

Stereo Review

NOVEMBER 1986 ● \$1.95

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Matthew Polk's Awesome Sounding SDA-SRS & SDA-SRS 2



SDA SRS 2
\$995 ea.

SDA SRS
\$1395 ea.

Digital Disc Ready

Matthew Polk, the loudspeaker genius, with his Audio Video Grand Prix winning SDA-SRS and latest technological triumph: the extraordinary SDA-SRS 2, honored with the 1986 CES Design & Engineering Award.

"The Genius of Matthew Polk Has Created Two Awesome Sounding Signature Edition SDAs"

"Spectacular...it is quite an experience"

Stereo Review Magazine

Now the genius of Matthew Polk brings you the awesome sonic performance of the SDA-SRS in a smaller, more moderately priced, but no less extraordinary loudspeaker, the SDA-SRS 2.

Matthew Polk's own dream speakers can now be yours!

Matthew Polk's ultimate dream loudspeaker, the SDA-SRS, won the prestigious Audio Video Grand Prix Speaker of the Year award last year. Stereo Review said "Spectacular...it is quite an experience" and also stated that the SRS was probably the most impressive new speaker at the 1985 Consumer Electronics Show. Thousands of man hours and hundreds of thousands of dollars were spent to produce this ultimate loudspeaker for discerning listeners who seek the absolute state-of-the-art in musical and sonic reproduction.

Matthew Polk has, during the last year, continued to push his creative genius to the limit in order to develop a smaller, more moderately priced Signature Edition SDA incorporating virtually all of the innovations and design features of the SRS without significantly compromising its awesome sonic performance. The extraordinary new SRS 2 is the spectacularly successful result. Music lovers who are privileged to own a pair of either model will share Matthew Polk's pride every time they sit down and enjoy the unparalleled experience of listening to their favorite music through these extraordinary loudspeakers, or when they demonstrate them to their admiring friends.

"Exceptional performance no matter how you look at it"

Stereo Review

Listening to any Polk True Stereo SDA* is a remarkable experience. Listening to either of the Signature Edition SDAs is an awesome revelation. Their extraordinarily lifelike three-dimensional imaging surrounds the listener in 360° panorama of sonic splendor. The awe inspiring bass performance and dynamic range will astound you. Their high definition clarity

*U.S. Patent No. 4,489, 432 and 4,497, 064. Other patents pending.

allows you to hear every detail of the original musical performance; while their exceptionally smooth, natural, low distortion reproduction encourages you to totally indulge and immerse yourself in your favorite recordings for hours on end.

Julian Hirsch of Stereo Review summed it up well in his rave review of the SDA-SRS: "The composite frequency response was exceptional...The SDA system works...The effect can be quite spectacular...We heard the sound to our sides, a full 90° away from the speakers...As good as the SDA feature is, we were even more impressed by the overall quality of the Polk SDA-SRS...The sound is superbly balanced and totally effortless...Exceptional low bass. We have never measured a low bass distortion level as low as that of the SDA-SRS...It is quite an experience! Furthermore, it is not necessary to play the music loud to enjoy the tactile qualities of deep bass...Exceptional performance no matter how you look at it."

The awe-inspiring sonic performance of the SDA-SRS 2 is remarkably similar to that of the SRS. Words alone can not express the experience of listening to these ultimate loudspeaker systems. You simply must hear them for yourself!

"Literally a new dimension in sound"

Stereo Review

Both the SDA-SRS and the SDA-SRS 2 are high efficiency systems of awesome dynamic range and bass capabilities. They both incorporate Polk's patented SDA True Stereo technology which reproduces music with a precise, lifelike three dimensional soundstage which is unequalled and gives you, as Julian Hirsch of Stereo Review said, "literally a new dimension in sound". Each beautifully styled and finished SRS 2 cabinet contains 4 Polk 6½" trilaminate polymer drivers, a planar 15" sub-bass radiator, 2 Polk 1" silver-coil polyamide dome tweeters and a complex, sophisticated isophase crossover system. It is rated to handle 750 watts. The SRS utilizes 8-6½" drivers, a 15" sub-bass radiator, 4 Polk tweeters and an even more complex crossover. It is rated to handle 1000 watts.

Both the SDA-SRS and SRS 2 incorporate: 1.) time compensated, phase-coherent multiple

driver vertical line-source topology for greater clarity, increased coherency, lower distortion, higher power handling, increased dynamic range and more accurate imaging. 2.) a mono-coque cabinet with elaborate bracing and MDF baffle for lower cabinet read-out and lower coloration. 3.) progressive variation of the high frequency high-pass circuitry for point-source

"the best SDAs yet... impressive and worthy of Matt Polk's signature"

High Fidelity Magazine

operation and wide vertical dispersion. 4.) the use of small active drivers in a full complement sub-bass drive configuration coupled to a large 15" sub-bass radiator for extraordinarily tight, quick and three-dimensional mid and upper bass detail combined with low and sub-bass capabilities which are exceptional. The speakers are beautifully finished in oiled oak and walnut.

Other superb sounding Polk speakers from \$85. ea.

No matter what your budget is, there is a superb sounding Polk speaker perfect for you. Polk's incredible sounding/affordably priced Monitor Series loudspeakers start as low as \$85 ea. The breathtaking sonic benefits of Polk's revolutionary True Stereo SDA technology are available in all Polk's SDA loudspeakers which begin as low as \$395. each.

"Our advice is not to buy speakers until you've heard the Polks"

Musician Magazine

The experts agree: Polk speakers sound better! Hear them for yourself. Use the reader service card for more information and visit your nearest Polk dealer today. Your ears will thank you.

polkaudio
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5601 Metro Drive, Baltimore, Md, 21215

CIRCLE NO. 37 ON READER SERVICE CARD

Where to buy Polk Speakers? For your nearest dealer, see page 190.

Matthew Polk's Magnificent Sounding New SDA 2A



SDA 2A
\$499.00 **

Digital Disc Ready

Matthew Polk stands proudly alongside the latest version of his Audio Video Grand Prix Award Winning SDA 2A

"The Magnificent Sounding New True Stereo SDA 2A Again Demonstrates the Genius of Matthew Polk"

This revolutionary speaker is the most extraordinary value in high end audio!

Matthew Polk's magnificent sounding new 3rd generation SDA-2A incorporates many new advances pioneered in his top-of-the-line Signature Edition SRSs. It achieves stunningly life-like musical reproduction which would be remarkable at any price but is simply extraordinary at \$499. each.

Polk's Revolutionary True Stereo SDA Breakthrough

The magnificent sounding new SDA-2A incorporates Polk's revolutionary True Stereo SDA technology. This patented, critically acclaimed, Audio Video Grand Prix Award winning breakthrough is the most important fundamental advance in loudspeaker technology since stereo itself. In fact, the design principles embodied in the SDAs make them the world's first and only True Stereo speakers.

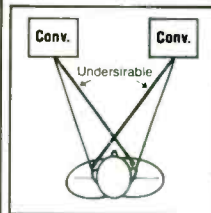
Why do Polk SDAs always sound better than conventional speakers? As illustrated in diagram 1: when conventional loudspeakers are used to reproduce stereo both speakers are heard by both ears which causes a form of acoustic distortion called interaural crosstalk which cuts down stereo separation, obscures detail and interferes with the proper reproduction and perception of imaging, and spaciousness. As illustrated in diagram 2: Polk SDAs are designed so that each speaker is only heard by the one correct ear (i.e. left channel/left ear, right channel/right ear), like headphones. The result is dramatically improved stereo separation, detail and three-dimensional imaging. In order to accomplish this (see diagram 3) each SDA incorporates a separate set of drivers which radiates a special dimensional (difference) signal which cancels the undesirable interaural crosstalk distortion coming from the wrong speaker to the wrong ear. High Fidelity called the results "Mind Boggling".

The Most Extraordinary Value in High End Audio Today

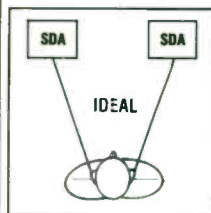
The new SDA-2As, like all the current SDAs, incorporate the latest 3rd generation SDA technology developed for Matthew Polk's Signature Edition SRS and SRS-2 including 1: full complement sub-bass drive for deeper, fuller, tighter and more dynamic bass response; 2: phase coherent time-compensated driver alignment for better focus, lower-coloration smoother, clearer, more coherent midrange and improved front-to-back depth and; 3: bandwidth-optimized dimensional signal for

"The result is always better than would be achieved by conventional speakers..."

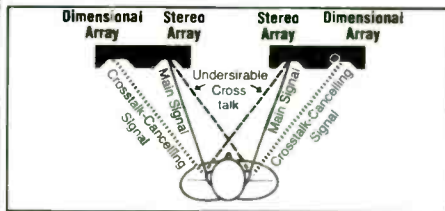
Stereo Review Magazine



Conventional Speakers Reproduce Stereo
When conventional speakers reproduce stereo, both speakers are heard by both ears which reduces stereo separation, obscures detail and interferes with proper imaging.



Only Revolutionary Polk SDAs Reproduce True Stereo
Only Polk SDAs reproduce True Stereo by allowing each speaker and signal (L or R) to be heard by only the correct ear (like headphones) which results in dramatically improved stereo separation, detail and three-dimensional imaging.



How Polk SDAs Achieve True Stereo

Each Polk SDA incorporates a special extra set of drivers which radiates a difference signal which cancels the undesirable signal going from the wrong speaker to the wrong ear. (Interaural crosstalk distortion) resulting in True Stereo reproduction.

smoother high-end and even better soundstage and image. The new SDA-2A is the finest sounding and most technologically advanced speaker ever produced at its extraordinarily modest price. It sounds dramatically better than speakers from other manufacturers that cost 4 times as much and more and is, at \$499 ea., truly the speaker of your dreams at a price you can afford.

"Breathtaking... a new world of hi fi listening." *Stereo Buyers Guide*

The spectacular sonic benefits of SDA technology are dramatic and easily heard by virtually anyone. Reviewers, critical listeners and novices alike are overwhelmed by the magnitude of the sonic improvement achieved

by Polk's SDA technology. One famous reviewer remarked that after hearing the SDAs his wife said that she heard such a dramatic improvement in the sound that she insisted that he replace their current speakers.

"Mindboggling, Astounding, Flabbergasting"

High Fidelity Magazine

All Polk's SDAs, including the new 2As, produce a huge lifelike three dimensional sonic image which will amaze you. You will hear for the first time instruments, ambience and subtle musical nuances which are present on your recordings but masked by the interaural crosstalk distortion produced by conventional speakers. Stereo Review said, "Spectacular... literally a new dimension in the sound... the result is always better than would be achieved by conventional speakers". High Fidelity said, "Mind Boggling... Astounding... Flabbergasting... we have yet to hear any stereo program that doesn't benefit". With SDAs every instrument, vocalist and sound becomes distinct, tangible and alive; allowing you to experience the spine tingling excitement, majesty and pleasure of live music in your own home.

Other Superb Sounding Polks From \$85. to \$1395. each

No matter what your budget is there is a superb sounding Polk speaker perfect for you. Polk's incredible sounding/affordably priced Monitor Series loudspeakers utilize the same basic components as the SDAs and begin as low as \$85. each. The breathtaking sonic benefits of Matthew Polk's revolutionary True Stereo SDA technology are available in 5 SDA models priced from \$395. to \$1395 ea.

"You owe it to yourself to audition them" *High Fidelity*

The experts agree: Polk speakers sound better. Use the reader's service card or write to us for more information. Better yet, visit your nearest Polk dealer today. Your ears will thank you.

polk audio
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5601 Metro Drive, Baltimore, Md. 21215

Where to buy Polk Speakers? For your nearest dealer, see page 190.

CIRCLE NO. 37 ON READER SERVICE CARD

Matthew Polk's Incredible/Affordable Monitors



RTA 12C
\$479.95 ea.

Monitor 10B
\$329.95 ea.

Monitor 5jr
\$129.95 ea.

Monitor 4A
\$84.95 ea.

Monitor 5B
\$189.95 ea.

Monitor 7C
\$249.95 ea.

Digital Disc Ready

Matthew Polk's remarkable Monitors offer state-of-the-art technology and performance usually found only in systems which sell for many times their modest cost.

"Polk Audio's Remarkable Monitors Deliver Incredible Sound/Affordable Price"

"Vastly Superior to the Competition"

Musician Magazine

Polk Audio was founded in 1972 by three Johns Hopkins University graduates, who were dedicated audiophiles with a common dream: superior sound for everyone.

"The affordable dream"

Off the Record

They believed that it was possible to design and manufacture loudspeakers of uncompromising quality which performed as well as the most expensive and exotic loudspeakers available, but in a price range affordable to virtually every music lover. The Monitors are the spectacularly successful result of their quest.

Polk Monitor Series loudspeakers have earned a well deserved reputation for offering state-of-the-art performance and technology usually found in systems which sell for many times their modest cost. In fact, they have been compared in sound quality with speakers which sell for up to \$10,000 a pair.

Matthew Polk has continued to work hard over the years to maintain the Monitor Series' preeminent position as the standard for quality and value in the audio industry. There have been literally thousands of improvements made to the Monitors and the current models incorporate the same high definition silver coil dome tweeters and Trilaminare Polymer drivers used in the SDAs. They are absolutely the best sounding loudspeakers for the money available on the market. It's no wonder Musician Magazine said, "Our advice is not to buy speakers until you hear the Polks." You owe it to yourself.

There's A Polk Monitor Perfect for You

The RTA 12C (\$479.95 ea.) has won the Audio Video Grand Prix Speaker of the Year Award. Its extremely high power handling (500 watts) and efficiency (92db 1 meter 1 watt) result in remarkable dynamic range and bass performance from large or small amplifiers.

The Monitor 10B (\$329.95 ea.) is considered one of the world's best sounding loudspeakers and in the words of Audiogram Magazine, "At the price they're simply a steal." Like the 12, the 10 utilizes dual Polk trilaminare polymer bass midrange drivers coupled to a built-in subwoofer for outstanding bass performance and dynamic range.

The Monitor 7C (\$249.95 ea.) is a smaller, less expensive version of the Monitor 10. Audio Alternatives Magazine said, "It is amazing."

The Monitor 5B (\$189.95 ea.) is similar in design and performance to the 7, however it utilizes an 8" subwoofer rather than a 10".

The Monitor 5jr. (\$129.95 ea.) has been called, "the best sounding speaker of its price in the world, regardless of size."

The Monitor 4A (\$84.95 ea.) was called by Audio Critic Lawrence Johnson, "an all around star of great magnitude." The 4A's low price means that no matter how small your budget, you can afford the incredible sound of Polk.

ever, more importantly, it is the elegant integration of concepts and components which results in the superior sonic performance and value which sets the Monitor Series apart.

"At the price they're simply a steal."

Audiogram Magazine

Audiogram magazine said, "How does Polk do it? We think it is mostly execution. They hear very well and they care." Audiogram is absolutely right! At Polk we take the same care with each and every product we build, whether it is our most or least expensive. We lavish the same lengthy amount of critical listening and tuning on every single Polk speaker because we know that having a limited budget does not necessarily indicate that you have a limited ability to appreciate true musical quality.

You can afford the incredible sound of Polk

The experts agree: Polk speakers sound better! There is a Polk speaker which is perfect to fulfill your sonic dreams at a price you can afford. Visit your nearest Polk dealer today and audition the remarkable Monitors and the revolutionary SDAs. You'll always be glad you bought the best.

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"Absolutely first rate... superior sound at a moderate price."

Stereo Review Magazine

All the Polk Monitors regardless of price offer consistently superb construction and sonic performance. They achieve open boxless, three dimensional imaging surpassed only by the SDAs. In addition dynamic bass performance, lifelike clarity, silky smooth frequency response, ultra wide dispersion, high efficiency and high power handling are all much appreciated hallmarks of all the Polk Monitors. This is in large part due to the fact that they all utilize very similar components and design features. How-

Win a Free Pair of Awesome Sounding Polk Audio SDA SRSs

Win a Pair of SRSs

- Listen to the Polks
- Give this coupon to your Polk dealer
- You may win a \$2800 pair of SRSs

Before Dec. 15, 1986

This is an entry form in a world-wide drawing for a free pair of SDA-SRS loudspeakers. Simply fill out this form and leave it with your participating Polk dealer, after you audition the Polks

Name _____

Address _____

City _____ State _____ County _____ Zip _____

Phone (please include area code) _____

What most impressed you about the Polks?

- Deep, tight, full bass High efficiency and power handling
- Huge sound field and image Crisp, lifelike clarity

Where to buy Polk Speakers? For your nearest dealer, see page 190.

CIRCLE NO. 37 ON READER SERVICE CARD



Get a Great Picture and Spectacular Stereo with Radio Shack's New VCRs

HQ System Plus Built-in Stereo TV Tuners

These new Realistic® VHS decks have the HQ system for sharper video, plus an MTS/SAP tuner for stereo TV and second-language broadcasts. Just connect either model to your stereo system as you would an audio deck.

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Model 41 combines the HQ system and comb filters for absolutely sensational video tape clarity and color accuracy. And VHS Hi-Fi gives you audio performance that rivals compact disc! This VCR will also work as a long-play high-spec audio recorder. It's the heart of a superb audio/video system. Only \$599.95 or as low as \$28 per month*.

VHS Stereo With Dolby® Noise Reduction

Model 31 has features that simplify operation. Auto-function loads a tape, plays it, rewinds, and shuts off. An input selector makes it easy to tape TV/FM simulcasts. You also get a 110-channel cable-ready tuner and a 14-day/5-event timer. Only \$499.95 or as low as \$23 per month*.

In Stock Today at Our Store Near You

Both of these versatile decks include first-class owner's manuals, an important item that many other brands skip on. So come in today. See and hear for yourself the Realistic difference in our best-ever VCRs!

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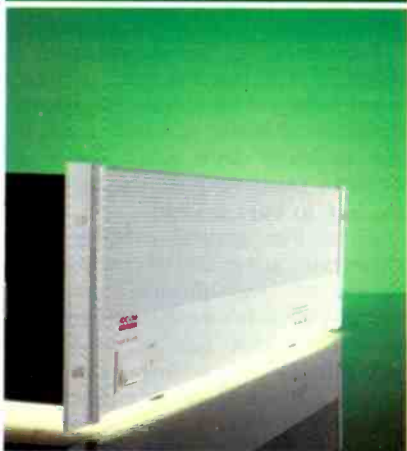
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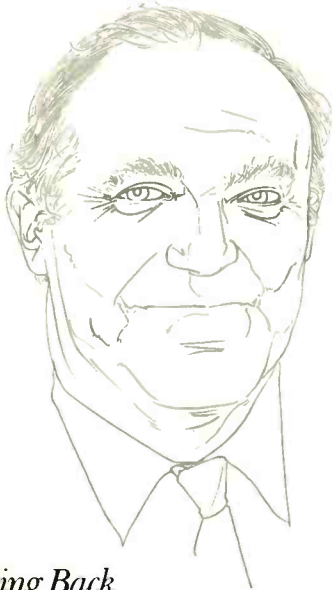
VOL. 51 No. 11 NOVEMBER 1986 (ISSN 0039-1220)

COVER: DESIGN BY SUE LLEWELLYN, PHOTO HALLEY GANGES

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SPEAKING MY PIECE

by William Livingstone



Biting Back

ACCORDING to an ancient journalistic axiom, accounts of dogs biting people are only of routine interest, but when man bites dog, that's news. Those of you who read our letters column regularly know about the bites that disgruntled readers inflict on the editors since we print a cross section of letters that express readers' complaints and displeasure.

Reversing the usual procedure, I hope it will interest you to know what ticks me off about readers. My displeasure is not severe enough for me to leave deep tooth marks or even to snarl very menacingly, but I'd like to bark a little.

First, I'm getting irritated with those who never tire of complaining whenever we publish anything about video. It's hard to understand how they can get so emotional about it. There are simply too many exciting musical experiences available in the video medium for us to ignore it. Video is not a rival that is going to replace audio. As speaker manufacturer Jim Winey, of Magnepan, says, video adds an extra dimension to audio.

For my bedroom I just bought a new TV set that bears the brand of a major manufacturer of audio equipment. The picture on the new set is wonderful, but the sound is shockingly poor. There is extra equipment to help get better quality from

TV sound, but we all need guidance in shopping for it and in making it work properly.

I think it is exciting that a speaker manufacturer of the stature of Bose has teamed up with a major television manufacturer, Zenith, and added the sonic technology of the Acoustic Wave Guide to TV sets. Any effort that makes so big an improvement in TV sound is to be applauded. The result may not satisfy audio purists who want only component video to put beside their state-of-the-art hi-fi equipment, but we will all benefit from anything that makes the general public—and TV broadcasters—more aware of good sound.

Readers who complain about compact discs that do not contain the maximum seventy-odd minutes of music are also becoming wearisome. Few LP's ever contained the full sixty minutes of music that was possible with vinyl records, so why should that be a major consideration for CD's?

With recordings of rock and other forms of popular music the royalty structure is so complicated—what with fees for performers, composers, and lyricists—that the amount of music that can be put on a record in whatever format is often limited by financial considerations. With re-issues it is sometimes possible to put together coherent long programs from a particular artist's past recordings, but with new material programs are planned on artistic grounds, not length for its own sake. You simply cannot buy music by the pound. Would you refuse to read *Pilgrim's Progress* or *Less Than Zero* because they contain fewer words and pages than *Gone with the Wind*? Would you refuse to go to a performance of *La Bohème* because it doesn't last as long as *Parsifal*?

It would take more than a couple of barks from me to set straight the misguided readers who refuse to buy CD's that are derived from analog masters. To persuade them to give first priority to the quality of the music and the performance and to convince them that wonderful CD's can be made from analog recordings we have a whole article on that subject. It's by Gerald Seligman, a writer new to this magazine, and it begins on page 85. □

Stereo Review

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CBS MAGAZINES, A DIVISION OF CBS INC.

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This one works in the studio.



This one plays at home.



