and Lerner handles it well. The recorded sound is slightly bass-heavy, but otherwise this release is a smoothy produced showcase for some fine piano playing.

JAMES WIERZBICKT

## The Tape Deck

Critiques of new cassette and open-reel releases

by R. D. Darrell

### Timbre!

MUCH OF MUSIC'S FASCINATION comes from diverse, vividly "present" personalities—not only those of performers and composers, but those of particular instruments. Individual compositional idioms and executant styles help shape our sense of musical "personality," but so (perhaps even more powerfully) do the sonic qualities usually classified as timbre—or in German, more accurately, as *Klangfarbe*.

It may be easiest to evaluate timbral effects by listening to varicolored performances of abstract music or by comparing different instrumentations of the same composition. Both approaches are possible with the latest recording of Bach's Well-Tempered Clavier, Bk. I. a work best known in piano versions, but which (since clavier = keyboard) is equally if not more suited to the clavichord, harpsichord, or organ. We've had earlier recorded examples of the first two, but the American expatriate organist Daniel Chorzempa is the first I've heard to utilize all three (Philips prestigebox digital/chrome 7654 106). [See review, August. | The choice for each prelude/fugue pair is arbitrary but usually justified: ten for clavichord, nine for harpsichord, five for organ—true period instruments as beautiful visually (in booklet illustrations) as they are fascinating aurally. Chorzempa's readings range from gloriously invigorating to mechanically routine, but what matters most are the magical sounds-and the fresh stimulation they give the however-familiar music itself

The bitter-sweet double-reeds. Of all timbres, few are more distinctive or appetizing than the spicy piquancies of the oboe and its siblings: oboe d'amore, English horn, and bassoon. Present tapings are dominated, as usual, by the matchless Heinz Holliger. In two Philips digital/chrome releases, he's ideally accompanied by the Academy of St. Martin-in-the-Fields. The first (7337-304) offers the same three Bach oboe and oboe d'amore concertos recorded last March (in slightly different Joshua Rifkin reconstructions) by Stephen Hammer for Pro Arte. On the second (7337 311), Holliger takes over from Iona Brown as conductor, while violinist Gidon Kremer solos in Vivaldi's R. 582 Concerto and costars with the oboist in Bach's S. 1060 and Vivaldi's R. 576. Then, with Michael Gielen's Cincinnatians (Vox Cum Laude D-VCS 9064), Holliger couples a remake of his memorable interpretation of Richard Strauss's Oboe Concerto with the recorded debut of Lutosławski's rhapsodic, provocatively (rather than repellently) avant-garde Double Concerto, in which harpist Ursula Holliger is the costar. (The work was specifically composed for them.) [See review, July MUSICAL AMERICA edition.]

After Heinz Holliger, Bernhard Glaetzner may seem a bit small-toned at first, but his distinctive personality and uncommon agility soon hold one spellbound in a brightly recorded, musically delectable oboe concerto program with Hartmut Haenchen's Berlin Chamber Orchestra (Spectrum SC 275). Although Telemann's great F minor Concerto and Vivaldi's fine R. 448 and 461 have been recorded before, these new versions are a joy in themselves, and one's delight is redoubled in the less familiar E minor and C minor concertos that so eloquently belie those who would demean Telemann as no more than a prolific routinier.

But even Telemann's imaginative exploitations of timbre were anticipated by Vivaldi—as can be heard in the inspired accounts of six double concertos starring various St. Martin Academy soloists under Neville Marriner (Philips digital/chrome 7337 379). Those for paired flutes, horns, mandolins, and oboes, also R. 545 for oboe and bassoon, have been recorded before, but rarely as well, and the R. 563 for two trumpets and violin is a welcome change from the popular R. 537.

Our own young West Coast "Musical Offering" ensemble also uses modern instruments, but has yet to acquire the British Academicians' Baroquian expertise. Yet the players are so aurally bewitching and radiate such infectious feeling that even a crotchety purist like me can delight in their novel Vivaldi program (Nonesuch digital/ferric 79067-4) of three orchestraless chamber "concertos"-R. 94, 95, and 107, all new to me—plus two occasionally recorded sonatas: R. 53 for oboe, R. 83 for violin and cello, both with continuo. The almost tangibly "present" players all are deft, but bassoonist Kenneth Munday and harpsichordist Owen Burdick project especially engaging tonal personalities.

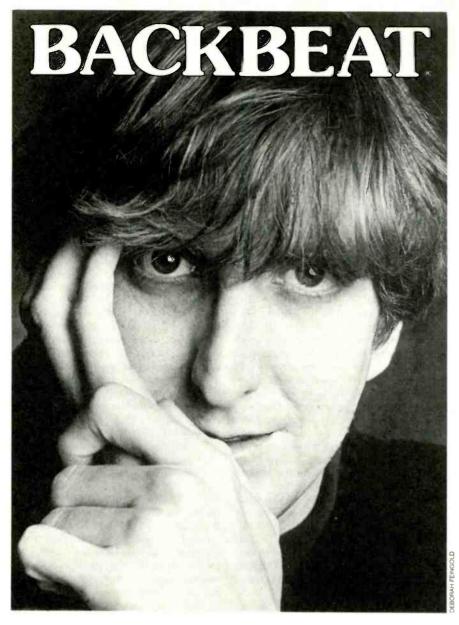
Open Reels. Audio technology at an extreme stretch can achieve a kind of super-realism—sound in excelsis, as it were—of awesomely palpable presence. For the specialized study of timbres, nothing can be more illuminating than some of the astounding programs (boasting real-

time duplication and available in variously encoded cassette and reel formats) from Direct-to-Tape Recordings (14 Station Ave., Haddon Heights, N.J. 08035). I've never heard "realer" harp tones than in the digitally recorded "Concert Harp" recital (DTR 8301, \$12) by Jude Mollenhaur, a pupil of the late great Carlos Salzédo. She plays (on a Salzédo instrument) mostly his little pieces and arrangements, of scant musical interest but inexhaustible tonal charm. Eileen Grycky's and Christiaan Taggart's "Romantic Music for Flute and Guitar" (DTR 8315, \$13) is slightly less appealing, but its mostly novel works (by Luigi Legnani, Marinus de Jong, and Benjamin Godard) are enhanced by a sparklingly "live" acoustical ambience. The one analog recording here-Thomas Murray's Trinity Church (Boston) organ derangements of pops-orchestral favorites-is, if anything, even more stupendous technologically, and thus all the more an aesthetic travesty (SK 277, \$13).