Yamaha's newest high-end CD player has a split personality. In its CD-2000M version, with rack-mount adaptors and balanced line outputs with XLR connectors, it fits right into recording studios and broadcast applications.

In the CD-2000 version, we've taken away the adaptors and studio outputs. But none of the performance.

And performance is what the CD-2000M and CD-2000 are all about.

Both have unique vibration-damping feet and special Vibration Damping Circuit Assembly to eliminate vibration-induced modulation which can degrade the audio signal. 3-beam laser pickup with Auto Laser Power Control circuit for precise tracking accuracy. And high-grade double-resolution digital output filters for reference standard reproduction purity.

*Suggested Retail Price.

In addition to all the expected features, both have some unexpected ones. Like variable output level to correctly match the output level with other system components, and act as a remote volume control. Gold-plated connectors. And full-control wireless remotes.

But the most unexpected feature is one found only in Yamaha CD players. And that is our century of experience in making the finest acoustic and electronic musical instruments. It is our musical ears as well as our technological mind that give Yamaha audio equipment a musicality that goes beyond specs. It's a commitment you can hear.

Audition our entire new CD player lineup from as low as \$259* to \$899*.

Yamaha Electronics Corporation, USA, P.O. Box 6660, Buena Park, CA 90622



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CAN YOU FIND THE STEREO



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CIRCLE NO. 73 ON READER SERVICE CARD

Julian Hirsch—25 Years

September's tribute to Julian Hirsch was well deserved. His objectivity is welcome in a field as subjective as hi-fi.

JONAS CHO
Monterey Park, CA

I enjoyed Michael Smolen's article on Julian Hirsch's twenty-five years with STEREO REVIEW. I have always been interested in his reports but had not known we had so much in common. I subscribed to his *Audio League Report* and kept a full set until last month, when I finally discarded them.

Like Mr. Hirsch, I ritually attended the audio fairs, but in Los Angeles. I wish they still had them, though I realize that if the crowds were big then, they would be crushing today. My treasured experiences include meetings with Paul Klipsch, Paul Weathers, and others. I wish I had met Mr. Hirsch as well.

JIM SHERWIN
Hillsborough, CA

Speaker Consumer Ed.

As one of those much-maligned audio salespeople who would sell their souls for a buck, let alone a poor speaker for a good profit, I wish to say "Hurray!" for the articles on speakers in the September issue. I truly enjoyed all three of them: "Speaker Placement," "Crossover Basics," and "How to Buy Loudspeakers." You have done your readers a service and made my job easier.

TERRY S. LINDSAY
Columbus, OH

Crossover Quibbles

I must take exception to a closing comment by Richard Chinn in "Crossover Basics" in September. While the body of the article presented a basic trip down Crossover Lane, the comment that "first-order filters are still being used in inexpensive speakers for reasons of economy" denies the proper use of such filters in highly rated designs.

Loudspeakers produced by Klipsch, Vandersteen, Thiel, our own company, and many others utilize first-order filters to deliver phase coherence, uniform amplitude response, and maximum dynamic range. Perhaps what Mr. Chinn intended to say is that cheap speakers use cheap components, but that is how designers hold down costs in such products. But to imply that the first-order filter is inherently cheap is to deny the work of dedicated engineers who refine the filter to deliver *the most musical signal*. And that's the point of any filter design, isn't it?

ROBERT CONNER
President, Shadow Audio
Omaha, NB



Sammy Hagar, now of Van Halen

The New Van Halen

Mark Peel's September review of Van Halen's new album, "5150," was the worst piece of journalism I've ever had the displeasure of reading.

To correct Mr. Peel on a couple of points: the band's drummer is named Alex Van Halen, not "Andy," and the song *Inside* wasn't about Sammy Hagar's regretting joining Van Halen but his joy in doing so.

Calling Hagar dull and crude is an insult to anyone in the business. It is proven that he is one of the best songwriters and vocalists around. And calling Eddie Van Halen boring is just plain asinine. He is the finest guitarist anywhere, bar none. If the album is so bad, why has it gone Gold and why is it well on the way to Platinum?

THOMAS J. ERATO
Milwaukee, WI

It was refreshing to read Mark Peel's comments about Van Halen's new album in the September issue. It's about time someone pointed out that Van Halen was diminished by the loss of David Lee Roth. Sammy Hagar hasn't the quality of voice, energy, humor, or characterization that Roth does. Roth is far superior as vocalist and showman.

I. FAY
Sudbury, Ontario

Music by the Minute

I could not let your snide nonanswer to Steven B. Gerken's letter in the July issue pass without comment. The fact that "most LP's do not contain the maximum amount of music that could be accommodated" is not directly relevant to the issue of the playing time of CD's. A CD has over 25 percent more playing time available than an LP, and yet it costs twice as much as an LP with the same music. When we see CD's with as little as 30 to 35 minutes of music, we are justified in believing that a ripoff has occurred.

GARY B. NELSON
Pittsburg, CA

See this month's "Speaking My Piece."

New Subscriber

I have to admit, I just bought STEREO REVIEW for the first time in years. I did it so I could get your address to ask a couple of questions about MTS and how to receive it through a cable descrambler. But after I bought the August issue and looked through it, what do you know? Five pages of everything I wanted to know and more. Pretty timely, I think. I read the rest of the pages in a couple of hours and found that ... well, here's my subscription check.

GLENN R. AFTER
New York, NY

Made in Georgia

While reading "Made in the U.S.A." by William Burton, a story that appeared in the July 1986 issue of STEREO REVIEW, I noticed that it failed to include Maxell's Conyers, Georgia, factory. This omission is rather startling, since our factory produces over 750,000 audio cassettes, 1,600,000 videocassettes, and 1,000,000 floppy disks per month. With approximately 230 people on its payroll, Maxell America, Inc., is a major employer in Conyers, a suburban Atlanta community.

GERALD J. GHINELLI
Marketing Manager,
Maxell Consumer Products
Moonachie, NJ

No slight was intended, and we are happy to have this oversight brought to our attention.

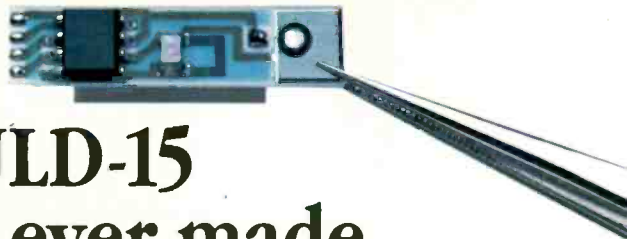
Errata

Alanna Nash's September review of "Signs of the Times" by John McCutcheon and Si Kahn contains a misprint. In a project to bring music to the deaf, the artists toured with *signer* (not *singer*) Susan Freundlich. Freundlich interpreted the music by signing to the audience while McCutcheon and Kahn played and sang.

Also, in the article "Speaker Placement," the word "mode" was incorrectly changed to "node" in three places. In the first sentence of the article author Larry Klein loosely defined "room modes" as "standing waves" and then went on to describe their effect on low-bass performance. Standing waves produce areas of both more and less than normal (or average) acoustic activity. A "node," on the other hand, in acoustic or vibration analysis, is a neutral area where there is *no* movement in the vibrating body.

In August's "Europop," Steve Simels incorrectly attributed the song *Ma belle ami* to the Dutch group the George Baker Selection. The group Tee Set should have been credited with it.

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NEW PRODUCTS

JVC

The JVC XL-M700 CD changer has a standard disc drawer for playing single compact discs but will also accept a magazine loaded with six discs for extended listening. A twenty-digit keypad can be used to access or program any track on any disc. Up to thirty-two tracks can be programmed for playback. A cancel button can remove unwanted tracks from the program. A random-play feature selects tracks from all loaded discs or from all programmed tracks. Headphone output is adjustable. Channel separation at 1,000 Hz is rated at 90 dB, signal-to-noise ratio at 93 dB, and dynamic range at 95 dB. JVC, Dept. SR, 41 Slater Dr., Elmwood Park, NJ 07407.

Circle 120 on reader service card



Sentrek

Unlike most car speakers, the bass-reflex SC line from Sentrek allows the sound wave from the rear of the speaker driver to reinforce the wave from the front, increasing the overall efficiency of the speaker. The SC 500 (shown), SC 480, and SC 360 are all surface-mounting speakers designed for placement on rear decks or in vans. The SC 500 has a flat honeycomb woofer with a 10-ounce magnet, a 2-inch midrange, a 1 1/2-inch tweeter, and a 1-inch super-piezo tweet-

er. Maximum input power is 100 watts.

The SC 480, a two-way speaker with a 10-ounce magnet in its 4-inch woofer and a 3-inch tweeter, is rated for a maximum input of 80 watts. The SC 360, also a two-way speaker, has a 5.3-ounce magnet in its 3-inch woofer and a 2-inch tweeter. Maximum input is 60 watts. Prices per pair: SC 500, \$84.95; SC 480, \$64.95; SC 360, \$39.95. Sentrek, Dept. SR, 751 Racquet Club Dr., Addison, IL 60101.

Circle 121 on reader service card

Nakamichi

Nakamichi's OMS-7A Mk II compact disc player has direct track and index access, programming for up to twenty-four selections by track or index number, remote control, and a headphone jack with separate level control. Both the OMS-7A Mk II and the OMS-5A Mk II (without remote) have skip search and two-speed scan in both directions, repeat play of a programmed sequence or an entire disc, and display of elapsed playing time of the current track or disc or of the time remaining on the disc. Other common features include dual linear 16-bit digital-to-analog converters, quadruple oversampling, six optically coupled data links, three-beam lasers with astigmatic detection, floating disc drives, gold-plated output jacks, and discrete third-order analog Bessel filters. Frequency response for both players is given as 5 to 20,000 Hz ± 0.5 dB. Prices: OMS-7A Mk II, \$1,650; OMS-5A Mk II, \$1,375. Nakamichi, Dept. SR, 19701 S. Vermont Ave., Torrance, CA 90502.

Circle 122 on reader service card



NEW PRODUCTS

Parasound

The PVA-1 audio/video signal processor from Parasound includes circuitry to synthesize stereo from mono sources, reduce noise, equalize, decode, and amplify surround-sound channels, control video input and dubbing, and enhance the video signal. A sixteen-button wireless remote control adjusts the master audio level, surround-sound level, video input, color, hue, and sharpness. The ten-band equalizer section has controls for tape monitoring, dubbing, record equalization, and bypass. Each band can be boosted or attenuated by as much as 12 dB.

The levels of the various frequency bands are displayed on a three-color spectrum analyzer with 100 LED's. Dy-



amic Noise Reduction (DNR) can be switched in to reduce background hiss in any program source. The PVA-1 includes a 25-watt surround-sound amplifier with a separate equalizer having bands centered at 90, 250, and 2,500 Hz. Level and delay time of the rear channels can be adjusted. Price:

\$599.95. Parasound, Dept. SR, 680 Beach St., San Francisco, CA 94109. **Circle 123 on reader service card**

Polk Audio

Polk's compact SDA-CRS+ speaker has a 10-inch passive radiator, two 6½-inch woofers, and a 1-inch dome tweeter. The "True Stereo" speaker has many of the improvements developed for Polk's larger Signature Edition models, such as "full complement sub-bass drive." The phase-coherent driver alignment is said to improve imaging, reduce coloration, smooth high-frequency response, and produce a more coherent midrange. The speakers are recommended for use with amplifiers rated between 10 and 250 watts per channel. Frequency response is given as 35 to 20,000 Hz ± 3 dB. Nominal impedance is 4 ohms. Each speaker measures 20 inches wide, 12½ inches high, and 9½ inches deep. Price: \$790 per pair; optional stands shown, \$89.95 per pair. Polk Audio, Dept. SR, 5601 Metro Dr., Baltimore, MD 21215.

Circle 37 on reader service card



Onkyo

Five audio and two video components can be plugged into Onkyo's Integra TX-108 (shown) and TX-88 AM/FM receivers. The TX-88 is rated for 80 watts per channel rms into 8 ohms, the TX-108 for 100 watts. Audio signals from one source can be mixed with video signals from another, allowing an FM simulcast to be recorded onto a video-cassette. Both receivers can synthesize stereo sound from mono sources. Dynamic Bass Expanders provide bass boosts, adjusted according to the level and frequency of the audio signal, and

extend the bass frequency response. The TX-108 also has a Dynamic Transient Expander designed to restore lost impact and dynamics.

Both receivers have a large main power transformer and a smaller secondary transformer, a design that is said to eliminate voltage fluctuations that can reduce bass impact and stereo image detail. Both also have wireless remote controls that can also operate certain Onkyo turntables and cassette decks. Prices: TX-88, \$650; TX-108, \$800. Onkyo, Dept. SR, 200 Williams Dr., Ramsey, NJ 07446.



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334391

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345827

336396-396390. Billy Joel's Greatest Hits, Volumes 1 & 2. (Counts as 2—Columbia)
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319541. Elton John—Greatest Hits! (MCA)
343715. Vivoldi—Four Seasons. Maazel, members Orch. National de France (Digital—CBS Masterworks)
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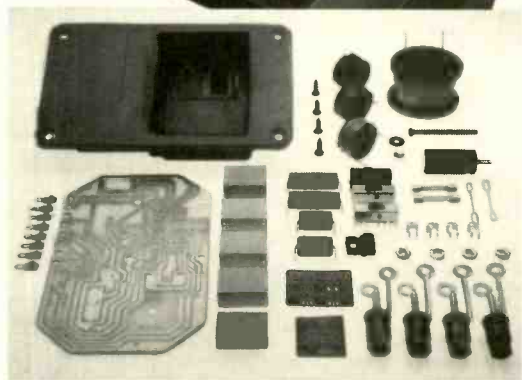
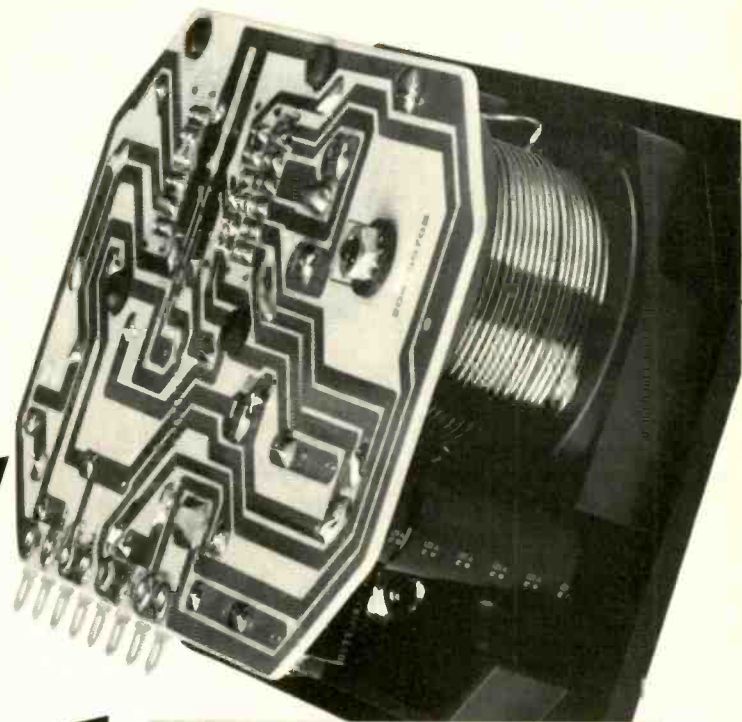
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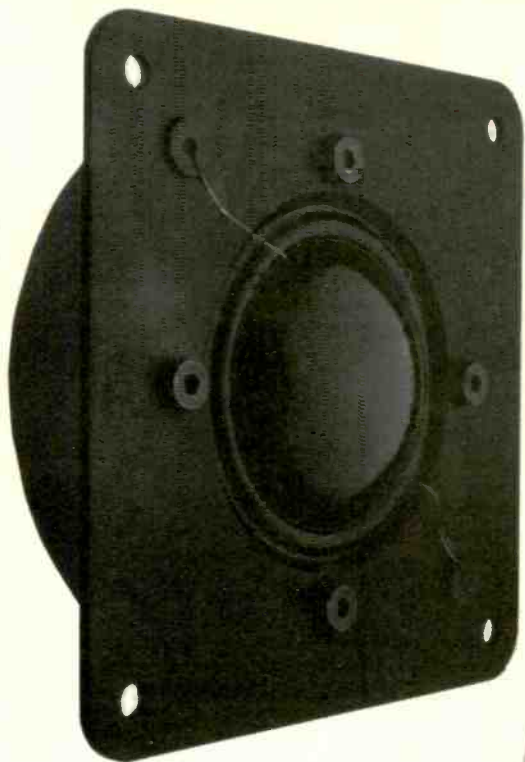
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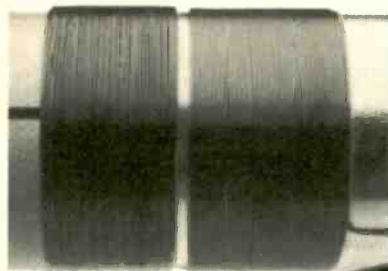
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1983 Magnat develops a patented soft-metal dome tweeter that is far more rigid than soft plastic or textile domes, but doesn't suffer from the high-frequency resonances of other metal domes.

1984 Magnat designs Magnasphere™ omnidirectional drivers. These ball-shaped, baffle-free transducers emanate sound in all directions. Magnasphere speakers receive a record three "Decibel d'honneurs."



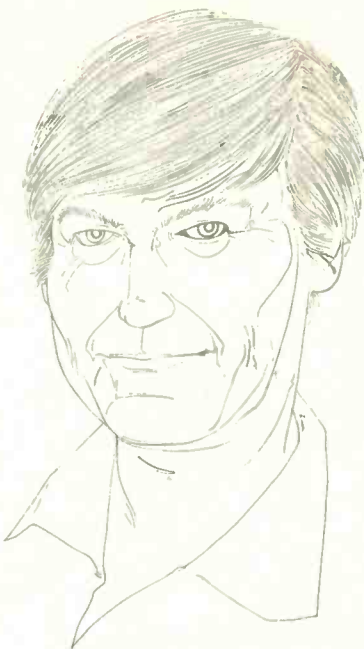
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AUDIO Q. AND A.

by Ian G. Masters



Record Levels

Q Is it true that one song can be recorded at a higher level than another using the same tape, recorder, turntable, and amplifier? I use high-grade chromium-dioxide tape in my cassette deck, and I find that while one song sounds fine at +5 dB, others sound bad even at +3 dB.

STEVE WALL
Chicago, IL

A The success with which you can record something at a high level depends very much on its musical content. The more high-level, high-frequency material there is, the more unforgiving the tape will be. But the meters you use to set levels are dumb—they don't know whether they are indicating bass, which is relatively easy to record, or treble, which can be difficult. A piece of music that has a very prominent kick-drum, say, may be fine at +5 dB, while one with strong cymbals may break up at considerably lower levels. For this reason, recording meters can only give you an approximation of the correct level—your ears have to do the rest.

The type of meters you use can also affect how well you can record certain kinds of music. For example, with conventional VU meters, which give an indication (more or less) of average level, it's relatively simple to match the apparent loudness of two pieces of music, because our impression of volume relates to average level. But such meters react too slowly to give an accurate idea

of momentary peak levels, and it is the peaks that are most likely to result in audible distortion. So it is usual practice to provide a few decibels of "headroom" to accommodate most of the peaks. The theory is that as long as you keep the meter readings just under 0 VU, most of the momentary peaks not shown by the meters will still be in the "safe" region.

With peak-reading meters, only the maximum levels are indicated. This allows you to keep all signals below the point where they may cause undue distortion, but it means that you have to do a fair amount of "earballing" to make sure that two pieces of music will seem to be recorded at the same level. Peak-to-average ratios vary widely from record to record, depending partly on the nature of the music itself and partly on the recording engineers' decisions as to how much compression or limiting to use, so two songs that read the same on the meters can sound as if they're at quite different levels.

For anyone who grew up with VU meters, peak meters can take some getting used to. Not only are the techniques for matching levels different, but the meter readings themselves are different. Because peak indicators show maximum levels, there is no reason to build in headroom. Consequently, even more than with VU meters, levels should not be allowed to creep into the red. To record at +3 or +5 dB is tempting fate—most machines and tapes are not designed for such levels. Keep your meters below the red and match levels by ear. Your recordings should improve tremendously. If you want your music louder, turn it up on playback.

Upgrading for CD's

Q Back in 1959, I purchased a tube amplifier and a pair of 16-ohm speakers. Since then I have carried them all over the world, and they still sound great. Can I use a compact disc player with this system, or should I purchase new equipment?

LEROY T. SNYDER
Pompano Beach, FL

A There's no technical reason not to use a CD player with your system. Simply connect it to a high-level input. As far as your tube amplifier is concerned, it would simply be another audio signal.

There are two other things to consider, however. One is that the dynamic range of a digital signal source is very much wider than any of the sources you are likely to have been using up to now, and the loudest passages may put an undue strain on your amplifier unless you listen only at fairly low levels. Driving the amplifier regularly into clip-

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ping—a very real possibility in this case—could seriously damage your speakers. On the other hand, your speakers are quite efficient, so the drain on your amp may not be too great as long as you don't push it too hard.

The other concern has to do with the quality of the sound itself. Only the most diehard digiphobe would deny that the compact disc represents a major step forward in the reproduction of sound, and it *may* well be that equipment almost three decades old will not be able to take advantage of that quality. Perhaps the best thing for you to do would be to borrow a friend's CD player and see how much improvement in quality you hear. If the difference is minimal, it's probably the fault of the rest of your system, and you should consider updating.

Preventing Print-Through

Q I have hundreds of recorded tapes, both open-reel and cassette. If they have been recorded at the proper level, how often should they be run through in one direction to prevent print-through?

JOHN H. GOERTZ
Spring Valley, CA

A As far as print-through is concerned, winding a tape from one reel to the other is likely to have only minimal curative effect. Print-through is caused by the signal on one layer of the tape slightly magnetizing the adjacent layer in its own image. Winding the tape onto the other reel simply changes what's on adjacent layers, which means that a given signal will only print through part of the time. But if the condition has already occurred, you may just find that a particular quiet passage ends up with *two* unwanted murmurs under it.

In any event, print-through is not really the bane it once was. Almost all consumer recording is done on cassettes, and today's better cassette tape has relatively high coercivity, meaning that it needs a fairly high signal to produce a given level of magnetic flux. Therefore, it's harder for the weak signal on one bit of tape to impress itself on an adjacent layer. The almost universal use of noise-reduction systems lessens the effect even further.

There is one very good reason for winding your tapes through at playback speed, however, although it has nothing to do with print-through. Tapes stored after a fast wind tend to have uneven stresses on them or to have edges that protrude and can become damaged. Both conditions can seriously degrade the tape's performance on subsequent playings. Normal speed tends to be much smoother, which is why many professionals routinely store their tapes

AUDIO Q. AND A.

"tails out" rather than rewinding them before putting them on the shelf.

Bass in the Car

Q I have installed a high-quality stereo system in my car, a hatchback, but I have no bass. I built airtight enclosures for the rear speakers, which helped, but the bottom end still doesn't equal the

rest of the signal. Do you have any other suggestions?

STEVE TRAVIS
Ellenwood, GA

A My first thought is that your rear speakers may be out of phase, which would certainly result in a weak bass response, particularly in an automobile, where the speakers are close

enough to each other for low frequencies to cancel each other out pretty thoroughly. Normally, a phase imbalance would also be associated with some degradation of stereo imaging, but this effect may be offset by your front speakers if they are in phase. One quick phase check is to play a piece of program material with lots of bass and turn the balance control all the way from one channel to the other. If the bass changes appreciably, being greater when the control is at the extreme settings rather than in the middle, you almost certainly have a phasing problem. The cure is simply to reverse the polarity of the connection to one speaker (you might try this anyway if the results of your test with the balance control turn out to be ambiguous).

If phasing is *not* the trouble, it might be that the airtight boxes you built are unsuitable for your speakers, resulting in over-damping. The owner's manual should help here. Or, failing that, drop a line to the manufacturer. It may be a simple matter of different sensitivities between your front and rear speakers, in which case your system's equalizer should be able to correct the situation.

Fuse Blowing

Q My 100-watt receiver has blown its fuses twice. Is it my fault, or could the unit be incompatible with the wiring in my house?

DAN McDONALD
Laurinburg, NC

A Unless the receiver was designed to be used in another country with a different AC voltage, your problem is unlikely to be caused by incompatibility with your wiring. One possibility is that you are simply driving your system too hard and the fuses are blowing before the speakers do. Very inefficient speakers need lots of power—100 watts is not really all that much—and very high signal levels can drive the amplifier into clipping a lot of the time. The solution is to turn the level down or buy more efficient speakers.

Another cause could be a very low impedance presented to the receiver's output stage. If you are driving two sets of speakers, there is a good chance that the total impedance at some frequencies is low enough to demand more current than the amplifier can provide. Try running only one pair for a while and see if the problem recurs. You may also have an intermittent short circuit that causes the fuses to blow. Check the connections both on the back of the amplifier and at the speakers themselves to make sure there are no little wisps of wire that can touch the other terminal.

If none of these diagnoses fit, your receiver may have an internal fault, and it will require professional service.

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CIRCLE NO. 68 ON READER SERVICE CARD



ALPINE 7900 TUNER/CD PLAYER

by Julian Hirsch and Christopher Greenleaf

THE Alpine 7900 is a deluxe car stereo head unit featuring a CD player (instead of the usual cassette deck) and a digital-synthesis AM/FM stereo tuner with channel stepping and scanning capability. It has separate stereo line-level outputs for front and rear speakers, with balance and fader controls concentric with the volume knob. The bass and treble tone controls are operated by small center-detented knobs that are recessed into the front panel and extend at a touch for adjustment. The 7900 contains no power amplifiers and must be used with at least one external stereo amplifier (two if rear speakers are to be driven).

The CD player loads through a narrow slot above the central display panel, and the disc is automatically drawn into the machine by a motor when it is inserted part way. Inserting a disc switches the player on, and the fluorescent display switches from the radio frequency (or time) to show the CD track number currently being played.

Most of the operating controls are clearly illuminated and serve multiple functions. For instance, in the tuner mode the RADIO/M.S. rocker switch can be used either to select the band or to initiate automatic scanning up the band until the tuner acquires a signal, on which it pauses for 5 seconds before continuing on its search. In the CD mode, the same control (the M.S. stands for music sensors) can step the laser to the beginning of the next track or back to the start of the current track. Similarly, the TUNE/CD rocker can

step the AM or FM frequency up or down by one increment for each touch, or continuously while held in; in the CD mode, it plays the disc rapidly in either direction with audible sound. A smaller multipurpose button stores up to eighteen radio frequencies in memory (in two banks of FM and one bank of AM) or returns the laser to the start of a disc. When this button is held in, the TUNE/CD rocker can be used to set the hours and minutes on the digital clock display.

Although the display indicates the pause and play modes of the CD player and shows the current track number, it does not provide the oth-

The versatile Alpine 7900 was very easy to operate, and the FM and CD sections met or surpassed all their ratings.

er information normally expected from home CD players, such as the total number of tracks, total playing time, elapsed time, or index numbers. The player also has no programming capability, but it is easy to step rapidly through a CD with the scan/skip controls. The eject button ejects the CD halfway. If the disc is not removed completely within 15 seconds, the motor draws it back into the slot and the player goes into its pause mode to protect the disc from being damaged. Pressing the illuminated TUNE button puts the CD player in pause and restores tuner operation. To return

to the CD, you merely press the PLAY/PAUSE button. The AUTO DISC INITIALIZER (ADI) button automatically returns the laser to the start of the first track. Pressing any of the function buttons on the Model 7900 produces an audible beep, which can be silenced if desired. The player is protected by a thermal-overload sensor (120° F. maximum), and if its microprocessor malfunctions there is a tiny hole beneath the volume knob for resetting it.

The Alpine 7900 obviously has a considerable amount of circuit complexity, and in spite of some very ingenious packaging design, the engineers were not able to work miracles. It consists of three separate modules connected by cables (in addition to the power-amplifier connections). The control module, which also contains the CD player, fits a standard dashboard cutout. The tuner module—a flat metal box 7 inches wide, 5¼ inches deep, and 1 inch high—has no controls and can be installed under the dashboard with brackets or on one of the front carpets with Velcro strips.

The third module is a DC-to-DC converter that apparently supplies some of the voltages needed by the CD player. It is a small box, about 5 x 1½ x 1 inch, connected to the tuner module by a short integral cable and designed to be attached to the carpet (near the dashboard) with Velcro. Price: \$800. Alpine/Luxman, Dept. SR, 19145 Gramercy Pl., Torrance, CA 90501.

Lab Tests

The FM tuner section of the Alpine 7900 had a high mono usable sensitivity of 11 dBf (1 microvolt, or μV , at its 75-ohm antenna input). Although the stereo indicator was activated by a signal of only 6 dBf (0.55 μV), the muting and stereo-blending circuits made it difficult to measure the tuner's stereo sensitivity. A small amount of stereo channel separation was obtained at about 25 dBf (5 μV), but, as with most car radios that have automatic channel-blending circuits, there was no clearly definable threshold level for proper stereo reception. The noise level was low in both mono and stereo, and the distortion was less than 0.3 percent in mono and

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about 1 percent in stereo over a wide range of signal levels.

The channel separation at a 65-dBf (500- μ V) input was good, about 35 dB over most of the midrange. The AM rejection was poor at 45 dBf (50 μ V) but was very good at 65 dBf. Unfortunately, the selectivity could not be measured because an apparent side effect of the muting or AGC (automatic gain control) systems was effectively to desensitize the receiver to strong signals located a few hundred kilohertz from the tuned frequency. In addition to the typical falling high-frequency output, the AM tuner's frequency response showed a rise of about 10 dB at the low frequencies.

The FM frequency response, with the tone controls centered, was flat within ± 0.5 dB from 20 to 8,000 Hz and down 3.5 dB at 15,000 Hz. The tone controls had good characteristics; the bass-turnover frequency shifted between 100 and 500 Hz, and the treble curves hinged at about 1,500 Hz. The bass adjustment range was +10, -10.5 dB, and the treble range was +11, -10.5 dB.

The CD player drew the disc firmly into the mechanism and operated silently and smoothly. Most of its performance parameters were typical of good home CD players. The

The CD player is thoroughly insulated from road shock and vibration. On the test bench, even hard slapping had no audible effect on the program.

channel separation was not quite equal to that of most home players because of the inevitable proximity of many of the signal cables connecting the three modules and the resulting capacitive coupling at high frequencies.

Square-wave response measurements showed that the player uses analog low-pass filters, and it was apparent that it uses a single digital-to-analog (D/A) converter multiplexed between channels. We measured an interchannel phase shift that increased smoothly from about 1.5 degrees at 100 Hz to almost 90 degrees at 20,000 Hz. The frequency

FEATURES

- Digital-synthesis AM/FM tuner
- Auto-scan and manual tuning
- Presets for twelve FM and six AM stations
- Signal-controlled channel blend
- Soft muting
- Fader and balance controls
- Bass and treble tone controls with retractable knobs
- Power-loading CD player with automatic repeat of entire disc
- CD pause control
- Step-by-step track access or fast search in either direction with audible program
- Preamplifier outputs for front and rear speakers

LABORATORY MEASUREMENTS

- Tuner Section**
 - FM mono usable sensitivity** (75-ohm input): 11 dBf (1 μ V)
 - Mono 50-dB quieting sensitivity** (75-ohm input): 13 dBf (1.25 μ V)
 - Signal-to-noise ratio at 65 dBf:** 73.2 dB
 - Distortion at 65 dBf:** 0.27%
 - FM frequency response** (-3-dB limits): 20 to 18,000 Hz
 - Maximum output voltage** (100% FM modulation): 1.9 volts
 - Stereo separation** (at 65 dBf) at 100, 1,000, and 10,000 Hz: 21, 37, and 40 dB
 - Capture ratio at 65 dBf:** 1.5 dB
 - AM rejection at 65 dBf:** 69 dB
 - Image rejection:** 74 dB
 - AM frequency response:** 20 to 3,150 Hz +11, -6 dB
- CD Player**
 - Frequency response:** left channel, 20 to 20,000 Hz +0.2, -0.5 dB; right channel, 20 to 20,000 Hz +0.5, -0.2 dB
 - Maximum output voltage:** 3.6 volts
 - 1,000-Hz distortion:** 0 dB, 0.0039%; -10 dB, 0.0027%; -20 dB, 0.0025%
 - Channel separation:** 1,000 Hz, 84.5 dB; 10,000 Hz, 64.5 dB; 20,000 Hz, 57.5 dB
 - Noise level** (referred to 0 dB, A-weighted): -99 dB
 - Cueing accuracy:** A
 - Slew time:** 4.8 seconds
 - Defect tracking:** tracked all calibrated defects on Philips TS5A test disc
 - Impact resistance:** top, A; sides, A

response, however, was excellent, well within the ± 0.5 -dB rating from 20 to 20,000 Hz.

The really important properties of a CD player, especially one designed for mobile service, are how well it performs its tracking and cueing functions under conditions of high shock and vibration. The Alpine 7900 showed its true mettle in these respects. Its cueing was flawless, it tracked all the calibrated defects on the Philips TS4A test disc without audible errors, and it slewed across our standard disc in 4.8 seconds. Although that is not as fast as some of the recent home players we have tested, it is more than adequate for the automotive environment for which this unit was designed.

Best of all, and most important for a car player, the Alpine 7900 is thoroughly insulated from road shock and vibration. We would give it a high grade for its impact resistance since hard slapping on any part of its exterior had no audible effect on the program. A violent blow with the fist, or dropping it a couple of inches onto the table, did cause it to lose tracking, but we suspect that in

use such an impact would also damage the car!

Despite its great versatility, the Alpine 7900 was a very easy unit to operate. The controls are large and well lit, and the beep that accompanies their activation is loud enough to be clearly audible in most cars even at highway speeds. The instruction booklet lists the key specifications for the FM tuner and CD player sections, and we were pleased to find that both sections met or surpassed all of their ratings. This is not a trivial matter. A surprising number of well-regarded home components do not pass the same test, and very few car radios or cassette players are specified as fully and accurately as the Alpine 7900. Combined with the way it performed on the test bench, that says a lot concerning its quality and general excellence. *J.H.*

Road Tests

Julian Hirsch and I do not usually communicate about the equipment we are testing, as we want to keep our evaluations completely independent. When I received the Alpine 7900, however, Julian had

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CAR STEREO

passed on a message indicating that I might have a rather difficult time getting it to react to physical shock. Being curious and easily intrigued by such comments from a veteran of the test bench, I naturally made shock resistance my first test.

At home, before installation in my car, the Model 7900's reaction to any but the most violent bangs and jolts was to ignore them. Dropping the player from a height of several inches made it stop playing briefly, but it invariably started again within a few seconds of where I had so rudely interrupted it, if not to the exact spot where it had muted. There was never a miscue or a stutter. On the road, only one jolt brought on momentary muting, and the pothole that caused it was bad enough to distract me from listening anyway.

The tonal performance of the CD player was excellent. At very, very low levels on certain quiet discs, such as in the music section recorded at -60 dB on the Denon "Audio Technical CD," I heard the sound alternate between low-level noise and full muting, but this behavior is unlikely to be noticeable at all on the road even with extraordinarily quiet passages at very high playback levels. My "worst-case" disc of rather poorly recorded eighteenth-century orchestral string music was at least as listenable as it has been on other good players. Peter Hurford's CD of Mendelssohn's organ music contains both potent high-treble information and a wealth of majestic, deep bass, both of which the player reproduced with clarity and authority. Absolutely no quibbles with the CD player's audio—a first-rate job. The track-access speed was also excellent.

The FM tuner exhibited the sort of approach to strong, medium, and marginal signals I have encountered in other Alpine car radios. Strong signals were clear and nicely underscored by velvety-quiet backgrounds in both stereo and mono. Moderately good signals began to lose stereo separation only when there was a momentary dip in signal strength. The operation of the automatic mono/high-blend circuitry was unobtrusive. In poor signal conditions, the sound was mostly mono, of course. The Alpine engi-

neers obviously opted for clarity and quietness over stereo separation at minimal signal strength, a decision I can applaud since intelligibility is important in the car.

The AM section's sound, while prone to some impulse noise and static, was a cut above average, especially in providing some semblance of bass in most music. The tuner was not able to pull in as many distant AM signals as I am accustomed to receive in the New York area.

The head unit felt comfortable to use within a few minutes. The tactile differences between the various groups of controls helped guide my

The audio performance of the CD player was excellent—a first-rate job. Strong FM signals were clear and nicely underscored by velvety-quiet backgrounds. The AM sound was a cut above average.

hand to the right ones even with my eyes on the road. From both the passenger's and driver's sides, visibility was good at all but the most extreme angles. The configuration of the balance and fader controls was especially handy. Their center arcs of effect caused only small changes, allowing for fairly fine adjustments of relative levels.

The Alpine 7900 is a sophisticated but uncluttered head unit to look at and to use. The audio is uniformly smooth and clear for CD and FM listening, with simple control options that are easily seen and used. My sole criticism is that the manual, while well written, completely ignores the question of using the Model 7900 with a tape player. Although there is no auxiliary input except the phono connection from the tuner module, presumably it can be done, but just how is left to the owner to guess. In my case, I have added CD listening to my enjoyment of tapes and radio in the car, not substituted the still repertoire-shy CD for cassettes. But this is a small criticism of an otherwise beautifully designed and presented autosound component. C.G.



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If you're running that terrific new CD player off an amplifier or receiver that's three to five years old, you're missing out on a great deal of clean, uncompromising sound. Most amps of that vintage just can't create the extra headroom that's necessary for accurate digital reproduction. Every time the music hits a peak, your amp will be gasping for breath. And you'll definitely hear about it. Unless you have a Proton 40 Series amplifier or receiver with our exclusive, patented DPD circuitry.

Reserve power in an instant

DPD stands for Dynamic Power on Demand™. Designed for the increased demands of today's digital audio discs and hi-fi video sound, it utilizes a sophisticated, dual power supply which acts as a power reserve. During musical peaks, it delivers up to four times the amplifier's rated power for an amazing six dB of headroom. And DPD handles these boosts much more smoothly.

Plus, DPD sustains that dynamic power up to 400 milliseconds. More

than enough time for you to hear all the crisp, clean transient response you've been missing. From the pluck of a cello. To the crash of a cymbal. As faithfully as if they were being performed live.

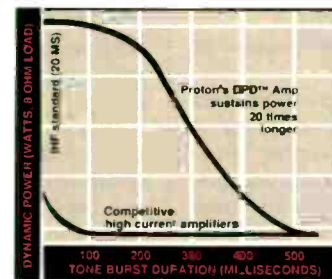
Best of all, DPD gives you all of this extra power without your having to pay the extra price for a much larger amplifier.

So if you want totally uncompromising digital sound, you can't afford to compromise with your system. That's why you need Proton with DPD. With anything else, you'll be missing out.

For the Proton Audio/Video Dealer nearest you, call (800) 772-0172 In California, (800) 428-1006



Proton's acclaimed 40 Series Audio Components top to bottom: D940 Stereo Receiver with DPD™, 440 Stereo Tuner, D540 Stereo Amplifier with DPD™, 740 Stereo Cassette Deck and the 830R Compact Disc Player.



PROTON

Clearly the best.

737 West Artesia Blvd., Compton, Calif. 90220

by Julian Hirsch



The Pros and Cons of Integrated Components

ANYONE who has ever entered a hi-fi dealer's showroom is aware of the existence of integrated and separate audio components. A natural question would be, "Why should I buy one or the other?"

Although no *definitive* answer can be given to such a question, understanding the difference between these two basic forms of component packaging will make it easier for you to decide which one is right for you. When hi-fi was purely a hobbyist activity, you could only buy a separate power amplifier, preamplifier, or tuner, although it was not uncommon for people to build their own components either from scratch or by assembling a kit. Dedicated audio hobbyists frequently modified and upgraded their systems by replacing, or adding, one component at a time. The completely modular design of their music systems was obviously important to those early audio hobbyists.

Most audio components in those

days, including commercially manufactured products, lacked the services of competent industrial designers and, to put it charitably, would not be considered as aesthetic improvements to the average living room. The inevitable highly visible maze of cables between the several unconcealed chassis certainly did not encourage the rapid growth of hi-fi as a part of everyday life.

I don't know who was the first to combine a preamplifier and power amplifier on a single chassis, but this logical pairing brought practical as well as aesthetic benefits to consumer audio. Cables and connectors were (and still are) a major source of noise and unreliability in all forms of electronic components. By eliminating a number of connectors and signal or power cables between the two units, the combination of a preamplifier and power amplifier, called an integrated amplifier, was likely to be more reliable than the equivalent separate components. One drawback to integrated amplifiers, however, was their increased susceptibility to power-line hum from the proximity of high-gain, low-level circuits to the heater wiring for the tubes of both sections. Although this problem could be minimized by good design, it was always a potential trouble area.

When a typical power amplifier delivered 20 or 30 watts output (from one channel in those pre-stereo days), its size and weight were easily manageable even when the preamplifier shared the same chassis. There were, and still are, considerable manufacturing economies in integration, the result of sharing a

single chassis and power supply. At higher power levels, though, the size, weight, and operating temperature of a vacuum-tube power amplifier presented formidable problems, and integration with a preamplifier was simply not practical.

The move from vacuum tubes to transistors changed the picture radically. The physical space required by the preamplifier and power-amplifier circuits was relatively small, and power-line hum was no longer a serious problem. Integrated amplifiers soon outnumbered separates, and they still do. Eventually, around 1960, AM and FM tuners were integrated with the amplifiers to form a receiver, which has been

Combining a preamplifier and a power amplifier on a single chassis, the "integrated amplifier" brought practical as well as aesthetic benefits to consumer audio through eliminating a number of cables and connectors.

for many years the most widely sold electronic audio component.

The receiver represents the practical limit of integration in a high-quality music system. A few years ago there were a number of so-called "compact" systems in which a record player or tape deck was combined with the receiver, but these have essentially disappeared from the hi-fi marketplace. And, of course, the console models in which a receiver, a record player, and speakers shared a common cabinet was not and never could be considered a "hi-fi" system.

Nevertheless, separate components are still with us and are likely to remain so. There are several good reasons for this, as well as some whose validity may be debatable. For one thing, high-power amplifiers are much more common today than in hi-fi's early years. The desirability of having at least 100 watts per channel of clean power available is generally accepted, especially in view of the extended dynamic range provided by compact discs. There

Tested This Month

*Adcom GFA-555
Power Amplifier
Akai CD-A70 CD Player
B&W Matrix I Speaker
Denon TU-600 Tuner
Luxman LV-105
Integrated Amplifier
Allison LC110 Speaker
AKG Acoustics K240DF
Headphones*

have been a few integrated amplifiers with power ratings as high as 150 watts or more, but they were very large and heavy. A more common limit today seems to be about 70 or 80 watts.

There is also the perennial consideration among audiophiles (though not necessarily among all audio consumers) of the ability to replace system components individually as new designs appear. Obviously, separate components have a strong appeal to anyone who expects to buy a new power amplifier or preamplifier (not necessarily simultaneously) at some future date.

Perhaps the most dedicated users of separate components are the "high-end" audiophiles. There are a goodly number of people whose quest for sonic perfection supports a segment of the audio industry that is virtually unknown to the general public. To many of the high-end hobbyists, integration of components is anathema, and not only because of any effect it might have on the sound.

Exotic high-end preamplifiers are usually very expensive and often rather large. The same qualities are associated with the huge power amplifiers that can be seen and heard in specialty audio showrooms and at audio shows. It would be highly impracticable to integrate products such as these; not only would consumer choice be narrowed (the amp and preamp the audiophile wants do not necessarily come from the same manufacturer), but an integrated amplifier might cost \$5,000 to \$10,000 and require a fork-lift to move!