Titillating as these audiodisiacs may be, I soon yearn for more substantial musical satisfactions, such as those in the first reel-taping in many years of Smetana's Má Vlast (Musical Heritage/Barclay-Crocker double-play MHS 4495, \$16.95) and the latest volume in the Fitzwilliam ensemble's series of complete Shostakovich String Quartets (Oiseau Lyre/B-C LOL 28, \$9.95). Zdeněk Košler is no Václav Talich, and his Slovak Philharmonic not the most refined orchestra, but their Czech cycle has the right accents and its 1977 Opus recording is gleamingly clear. Furthermore, Shostakovich's Quartets Nos. 3 and 11 are as profoundly moving as those in the four earlier reel issues (two more are still to come)

Other current reels from Barclay-Crocker (313 Mill St., Poughkeepsie, N.Y. 12601) are programs I've praised earlier in cassette editions: Pro Arte's digitally recorded Odeon Trio versions of the Dvořák Second and Fourth (Dumky) Trios (PRO 0130, \$9.95) and the two great Schubert Piano Trios (PRO 0202 double-play, \$18.95). Also Vols. I and II of the incomparable Academy of Ancient Music period instrument Mozart Symphonies and Sinfonias (Oiseau Lyre/B-C LOL D 167D-3 and D 168D-3, \$27.95 each).

Hard as it may be for nonreelists to believe, all these sound better than ever in reel format, which also eliminates some of the inconvenient turnovers in the two Schubert cassettes and the three-cassette Mozart collections.



## A Musician for Life

T-Bone Burnett was The Next Big Thing in 1983. Then, suddenly, no record contract.

by Samuel Graham

"THIS IS A NEW KIND of interview," says T-Bone Burnett. "I'm only gonna use two words: swingin' and cool. So if you ask me what I've been doing, I'll say I've just been swingin'." Burnett is a little tired of talking

to the press, and he has a right to feel that dentally failed to renew his recording contract. Bonnie Raitt and Jonathan Richman

way. Three excellent releases in three years earned this musician the Songwriter of the Year award in the national Rolling Stone Critics' Poll last winter. The same week that news appeared, Warner Bros. coinci-

have also been dropped by the label recently, though in T-Bone's case the decision was particularly incongruous.

But Joseph Henry "T-Bone" Burnett has been doing a good deal more lately than swingin' and being cool. He has toured almost incessantly as a solo act, including several dates with Elvis Costello. As a producer, Burnett is working with Los Lobos. a superb Mexican-American band from Los Angeles, on their second album together. He's also writing songs and developing a film score.

So far, however, T-Bone's adventures as a recording artist have not been the stuff of which dreams are made. At thirty-six, Burnett has been playing the record game for nearly 20 years. A native of Fort Worth, Texas, he grew up on a diet of local country and r&b, from Willie Nelson to Jimmy Reed. He learned to play guitar when he was ten years old, worked in various bands. and by the time he was seventeen co-owned Clifford Herring Sound, a Fort Worth studio noted for such pop classics as Hey Paula and The Last Kiss. "I pimped to buy it." he deadpans. "Actually, you didn't need that much money to buy a studio. And you didn't need much experience to be an engineer-it was just at the beginning of the technological boom. I went in there and started plugging things in. I spent days and days experimenting, making horrible records.'

Burnett kept on producing and engineering in Fort Worth, working with Delbert McClinton, Lou Ann Barton. Betty Buckley, and others; he also had his own B-52 Band (no, not those B-52's). But by the mid-Seventies, he'd left Texas far behind for the greener pastures of Los Angeles and New York. In '76, Burnett was playing with longtime Bob Dylan cohort Bobby Neuwirth when Dylan himself showed up and invited the band to join his Rolling Thunder Revue. "It was my first weekly paycheck," says T-Bone. "and the first time I'd ever gone out on the road for six or eight weeks at a stretch." It was also the period of Dylan's much-publicized conversion to Christianity, an event in which Burnett was said to have played a significant part.

With two other Rolling Thunder members, Steven Soles and David Mansfield, Burnett went on to form the Alpha Band and signed with Arista, an arrangement he later called "a marriage made in Forest Lawn." Sometimes brilliant, sometimes merely obscure, their three albums for the label failed to sell, despite considerable critical acclaim.

That same pattern has continued into Burnett's solo career. "Truth Decay" is a rare combination of brains and brawn, wit and insight-smart music that also rocks. But the album suffered from poor distribution. That wasn't a problem for "Trap Door" or "Proof Through the Night," but despite some fine songs, guest appearances

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by Pete Townshend, Richard Thompson, Ry Cooder, and others, those records didn't sell much either. Somewhat bloodied but unbowed. Burnett is now laying low, plotting his next move in the vinyl wars.

Backbeat: How's life without an album contract?

Burnett: Well, there're a few offers. I'm listening to everybody . . . I've learned a lot. I have some idea now of what I've done, and what I've failed to do. I'm learning how to be generous and humorous onstage; my records come off very serious and severe, and I'm not really like that.

Backbeat: You're not in a hurry to record again.

Burnett: I don't think there is any hurry. Backbeat: Is that a change in attitude?

Burnett: Not really. I've been that way my whole life. At first I was terrified of recording, so I wasn't in a hurry. Now I'm just trying to take considered action.

Backbeat: It was ironic that you were named Rolling Stone's top songwriter the same week your contract came to an end. Burnett: That's the publicity genius of Warner Bros., you know. . . . I really love their people, they're decent. There is a touch of irony in what I just said, but I think they want to see me do well. Leaving was pretty much a mutual decision.

Backbeat: Perhaps you didn't see eye to

Burnett: They helped me tremendously. But they need a different record right now than I'm prepared to make.

Backbeat: What do you think of "Trap Door" and "Proof Through the Night"? Burnett: The production on "Proof" got overblown. Live, Hefner and Disney is very funny; on the record it sounds a little Moody Blues-ish.

Backbeat: I agree. The demos I heard of Pressure and Baby Fall Down had more impact stripped-down, almost like rockabilly; they reminded me of "Truth Decay.

Burnett: Yeah, they got overproduced. It's my fault, ultimately, for letting it get past me. But at the time, I was preoccupied with singing well.

Backbeat: Who's Jeff Eyrich?

Burnett: I don't know.

Backbeat: Didn't he produce "Proof"? Burnett: Yeah. . . . Uh, he did Million Miles Away by the Plimsouls. He's okay. Backbeat: Why didn't you act as producer?

Burnett: The deal we had with Glyn Johns

fell through, but we already had the musicians booked in England, and if I hadn't gone into the studio, the record wouldn't have come out until this year. So Eyrich was there, and my managers said, "Try this guy." I wasn't happy about it, but it wasn't anyone's fault.

Backbeat: Did you want to be on your

**Burnett:** No, I wanted a producer, really

bad, so I could just play and sing. But that's a hard person to find, especially since producing is primarily what I do.

Backbeat: Do you like "Trap Door" better than "Proof"?

Burnett: I don't know. . . . I listened to "Truth Decay" two or three weeks ago; I like that. I think the next one will be similar, in that I'm gonna try to do it inexpensively and quickly, with few musicians.

There's probably one really good song on every record-Shut It Tight (on "Proof Through the Night"); Power of Love and I'm Coming Home (both on "Truth Decay"); and Trap Door. There isn't a really bad song in the lot. But those three records were pretty much written at the same time, and they're all about the same thing. The new songs are a lot more positive and funny, and they also have a lot to do with what I've learned about communicating from the last couple of years of performing. The studio's such an insular place.

Backbeat: When "Proof" came out, you were called "the quintessential artist of the Eighties"; another quote from the press said you were like Dylan in his "John Wes-

#### **Selected Discography**

T-BONE BURNETT

Truth Decay. Takoma TAK 7080; 1980. Trap Door. Warner Bros. 23691-1; 1982 (EP)

Proof Through the Night. Warner Bros. 23921-1; 1983.

With BOB DYLAN Hard Rain. Columbia 34349; 1976.

With THE ALPHA BAND The Alpha Band. Arista AB 4102; 1976. Spark in the Dark. Arista AB 4145;

Statue Makers of Hollywood. Arista AB 4179; 1978.

ley Harding" period. Those claims must have been pretty hard to live up to.

Burnett: I don't think all that stuff matters much. What makes a difference is if the music is really good and generous.

Backbeat: Why do you suppose your records failed to connect with a larger public?

**Burnett:** What I'm doing and talking about is not part of a trend. It's not mass-popularity music. There aren't a lot of eight-yearolds who are gonna understand what I'm talking about in Trap Door. The audience is growing, but slowly, person to person.

Backbeat: Is it also possible that, to the people who did understand, you were a bit preachy, because you wrote so many pointed, sarcastic commentaries?

Burnett: Maybe. I don't think of them that way, but people probably have some preconceptions about me. I know that any discussion of morality begins with oneself that's about all I'll say.

Backbeat: Well, let me put it this way. On "Truth Decay," you had House of Mirrors, a talking blues in which you identified what you thought were basic falsehoods about the way some people live, the sheep mentality and all.

Burnett: That song's very funny, too.

Backbeat: It is, but two records later, The Sixties says the same sort of thing. Hefner and Disney is also fairly high-minded. As a listener, I got tired of that.

Burnett: As I said, they're all basically the same album, starting with Quicksand and ending with Shut It Tight. I know their spirit is benevolent. They're for the individual; their goal is to encourage the individual to go on. It is a lot to swallow. I do agree with what you're saving; I wrote Shut It Tight because I knew it was time to end that chapter. The new songs are more obviously affirmative; one's called Let's Clean Up This City.

Backbeat: What about the music?

Burnett: It's simpler, and more melodic. Backbeat: I hear you've written something with the band U2 called Having a Wonderful Time, Wish You Were Her. That's an unusual collaboration. How did it happen?

**Burnett:** We were staying in the same hotel and we ran into each other in the bar. [U2 vocalist Bono is a great guy, and an amazing rock and roll singer. I don't know who'll record that, although it's on a real standard subject—pretty broken-hearted. It's supposed to be funny, too, but you have to be careful with humor; you start writing novelty songs if you don't watch it. Part of the failure of "Proof Through the Night" was that some of the funny songs were taken too seriously.

Backbeat: Such as?

Burnett: Hefner and Disney, primarily. It is an allegory, but I didn't mean it as an epic. It's just a little song. The Murder Weapon is about the tongue: "It can kill from any distance, but you never see it strike/There isn't any warning, no blinding flash of light. . . . " On the record, people think it's about nuclear weapons or some-

Backbeat: How has playing solo helped you focus yourself?

Burnett: It has forced me to get down to the heart of what I'm doing.

Backbeat: Not to be cynical, but playing solo has its financial benefits.

**Burnett:** That's not cynical, just practical. A lot of people can make money for a year or a few years, but it's the very rare person who can actually be a musician for life. That's what you have to come to grips with. If you are, what's it gonna be? What are you willing to do?

Backbeat: What are you willing to do? Burnett: I think I can continue what I've been doing this year.

Backbeat: Playing solo, and writing? Burnett: Yeah, if worst comes to worst.

HF

## **Reviews**

## Make Mine Monk

Various Artists: That's the Way I Feel Now Hal Willner, producer A&M SP 660 (two discs)

Thelonious Monk died in 1982. Memorial concerts and LPs quickly and rightfully canonized this modern jazz titan as a founding father; but along with Duke Ellington, Charlie Parker, and Miles Davis, Monk deeply affected all postwar pop. Delicately spare melodies that toyed with dissonance and densely clustered, highly emotional harmonic voicings were just two startling revelations of his musical personality; he also incorporated shifting dynamics in his rhythms as effectively as any 20th-century composer.

"That's the Way I Feel Now" (the original working title of the famous Monk's Mood) is a lovingly constructed, generally brilliant two-disc set that brings together a wide spectrum of rock and jazz players and arrangers, who grew up in the '50s and '60s and felt Monk's influence strongly. Two years ago producer Hal Willner (who has been Saturday Night Live's musical coordinator for the past four seasons) was responsible for the success of a similar concept LP, "Amarcord Nino Rota," a tribute to Fellini's longtime musical collaborator by artists ranging from Blondie's Chris Stein to jazz heavy Carla Bley. Willner, a Monk fan since childhood, felt that the tribute concerts he attended "lacked a diversity of musicians," so he decided to record some himself. Donald Fagen, Joe Jackson, guitarist Chris Spedding (who quickly enlisted his friend Peter Frampton), and NRBQ were interested immediately.