The arguments for and against component integration can be summed up easily.

PRO:

- Economies of manufacture result from the use of a common chassis, cabinet, and power supply.
- Compact size and unified styling simplify home installation.
- Reliability is improved by the elimination of cables and connectors between units.

CON:

- The integrated amplifier must be replaced or serviced as a unit instead of as individual components.

- Power capability is limited.
- An integrated amplifier requires more visibility and accessibility than many separate power amplifiers and preamplifiers.
- Certain design approaches or construction techniques cannot be used in integrated components. Among these are separate power supplies or transformers for each stereo channel, large-diameter internal signal cables, and extensive vacuum-tube circuitry.

For most people, the choice between integrated components and separates can be made on purely practical grounds of price, size, specifications, convenience of use, and compatibility with other parts of a system. Such differences in sound quality as may exist are likely to be of interest only to the most dedicated audiophiles. You can probably find good and not-so-good examples of both types of equipment, and basically their quality and suitability have nothing to do with the packaging format.

Everything I have said about the

integration of preamplifier and power amplifier applies equally (or possibly more so) to receivers. A

For most people, the choice between integrated components and separates can be made on purely practical grounds of price, size, specs, and convenience. You can find good and not-so-good examples of both types.

close comparison of receivers, preamplifiers, power amplifiers, and integrated amplifiers (preferably from the same manufacturer) will usually reveal that most of the differences between them lie in control flexibility—the number of switchable signal sources, tape-monitoring facilities, head amplifiers for moving-coil cartridges, and the like. For some people these factors can be decisive in making a purchasing decision.



"... Well, frankly, Sid, it's been a bad year for us. For the first time in twenty-two years of exhibiting, we've had to build our booth out of simulated plywood."

Escort Refuses!

Dear Customer,

From: Drew Kaplan

Escort turned down our \$10,000 head to head challenge described below. Escort says that Maxon's Radar Detector is "primitive", "bottom-end" and "an off-shore produced electronics 'gadget' ". I don't know about you, but to me these words conjure up visions of a cheap toy being produced off in the middle of a rice paddy somewhere in the middle of nowhere.

Escort, on the other hand, which is made in the U.S., exudes a high cost, quality image. Don't you just bet that it costs a fortune to build Escort and Passport (the smaller version)?

Well, we are going to challenge Escort AGAIN to a head to head 'duel to the death' on Maxon's electronic merits alone. And, we plan to win. But first there are a few things you should know.

Cincinnati Microwave, the company that makes Escort & Passport, is a public company. And being public, they have to file financial information with the SEC.

The public information they have published appears to show that in the year that ended Dec. 1985, Cincinnati Microwave with "substantially all of its revenues and profits derived from the sale of radar warning receivers" made an operating profit of about \$45,810,000 on sales of about \$112,605,000. Wow!

The \$45 million profit is after all engineering, selling and General & Administrative expenses, but before taxes.

Their cost of sales (goods) was only about \$40,027,000. So, if you divide \$40,027,000 by \$112,605,000 it doesn't take a genius to figure out that cost of goods represents an average of only about 35.5% of selling price. Wow!

I only bring up their profit to illustrate that a high retail price doesn't always

mean a high manufacturing cost.

There's no question in my mind that Maxon can manufacture cheaper in an off-shore 'rice paddy', but if you pay \$245 for Escort or \$295 for Passport, it should be based on a head to head test with Maxon, not on perceived retail price points.

FORGET PRICE COMPLETELY

So, forget that Escort costs \$245, Passport \$295, and Maxon \$99⁹⁰. Let's judge them on their own merits. And, let's look at just what Escort itself has to say about our challenge. (Please read DAK's and Escort's letters to the right.)

Escort says that, "Regardless of the results, such an event lends credibility to the challenger." Well, they are absolutely correct. That's why I put up the \$10,000 in the first place. Fair is fair.

Plus, there are several radar detectors that claim to have won this or that ranking in "Independent Magazine Reviews." So, I'm ignoring any reviews and asking for a one on one, head to head test.

But look at what Escort says in their letter: "Range is the easiest detector quality to measure, but by no means the only important quality." Wow, I thought range was really important?? Escort refers to "goodness" being determined by things not so easily measured.

Well frankly, I don't know how to measure "goodness". Escort, in my opinion,

is a top notch company. They make a superb product I'd be proud to sell. And, they have great customer service.

DAK has great toll free technical and regular customer service. But, I'd be the first to admit that with over \$45 million in profits, Escort can probably run circles around us in advertising, and maybe even in service. But, I don't think they can beat Maxon's Radar Detector.

HOW GOOD IS GOOD?

When Escort was introduced, it was revolutionary. But, you can only go so far. And in my opinion (someone else might object), radar detecting has gone about as far as it can go. So, while Escort has made improvements, it's Maxon who has moved mountains to catch up.

DAK UPS THE ANTE TO \$20,000

Now I realize that next to \$45 million dollars, \$20,000 isn't much, but it's a lot to DAK. And, I'll even go one step farther. I'll print the exact results of the test, win, lose, draw, or no-show in the first catalog I publish after January 1, 1987.

Escort, the ball is now in your court. Below is the "NEW" version of my challenge with the time and amount changed.

I don't know what else DAK or Maxon can do to prove that the RD-1 Superheterodyne Detector should be judged on its head to head performance against Escort, not on its selling price!

WAS \$10,000

A \$20,000 Challenge To Escort

Let's cut through the Radar Detector Glut. We challenge Escort to a one on one Distance and Falsing 'duel to the death' on the highway of their choice. If they win, the \$20,000 (was \$10,000) check pictured below is theirs.

By Drew Kaplan

We've put up our \$20,000 (was 10). We challenge Escort to take on Maxon's new Dual Superheterodyne RD-1 \$99⁹⁰ radar detector on the road of their choice in a one on one conflict.

Even Escort says that everyone compares themselves to Escort, and they're right. They were the first in 1978 to use superheterodyne circuits and they've got a virtual stranglehold on the magazine test reports.

But, the real question today is: 1) How many feet of sensing difference, if any, is there between this top of the line Maxon Detector and Escort's? And 2) Which unit is more accurate at interpreting real radar versus false signals?

So Escort, you pick the road (continental U.S. please). You pick the equipment to create the false signals. And finally, you pick the radar gun.

Maxon and DAK will come to your highway with engineers and equipment to verify the results. And oh yes, we'll have the \$20,000 check (pictured) to hand over if you beat us by more than 10 feet in either X or K band detection.

BOB SAYS MAXON IS BETTER

Here's how it started. Maxon is a mammoth electronics prime manufacturer. They actually make all types of sophisticated electronic products for some of the biggest U.S. Electronics Companies. (No, they don't make Escort's).



Bob Thetford, the president of Maxon Systems Inc., and a friend of mine, was explaining their new RD-1 anti-falsing Dual Superheterodyne Radar detector to me. I said "You know Bob, I think Escort really has the market locked up." He said, "Our new design can beat theirs".

So, since I've never been one to be in second place, I said, "Would you bet

\$20,000 (10) that you can beat Escort?" And, as they say, the rest is history.

By the way, Bob is about 6'9" tall, so if we can't beat Escort, we can sure scare the you know what out of them. But, Bob and his engineers are deadly serious about this 'duel'. And you can bet that our \$20,000 (was \$10,000) is serious.

... Next Page Please

...Challenge Continued
We ask only the following. 1) The public be invited to watch. 2) Maxon's Engineers as well as Escort's check the radar gun and monitor the test and the results. 3) The same car be used in both tests. 4) We'd like an answer from Escort no later than December 31, 1986 and 60 days notice of the time and place of the conflict. And, 5) We'd like them to come with a \$20,000 (was \$10,000) check made out to DAK if we win.

into action in just 1/4 of one second. Just imagine the sophistication of a device that can test a signal 4 times in less than 1/4 of one second. Maxon's technology is mind boggling. **But, using it isn't.** This long range detector has all the bells and whistles. It has separate audible sounds for X and K radar signals because you've only got about 1/3 the time to react with K band. There's a 10 step LED Bar Graph Meter to accurately show the radar signal's

And you'll have a very high level of protection. Maxon's Dual Conversion Scanning Superheterodyne circuitry combined with its ridge guide wideband horn internal antenna, really ferrets out radar signals.



By the way Escort, we'll be happy to have our test around a bend in the road or over a hill. Maxon's detector really picks up 'ambush type' radar signals.

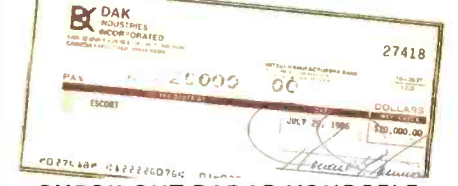
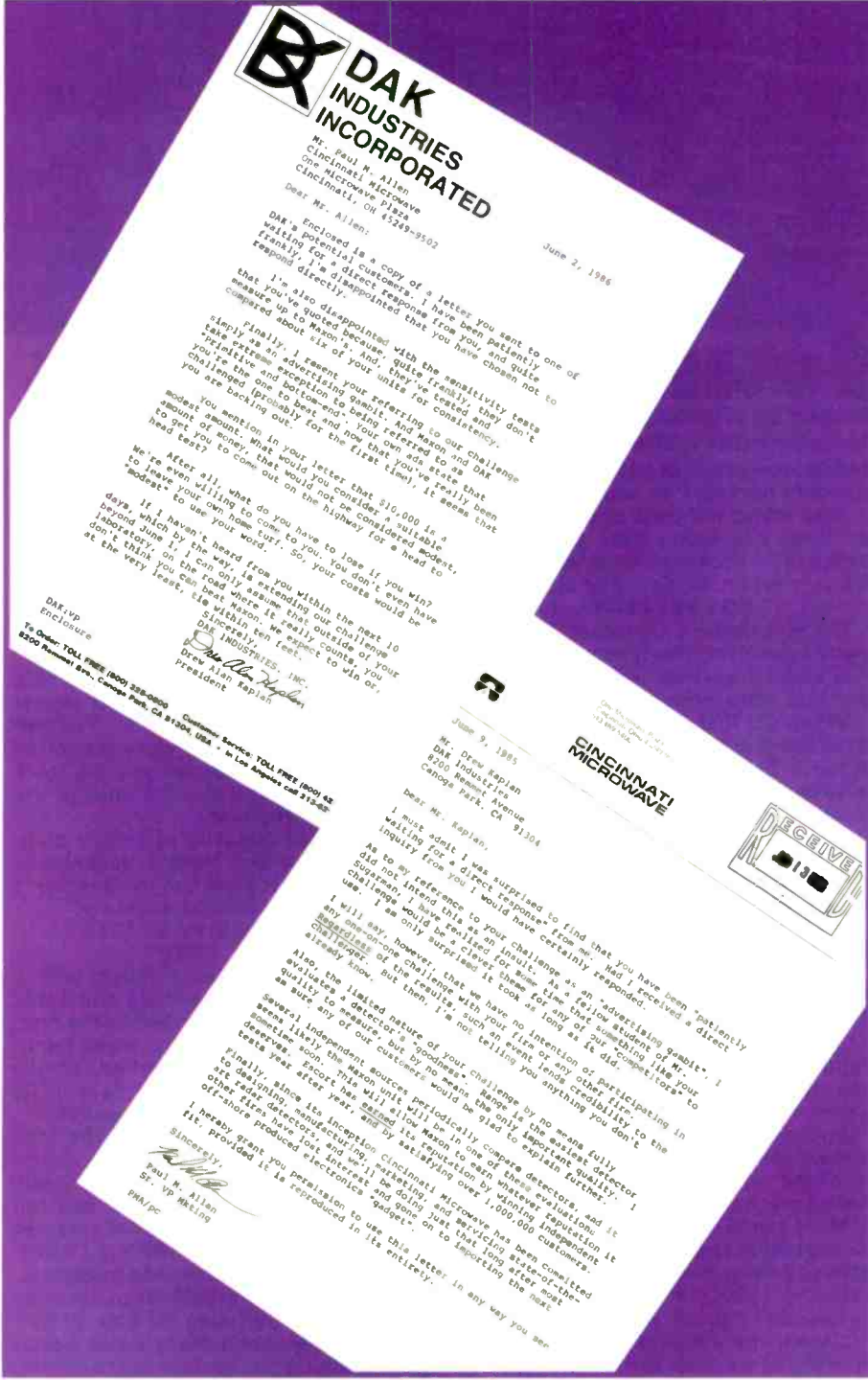
And the key word is 'radar', not trash signals. The 4 test check system that operates in 1/4 second gives you extremely high protection from signals from other detectors, intrusion systems and garage door openers.

So, when the lights and X or K band sounds explode into action, take care, there's very likely police radar nearby. You'll have full volume control, and a City/Highway button reduces the less important X band reception in the city.

Maxon's long range detector comes complete with a visor clip, hook and loop dash board mounting, and the power cord cigarette adaptor.

It's much smaller than Escort at just 3 1/2" Wide, 4 3/4" deep and 1 1/2" high. It's backed by Maxon's standard limited warranty. Note from Drew: 1) Use of radar detectors is illegal in some states.

2) Speeding is dangerous. Use this detector to help keep you safe when you forget, not to get away with speeding.



CHECK OUT RADAR YOURSELF RISK FREE

Put this detector on your visor. When it sounds, look around for the police. There's a good chance you'll be saving money in fines and higher insurance rates. And, if you slow down, you may even save lives.

If you aren't 100% satisfied, simply return it in its original box within 30 days for a courteous refund.

To get your Maxon, Dual Superheterodyne, Anti-Falsing Radar Detector risk free with your credit card, call toll free or send your check for just \$99⁹⁰ (\$4 P&H). Order No. 4407. CA res add tax.

OK Escort, it's up to you. We've got \$20,000 (10) that says you can't beat Maxon on the road. Your answer, please? Escort and P&Hport are registered trademarks of Cincinnati Microwave.

SO, WHAT'S DUAL SUPERHETERODYNE?
 Ok, so far we've set up the conflict. Now let me tell you about the new dual superheterodyne technology that lets Maxon leap ahead of the pack. It's a technology that tests each suspected radar signal 4 separate times before it notifies you, and yet it explodes

strength. And, you won't have to look at a needle in a meter. You can see the Bar Graph Meter with your peripheral vision and keep your eyes on the road and put your foot on the brake. So, just turn on the Power/Volume knob, clip it to your visor or put it on your dash. Then plug in its cigarette lighter cord and you're protected.

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\$169⁹⁰ MARKET BUSTER



Remote Sound Blaze Plus

Like the blazing flash and violence released by a lighting bolt striking earth, your stereo system's sound will explode with life. With a 95db signal to noise ratio, a 95db dynamic range, and a 5hz to 20,000hz frequency response, Emerson's new programmable remote CD player is sure to stagger your perception of audio.

By Orew Kaplan

There's no warning. There's no record noise, no tape hiss. Vibrant but finely detailed music just explodes from your stereo system. The sound is like a shock-wave reverberating through your home.

This is the experience you can expect with your first introduction to digital audio. Forget any experience you've ever had before with stereo. CD audio is an awesome advance that dwarfs the switch we made years ago from 78s to LPs.

Imagine listening to music with a frequency response from 5hz to 20,000hz +0.5db -1db. Wow! Imagine sound so pure that harmonic distortion is just 0.003%. And, if you're into zeros, flutter and wow is "unmeasurable".

The sound quality, and yes, the sonic violence will thrill you. I've spent over 15 years on the test bench and in the studios, and the only equal I've heard to this sound is 'live sound'.

And, live sound doesn't mean the sound you hear at a concert where you are simply listening to the auditorium's PA system. Live sound means sitting right in the middle of the orchestra.

I know, I'm a cellist. And, there's just no sound experience like the sound we hear in 'the pit'.

NO SOUND AT ALL

CD gives you a signal to noise ratio of 95db. There is, for all intents and purposes, absolutely no hiss, no scratch, and best of all, no surface noise.

You've got to experience the silence during very quiet passages to comprehend the sonic adventure of the music. It's as if your stereo isn't even on and then, suddenly, a thunderclap explodes!

Conventional records and tapes have a dynamic range of perhaps 50db. Dynamic range is simply the difference in sound level (volume) between the softest and loudest recorded sounds.

CD gives you a 95db dynamic range, which is roughly equivalent to the difference between absolute silence and

standing next to a jet engine.

Your music will be dramatically more exciting. You won't have to carefully compare CD to conventional sound. From the very first note, you'll be in shock.

NOT PERFECT?

CD isn't perfect. Or rather, it is, and that's a problem. You'll hear everything. You'll hear every note, every instrument, as if you were sitting in the orchestra.

When CD first came out, there were three complaints. 1) It could sound harsh or hard. 2) There weren't enough CDs released. 3) Not all CD discs were really recorded digitally. **Here are the answers.**

1) Early discs did sound harsh. A characteristic of pressing LPs is that they drop off from 5-10,000hz, so recording engineers boost those frequencies.

A few cuts with an equalizer bring the first discs back to super smooth sound.

2) True again. CDs were in short supply. Now there's a virtual avalanche of thousands of titles, and more each week.

3) True again. Not all CDs come from digital masters. CDs from digital masters can sound phenomenally better than a conventional LP. (It's earthshaking.)

But, when analog (conventional) masters are recorded in the studios, they are recorded on two inch wide tape at 15 inches per second. They sound great.

Most sound quality is lost in pressing records and copying cassettes. A CD from an analog master isn't quite as good as from a digital master, but its superiority over an LP is still like day and night.

CDs are now a standard format. There's no stylus to wear out and the disc doesn't wear out because nothing touches it.

INFRARED REMOTE CONTROL

You can sit in your favorite easy chair and simply touch buttons. You can hear a track again, or skip to the next.

You can program up to 15 tracks randomly from the remote. And, of course, you can 'Play', 'Pause', 'Stop', and continuously 'Repeat' all from the remote.

WHY EMERSON?

This CD disc player is the latest Japanese made second generation type.

It has a 3-beam, laser servo system with heavy sampling for superb sound. Plus, it's loaded. You can select up to 15 tracks in any order you like. There's even a repeat button. So, you can repeat selected tracks or the entire disc, forever.

Just touch a button and you can skip to the next track during play, or repeat the track you are listening to. You can even playback indexed passages within a track. A display shows you the track that is playing, the elapsed time, or the total time of the disc.

Installation consists of simply plugging it into any 'aux' input on your receiver or preamp. It's backed by Emerson's standard 1 year limited warranty.

TRY EXPLOSIVE SOUND RISK FREE

Plug it in. Experience music with a thrilling frequency response and sonic range. Plus, you'll be thrilled by the hiss, and background noise you won't hear.

If you're not 100% satisfied, simply return it to DAK within 30 days in its original box for a courteous refund.

To order Emerson's Top Of The Line Infrared Remote Control, Fully Programmable CD Disc Player and experience the sonic thrills of a lifetime, call toll free, or send your check for DAK's market breaking price, of just \$169⁹⁰ (\$7 P&H). Order No. 4640. CA res add sales tax.

It may strain my credibility to describe any device I'm offering for only \$169⁹⁰ as providing sound many times better than anything you've ever heard before. But, use DAK's risk free trial to experience this bigger than life sound for yourself.



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8200 Remmet Ave., Canoga Park, CA 91304

The Truth About VCRs

With over 30% of American Households and over 70% of DAK Customers already owning video cassette recorders, there must be something to them. Are they a hype, a necessity, or a fad? Let's find out.

By Drew Kaplan

First a confession. I like TV. I like movies. And, I don't just watch the nightly news and Wall Street Week.

I have friends who are part of the erudite elite who "don't watch the boob tube" because it isn't cerebral enough.

But, give me a good action film (I love classics), or give me a seamy weekly series with lots of intrigue, and you've got me hooked.

So, what does this all have to do with video cassette recorders? And, why might an inexpensive VCR be your best bet? Well, let's see.

If you're like me, you end up being away from home during your favorite shows. Or, if you've checked the schedule for the new TV season, you may have found that two of your favorite shows are on opposite each other.

And, isn't it frustrating to have two shows on at 9PM and nothing on at 10? Isn't it frustrating being home only two nights of a 3 night mini-series? Well, with a VCR, all these and a lot of other problems can be solved.

THE HARRIET FACTOR

Harriet is my wife's old team teaching partner. She had never had a video recorder. So, we gave her one. Several weeks later she called, absolutely elated.

She was recording the Phil Donahue show every day and watching it when she got home from school.

She had also recorded several movies from cable that she kept missing while she was at work, or because they were on too late at night for her to watch.

By the way, I have the same problem as Harriet. I have cable and I have a satellite dish. But, I never seem to be able to sit down at the right time.

So, I record movies that come on at 2AM, or while I'm at work.

THE FAMILY AFFAIR

My parents are another story. They've had a recorder for years (being my parents has its advantages). My parents have two loves, concerts (my mother is a concert pianist), and UCLA Basketball.

They go to concerts several nights a week and tape the UCLA games while they're out. Then, if you can believe this,

they make popcorn and stay up to watch the game till 1:30AM.

And speaking of sports, how many Saturday afternoons do you flip back and forth between several games, only to miss the play you really wanted to see. If you had a recorder running, you could instantly see your own instant replays.

So, for golf, football, baseball, or tennis, you can control all the action.

Plus, forgetting sports for a moment, if you've ever watched magic on TV, wait till you watch the slow motion replay over and over again.

You just might figure out 'sleight of hand' tricks that you never would have understood any other way.

But, back to the family. We gave my wife's parents a VCR and they didn't know how to hook it up.

THIS IS IMPORTANT

It never occurred to me that there was anything to hooking up a video recorder.

Just unhook the antenna or cable from your TV and connect it to an identical connector on the VCR. Then connect a cable (included) between the recorder and your TV. That is the complete cable hookup. What could be easier?

Anyway, my father-in-law gets up at 5AM, so they go to bed very early. Once they hooked up their recorder, they discovered a whole world of late night TV.