Stylistic variation is the album's theme, starting with a short, chiming chorus of trombones arranged by Bruce Fowler on *Thelonious*, followed by a train wreck

For additional reviews of Pop and Jazz music on videodisc and Compact Disc, see New Technologies.



Thelonious Monk inspired everyone from Carla Bley to Joe Jackson to NRBQ (above).

that segues into NRBQ's roadhouse version of Little Rootie Tootie. Pianist Terry Adams is a devout Monk aficionado, and his performances here and on In Walked Bud (with trombonist Roswell Rudd and Monk's longtime rhythm section of bassist John Ore and drummer Frankie Dunlop) alternate close attention to detail with the boogiedown abandon that is NRBO's stock-intrade. The duo of guitarist Steve Kahn and Fagen on synthesizer turns in a pretty, muted performance on Reflections. Fagen's long, thoughtful solo is the kind you always wish he'd take on his own albums but never does. In contrast, Dr. John's rolling, unaccompanied Blue Monk is unadulterated New Orleans funk. Soprano saxophonist Steve Lacy, also a former Monk sideman, is featured on four cuts, but his special affinity for the music, and differences between settings here, justifies his frequencv; his duets with both Elvin Jones and veteran Monk tenor saxophonist Charlie Rouse are spontaneously telepathic.

The two big-band arrangements are particularly stunning—each in its own way, of course. Jackson's approach to 'Round Midnight is lush and impressionistic; strings and woodwinds swirl around his lean, dramatic piano lines. Oliver Nelson appears to be an influence, if Jackson's stark reed voicings and einematic approach to tone color are any indication. Bley's take on Misterioso is a virtual tour-de-force of effects; behind Johnny Griffin's jampacked tenor solo she alternates stop-time passages with leisurely singing horns.

The album's more left-field, rock-ori-

ented collaborations may not go down well with bebop purists; indeed, some cuts are better than others. Spedding's restructuring of *Work* into a hard-rock stomp sets up Frampton's ersatz-flamenco solo nicely; one suspects that Spedding's discovery of his own resonant inner harmonies would have made Monk smile in approval. Todd Rundgren, hearing *Four in One* as a deliberately cheesy, drum-machine shuffle beat, stuffs a sound effects barrage in between the notes of Gary Windo's lurching alto solo, with hilarious results.

Shockabilly, led by New York City avant-garde guitarist Eugene Chadbourne, contributes the controversial *Criss Cross*, which features caterwauling distortion, feedback, and the barest hint of melody. *Ba-Lue-Bolivar-Ba-Lues-Are*, as reshaped by the Detroit production team Was (Not Was), slightly less iconoclastic, revolves around a space-age New Orleans funeral march beat and Sheila Jordan's wafting, ethereal scat-singing.

But if one accepts Willner's premise that "Monk and Miles Davis, as jazz musicians, have had the most far-reaching effect on rock," then even the more bizarre arrangements here can be heard as revealing testaments. "This kind of album allows one to hear such a different aspect of a pop/rock musician," Willner says. "There's just not that pressure to sell a million records." Because he encouraged these pros to pay homage to Monk in their own idioms, "That's the Way I Feel Now" succeeds wonderfully as an album, and as a tribute.

CRISPIN CIOE

Alive!: City Life Helen Keane, producer

Alive! 543 (1000 Navarro Bluff Rd.,

Albion, Calif. 95410)

Toss together heavy doses of scat singing, feminist lyrics rarely heard in the jazz world, and mix into a base of African and Latin polyrhythms. That's Alive!, the Bay Area's jazz collective, whose "City Life," its third offering in seven years, maintains the quintet's claims to eclecticism. But unlike its performances and previous live album, the too-brief cuts on "City Life," all averaging around four minutes, don't permit the instrumentalists to take creative solos, and too often their energetic ensemble playing starts cooking as the song ends.

Despite the group's "politically correct" workstyle of collective arranging and equality for all five core members-Janet Small (keyboards), rhiannon (lead vocals). Barbara Borden (drums). Carolyn Brandy (congas and percussion), Susanne Vincenza (bass and cello)—rhiannon is highlighted here, as exemplified on the winning title track. Her frenetic scatting spree, accelerated by the percussion section. lists the hectic schedule of a modern mother who rushes the kids to school, dashes onto the freeway. puts in a busy day at the office, but still finds time to make love, take a sauna, and listen to Amazons calling. Small's bouncy What Is Life hops along on Borden's sensi-



Small, rhiannon, Borden, Vincenza, and Brandy of Alive!: a collective that works

tive cymbals and a saxophone solo from guest artist Mary Fettig; rhiannon's punchy phrasings against Small's piano accent the upbeat philosophical lyrics.

The Brazilian beats of *Skindo Le Le* are a perfect vehicle for Brandy's and Borden's explosive jamming. But Fettig almost steals the show from them on the instru-

mental Afreaka. And while Small has emerged as a first-rate writer, the ethereal arrangements on her Happy Ending resemble meditation music rather than jazz. Anouman—Lazy Afternoon, the album's other ballad, also suffers from a draggy melody and overly spaced-out vocals. On Diamonds Are Where You Find Them, the



#### BACKBEAT Reviews

collective displays its knack at sliding through a grab bag of styles; this Brandy-Small composition starts with an airy kalimba and classical cello and ends with a funky sax riff.

For those unfamiliar with Alive!, "Call It Jazz," the group's live second album, with its longer instrumental solos and consistently stronger lyrics, might be a better place to begin. But for those already converted to these five musicians, "City Life" is just fine. KATE WALTER

#### John Hicks

John Hicks, producer Theresa TR 119 (1300 Solano Ave., Albany, Calif. 94706)

Pianist John Hicks, a perennial sideman, is beginning to think like a leader. His new LP may not be his first foray on his own, but its unexpected delights make it come off like a new start. This success is attributable as much to what Hicks doesn't do as to what he does

It's the rare mainstream second-stringer who will opt for more than the standard horns plus rhythm lineup in the studio. The chosen material is usually as predictable; a few standards, a couple of blues, and if we're lucky an original or two. Such a familiar setup is no reflection of the final product; the playing can be quite inspired in a comfortable, no-risk sort of way. But when the rules have been deliberately broken, there is a certain payoff.

Through imaginative and thoughtful production, Hicks has been able to transform what could well have been another professional blowing session into a modest event. He avoids both horns and the basic piano-bass-drums rhythm section. Four tracks feature the unusual grouping of piano with vibes (Bobby Hutcherson) and bass (Walter Booker), one tune is a piano duet with wife Olympia Hicks, and the remaining cuts are solo performances. This material avoids the obvious. The Hicks originals and tunes by Hutcherson, Walter Davis. and composer Paul Arslanian complement the selection of a little-played Billy Strayhorn gem, The Star Crossed Lovers, and one standard, That Ole Devil Called Love, which are usually not associated with instrumentalists of Hicks's generation. The novelty of the material generates swinging aggressiveness in everyone's playing; this is chamber jazz that has meat on its bones

Hicks is not an innovative pianist. His influences-a little McCoy Tyner, a bit of Duke Ellington, a lot of Bill Evans-are always apparent in his playing. But his straightforward, unpretentious style sets him apart. He lets the music reveal itself, stating beautiful melodies with an ease that is free of affectation or cluttered embellishments. His ruthlessly driving improvisations are never independent of the compositions; tunes are never mere excuses for

virtuosic display.

Because he is so dependable and adaptable, we tend to take Hicks for granted. Now is the perfect time for that to change; "John Hicks" is the sleeper of this year's ten best jazz albums.

STEVE FUTTERMAN

#### Don Sebesky: Full Cycle

Don Sebesky, producer GNP Crescendo 2164 (8400 Sunset Blvd.. Los Angeles, Calif. 90069)

Along with those of Slide Hampton and Willie Maiden, the compositions and arrangements of trombonist Don Sebesky gave Maynard Ferguson's late '50s band a strong identity. After a year there, however. Sebesky gave up the trombone to devote himself to writing and conducting. With producer Creed Taylor he created "the CTI sound," providing classical and jazzinspired settings for many performers. including Wes Montgomery and George Benson.

Now, at the age of forty-seven, Sebesky is finally fronting a band. His arrangements derive from Gil Evans, but he's much more disciplined-less inclined to let a soloist ramble on into eternity and more concerned with involving the whole ensemble. As a result, he consistently achieves the kind of personal interpretation that Evans's overly laidback attitude tends to dissipate. Sebesky, who now plays electric

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## Percussion Sweet and Bitter

## Reviewed by Steve Futterman

Max Roach: Standard Time Jim Fishel, producer Polygram EmArcy Jazz Series 814 190-1 (two discs)

FEW MAJOR BANDLEADERS have been given more lip service from critics and less archival support from the record industry than drummer Max Roach, who formed two of the most exciting and innovative bands around during that most fertile of jazz eras from 1954 to 1960. Brown-Roach Inc., the cooperative unit he co-led with trumpeter Clifford Brown from 1954 to '56, was the greatest of all hard bop bands; Roach's 1958-60 association with another brilliant trumpeter, Booker Little, produced music that can stand with the post-bop explorations of Miles Davis and Ornette Coleman. Want to hear this stuff? The BRI material is available in this country only through Japanese imports, and Roach's work with Little is either on obscure independent labels or totally out of print.

So my feelings about "Standard Time" are ambivalent. This grab bag of studio outtakes and random selections from previously released but now unavailable albums is a tease—or at best a mixed blessing. Hearing such assorted gems from a golden age only reminds us that the bulk of these treasures, and the most important ones, are out of reach. Finding a lost track from BRI while the "Jordu" LP is still unobtainable on an American label is like discovering a forgotten Chaplin short while The Gold Rush is out of circulation.

This neglect only adds to the obsessive folklore that feeds jazz record buying. "Sure," the rabid collector sneers. "if you think that's great, you should have heard the one that got away." I usually bristle at that cliquish attitude, but in Roach's case it's perfectly justified. Nearly everything he did in the last half-decade of the Fifties is great, and all of it deserves to be heard.

By hooking up with Brown, Roach formed a classic band on his first try.

Steve Futterman is a free-lance writer who contributes regularly to Musician and Record.



Trumpeter Booker Little (left) with bandleader Max Roach in '58: tempered radicalism

Brown had it all: gorgeous tone, effortless execution, and singingly melodic ideas. His playing leaves you with a rush of elation—everything seems to be within his grasp. No musician since Armstrong has been able to coax such radiant joy out of his instrument. Brown was an Olympian talent untouched by hubris. His was the sound of pure confidence.

Playing the hardest hard bop. BRI's favorite and most comfortable tempo was up, way up. Roach took the band's moniker seriously; his drums were part of the front line right alongside the horns. When the music got hot, as it does on Blues Walk (this album's only Brown entry and a previously unreleased outtake), the pace was just ridiculous. But the musicians maintained an inward repose; at full throttle, Brown-Roach Inc. were lyric poetry delivered with the collective force of a Mack truck.

When Brown was killed in a car accident in 1956, the group sound he had helped mold hardened into formula. Certain devices of the original unit—pitting two horns together for climactic effect, occasional forays into waltz time, uptempo renditions of standards and Ellington numbers—all these were retained for Brown's replacement, Kenny Dorham. "Standard Time" devotes the greatest amount of space to this transitional band, whose primary recordings are (need I say it), for the most part, unavailable.

One of jazz's great underdogs, Dorham did an admirable job of coping with a no-win deal, ultimately emerging as one of the finest stylists of his generation. "Standard Time" helps chart this development. Knowing he couldn't touch Brown's chops, Dorham concentrated on the more important lesson of the master—form and substance. His solos on Mr. X, Minor Trouble, and Valse Hot, while never approaching the magnificent architecture of Brown's, are still ingeniously crafted. Dorham's playing is always lean, crisp, and convincing, traits

that remain a high premium in the genre.

The Brown mold was finally broken in 1958 when Roach put together a new band whose tempered radicalism mirrored the changes that were taking place as the Fifties ended. Although this music is now no more than a historical footnote, it incorporated some of the most cogent aspects of the piano-less freedom and tonal experimentation of Coleman, and the modal expansions of Davis. By hiring young musicians like Little and changing the instrumentation (he replaced the piano with a tuba, for example). Roach was able to completely revamp his group's sound and identity. Of the two cuts presented here, only Monk's Bemsha Swing gives an indication of the inventiveness of this band. Principal soloist and occasional composer/arranger, Little is a giant whose best music still goes unheard. He took Brown's bop technique and drive and brought it into the post-bop era. His use of tonal manipulation, off-center time, and dissonant orchestral voicings—as a player and a composer—sounds daring even today (that is, if you can locate his records). But what immediately and irrevocably sets him apart from Brown is his profound sorrow. Even at his most effusive moments, Little's sound is disturbing in its dire intensity. With hindsight it could be called foreshadowing: Three years after joining Roach, Little died of uremia at age twenty-four.