Now they watch Dynasty during dinner. And look. They had never stayed up to see the Johnny Carson show.

Wow! A video recorder can let you watch what you want, when you want, without being restricted by your work, social life or sleep. Now you can watch last night's midnight show at dinner, or tonight's dinner show at midnight.

LOADS YOU CAN DO

If you're going on vacation, you can keep up with weekly series while you're gone, even on different channels.

You can record shows you want your children to see at a more appropriate time. For example, it really galls us that the Christmas specials all seem to come on after our youngest son's bedtime.

And besides, he likes to watch them several times. And, speaking of being galled, he's galled because his older

brother can stay up and watch shows after he has to go to bed.

So, it's not unusual for us at the Kaplan household to be taping channel 7 while we're watching channel 4. I wonder how the Nielsen ratings cope with taping?

And while we're on ratings, the advertisers on TV hate VCRs. They hate VCRs because we all tend to use our wireless infrared remote controls to fast forward through their commercials.

And, if the phone rings (which it always does), I can simply pause the tape without missing the final clue to a mystery.

And there's still more. If I'm home but my wife and/or kids are out, who wants to watch a comedy or a love story alone?

It's much better to tape it and watch it when the whole family can be together.

Plus, with all the movie rental shops around, you can rent an evening of entertainment for as little as a \$1.

And, lots of people seem to be doing just that. The latest statistics show that people are staying home and watching rented movies rather than going out to restaurants and movies.

I'm sure glad I own an electronics company and not a restaurant. And while you may decide for yourself whether VCRs are a fad or a necessity (I vote for necessity), since they do all of the above, they certainly aren't a hype.

Two is better than one. We have several VCRs (I do have a great job). Even though only 70% of DAK customers own VCRs, they/you actually own a total of more VCRs than we have customers.

So, the Kaplans aren't the only family that enjoys having a recorder in both the family room, den and/or bedroom.

With two recorders, you can tape two different shows, and you can make copies of tapes. (Note: Making copies of many movies, even off the air, is illegal).

Now it's time to examine the features on the latest Japanese made Cable Compatible VCRs with HQ Picture Enhancement and Wireless Infrared Remote Control. Let me tell you about 3 VCRs.

The least expensive will probably do everything you want. So, don't spend a dime more than you have to.

...Next Page Please





...Video Continued

These VCRs are all top quality and you can expect years of entertainment.

QUESTIONS

I get lots of questions about the difference between Cable Compatible and Cable Ready. There is none. Last year, the Electronics Industry Association decided to use Cable Compatible because to them, Cable Ready might imply unscrambling signals.

The latest NEW in VCRs is HQ, and few people know what it is. In short, it's a circuit that improves the definition of the recorded picture. You'll note a distinct separation between whites and colors.

It really does enhance the sharpness and quality of the detail in your recording, especially at slow speed.

Window Number One

(SEE PICTURE ON PREVIOUS PAGE)

Here's a front loading, infrared remote control VHS video cassette deck from Emerson with HQ that will give you great recordings and phenomenal control.

From the moment you put a video cassette into the front loading motorized slot and see it automatically drawn into the recorder, you'll appreciate the quality.

107 Channel Electronic Tuning. This recorder's synthesized tuner can tune in VHF channels 2-13 and UHF 14-83. Plus, you'll also be able to tune in 25 Mid-Band and High-Band Cable Channels.

You can choose any 16 channels for instant step tuning from either the recorder or the remote. You can choose from any band in any order you like.

MASSIVE PROGRAMMABILITY

You can select up to 8 programs over a two week period to record. And, you can select one program to record every day. If you can set an alarm clock, you can program this recorder to record.

8 programs is the most I've seen on any recorder, but it can really come in handy. I missed the final episode of Knots Landing last year because I thought I would be home earlier. If anyone could send a copy, I would really appreciate it.

And there's One Touch Timed Record. It lets you automatically record in increments of 30 minutes.

WIRELESS INFRARED REMOTE

From system power to forward and reverse high speed search, to changing channels, you're in full control. If a remote seems to simply smack of posh luxury, look at what it can do for you.

You can touch the still frame button and freeze the action. Now you can really tell if the umpire was correct or not.

You can play the same movement over and over again until you are absolutely sure of what you've seen.

And, don't forget, you can high speed search through commercials.

And if you're like me, you'll use the tuner in this VCR while you watch live TV so that you can remotely flip stations during commercials. This VCR makes any TV Cable Compatible.

AND MUCH MORE

There's a digital clock/timer and even a tape counter. Of course, you can watch one program while you record another. And, there's a picture sharpness control.

There are 3 recording and playback speeds for up to 8 full hours of recording. And finally, when a tape reaches the end, it will automatically rewind.

So while Emerson's Window One VCR at \$249⁹⁰ is the least expensive, you can easily see that it's loaded with features to help you enjoy your video experience.

Window Number Two

(SEE PICTURE UPPER LEFT)

Here's a front loading, infrared remote control VHS video cassette deck from Emerson with HQ that will give you special effects and more.

First the special effects. This is a 4 head VCR, which means that instead of two video heads there are 4.

This allows you to have superior still frame and lets you have slow motion. Now you can really slow down the action and study a golfer's swing, a magician's hands or a rocket ship landing.

If you want to scrutinize your movies, this is the recorder for you. The extra two heads can also have an improved effect on slow speed recording, but frankly, today's pictures are so good there's not much to improve.

105 Channel Electronic Tuning. This

recorder's direct access tuner can access VHF 2-13, UHF 14-83, plus 23 Mid-Band and High Band VHF Cable Channels.

There are 12 buttons that you can set to any channels you choose for instant direct access.

WIRELESS INFRARED REMOTE

From system power to forward and reverse high speed search, to still frame and Slow Motion, you're in full control.

Plus, you can directly access from the remote any of the 12 preset channels.

So, just imagine watching a movie and wanting to slow down the action from your favorite easy chair. You can really get a good close look at whatever captures your interest. And of course, flipping channels is a breeze. This recorder makes any TV Cable Compatible.

FULL PROGRAMMING

You can select up to 4 programs over a two week period to record. And, you can select one program to record every day. It's about as easy to program as your alarm clock. Plus, it features One Touch Timed Record.

MORE GOODIES

There's a digital clock/timer and a tape counter. Of course, you can watch one program while you record another. And, there's a picture sharpness control.

There are 2 recording and 3 playback speeds for up to 8 full hours of recording. And finally, when a tape reaches the end, it will automatically rewind.

So from golf to magicians, from my son's soccer to space movies, you can really bring a movie's special effects down to earth, with the control you have of this \$299⁹⁰ 4 head Window Two VCR.

It will give you greater control of your picture and random access tuning of your channels at both the recorder and from the remote.

Window Number Three

(SEE PICTURE UPPER RIGHT)

Here's a front loading, infrared remote control, 4 head VHS HiFi VCR with HQ that will knock your socks off.

VHS Stereo HiFi gives you an incredible 20hz to 20,000hz frequency response with an 80db dynamic range.

...Next Page Please



...Video Continued
 You'll experience the full sonic drama of movies that you rent, and add a superb audio tape deck to your stereo system.

And, not only can you record or turn any TV into a Cable Compatible TV, you can receive the new stereo TV broadcasts automatically. So, why replace a perfectly good TV just to get stereo?

VHS HiFi uses the spinning video heads to record sound along with the video on the tape at speeds in excess of 200 inches per second. So, the sound quality is, to say the least, astounding.

Of course, there's a conventional stationary audio head, so this recorder is compatible with all standard tapes, but wait till you hear the sound. And, wait till you use this recorder for recording music in your stereo system.

Using video cassettes, you can record audio only for the best recordings you've ever heard through your stereo system.

And look at this. With VHS tapes selling for about \$5, you can record up to 6 hours of this incredible sound on one cassette with or without a picture.

THE BAD PART

Connecting this video recorder to your TV is done just like the previous two recorders. It's simple. But, to utilize the VHS HiFi and Stereo TV tuning, you must also connect this VCR to your stereo.

Just connect the standard stereo patch cords (included) to any 'Aux' input.

So, the bad part is that if your TV and stereo aren't together, this incredible machine isn't for you. Of course, it always sends conventional TV sound to your TV.

139 Channel Electronic Stereo Tuning. You can select any 16 preset synthesized cable compatible channels by touching a direct access button on the remote. And, every one is ready for stereo. It receives VHF 2-13, UHF 14-83, and cable 14-65 and Cable Sub Band 95-97.

WIRELESS INFRARED REMOTE

From system power to forward and reverse high speed search, to still frame and Slow Motion, you're in full control.

Plus, you can directly access the 16 preset channels from the remote.

So, you can slow down the action, you

can still frame it or you can speed it up. PROGRAMMABILITY TOO

You can select up to 4 programs over a two week period to record. And, you can select one program to record every day. If you can set your alarm clock, you can program this VCR. It also has One Touch Timed Record. Each time you touch the button, you will add 30 minutes of recording, up to 2 hours.

LOADED

There's a digital clock/timer and a tape counter. Of course, you can watch one program while you record another. And, there's a picture sharpness control.

There are 2 recording and 3 playback speeds for up to 8 hours of recording. And, when a tape reaches the end, it will automatically rewind.

Plus, you can receive Simulcast, SAP (Separate Audio Program) and there's a headphone jack. Tape loading is motorized. And, there's a VHS HiFi level meter.

So, if you use this VCR for video or as an audio deck, you're in for a treat. And, if you add surround sound, wow!

Note: Most movies you rent not only have great sounding stereo, but surround sound information already on the tape.

So for special effects, for 139 stereo cable channels, for the incomparable VHS HiFi Sound, choose the \$499⁹⁰ Window Number Three VCR.

HARD CHOICES

All three decks provide superb picture quality, wireless infrared remote control and programmability. To record weekly series or play back rented tapes, Window One will provide all you need.

If you record ball games and you want to have the capability of slowing down any movie's action, plus add random access to your remote, choose Window Two.

Where only the top of the line will do and you're going to get involved with the sound as well as the slow or fast action, move all the way up to Window Three.

Whatever your choice, you'll be thrilled with the quality and performance of these Japanese crafted VCRs. They are backed by Emerson's limited warranty.

VIDEO COMES ALIVE

RISK FREE

It's not an easy choice. I've used them all. In my main system I do have the VHS HiFi deck. I love the sound and, of course, the picture. But, I have the Window One, least expensive VCR in our bedroom, and it works great.

Whichever VCR you choose, if you're not 100% satisfied, simply return it to DAK in its original box within 30 days for a courteous refund.

To order Emerson's Window Number One VCR with HQ and Wireless Infrared Remote, 107 Channel Tuning and 8 program capability risk free with your credit card, call toll free, or send your check for DAK's breakthrough price of just \$249⁹⁰ (\$11 P&H). Order No. 4641.

To order Emerson's Window Number Two VCR with HQ, Special Effects and wireless Infrared Remote with 12 channel Random Access Tuning, 105 Channel Tuning and 4 program capability risk free with your credit card, call toll free, or send a check for DAK's breakthrough price of just \$299⁹⁰ (\$11 P&H). Order No. 4642.

To order Emerson's Window Number Three VCR with HQ, VHS HiFi, Special Effects and Wireless Infrared Remote with 16 Channel Random Access, 139 Channel STEREO Tuning and 4 program capability risk free with your credit card, call toll free, or send your check for DAK's breakthrough price of just \$499⁹⁰ (\$11 P&H). Order No. 4643. CA add tax.

Well, if you haven't joined the 30% plus of the households that own VCRs, at least by the time you've read this far you've probably got a pretty good reason.

I find that VCRs are one of those things that I just can't see how I ever lived without. And with Emerson's quality and price, this is a perfect time to add a second VCR if you already own one.



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 Any Other Inquiries... 1-800-423-2866
 8200 Remmet Ave., Canoga Park, CA 91304



The \$999 Typewriter/Computer
BOMBSHELL

Unfair Competition?

An Unfair Challenge to IBM's Typewriters and Computers

What if you and every secretary in your office could have powerful computers that were as easy to use, but cost less than IBM electronic typewriters? What if they also ran IBM compatible software? Well, now you can get this 256K IBM PC Clone, the Amber Monitor, the Letter Quality Printer, and The \$400 Software Library for just \$999.

By Drew Kaplan

Look around your office. Are your secretaries wasting time typing and re-typing letters and documents?

Well, throw out your dumb typewriters. Now typing on an IBM compatible computer can be as easy, and yes, cheaper than using an IBM electronic typewriter.

Every word you type can be stored in the 256,000 character memory or on floppy disks. So, when you make corrections to a letter or document, you'll never need to retype the whole letter again.

30 MINUTES TO PRODUCTIVITY

In 30 minutes you or your secretary will be comfortably typing letters faster than on any typewriter. This computer is so easy to use that there's no 'computer fear' from non-computer typists.

But, if you're looking for computing power, get ready to blast off. It is so powerful that it will run Lotus 1-2-3, Flight Simulator and every other IBM compatible program that we've tested.

In fact, the manufacturer states in the Operator's Guide that, "The computer is ultimately and completely compatible with the IBM Personal Computer."

Actually, typing letters is child's play for this sophisticated machine. But for \$999, it's sure to be the most popular typewriter in any office or even at home.

So, compare it to the typing ease and durability of say the new IBM Wheelwriter 5 at about \$1045, or a Xerox Memorywriter 625 at about \$1595.

Or compare just the computer section to the agility, speed, and intelligence of an IBM computer. Then, check our price.

FORGET LIFT OFF CORRECTION

Think about making a change in the first paragraph of a letter you have dictated. Just mark up the draft copy and give it back to your secretary.

She can bring the letter back onto the 80 column 25 line Amber Monitor, make the corrections, touch one button and

the letter will automatically print out with your corrections and additions.

You'll never have to reread or re-proof retyped letters again for errors. And instead of spending 15 minutes retyping and re-proofing, your secretary can be working on your next project.

A typewriter-type word processing program whose commands flash on the screen, when needed, makes this the ideal transition from typewriter to computer.

Look how easy it is to use. Simply touch the F1 key at the left of the keyboard to delete a character. F2 deletes a word. And, F3 deletes a whole line.

F5 turns this machine into a line by line typewriter for typing directly onto envelopes or forms. F6 prints out anything on screen at any time.

This is a magnificently simple program that you or your secretary will be comfortable with in 30 minutes.

But when you are comfortable, you'll want to open our sophisticated \$400 Software Library that lets you really start to use the power of this computer.



(DAK's added Software shown with included Visual Manuals)

You can type in lists of your customer's or employee's names and addresses. Then create a letter, select which names you want to receive the letter, and the computer will automatically print out individualized letters for each person.

So if you want 5 people or 500 people

to be notified personally of your newest product or policy, now it's all automatic.

There's also a Budget Program, a Calendar Program and even a Portfolio Management Program we have included.

Of course you can use any IBM compatible PC programs from Lotus 1-2-3 to Norton Utilities. Or, you can buy other even more sophisticated word processing programs that even correct your spelling or give you an on-line thesaurus.

MORE THAN A TYPEWRITER

This IBM compatible computer with its two 360 kilobyte drives, 256K random access memory (more is available), composite video and yes, even RGB full color graphics output, is made by Visual, the 5th largest manufacturer of office graphics terminals.

Visual's computer is loaded. It has both a Centronics parallel printer output (we've included a superb daisy wheel letter quality printer) and an RS232 serial communications port (yes, you can add a modem to access outside data banks, or your main frame computer).

Visual's 1985 price list shows a list price of \$1895 for this computer. And, that doesn't include the Amber Monitor, the Printer, or the Software Library that we've added. It just includes the computer and of course the IBM compatible MS DOS 2.1 operating system.

WHY SO CHEAP?

Visual makes terminals. They thought they'd design a superb IBM Clone and sell it with their terminals.

Well it turned out that Visual's salesmen weren't equipped to sell computers and Visual had put too much money into these computers (the built-in color graphics, TTL output, 2 floppy disk drives and lots of other features) to sell them at today's stripped down prices.

So, Visual has sold them all to DAK and has taken an enormous loss. (But don't worry about Visual. They are a

large company and 'dumping' these computers just lets them get back to concentrating on their main terminal business.)

So, you'll save a fortune and that's why this is an unfair comparison to IBM.

You see, you're saving money only because Visual lost money. IBM not only needs not to lose money, but needs to make a profit as well.

And, don't worry about ending up with an orphan. Unlike small computer companies that come and go, as long as Visual makes terminals, they will be around to protect your investment. Plus, they use the Sorbus Network for service. **TAKE YOUR WORK HOME TOO! Wow!**

With the addition of a \$149 optional 25 line 80 column LCD display, you can take this computer home. It only weighs 18 pounds, so it's easily transportable.

So, when it gets to be 6:00 and there's still work to be done or files to be studied, just take the computer home or send it home with your secretary.



And, with the addition of a modem, you can even transmit files from home to the office. Or, you can log onto data bases like CompuServe or Dow Jones.

THE GOOD, THE BAD, & THE BEAUTIFUL

From your first touch of the rugged sculptured keys of this computer, you'll appreciate the built-in rugged quality.

There's even a 10 key numeric pad. The 83 key keyboard is identical to IBM's PC, except for the addition of lights on the 'Cap Lock' and 'Number Lock' keys.

The contoured keyboard is extremely comfortable. But, I must warn you that if you've never typed on an IBM PC, they've made the Shift keys and Return Keys slightly smaller than on a typewriter and it will take you a few minutes to adjust.

The computer has two floppy disk drives that use double sided double density 5 1/4" floppy disks. Each floppy disk holds 360,000 characters.

As a free gift from DAK, we're including a box of 10 disks. You can store 3,600,000 characters.

The computer uses a 16 bit 8088 Intel processor with a 4.77 MHz clock speed. It is AC powered and UL and FCC listed.

There is 256K of installed random access memory (RAM) for you to use as compared to 128K for most computers and the 7K on the IBM Wheelwriter 5.

We've included Magnavox's latest 80 column 25 line 12" non-glare Amber Monitor. It has 900 lines of horizontal resolution and 350 lines of interlaced vertical resolution to display graphics.

You can also connect an RGB (red green, blue) monitor for full color graphics. With most computers, the internal 'color card' can cost you several hundred dollars. Visual's has it built-in.

You can expand this computer by adding custom cards. There is an expansion port that can be directly connected to an IBM expansion chassis. Of course, the computer is infinitely expandable by running IBM compatible software.

Here's another bad point. This system is bigger than a typewriter. The computer is 18" wide and 15 1/2" deep. And, with the monitor sitting on top, it is 14 1/2" tall. Actually, the computer really isn't any bigger than a typewriter.

But don't forget the printer. It can be placed up to 6' away, but it really belongs next to the computer so that you can easily put in paper, envelopes etc. It is 15 1/2" wide and 12 1/2" deep.

So for most productive use you need a return on your desk that is about 33 1/2" long. Of course, the printer can sit on a typing stand next to your desk or even your credenza. You'll be amazed at the increase in your productivity.

THIS IS NOT A CHEAP STARTER COMPUTER. Forget our price. Put it side by side with a similarly equipped IBM, run the same programs and you'll get the same results.

In fact, it's so compatible that you can interchange disks of your letters and programs between Visual's computer and an IBM PC whenever you wish. **Wow!**

THE PRINTER

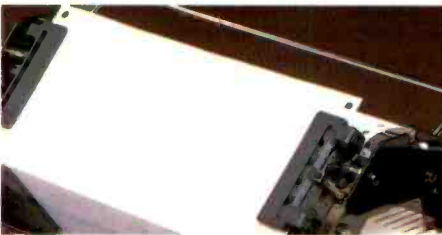
This Silver Reed daisy wheel printer will type on your standard letterhead, envelopes, 3 X 5 cards or mailing labels.

It uses the same type interchangeable daisy wheel direct impact print system as typewriters (heavy duty of course).



The printer prints at 10-12 characters per second bidirectionally. You can set horizontal spacing, 'pitch', for expanded or contracted letter spacing. You can underline automatically and you can print normal or Bold.

But, don't worry. You can simply put in your paper and type. You can even use continuous form tractor feed paper with the optional \$69 tractor feed.



Or, use your own letterhead with the optional \$119 cut sheet feeder.



FINAL NOTES

Both the Silver Reed Printer and Magnavox monitor are backed by their respective manufacturers' limited warranties. The Visual Computer is backed by Visual's limited warranty and serviced by Sorbus (or Visual).

DON'T FORGET IT'S PORTABLE

For just \$149, you'll get the factory installed 80 column 25 line (graphics capable) LCD display which simply lifts off when you're using the Amber Monitor.



You may not take your computer home or to another office every day, but the versatility is phenomenal.

ACCEPT OUR TYPEWRITER COMPUTER CHALLENGE RISK FREE

Wait till you see this state of the art computer marvel on your desk. And wait till you see what its incredible computing power can do for your productivity.

If you're not 100% satisfied with its typing or computing ability, simply return it to DAK in its original boxes within 30 days for a courteous refund.

To get your Visual 256K IBM Compatible Computer with Two 360K Floppy Disk Drives, Composite and RGB Outputs, Amber Monitor, Silver Reed Letter Quality Daisy Wheel Printer, \$400 value Software Library, 10 Free Double Sided Double Density 5 1/4" Disks and connecting cables for the monitor and the printer risk free with your credit card, call toll free or send your check for DAK's limited Close-Out price of just \$999 plus \$24 for P&H. Order No. 4500. CA res add tax.

OPTIONS

If you're into massive spreadsheets and the largest programs, order the 512K upgrade which doubles the 256K memory. It's installed by the factory for an additional \$129 (\$5 P&H) Ord. No. 4625.

Add the Factory installed 80 column LCD 25 line display so you can move Visual's computer and work wherever you want. It's just \$149 (\$5 P&H) Order No. 4626.

If you want to run continuous forms, from mailing labels to checks to letterhead, the Silver Reed Tractor feed snaps on and off in about 30 seconds. It's just \$69 (\$3 P&H) Order No. 4345.

Use your standard letterhead automatically with the cut sheet feeder. It feeds paper like an automatic copier tray. It's just \$119 (\$5 P&H) Order No. 4627.