"Standard Time" hints at these various bands, which is reason enough to buy it. For the Roach novice, the album makes a fine introduction to great music that, because of its unavailability, has already acquired iconic status. For collectors, the oddities (an entire side of intense but overlong jamming) and randomness of the selections (the drummers' battle Rich versus Roach) are anything but a drawback. Still, the whole thing seems a bit self-defeating. Without access to this album's sources, "Standard Time" is like an addendum to nothing.

piano, uses the instrument judiciously, for added color.

On this debut he has chosen a halfdozen standards by six stars: Miles Davis's All Blues, John Lewis's Django. Bud Powell's Un Poco Loco, Bill Evans's Waltz for Debbie, Freddie Hubbard's Intrepid Fox, and John Coltrane's Naima-managing, miraculously, to improve on even the best of these in their original form. All Blues becomes an even more compelling mood piece; various instrumental lines drift and float like smoke rings, sometimes resolving in solos. Sebesky hears Django as a mournful Spanish theme, using Lew Soloff's trumpet. Alex Foster's flute, and a doleful guitar played by his son. Ken, to bring out the full sense of sadness. On the other hand, Un Poco Loco, a crisply tumultuous series of solos and challenges accented by Jimmy Madison's drumming, enlarges on Powell's familiar solo. JOHN, S. WILSON

Pop

Marcia Ball: Soulful Dress Denny Bruce, producer

Rounder 3078

What makes Marcia Ball so atypical as a soul woman is her Texas roadhouse-bred matter-of-factness. She works in saloons singing the blues, r&b, her own songs and

others', and she does this very well. But her style is loping, not charging; even at her beltingest she retains a softened, laidback. hot-night laziness. Without obvious diaphragmatic pressure, her hardest notes are miles away from the Sturm-und-Drang of blues-rocker Janis Joplin, though Ball's crooners are punchier and more energetic (and more believable) than the light and feathery insinuations of Bonnie Raitt, to whom she bears a slight vocal resemblance. On "Soulful Dress," which treads the fine line between hot and harmless, we find sensuality (Soulful Dress, Soul on Fire), betrayal (Jailbird, Made Your Move Too Soon), and promises (My Mind's Made Up)—a more than satisfactory blend for a debut blues LP.

But something is missing. It's not the genre's sexy blues undercurrent. Where many women aim for the coy and arch to get sexuality across, Ball's deft phrasing and midrange soprano convey credible passion. And it's not a lack of originality. Ball's version of Jailbird, with its promise "I'll never hit another man." and her decision to choose only one lover in the self-penned My Mind's Made Up, are inventive twists. What makes this singer utterly real, and what will probably undo her, is her straightforward simplicity. Joplin succeeded as caricature, Raitt succeeds as nice-girl-goesnaughty. Marcia Ball sings and plays fullfledged blues-articulate, thoughtful, and

heartfelt. She's no fantasy. And she just may be too honest to stick.

LESLIE BERMAN

Detroit Gold, Vols. 1 and 2

Ollie McLaughlin & others, producers Solid Smoke SS 8021 & 8022 (P.O. Box 22372, San Francisco, Calif. 94122)

In any city that supports an active local scene, there will be artists not quite consistent enough to make it onto the chief label, but capable of delivering a few strong records. They usually wind up with a smaller company. Thus, Memphis rockabillys unwanted by Sun went to Meteor; a decade later, soul artists who couldn't cut it with Stax-Volt usually worked for Goldwax. In Detroit, during the Sixties heyday of Motown, they went to three labels run by Ollie McLaughlin: Karen, Carla, and Moira. The two volumes of "Detroit Gold" gather the best of their efforts. There's enough here for one dynamite set (à la Meteor's "Hillbilly Bop, Memphis Style"), but spread over two albums, the pickings are slimmer.

What's immediately obvious is the clout Motown itself exerted, inevitably, over any recording artist. Though some of these sides also show the influence of Curtis Mayfield's Chicago soul sound, a cut like Belita Woods's My Magic Corner (Vol. 1), with its rumbling bass intro set against



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#### BACKBEAT Reviews

horns playing a generic Motown chart, gives away the record's origins immediately. So does the tambourine underpinning of the Firestones' Buy Now and Pay Later (Vol. 1) or the Marvin Gaye homage of Jimmy Delphis's Almost (Vol. 2). Still other cuts bear a resemblance to non-Motown Detroit artists, such as Little Willie John (the Volumes' Ain't Gonna Give You Up. Vol. 2) and Wilson Pickett (Delphis's Mrs. Percy, Vol. 2). Overall, the arrangements tend to be sparser than Motown's-probably as much a matter of economics as aesthetic choice—and more rhythmically variegated.

Volume 1 gets the nod chiefly by virtue of Barbara Lewis's Hello Stranger, the most wistful girl-group ballad by a solo singer this side of Carla Thomas's Gee Whiz, and Deon Jackson's Love Makes the World Go 'Round, a sweet Sam Cookemeets-Motown derivative. Jackson also reveals a marked debt to Smokey Robinson on Ooh Baby, while Woods's three cuts show off an unfettered gospel voice.

Too much material from Delphis, a singer somewhere between Gaye and Jr. Walker who had no idea what to do with his own raw voice, weakens Vol. 2, and the belabored M-C Twine by Matt Lucas, the sole white artist represented, doesn't help, either. But it's partially redeemed by the inclusion of the Capitols' Cool Jerk, a trash-dance classic. "Detroit Gold" may not offer the constant revelations of a comparable Motown anthology, but the two albums have their share of small and sustaining pleasures. It's just a matter of weeding them out. JOHN MORTHLAND

#### The Dream Syndicate: Medicine Show Sandy Pearlman, producer A&M SP 6-4990

This can't be the same Dream Syndicate that emerged a couple years back playing obvious Velvet Underground derivations with drive, abandon, and guilelessness while bands all around them were failing with the same ploy. "Medicine Show" sounds more like a studio band shaped by an outsider, producer Sandy Pearlman. And if their version of bargain-basement L.A. psychedelia is still harsher than most, this album remains very much a corporate product, with the urge for radio airplay subsuming the music.

Telltale signs are everywhere. Bassist Kendra Smith, whose murky undertow had more to do with the group's sound than a bass line usually does, is gone, replaced by the more precise timekeeper David Provost. This cuts deeply into the momentum Dream Syndicate always built up in the studio as well as live, which not only diminishes our sense of them as a group, but puts too much pressure on lead guitarist Karl Precoda. His three basic solos sound as though they've been dropped in almost at random to fill space, because most of these tunes go on

way too long. The nadir comes on the 8:48 John Coltrane Stereo Blues, which is full of false buildups and crescendos intended to manufacture excitement not inherent in the song or arrangement. Session keyboard man Tom Zvoncheck, primarily a noodling technician, is also called on for solos; his break on Armed With an Empty Gun actually takes the meat out of the music. The background vocals add nothing to lead singer Steve Wynn's patented Lou Reed, Mick Jagger, or Jim Morrison imitations (which didn't used to seem such self-parody).

The band doesn't exactly help itself. either. Burn and Merritville are portentous mumbo-jumbo, and Dream Syndicate's preoccupation with gun lore and other symbols of rural American life seems contrived. Only Still Holding On to You and Daddy's Girl survive as songs. But these guys weren't great songwriters to begin with; they got by on energy and commitment, qualities that appear to have been muffled by business pressures. JOHN MORTHLAND



Linton Kwesi Johnson never forgets

Linton Kwesi Johnson: Making History Linton Kwesi Johnson & Dennis Bovell, producers. Mango MLPS 9770 (14 E. 4th St., New York, N.Y. 10012)

What with the conventions and the stumping, this is shaping up as the Summer of Talk. How opportune, then, that Linton Kwesi Johnson's "Making History" should come out now: An album of monologues that never feel like speeches, it's all unforgettable talk. A second-generation Jamaican journalist and activist in England, Johnson is, distantly, reggae's Studs Terkel. He grew up working-class and then he changed, but he has never forgotten-or stopped reminding anyone who'll listenabout working-class problems. Johnson doesn't theorize so much as mobilize. Then he jams on it, repeatedly, to skewed reggae backings as muscular as the street tussles he writes about.

Johnson hasn't come close to match-

ing his militant, piercing "Dread Beat an" Blood," released in the States in 1982. But there's not a weak cut on "Making History''—he talks with more feeling, more rhythm, and more sense than most singers know about. He never raises his boggy. impersonal voice; it has the gravity (though not the deceptive clarity) of a BBC announcer. Johnson's broadcasts are the kind of current events that BBC declines to cover; the title cut, for instance, reveals the lie of the official British explanation for recent black and Asian riots. Di Eagle an' Di Bear concerns the plight of Third World people too busy worrying about food to fight against the arms race.

The band behind Johnson usually supports its leader, reggae crooner Dennis Bovell, but Johnson takes it places Bovell has never seen. And he takes it places reggae rarely goes: There's up-front blues on Wat About Di Workin' Class?, even a reference to Italian movie music in Reggae Fi

Rodni.

There has been a tsunami of good talk lately, none of it generating from the campaign trail: the slick-schmooze of the New York rappers on these shores and a wave of dub poets revolutionizing reggae in Jamaica. But the original is still the best. Johnson's too much of a left scholar, and too damned good a poet, to claim he's just another face in the street. And yet, there is his voice: deliberate and burdened, as unindividual as a complaint from a crowd. That hardened, resolute voice is "Making History" s greatest success.

Bruce Springsteen: Born in the U.S.A. Bruce Springsteen, Jon Landau, Chuck Plotkin, & Steve Van Zandt, producers. Columbia QC 38653

On "Nebraska," his recorded-at-home 1982 solo LP, Bruce Springsteen stripped away both myth and melody to make an album that was stark and unremittingly sad. While it didn't quite succeed on its own terms-his bare-bones narratives were more depressing than cathartic-"Nebraska" marked a crucial break from Springsteen's pop-operatic past. He seemed to have grown weary of his rock-as-redemption fables and larger-than-life image; unlike the average star, he tried to be selfeffacing, a demigod wanting only to be a regular guy. He jumped off his pedestal by flinging his version of life in the face of his fans as if it were a bucket of cold water.

As "Born in the U.S.A." proves, that album was a turning point, not merely a pause, in his career. No longer the romantic renegade. Springsteen reapproaches rock with a folksinger's storytelling power and just the right distance from the glory days of his long-term adolescence. What links his work old and new is the well-muscled playing of the E Street Band, which transforms these hard-luck tales of blue-collar life into bracing, full-blown drama that is grand



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#### BACKBEAT Reviews

instead of grandiose. Springsteen's anger is stinging (on the thunderous title track). his humor rollicking (on Darlington County). his sense of personal regret palpable (on Bobby Jean, a poignant, veiled message to ex-band member Steve Van Zandt)-and the pain accumulated here is ultimately exorcised. As Springsteen points out, dancing in the dark has its therapeutic effects.

Ironically, now that he has captured the voice of the common man, the renewed vigor of "Born in the U.S.A." might turn the Boss into an across-the-board pop star. No sweat, though. Think of it this way: one of us made good. MICHAEL HILL



Little Steven: Big Bruce wasn't enough.

Little Steven: Voice of America Little Steven, producer EMI America ST 17120

On "Voice of America," Little Stevena.k.a. "Miami" Steve Van Zandt-moves off the streets and into the jungle. "Men Without Women" was an elegiac ode to his urban roots and the redemptive qualities of rock and roll; "Voice" is a political call to arms. Unlike his former boss, Bruce Springsteen, Van Zandt writes about groups rather than individuals, direct issues instead of metaphorical situations. "America" for Van Zandt spans both Latin and Northern regions; his new songs are explicit attacks on threats of fascism, terrorism, and impending war that know no boundaries.

With its ten sober, anthemic flagwavers, whose titles include Justice, Among the Believers, and I Am a Patriot, "Voice of America" may bring to mind the ranting pontifications of the Clash at their worst. Fear not, "Voice" is no "Sandinista!" Van Zandt escapes self-righteousness (Continued on page 87)

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#### **BACKBEAT REVIEWS**

(Continued from page 84)

and diffuse humanism by exposing his soul, not some book of slogans. An unembarrassed idealist who, at the same time, is filled with self-doubt and failed expectations, Van Zandt is a revolutionary who hasn't lost touch with his frailty and humanity. "If you are a fighter," he asks his rebellious lover in *Out of the Darkness*, "hold me a little bit tighter."