Standard 300,000 character black poly ribbons are just \$6 (\$0.50 P&H) Order No. 4346. You'll never see a lifted off correction mark that shows where errors have been removed again. You'll get 'Presidential Quality' letters that you'll be proud to mail every time.

IBM & IBM Wheelwriter 5, Lotus & Lotus 1-2-3, Flight Simulator, and Xerox & Xerox Memorywriter 625, are registered trademarks of International Business Machines, Lotus Development, Microsoft, and Xerox Corporation respectively.



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8200 Remmet Ave., Canoga Park, CA 91304

a rose by any other name

It's the sweetest phone that this writer has ever used. From its elegant good looks to its elegant sounding speakerphone, it's a class act. And, it remembers and dials up to 200 numbers by THE NAME of the person you want to call. Plus, it's now available in ivory and 1-line models too.

By Drew Kaplan

It's not red. And it has no aroma. But it is definitely a rose amongst the thorns. Here's an all new name dialing 2-line conferencing speakerphone that will revolutionize your concept of telephones.

As president of DAK, I've tested hundreds of phones. Some are very good and you will find them in DAK's catalog. But, I've never used a better sounding, more useful phone, at home or at the office, than the phone pictured above. Let me tell you some of the reasons why.



FIRST, IT DIALS BY NAME

I hate having to remember phone numbers. With this phone, all I do is push the 'H' button when I want to dial Home. The 'D' button dials DAK. And, the 'I' button dials my insurance broker.

Most other dialers make you remember location numbers, such as '26' for 'Mom'. So, you're really just substituting one number for another. Now, all I need to remember is the person's name.

Where I have more than one name that begins with the same letter, I can scroll through the names before it dials, or enter just the first 3 letters. So, if I want to dial Howard instead of home, I push 'H', 'O', 'W'.



It's quick, it's easy and you'll never have to remember or look up and dial anyone's number again. Each memory location can hold up to 32 digits and you can store up to 200 different names. It has a memory capacity of 4096 digits.

You can store your Sprint and MCI codes with the person's name, in a separate location that the phone automatically accesses as it dials, or totally separately so that you can automatically access the service and then dial a number manually.



And speaking of manual dialing, you don't even have to push the speakerphone button to dial. When you touch the first number on the dial, the phone automatically seizes the line, turns on its speaker, and you have on-hook dialing.

So, you never have to lift the receiver or activate the speakerphone unless someone answers the line.

FORGOTTEN HANDSET

This phone has the latest K2 handset. It gives you traditional Phone Company fit and feel, yet, I find it even more comfortable to use.

But, you'll probably never use it. The speakerphone is so powerful, so clean, and so easy to use, you'll never pick up the handset unless you need privacy.



I've used good speakerphones before, but this speakerphone's sound quality rivals an in-person conversation, not a phone call. How's that for a description of a phone you can try on a 30 day risk free trial?

2-LINE MASTERPIECE

You can select Line 1 or Line 2. And, you can push 'Conference' to combine both lines for convenient business conferences or friendly group calls with friends. There are LEDs that show which line is 'In Use', 'On Hold', or 'Ringing'. And, there are different rings for each line.

Installation is a breeze. It simply plugs into one standard modular 2-line jack or two modular 1-line jacks. Nothing could be simpler. Just plug it in.

PAGES OF HELPFUL FEATURES

The list of features would have to be microfilmed to fit on this page. There's a large LCD display that shows you the name you want to call and the number.

An automatic timer tells you exactly how long you've been talking. And, a clock appears on the display whenever you hang up.

Every conceivable feature from Mute to Tone/Pulse switching, to Pause, to Flash, to battery backup (2 C batteries included), to three direct Emergency Memory Keys and more is included.

There's even Automatic Redial which will redial a busy number for you every 30 seconds.

YUPPIE POWER

I'm anything but a yuppie, even though I just turned 40, but when you look at the sleek, swept back, silver-grey HiTec appearance, and when you examine its complete computer keyboard, you'll understand why it would warm a yuppie's heart. My heart is warmed by what it does, but I must admit it is impressive.

It's made by Colonial Data, a research company partially owned by one of the largest inter-connect (big business phone systems) companies in the world.

It is 9½" wide, and it's backed by Colonial's standard limited warranty. PUT NAME DIALING ON YOUR LINE RISK FREE

It's the best sounding speakerphone I've ever heard. Dialing by names instead of numbers is a quantum leap in both technology and convenience.

Now, I don't have to remember people's phone numbers. I just touch a 'C' for customer and let the phone do the rest.

If you are not 100% convinced, as I am, that this is the best sounding, most convenient phone you have ever used, simply return it in its original box within 30 days for a courteous refund.

To order your Name Dialing 2-Line Speakerphone with God only knows how many features risk free with your credit card, call toll free or send your check for DAK's breakthrough price of just \$129 (\$4 P&H). Use Order No. 4335 for Silver-Grey. Or, use Order No. 4452 for Ivory.

If you'd like the 1-line model in Ivory without the 2-line features, it's just \$99⁹⁰ (\$4 P&H). Order No. 4453. CA res add tax.

In DAK's electronic world, where a new best is achieved almost every day, this phone stands out as the 'best' best I've ever had the pleasure of introducing. DAK and the 'a rose by any other name' phone are not affiliated with CXC Corporation's Rose Console.



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Technical Information. . . . 1-800-272-3200
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8200 Remmet Ave., Canoga Park, CA 91304

What's a Mamfactacdc?

Have you guessed yet? It's all the musical sources in this incredible, top of the line, complete music system, backwards. And, if you think Mamfactacdc is a mouthful, wait till you see all you get for just \$299. Wow!

By Drew Kaplan

It's party time. With a Mamfactacdc, there's something for everyone. And, wait till you hear the sound.

This top of the line complete stereo system has more musical sources than any modular system I've seen. And, the sound from each source is breathtaking.

Let's explore all that it does on a musical source by source basis.

CD = Compact Disc Player. And it's not just any player. You can program up to 20 different selections in any order you desire. Wow, 20 memories!

You'll have Next Song and Previous Song. There's even Repeat so that you can have continuous music from 1 disc.

This CD even has a motorized front loading system. Its oversized display shows track number or running time, and, of course, program selections.



But, you've really got to hear a CD for yourself. The sound quality and clarity of the music is so awesome it makes the switch from 78s to LPs a non-event.

CA = Cassette Deck Times 2. There are twin high speed dubbing cassette decks. You can duplicate tapes at high speed or normal speed.

The decks are matched for flawless copies and there's even mike mixing. You'll love this feature if you sing.

Simply put a recorded tape in deck 'A' and copy it onto deck 'B' as usual. But, while you're copying, you can add your own vocal. Just plug in your mike and sing. You can be a single, a duet, a trio, or even a chorus by repeated recording.

Of course, you can make original tapes from any of this system's musical sources.

And, look at this. There's even sequential play, so you can play a cassette in one deck and when it's finished, the other deck will automatically start. You'll have twice the amount of uninterrupted music.

With these twin decks, you'll make great recordings and enjoy great sounding music from your cassettes.

TT = Belt Drive Turntable. It's a semi-automatic turntable with a hinged dust cover. A low mass tone arm and quality cartridge protect your cherished records while providing superb reproduction.

You can listen to LPs and 45s. There's automatic arm return. And, there's a cueing control for record protection and easy track selection.

In a world gone CD crazy, if you're like me, you'll still want to listen to your record collection. And, this stable turntable should provide years of superb listening pleasure from your records.

FM/AM = FM stereo and great sounding AM are yours with the sensitive tuners in this system. A large slide rule dial makes it easy to find stations.

There's a built-in antenna or you can connect to an outside antenna. Just wait



till you hear your favorite stations locked in by these receivers.

MUCH MUCH MORE

There's a 5 band equalizer so that you can sculpture your sound just the way you want it. You can really 'detonate' the bass or high end for room filling sound.

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Emerson had to use better than normal speakers in this system to handle the dramatic capabilities of the CD. You won't be disappointed with the full rich sound.

There's no volume knob because this system has an electronic volume bar. Just touch one end or the other.

And there's one more thing. There's a built-in clock timer. You can have this system shut itself off automatically. Or, you can have it turn itself on.

When it turns itself on, it can wake you with your favorite music, or if you've set it to record, it can record from the AM or FM radios. Wow, how neat.

It is 16½" tall, 14" wide, and 13¾" deep. Each speaker is 14¼" tall, 7" wide, and 9¾" deep. It's backed by Emerson's standard limited warranty.

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A lot of sources stuck together wouldn't mean much if they weren't top quality. Just wait till you hear how your favorite music sounds through this system.



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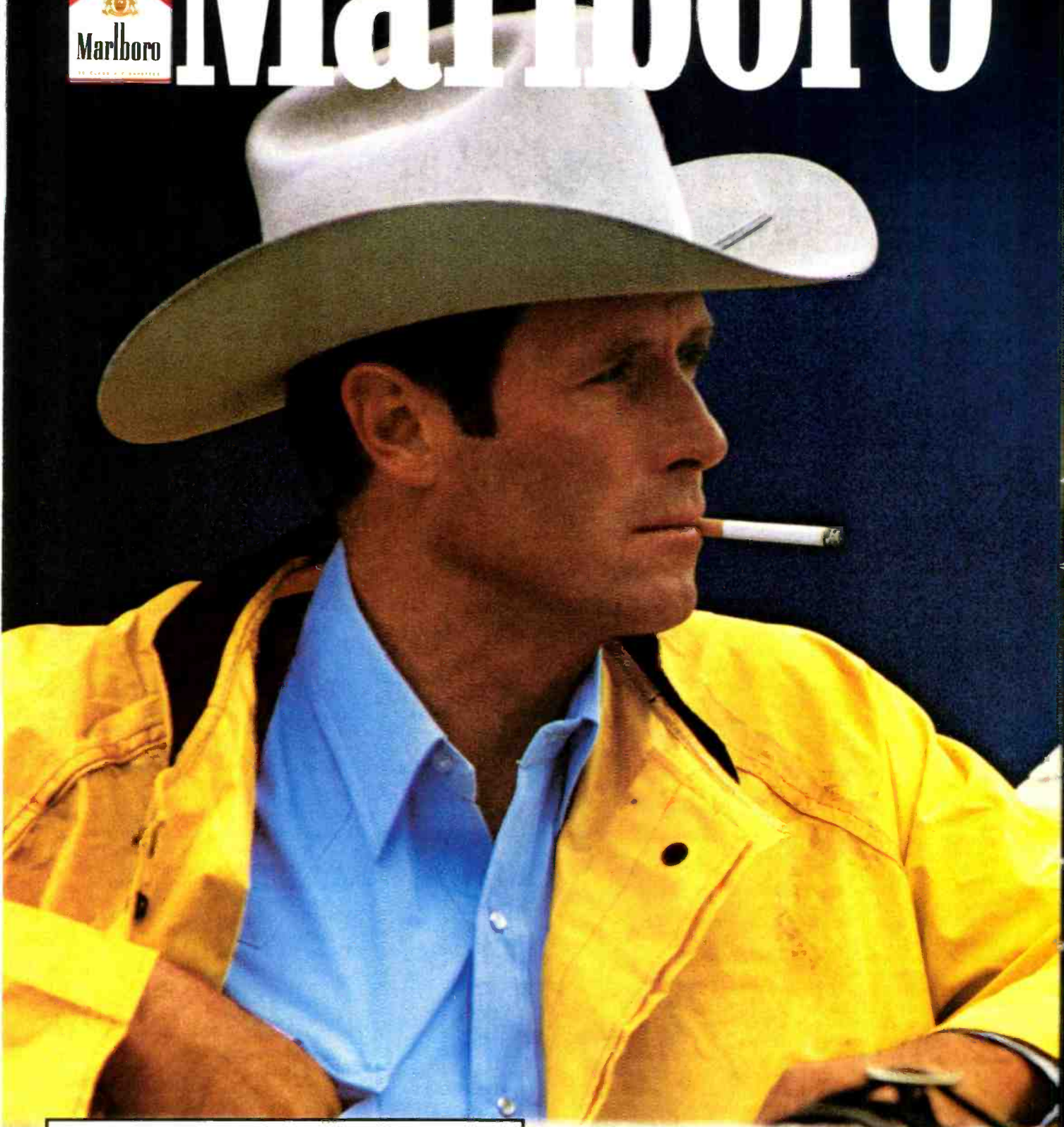
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PHOTOS BY JOOK LEUNG

ADCOM GFA-555 POWER AMPLIFIER

Julian Hirsch, Hirsch-Houck Laboratories

THE Adcom GFA-555 power amplifier is somewhat unusual in being an affordably priced product that has also received wide acceptance from the "high-end" section of the audio fraternity. The amplifier combines basically conventional circuit design with a number of unusual operating details that set it apart from other high-power amplifiers. It is rated to deliver 200 watts per channel into 8-ohm loads from 20 to 20,000 Hz with no more than 0.09 percent total harmonic distortion, or 325 watts into 4 ohms at 0.25 percent distortion. As a bridged-mono amplifier, it is rated at 600 watts into 8 ohms with less than 0.25 percent distortion.

The Adcom GFA-555 is a full-size, handsomely styled amplifier. Its front panel, decorated with a pattern of horizontal striations, has a large rocker-type power switch and a small red LED pilot light at the lower left. At the other end of the panel, two LEDs monitor the left and right channels and flash instantaneously when the distortion in either of them exceeds 1 percent.

Since these overload indicators actually monitor the entire feedback loop, they respond to any form of nonlinear distortion, including transient intermodulation distortion (TIM) or even a DC offset (the amplifier is direct-coupled throughout).

On the rear of the amplifier are the heat-sink fins, heavy-duty insulated binding-post speaker terminals, phono-jack line inputs, and a switch that converts it from a conventional stereo configuration to a bridged-mono amplifier.

The output stage of each channel contains eight high-power transistors capable of delivering more than 20 amperes to low-impedance loads. The operating bias of the driving and output transistors is stabilized against changes in temperature, line voltage, or signal conditions by a newly developed current-feedback technique.

There are no conventional current-limiting protection circuits in the GFA-555. A very large, short-term overload, such as might be caused by an output short-circuit at high power outputs, will blow one of the internal DC power-supply

fuses or the 10-ampere line fuse (which is user-replaceable). Sustained high-power operation may eventually increase the heat-sink temperature to 75° C, at which point a thermal circuit breaker shuts off the amplifier. When the amp cools to a safe temperature, operation is automatically restored. The power supply uses a 700-watt toroidal transformer that is said to have many of the advantages of two separate transformers but to be more cost-effective.

The Adcom GFA-555, which weighs about 30 pounds, is 17 inches wide, 11 inches deep, and 7 inches high. Optional rack-mounting extensions and handles add 2 inches to the width and 1¼ inches to the depth. The amplifier is available in a black or glossy white finish. Price: \$679.95 in black, \$749.95 in white. The RM-7 rack adaptors are \$19.95 per pair. Adcom, Dept. SR, 11 Elkins Rd., East Brunswick, NJ 08816.

Lab Tests

Our standard one-hour preconditioning at one-third rated power left the top of the Adcom GFA-555 very hot to the touch. The amplifier's output clipped at 242 watts into 8 ohms, 352 watts into 4 ohms, and 465 watts into 2 ohms. In our dynamic power measurements, the clipping level during a 20-millisecond tone burst was 352 watts into 8

LABORATORY MEASUREMENTS

1,000-Hz continuous output power at clipping: 242 watts into 8 ohms, 352 watts into 4 ohms, 465 watts into 2 ohms; in bridged mono mode, 760 watts into 8 ohms, 900 watts into 4 ohms

Clipping headroom (relative to rated output): 0.83 dB (8 ohms), 0.35 dB (4 ohms)

Dynamic headroom: 2.46 dB (8 ohms), 2.87 dB (4 ohms)

Dynamic power output: 352 watts into 8 ohms, 630 watts into 4 ohms, 1,120 watts into 2 ohms.

Harmonic distortion (1,000 Hz, 8 ohms): 1 watt, 0.038%; 200 watts, 0.019%

Sensitivity (for a 1-watt output): 130 millivolts

A-weighted noise (referred to a 1-watt output): -101.5 dB

ohms, 630 watts into 4 ohms, and 1,120 watts into 2 ohms. We measured the power envelope of the GFA-555 by extending these tone-burst measurements to longer "on" times, up to 300 milliseconds. At the longer burst durations, the maximum output was 65 to 70 percent of the EIA dynamic power output with 8- and 4-ohm loads, and 50 percent of the dynamic power with 2-ohm loads. We also made limited tests of the amplifier in its bridged mode, where the amplifier clipped at 760 watts into 8 ohms and 900 watts into 4 ohms.

The 1,000-Hz distortion was nearly constant over the full power output range of the amplifier, and only slightly higher with 2- and 4-ohm loads than with 8 ohms. The 8-ohm readings were between 0.02 and 0.04 percent from 1 watt to over 200 watts output. Driving 4 ohms, the distortion was between 0.038 and 0.07 percent from 1 watt to more than 300 watts. The 2-ohm measurements ranged from 0.07 to 0.16 percent from 1 watt to 450 watts per channel. Over the entire audio frequency range, the distortion was nearly the same at rated power, half-power, and one-tenth power. It was between 0.02 and 0.04 percent from 20 to 10,000 Hz and reached a maximum of 0.07 percent at 20,000 Hz and 200 watts output.

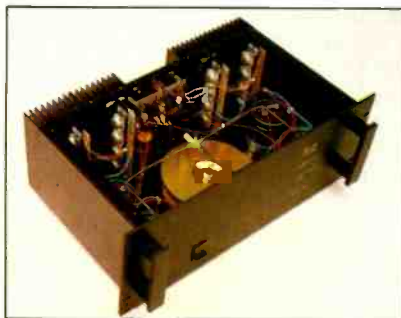
The distortion indicators on the front panel operated with exceptional effectiveness and accuracy. They lit precisely at the point where the waveform began to show signs of clipping.

The GFA-555 required an input of 0.13 volt for a 1-watt reference output, and the A-weighted output noise was 101.5 dB below 1 watt. The slew factor was 3, with a 200-

watt sine-wave output assuming a triangular shape at about 60,000 Hz. The reactive load factor was 1.02 dB, and the amplifier was stable with simulated reactive speaker loads. Its frequency response, flat within 0.1 dB throughout the audio range, was down 1.2 dB at 5 Hz and 3 dB at 140,000 Hz. Although Adcom says that the GFA-555 has no capacitors in its signal path, the infrasonic rolloff we found suggests that there is at least an input blocking capacitor.

Comments

The Adcom GFA-555 demonstrated its indestructibility during our tests. Starting from a very hot top surface after the one-hour preconditioning period, it became even hotter as we drove low-impedance loads to high levels. Finally, with an



output of hundreds of watts into 2-ohm loads, it simply shut down. Since the front-panel pilot light was extinguished, we thought at first that the 10-ampere line fuse had blown. When it proved to be intact, we waited with as much patience as we could muster for the amplifier to return to life, which it did in about half an hour. The thermal circuit breaker operated several other times during our tests, but this mi-

nor annoyance was certainly preferable to the alternative of blown output transistors! In the bridged mode, the line fuse finally blew out at 900 watts into 4 ohms.

Clearly, the Adcom GFA-555 is a muscular component that is thoroughly protected against most of the accidents that can befall a high-power amplifier. Although there were frequent thermal shut-downs during some of our bench tests, the amplifier ran almost perfectly cool during our listening tests. Adcom stresses the 60,000 microfarads of power-supply filter capacitance and suggests shutting off the AC power to the amplifier while it is playing as a demonstration of the power supply's energy-storage capability. Depending on the playing volume and the nature of the program, we found that it played without audible change for 12 to 15 seconds after being switched off. We were impressed.

Another noteworthy characteristic of this amplifier is the absence of relays—it turns on and off in total silence, with no thumps in the speakers or audible sounds from relay operation. And we certainly appreciated the absence of a fan when we were listening to the amplifier.

It is difficult to comment on the sound of the GFA-555. It is obviously a superb amplifier by any objective standard. As we have found, A/B comparisons with other amplifiers are fruitless, and none of the speakers we had on hand presented the kind of load that would reveal the special qualities of an amplifier like the GFA-555. Adcom says that it will drive the 1-ohm impedance of an Apogee speaker, and everything we learned about it makes that seem like a reasonable claim.

The GFA-555 is not only one of the smoothest, quietest, and nicest-performing amplifiers we have used, but it also happens to be one of the most attractive. Our test sample had the optional white panel finish, which deserves to be given a highly visible position in any music room. Other Adcom components are also available in white—could this herald a trend away from the all-black styling that seems to dominate the audio industry?

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If there was ever a machine ahead of its time, it's Pioneer's new CLD-909. The most remarkable machine ever invented to play compact discs, LaserVision discs and music video discs.

No longer need you buy two machines to get the best of both sight and sound. The CLD-909 does it all. And does it beautifully.

The CLD-909 represents a stretch of the engineer's imagination. It incorporates a number of technological breakthroughs. One is a laser pickup/objective lens system with the smallest aperture yet—0.55 microns. That's one thirty-four hundredths the diameter of a human hair. It takes this kind of incredibly fine laser focus to read the density of information encoded on CDs and LaserVision discs. Another is a newly-developed Constant Distance Tilt Servo that maintains high trackability even on severely warped discs.

It is this kind of advanced technology that lets the CLD-909 deliver a picture 20% sharper than live broadcast television. And 60% sharper than the latest VHS HQ VCRs.

Getting the picture? It's so sharp and accurate and faithful to life that things appear almost 3-dimensional. And unlike videotapes, optical discs don't wear out. They also give you random, immediate access to any frame or time point. Impossible with tape.

And what convenience and versatility. You can program the CLD-909 to play audio or video tracks in any order you wish. You can

repeat programs, segments, or entire sides. The possibilities are just about endless.