The sound also reflects Van Zandt's new defensive stance. "Men Without Women" was the apotheosis of the tough but elegant r&b that he crafted for Southside Johnny and the Jukes; "Voice" is loud, bolting hard rock. He has dropped the horns and put new emphasis on guitars and percussion, having memories of both the Jukes and Springsteen far behind. If his sound is reminiscent of anyone, it's the Rolling Stones of last year's "Undercover." Besides their similar themes, both albums share a metallic chordal texture meshed with cutting Latin-funk rhythms. Because of the thrust of his band's attack, Van Zandt is able to turn his serviceable voice into a real means of expression. matching their roar with his own unbridled passion.

With the concurrent release of Springsteen's "Born in the U.S.A.," "Voice" might get buried, which would be too bad. In any of his incarnations, Van Zandt is a compelling individualist who demands to be taken seriously. This album and its message are to be avoided at your own risk.

STEVE FUTTERMAN

Johnny Winter: Guitar Slinger Johnny Winter, Bruce Iglauer. & Dick Shurman, producers

Alligator AL 4735 (Box 60234, Chicago, Ill. 60660)

On the aptly titled "Guitar Slinger." Johnny Winter comes out looking for a fight, laying down guitar solos like rows of barbed wire and daring anybody to cross

them. "It's my life, baby/Let me live it like I please," he announces in a defiant growl. Now on an independent Chicago label and backed by some of the Windy City's finest players, Winter is completely in his element.

Of all the blues-influenced guitarists who emerged as rock stars in the late '60s and early '70s, Winter stuck closest to the foundations: to Delta, Texas, and Chicago blues. Although he made some rowdy, abrasive rock, he never came up with his "Layla," his "Electric Ladyland." an album that took off from the blues but spun in a personal orbit. In a spotty career, his most notable achievement was probably his work as producer of the late Muddy Waters's final batch of LPs, beginning with "Hard Again."

"Guitar Slinger" may have been inspired by the success of Stevie Ray Vaughan's 1983 "Texas Flood," which revitalized the blues trio format. Of these ten unfamiliar but classically styled songs, Earl King's Trick Bag, a sly commentary on domestic one-upmanship, may be the best known, but Kiss Tomorrow Goodbye is the real find, with a chord progression that has graced countless soul numbers. The album is designed as a guitar handbook: some Elmore Jamesian slide playing, some Texas shuffle, some dirty Chicago howling' and tumblin'. (it's missing Delta blues, but there's plenty of that on the LP Winter recently produced for harmonica player Sonny Terry, "Whoopin'.")

Although thematically "Guitar Slinger" treads on reactionary ground when it comes to male-female, um, relationships (murder is actually threatened on *Boot Hill*, for example), the album has the cut-loose spontaneity of a jam session without a jam session's haphazardness; bassist Johnny B. Gayden and drummer Casey Jones know how to keep things anchored. Adhering to the axioms of the blues is a smart move for Winter: Its boundaries prove liberating for him, because this music goes to his core.

MITCHELL COHEN

#### Peter Wolf: Lights Out Michael Jonzun & Peter Wolf, producers. EMI America SJ 17121

The name of the game in pop culture these days is Mix and Match the Genres. Whether it's movies like *Gremlins*, or a record like the Style Council's "My Ever Changing Moods," all past styles are open for use and/or abuse, thrown together to create new and often startling syntheses. This Cuisinart approach may not have seemed the easiest way for Peter Wolf, onetime singer/focal point/wildman for a little band known as J. Geils, to step out into the spotlight as a solo act. No one would have blamed the guy if he had played it safe after being cut loose.

Yet "Lights Out" works so well because it never retreats and hides behind the old forms. The key is the chemistry between Wolf and his coproducer, Jonzun Crew honeho and fellow Bostonian Michael Jonzun. This producer and songwriter/musician challenges Wolf's intuitive feel for most black pop of the postwar years (including the last crucial half-decade) by creating the hottest tracks for the man to howl on. Whether Wolf and Jonzun are scratching behind a flute solo, as in the scorching Oo-Ee-Diddley-Bop, or following that with a heavily synth-textured attempt at Billie Holiday's Gloomy Sunday. the songs use the past to illuminate the present and vice versa; the best numbers the title track, I Need You Tonight, Crazy, Billy Bigtime, Baby Please Don't Let Me Go-almost seem a culmination of what r&b has been pointing to for years.

It should be noted that, with 11 songs totaling over 40 minutes, "Lights Out" loses some of its overall impact; Side 2 does meander a bit. But just imagining how Wolf will reproduce its vibrant quality in concert proves how little he needs Geils to make a great record. "Great Googa-Mooga," cries Wolf in Crazy, "I'm crazy, crazy, that's what I am." We hear you, Pete—go get 'em... WAYNE KING

#### **RUBINSTEIN FEAST**

(Continued from page 62)

The performance with Walter Susskind of Rachmaninoff's Rhapsody on a Theme of Paganini also presents a fascinating contrast when compared to the collaboration less than a decade later with Fritz Reiner, newly reissued by RCA in its .5 series. The first is an extremely effective virtuoso run-through, and quite satisfying on its own terms. But hearing the Chicago version, one realizes afresh just how much Rubinstein must have thought and matured, all at an age when most pianists are only too content to relax and repeat (if possible) former glories. If there is any performance that contradicts the oft repeated charge that the great "Artoor" was slightly superficial

(especially when compared to . . .), try this on for size—and enjoyment. (The playing of the Second Concerto is also fine, if not on the same level as the *Rhapsody*.) RCA's half-speed remastering contributes greatly to making these wonderful past performances seem alive and present, and to making them sound superior to records made decades later.

If your interest has been piqued by any of this, there is something else to anticipate: the publication in the current issue of the Beecham Society magazine, *Le Grand Baton*, of a complete Rubinstein discography by Donald Manildi. If nothing else, it should reveal to any doubters the full extent of Rubinstein's contribution to our musical life. One looks forward to seeing it and to

finding out in detail what might yet remain to be reissued.

To conclude, the best thing one could say about all these discs (and everything else Rubinstein recorded, for that matter) would be to endorse what was expressed by a few of Rubinstein's own words from a 1977 PBS telecast: "There is a certain thing ... which goes out from my emotions-'from the feeling'—if you like to call it. soul...." To that I would add an invitation, again echoing Rubinstein himself: Come and feast, or, as you will, come and sample . . . but, in any case, certainly do conse—to a supreme pianistic celebration, all graciously presided over for our lasting pleasure by the grandest pianist of our time.

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