The CLD-909 includes many highly sophisticated features. Like

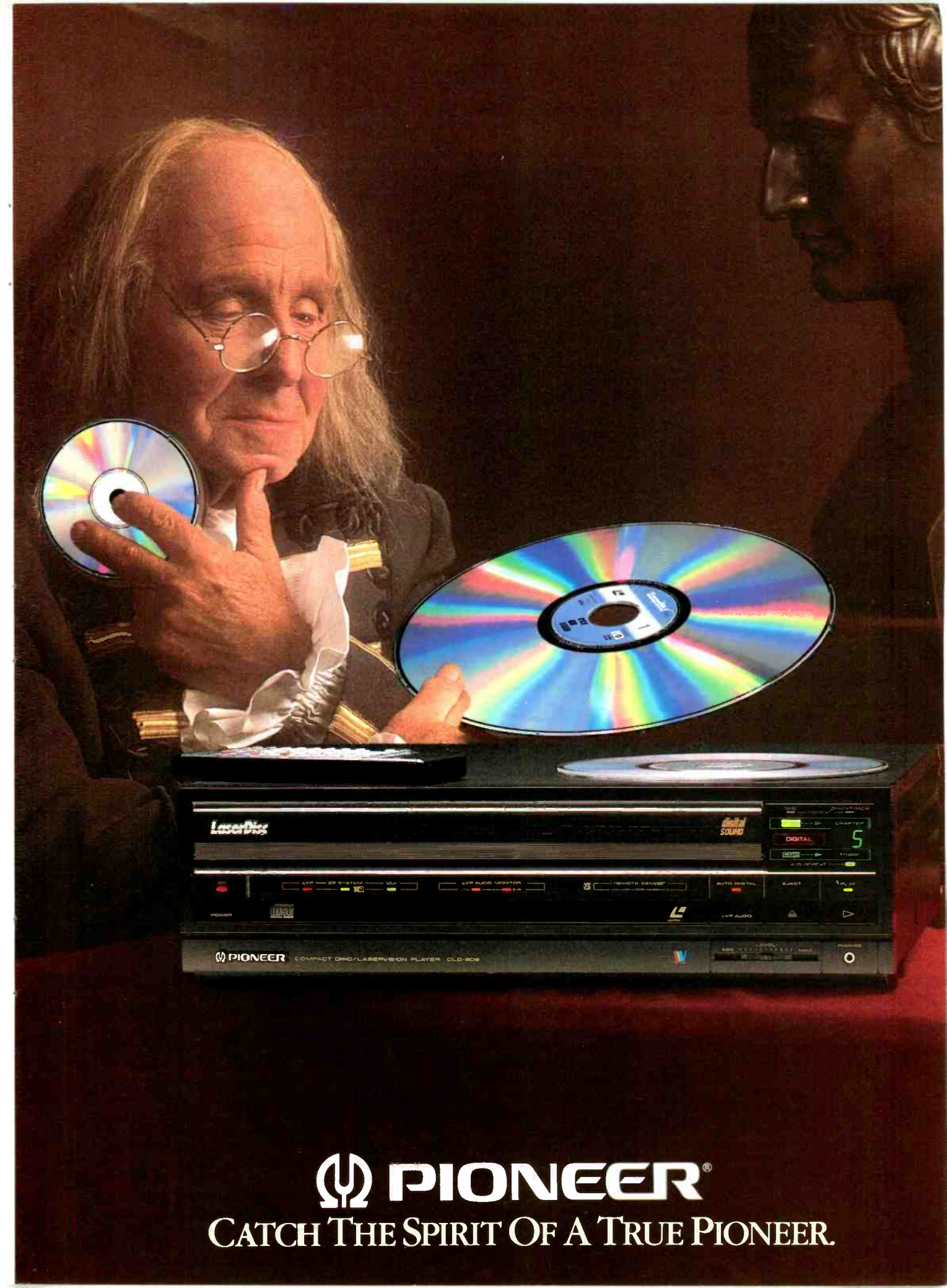
automatic disc and digital sound detection, semi-automatic front loading, subcode output, on-screen programming, as well as on-screen function display. It is fully remote-controllable for stand-alone or system use, and has a built-in computer control port. We've also designed a new CD Motor *Swing Assembly* that lets us make the CLD-909 just 4.7 inches high. Then we added sophisticated electronics like a new Pulse Count IC and Noise Canceller to achieve a remarkable horizontal resolution of 400 lines.

The CLD-909 gives you breathtaking digital audio to match its breathtaking video. From compact discs, of course, as well as many 12-inch LaserVision discs and 8-inch music video discs. And Pioneer's exclusive Linear Servo system accurately reproduces music from even warped, scratched or dirty CDs.

Pioneer's revolutionary CLD-909. More than just a new idea. It is without a doubt the finest source of sight and sound you can possibly own. See it at your Pioneer Dealer. Or call 1-800-421-1404.

CIRCLE NO. 55 ON READER SERVICE CARD

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AKAI CD-A70 COMPACT DISC PLAYER

Julian Hirsch, Hirsch-Houck Laboratories

AKAI'S CD-A70 compact disc player features a three-beam laser pickup (one for signal pickup and two for accurate tracking of the spiral recorded track). It also offers an exceptional degree of programming versatility, and each of its soft-touch front-panel pushbutton controls is duplicated on the supplied RC-700 wireless remote control. The front panel also contains the disc drawer and a stereo headphone jack with separate slider volume control (the rear line output is at a fixed level). There is a subcode output terminal on the rear apron for use with future digital accessories.

The CD-A70's display window has large, bright-yellow numerals to show the current track number and playing time (when the player is first turned on, the display shows

the total number of tracks and playing time on the disc). The index number, if any, is also displayed. Other illuminated words and symbols identify such control operations as PROGRAM, REPEAT, PLAY, and PAUSE.

The performance specifications of the CD-A70, like those of other CD players, are determined primarily by the compact disc system rather than by the design of the player itself. Its rated frequency response is 5 to 20,000 Hz \pm 0.5 dB, with a 95-dB signal-to-noise ratio (S/N), a 90-dB channel separation, and 0.003 percent total harmonic distortion at 1,000 Hz. The nominal line-output level is 2 volts.

Like a number of other CD players, the Akai unit has random-access programming capability. A keypad on the front panel can be

used for direct access to any track on the disc or to play any combination of tracks. The playing order is established by an unusually simple and logical system. After a track number has been entered (it appears on the display together with the word PROGRAM), you can choose among the logical commands AND, TO, and WITHOUT before the next number is pressed. For example, you can program the machine to play Tracks 4 through 11, omitting

Akai's CD-A70 offers an exceptional degree of programming versatility, and its front-panel controls are duplicated on the supplied wireless remote.

Track 6, by entering the sequence "4 TO 11 WITHOUT 6." The programmed and nonprogrammed operating modes are controlled by separate PLAY/PAUSE buttons. The CD-A70 also provides both direct

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Spine-tingling, breathtaking sound you can actually feel. Like the throbbing, rumbling bass of a rocket blastoff. The stage-thumping power of a Broadway finale. The romantic crackling of a fireplace. Or the trembling mouthpiece whisper of a single flute.

It's an experience you wouldn't think could come from a television. Until now.

Introducing Zenith's Digital Color TV with Sound by Bose—the raw emotional impact of a live performance. With sounds you've never heard, or felt, before from a television this compact.

It starts with the stereo signal Zenith invented, fed into the separate left and right amplifiers of a specially designed Bose sound system. Front-firing TWIDDLER™ drivers provide spaciousness and presence by filling the air with crisp, clear

mid-range and treble harmonics. All shaped into astonishingly true-to-life stereo images that complement the picture beyond the capabilities of separate component systems.

Next, deep bass with exceptional clarity is added by exclusive Bose Waveguide technology. Its power and emotion make you feel surrounded by on-screen action, even at low levels. With virtually no distortion, even at earth-shaking volumes.

Finally, instead of the old-fashioned loudness button, an exclusive dynamic equalization circuit automatically adjusts the level of bass sound to give you natural tonal balance with extraordinary richness and clarity at all volume levels and viewing positions.

And because it's digital, Zenith's 27" square-cornered picture brings you sharper, more vibrant colors than ever

before. Plus on-screen displays. Built-in Teletext for instant news, weather and sports. And a full set of jacks that make it the ultimate receiver/monitor for everything from VCRs and cable to PCs.

Zenith's Digital Color TV with Sound by Bose. The only way you'll ever believe it, is to go hear it at selected Zenith dealers.

You bring the ears, we'll supply the goosebumps.



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CIRCLE NO. 60 ON READER SERVICE CARD

Model SC2793S CV225 Base Optional. Diag. meas.
Where W.S.T. Teletext avail. © 1986 Zenith Electronics Corp.

FEATURES

- Front-loading motorized disc drawer
- Soft-touch operating controls
- Digital and analog lowpass filters
- Fast track search
- Fast scanning with audible sound
- Display of current track and index number, elapsed time of track or disc, total number of tracks and playing time of disc
- Direct or programmed access to any track or indexed segment (up to No. 99)
- Direct entry of tracks to be omitted in programmed sequence
- Indefinite repeat of entire disc or programmed sequence
- Phrase repeat
- Subcode output
- Headphone output with separate volume control

LABORATORY MEASUREMENTS

Maximum output level: 1.9 volts

Total harmonic distortion at 1,000 Hz referred to 0 dB: 0.0022%

Signal-to-noise ratio (A-weighted): 100.5 dB

Channel separation: 92 dB at 1,000 Hz; 92.5 dB at 10,000 Hz

Frequency response: +0, -0.6 dB from 20 to 20,000 Hz

Cueing time: 1.5 seconds

Cueing accuracy: A

Impact resistance: top, B; sides, A

Defect tracking: tracked all defects on Philips TS5A test disc

and programmed access to the indexed subsections of recordings.

The CD-A70, which is finished in black, measures 17¼ inches wide, 10¼ inches deep, and 3 inches high, and it weighs 8 pounds, 13 ounces. Price: \$475. Akai America, Dept. SR, 800 W. Artesia Blvd., Compton, CA 90220.

Lab Tests

The frequency response of the Akai CD-A70 was very flat from 20 to 10,000 Hz (with a periodic ripple of ±0.1 dB above 1,000 Hz) and sloped off to -0.6 dB at 20,000 Hz. The two channels had identical output voltages of 1.9 volts from a maximum-level (0-dB) recorded test signal. The square-wave output of the player indicated that it uses digital filtering (its specifications refer to a combination of an eighth-order digital filter and a seventh-order analog filter).

The total harmonic distortion (THD) was 0.0022 percent at 0 dB and was below the noise level at -10 and -20 dB. The A-weighted noise was -100.5 dB referred to 0 dB. The channel separation was about 92 dB between 100 and 10,000 Hz, decreasing to 84 dB at 20,000 Hz. Interchannel phase shift increased from 5 degrees at 100 Hz to 125 degrees at 20,000 Hz. The cueing accuracy of the player was excellent, and its slew time in our

standard test was 1.5 seconds, much faster than the average for CD players we have tested. The CD-A70 tracked flawlessly through all the calibrated defects on the Philips TS5A test disc. It also tracked quite well while being tapped vigorously on its top plate, and it withstood rather severe raps to its sides without audible effects on tracking.

Comments

The front-panel display of the CD-A70 was easily readable from a

distance of 15 or 20 feet, and the remote control operated reliably at the same distances. The sound was as good as that of any CD player we know of, and the listening volume through medium-impedance (200-ohm) headphones was also good. Unlike most CD players, the open/close button for the CD-A70's disc drawer is not located near the drawer (it is grouped with the other control buttons at the other end of the panel), but one soon becomes accustomed to this small quirk. Access time is among the fastest we have seen in this price range.

In fact, our sole criticism of this player derives from its very versatility! The instruction manual (in six languages) appears to be comprehensive, but we still had considerable difficulty establishing just what could and could not be done with the machine's programming system. Although the manual explains reasonably well how to use the programming features, it does not tell about their limitations. For example, attempting to use the repeat feature during programmed play will erase the program. We also could not find any reference in the manual to the PRGM SKIP and INDEX SKIP buttons and their functions. Quibbling aside, the Akai CD-A70 is a fine machine whose unique operating capabilities may make it a clear choice for many people.

Circle 141 on reader service card



"... How about you, Mr. Janklow? Did that last violin selection come from the speaker on your left, on your right, or from the violinist in the middle?"



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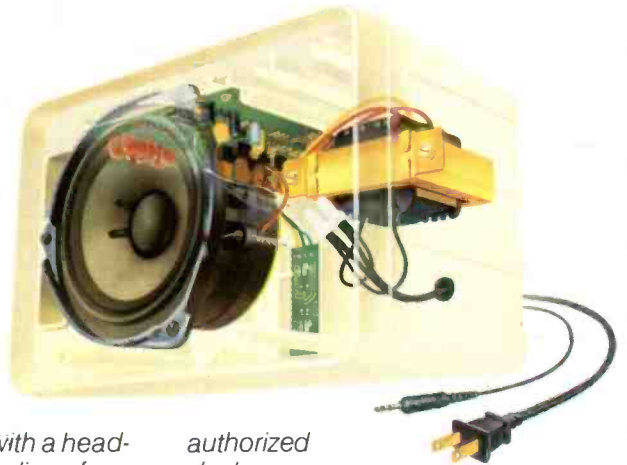
Toteworthy Stereo

Today, a good stereo's place isn't necessarily just in the home. Plug the new Bose® RoomMate® powered speaker system into a personal stereo, and you'll have a complete, compact, room-filling stereo system that you can use nearly anywhere. Or combine the RoomMate system with one of the new generation of portable compact disc players, and you'll have a digital stereo system that's as compact and easy to carry as a camera outfit!

The RoomMate system can create true high fidelity out of personal stereos and CD players because it has its own built-in amplifier and active

equalizer. In fact, the RoomMate system uses some of the same audio technology that made the Bose 901® speaker an audio legend. The RoomMate system works with keyboards, personal computers, and virtually anything equipped with a headphone jack. And there's a line of accessories available such as mounting arms, wall brackets, and the travel bag shown above. Best of all, the RoomMate system's price is very easy to live with.

You'll probably find applications for the system all around you—because there's high fidelity hidden inside almost all of your personal electronics! Audition the Bose RoomMate system at your



authorized dealer soon.

For more information, write: Bose Corporation, Dept. SR, 10 Speen Street, Framingham, MA 01701.

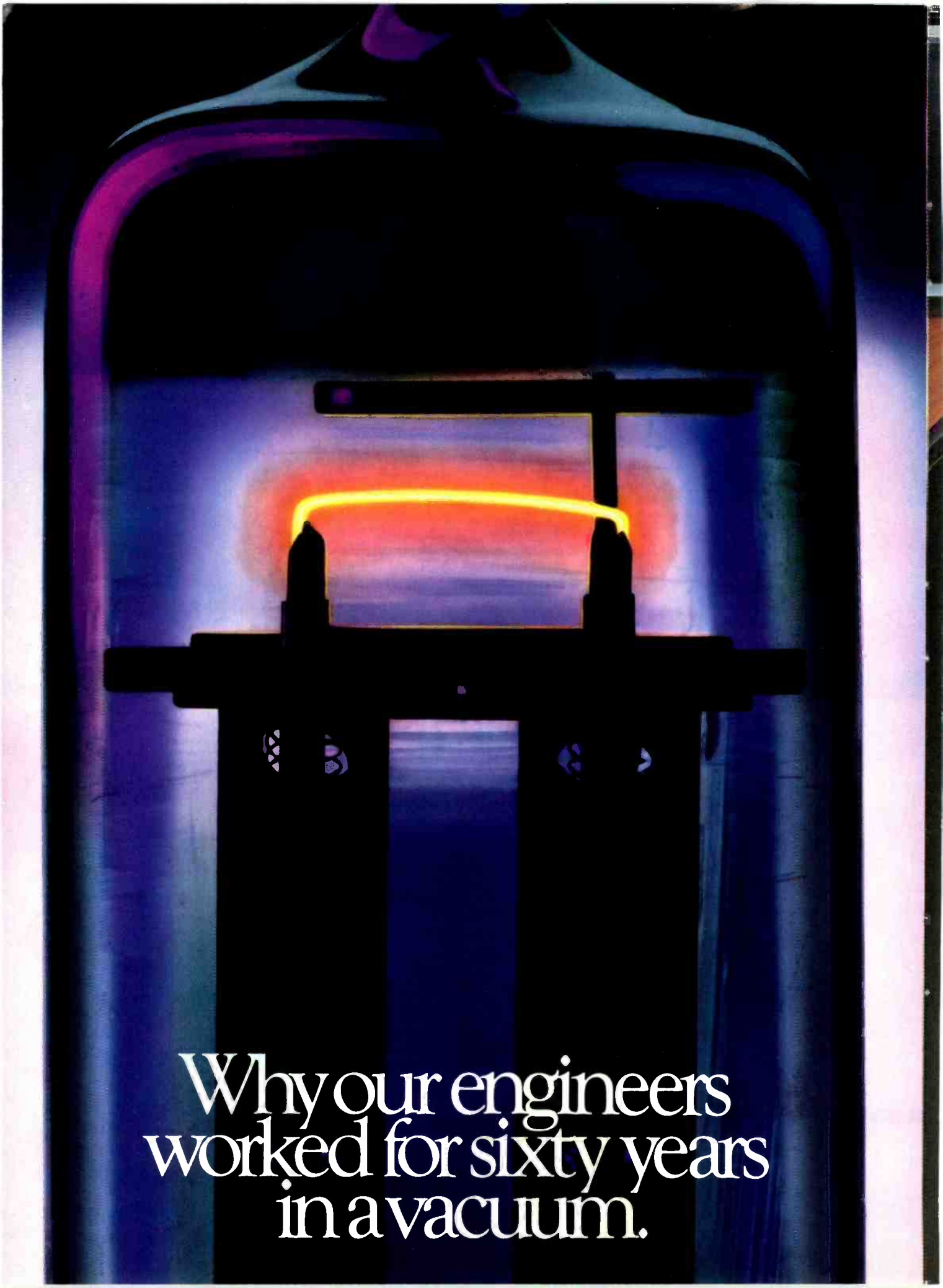
BOSE

Roommate

POWERED SPEAKER SYSTEM

Covered by patents issued and/or pending.
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CIRCLE NO. 32 ON READER SERVICE CARD

A photograph of a vacuum furnace. The furnace is a large, dark, cylindrical structure with a glass viewing window. Inside, a bright yellow-orange arc is visible between two electrodes. The background is a gradient of blue and purple. The text is overlaid at the bottom.

Why our engineers
worked for sixty years
in a vacuum.

In an effort to push past the boundaries of conventional amplification technology and design, Luxman engineers took a daring step back, and rediscovered the vacuum tube.

The result—Luxman's LV-105 and LV-103 Brid Amplifiers. Their design is so advanced it took 1985's prestigious "Good Design Award" from the Japanese Ministry of International Trade and Industry. They are the world's first "hybrid" amplifiers—combining the warm, rich sound of vacuum tubes, with the power of transistors.

Indeed, over the years, audio engineers have been searching for a design in amplification that would reproduce that elusive quality of sound called, live performance.

To create such a design, our engineers didn't simply fine tune solid state components, but drew upon Luxman's 60 years of vacuum tube technology and found the 6CG7A Twin Triode tube. A distinction that makes the Brid Amplifiers nothing less than pure listening pleasure.

Examine the inner workings of the Brid design. You'll find Twin Triode tubes perfectly matched with MOSFET high speed semiconductors. Together they

form an extraordinary hybrid circuit which delivers sound so clear, so pure and accurate, it's virtually indistinguishable from an original live performance.

Of course the real test, is to turn on a Brid amplifier and hear it perform for yourself.

At once, your ears are treated to smooth and natural, three dimensional sound. You hear the subtleties of instruments. You hear extended highs and lows. And you hear a

warmth and fullness of sound that's truly music to the ears.

And to create a complete audio and video performance in your home, the LV-105 incor-

porates a Professional Grade video amplifier. It improves both TV picture and VCR recording quality. So you get as much pleasure viewing, as you do listening with a Brid.

At Luxman, our engineers took a bold step back to achieve a rare standard of audio/video excellence. Now you can take a remarkable step forward and enhance your listening and viewing pleasure with

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sophisticated three-motor Cassette Decks, plus a new generation of CD Players with the Fine Ceramics anti-resonant construction Kyocera originated.

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B&W MATRIX 1 SPEAKER SYSTEM

Julian Hirsch, Hirsch-Houck Laboratories

ALTHOUGH the theoretical design criteria for enclosed speaker systems are well known, they assume a perfectly rigid enclosure. Any vibration of the cabinet surfaces produces an acoustic output that may not be directly related to the driving signal's waveform and whose phase and directional properties can degrade the overall system's sound output. The conventional solution to this problem is to make the speaker enclosure of thick, heavily braced wood or particle board and to make liberal use of internal

damping materials, such as glass fiber or wool, to minimize the effects of cabinet resonances. Other approaches have included the use of "sandwich" panels filled with sand, laminated-aluminum aerospace materials (Aerolam), and even concrete enclosures.

The new Matrix series from B&W Loudspeakers represents a different approach. Extensive listening tests and laboratory measurements by the well-known British manufacturer led to the conclusion that none of the conventional enclosure constructions was completely free from

audible colorations. The major requirements for eliminating these effects are low cabinet-radiation amplitude and rapid decay (damping) of the radiated energy.

The solution proposed by B&W's chief electronics engineer, Laurence Dickie, was to fill the interior of a conventional high-density particle-board cabinet with a matrix structure resembling a honeycomb, with long cells square in cross section. The matrix is formed of a series of interlocking, perforated members having relatively high damping qualities and high stiffness. The inner walls of the cabinet are grooved to accept the horizontal members of the matrix, which is then rigidly bonded to the cabinet. Finally, each cell of the matrix is filled with acoustic foam to damp any remaining resonances.

B&W engineers made lab studies of a number of speaker enclosures, attaching accelerometers to the outside of the cabinets to measure the vibration at many points on the surface and subjecting data obtained from these measurements to extensive computer processing. Comparisons of test results on similar enclosures made of different materials showed that the B&W Matrix structure was superior to the others in respect to vibration amplitude versus frequency and decay rate as a function of time. Its high mass also helped attenuate high-frequency cabinet radiation.

Completely new drivers were developed for the three new speaker systems designed around the Matrix enclosure. The woofer cones are shaped of a homopolymer form of polypropylene that was found to be 1.6 times stiffer than conventional copolymer materials and relatively free of breakup effects. The Matrix 1, smallest of the new family of speakers, has a single 6-inch woofer whose frame is cast as a unit with its magnesium-alloy front plate. The voice coil of the newly designed tweeter is cooled and damped by ferrofluid in its magnetic gap. The crossover, at 2,000 Hz, was simplified by designing a 12-dB-per-octave rolloff into the woofer so that only two components were needed in the external network to achieve the desired fourth-order Butterworth-squared characteristic.

A similar design was used for the tweeter's crossover. The tweeter is protected against burnout by a signal-powered circuit that disconnects it with a fast-acting relay whenever the high-frequency signal level becomes excessive. When the signal returns to a safe level, tweeter operation is automatically restored.

The specifications of the B&W Matrix 1 include a free-field frequency response of 80 to 25,000 Hz ± 2 dB, a system resonance of 60 Hz ($Q = 0.7$), a sensitivity of 85 dB (2.83 volts), and an impedance of 4.5 ohms ± 0.5 ohm (essentially resistive). The recommended amplifier power is 50 to 120 watts.

The Matrix 1 measures 16 inches high, 9 inches wide, and 12 $\frac{3}{8}$ inches deep, and it weighs 26 $\frac{1}{2}$ pounds (by our measurement—the specified weight is 22 pounds). Stands with loaded steel columns and heavy marble bases are optional. The speaker is available with walnut, black ash, or rosewood veneer finish or, on special order, high-gloss lacquer or natural oak. Price: \$499 per speaker in walnut or black ash, \$699 each in rosewood; stands, \$199 per pair. Anglo-American Audio, Dept. SR, P.O. Box 653, Buffalo, NY 14240.

Lab Tests

We installed the B&W Matrix 1 speakers on their 20-inch-high stands and a few feet from the rear and side walls. The averaged room-response curve from the left and right speakers was smooth and extended in the tweeter's operating range (above 2,000 Hz). There was the usual irregularity in measured output below 300 Hz, where room interaction is inevitable.

The close-miked woofer response, quite flat from 400 to 1,500 Hz, was down about 3 dB at 2,000 Hz. Below 400 Hz it rose to a maximum of +8 dB at 100 Hz before falling off at 24 dB per octave below 80 Hz. The composite response curve, formed by splicing the woofer curve to the overall room curve, varied only ± 2.5 dB from 370 to 20,000 Hz but still showed the same strong emphasis at 100 Hz as the close-miked measurement.

Our quasi-anechoic FFT response measurements confirmed the smoothness and extended range of

the system's middle- and high-frequency response, but we could not reliably measure its low-frequency performance with this method because of unavoidable reflections in our listening room. We had to depend on listening tests to judge the reality of the measured bass emphasis. It was unquestionably real—the Matrix 1 sounded distinctly heavier ("bassier") than any other speaker we had on hand, and it even seemed to have a subdued high-end response. The latter effect was obviously a psychoacoustic result of the frequency imbalance, since the highs were very much "all there," as could easily be heard on program material with modest low-frequency content. Male voices, however, had the heaviness characteristic of an exaggerated bass response in the 100-Hz region.

The impedance of the Matrix 1 measured between 3.5 and 5 ohms, averaging 4 ohms over the entire audio range. This confirmed the manufacturer's rating of an essentially resistive impedance, which any amplifier should be able to drive without difficulty. The speaker's sensitivity was low, measuring 83.5 dB sound-pressure level (SPL) at 1 meter with a 2.83-volt input of pink noise. An input of 6 volts (9 watts) was required to produce our usual 90-dB reference SPL output.

The Matrix 1's distortion at the 6-volt input level was 2 percent or less above 80 Hz, increasing smoothly to 4.2 percent at 60 Hz, 6.6 percent at 50 Hz, and 11.2 percent at 40 Hz. The speaker's group delay was exceptionally uniform in the tweeter's range, varying about 0.1 millisecond overall from 5,000 to 20,000 Hz and less than 0.4 millisecond down to 500 Hz.

The B&W Matrix 1 performed exceptionally well in our pulsed power-handling tests. At 100 Hz, the woofer's waveform began to distort visibly with an input of 1,800 watts, although it did not audibly "bottom." At 1,000 Hz the amplifier clipped at 2,275 watts, and at 10,000 Hz the tweeter's output was still undistorted when the amplifier clipped at 2,190 watts.

Comments

When we first heard the B&W Matrix 1 (and its larger relatives) at

the June Consumer Electronics Show in Chicago, we were not aware of any bass emphasis. Our principal impression then was of the superb clarity of its sound, which hardly seemed to be coming from the fairly small loudspeakers that we could plainly see before us. In more familiar surroundings the same clarity was present, but this time with a noticeable bass emphasis. We cannot be certain how much of this emphasis resulted from differences in the listening rooms and how much from the different program material—probably it was a bit of both factors.

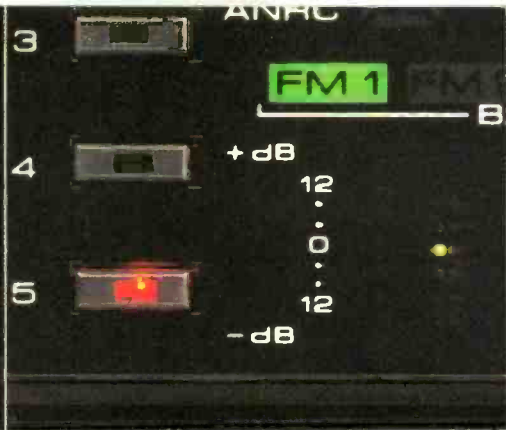
To put the matter into perspective, most speakers we have used in our room show bass coloration to some degree, but few have compensated for it with the extended high-end response and smoothness of B&W's new Matrix 1. Its sound is completely consistent with its price, if not with its size! It is all too easy to lose sight of the fact that the B&W Matrix 1 is not much larger than a mini-bookshelf speaker, since it sounds so much larger than it looks.

This relatively inefficient speaker really deserves a powerful amplifier, and our tests indicate that it can absorb (for brief peaks) far more power than will ever be supplied to it in a home music system. In spite of the manufacturer's power recommendations, we found its sound to be unstrained (but loud!) with musical program peaks of 350 to 500 watts. But don't expect to get much more than background levels from these speakers if you drive them with a 25-watt amplifier.

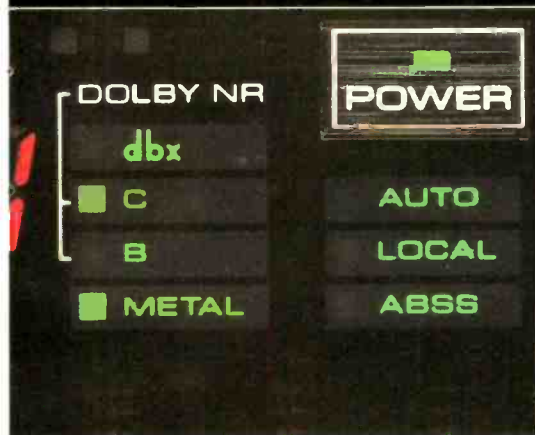
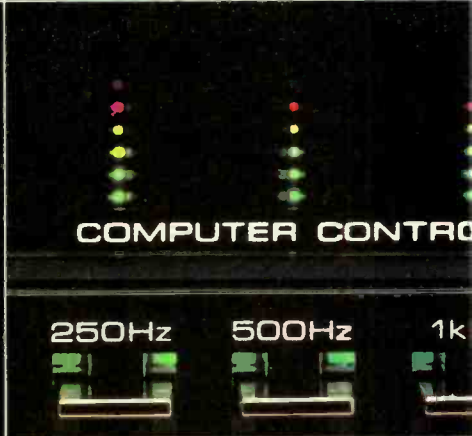
Although its weight may have no bearing on its sound, the Matrix 1 is also surprisingly heavy for its size. The optional stands weigh a solid 18 pounds each, so the combined weight of about 45 pounds for stand and speaker places the Matrix 1 somewhat above the usual bookshelf range. So, of course, does just about everything else about the speakers. While we lacked a test setup for measuring cabinet vibration, rapping the cabinet sides with our knuckles produced little more than bruised knuckles. You could get about that much resonance by rapping a concrete block!

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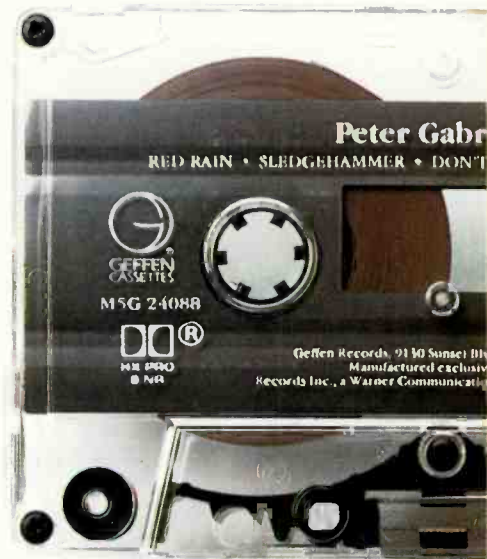


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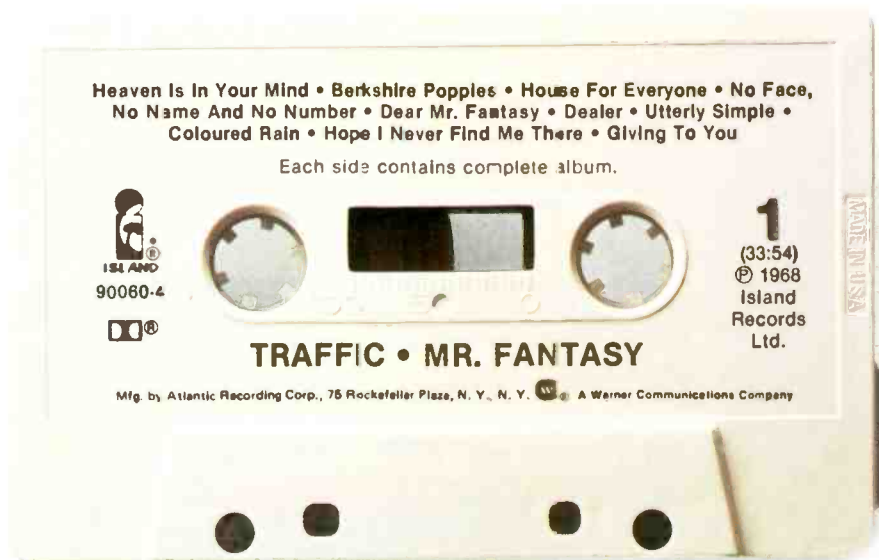
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DENON TU-600 AM/FM TUNER

Julian Hirsch, Hirsch-Houck Laboratories

DENON has applied the philosophy of "the simplest is the best" in the design of its new TU-600 AM/FM tuner. This approach is immediately apparent from the front panel, where most of the controls (all pushbuttons) form a single row for preset station and band selection. The ten preset buttons can be switched to store and recall a second group of ten station frequencies, giving the TU-600 a total of twenty memories. Each memory can be assigned to either an AM or an FM station, and pressing a button switches the tuner to the appropriate band as well as the specific station frequency. Small lights above the buttons identify the selected preset.

Like most current tuners, the TU-600 has digital-synthesis tuning, with the station frequency and band visible in a display window. Next to the frequency readout, a group of LED's indicate stereo reception, IF bandwidth, relative signal strength (in ten segments), and the status of the auto-tuning mode. In its automatic mode, the tuner mutes the

output and searches for the next receivable signal up or down, depending on which of the tuning buttons is pressed, switching automatically between mono and stereo. Disabling the auto tuning switches the tuner to mono reception, disables the muting circuit, and changes the frequency by a single increment (200 kHz for FM, and 10 kHz for AM) for each touch on the tuning button. Holding a tuning button in produces a rapid scan in the selected direction. Wide or narrow IF bandwidth is also selected by a button on the front panel.

In spite of the TU-600's compact size, simple appearance, and modest price, its specifications suggest that it is far from being a "basic" tuner. Although all its specs are good or better, those for harmonic distortion (0.03 and 0.04 percent for mono and stereo, respectively) and signal-to-noise ratio (92 and 86 dB for mono and stereo) are quite literally "state of the art," simply unheard of in a tuner at the TU-600's \$350 list price.

The Denon TU-600 measures 18¼ inches wide (including the plas-

tic-covered wood-grain end plates), 11 inches deep, and only 2¾ inches high. It weighs just over 8 pounds. Denon America, Dept. SR, 27 Law Dr., Fairfield, NJ 07006.

Lab Tests

We repeated most measurements of the TU-600 using both the narrow and wide IF bandwidths. With the wide bandwidth, the alternate-channel selectivity was an acceptable 43 dB, and the adjacent-channel selectivity was 3 dB. Switching to the narrow bandwidth changed these measurements to 76 and 5.5 dB, respectively. The chief perform-

Although all of the Denon TU-600's specs are good or better, those for harmonic distortion and signal-to-noise ratio are literally "state of the art," simply unheard of in a tuner of its modest price.

ance difference between these two settings was the tuner's stereo distortion, which was 0.5 to 1.5 percent over a wide range of signal strengths with the narrow bandwidth. Although this level of distortion is not likely to be audible on most pro-

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LABORATORY MEASUREMENTS

(All measurements are for FM tuner section using wide IF bandwidth unless otherwise noted.)

Usable sensitivity (mono): wide, 17 dBf (4 μ V); narrow, 28 dBf (13.8 μ V)

50-dB quieting sensitivity: mono, 19.5 dBf (5.2 μ V) wide, 18 dBf (12.6 μ V) narrow; stereo, 38.5 dBf (46.3 μ V) wide, 38 dBf (43.7 μ V) narrow

Signal-to-noise ratio at 65 dBf: mono, 90.7 dB; stereo, 76.5 dB

Signal-to-noise ratio at 85 dBf: mono, 92 dB; stereo, 86 dB

Harmonic distortion (THD + noise) at 65 dBf: mono, 0.062% wide, 0.25% narrow; stereo, 0.1% wide, 1% narrow

Harmonic distortion (THD + noise) at 85 dBf: mono, 0.0195% wide, 0.24% narrow;

stereo, 0.046% wide, 0.55% narrow

Capture ratio at 65 dBf: wide, 1.7 dB; narrow, 2.8 dB

AM rejection at 65 dBf: wide, 69 dB; narrow, 72 dB

Selectivity (wide): alternate-channel, 43 dB; adjacent-channel, 3 dB

Selectivity (narrow): alternate-channel, 76 dB; adjacent-channel, 5.5 dB

Stereo threshold: 30 dBf (17.4 μ V)

Hum: -90 dB

Stereo channel separation at 100, 1,000, and 10,000 Hz: wide, 38 dB, 53.5 dB, 38.5 dB; narrow, 26 dB, 26 dB, 29.5 dB

Frequency response: FM, 30 to 15,000 Hz +0.2, -1.3 dB; AM, -6 dB (referred to 400-Hz level) at 45 and 1,700 Hz

gram material—it is comparable to the distortion of the FM tuner section of a good automobile radio—the distortion was so much less in

The Denon TU-600 is one of the finest FM tuners we've had the pleasure of using. From an audible standpoint, it approaches the noise and distortion levels of a CD.

the wide-bandwidth mode that we would strongly urge using that mode at all times unless a specific interference problem is encountered. Like a few other tuners, this one requires a strong signal for its best performance, but at 85 dBf (10,000 microvolts, or μ V) the mono distortion was just under 0.02 percent, the lowest figure we have ever measured from an FM tuner. Even in stereo, the wide-bandwidth distortion was an impressive 0.046 percent.

The TU-600 also rivaled the best tuners we have tested in its noise quieting. At 85 dBf it measured 92 dB in mono and 86 dB in stereo, essentially as rated, and it was not affected by the choice of IF bandwidth. The sensitivity measurements were not particularly notable, though more than adequate for any

but the most extreme fringe-area installations. The AM rejection was excellent, the capture ratio good. The 19-kHz pilot-carrier leakage was a very low -80 dB, and hum was nearly unmeasurable at -90 dB. The FM frequency response was flat from 30 to 10,000 Hz and down 1.3 dB at 15,000 Hz. Channel separation (wide-band) was a maximum of 56 dB at 2,000 Hz, narrowing to 28 dB at 30 Hz and 32.5 dB at 15,000 Hz. The narrow-band mode reduced the separation to a nearly uniform 24 to 27 dB between 30 and 9,000 Hz, improving to about 35 dB at 15,000 Hz. In sharp contrast to

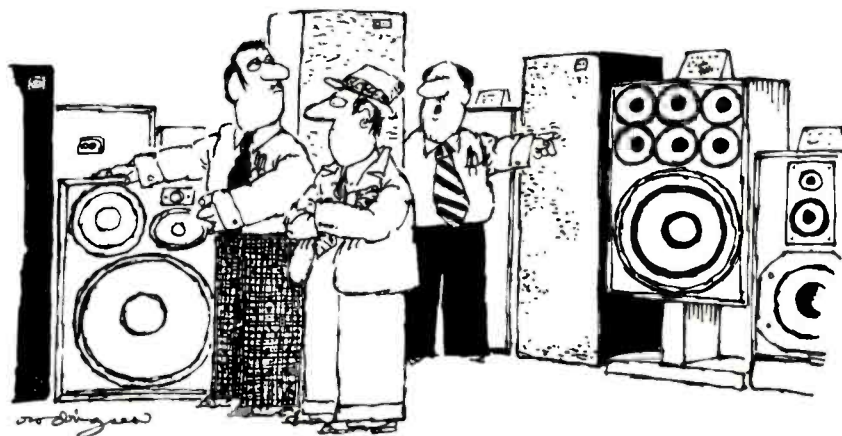
the exceptional FM performance, but like virtually every other tuner we have tested, the AM section's frequency response was poor. The Denon TU-600 produced one of the most restricted AM response curves we have ever seen, down 6 dB at 45 and 1,700 Hz from its maximum at 400 Hz.

Comments

The unassuming Denon TU-600 is one of the finest FM tuners we have had the pleasure of using. Before the availability of our Panasonic signal generator, we would have been unable to measure its noise level and distortion. Although the usable sensitivity was not noteworthy, most of its other measurements were. Even at the 65-dBf signal level used for most tuner ratings, its noise and distortion readings were outstandingly low, and for those listeners able to supply it with an 85-dBf signal, this tuner should handily surpass the performance qualities of almost any FM broadcast station. From a practical (audible) standpoint, it even approaches the noise and distortion levels of a compact disc.

This is the sort of performance one might expect (but almost never gets) from a "supertuner" selling at a premium price. In its moderate price range, the Denon TU-600 stands alone, providing convincing proof that the simplest can indeed be the best.

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LUXMAN LV-105 INTEGRATED AMPLIFIER

Julian Hirsch, Hirsch-Houck Laboratories

LUXMAN calls its new LV-105 a "Brid" (hybrid) integrated audio/video amplifier because it uses vacuum tubes in combination with transistors, FET's and MOSFET's. Other amplifiers have been designed with various hybrid circuit configurations, but the Luxman Brid is a combination we had not previously encountered—its vacuum tubes follow the field-effect-transistor (FET) low-level stage and drive the power-MOSFET output stages. According to Luxman, the 6CG7 twin-triode tubes used in the LV-105 are more linear than conventional transistor driver stages, and they have greater bandwidth and lower phase shift.

The LV-105 has two power supplies, the larger of which operates its audio transistor stages while the other supplies the voltages for the vacuum-tube stages. When the amplifier is turned off, the tubes go into a standby "pre-heating" mode in which their heaters operate on a reduced voltage (about 80 percent

of normal) and their plate voltage is reduced by half.

The Luxman LV-105 is rated to deliver up to 80 watts per channel into 8-ohm loads, from 20 to 20,000 Hz, with no more than 0.3 percent total harmonic distortion. The dynamic power output is given as 200 watts per channel into 4-ohm loads, and it is also rated for 200 watts with 2-ohm loads.

In addition to its complete audio control facilities, the LV-105 is designed to serve as a video control center. As many as three audio/video (A/V) sources—VCR's or video-disc players (VDP's)—can be connected at the same time, two in the rear and one in the front, though only two of them can be switched simultaneously.

The audio control facilities of the LV-105 are extensive. There are inputs for a moving-magnet (MM) or moving-coil (MC) phono cartridge, a tuner, a CD player, and two tape decks as well as the two audio/video sources. All switching is done by

pushbuttons, with the selected source identified by a light. There are independent recording source selectors, including switches for dubbing from either audio deck to the other and for video dubbing (from AV SOURCE 2 to AV 1 only).

Other front-panel buttons individually activate the two sets of speaker outputs and select the MM or MC phono inputs and the front or rear AV 2 inputs. Small knobs operate the bass and treble tone controls and adjust channel balance.

The rear apron of the LV-105 contains insulated binding posts for two sets of speaker outputs and six AC convenience outlets, three of them switched. The all-black LV-105 measures 17¼ inches wide, 13¾ inches deep, and 5¾ inches high. It weighs 23 pounds, 6 ounces. Price: \$700. Luxman, Dept. SR, 19145 Gramercy Place, Torrance, CA 90501.

Laboratory Tests

During our one-hour, one-third-power preconditioning of the LV-105, its thermal-protection circuits repeatedly shut the amplifier down. Moreover, it did not return to operation automatically after a cooling period. Following a shut-down, we had to turn it off and turn it back on again several minutes later. Fortu-

FEATURES

- "Brid" circuit with vacuum tubes driving power MOSFET's
- Separate power transformers and supplies for transistor and tube circuits
- "Pre-heating" mode to operate tubes at reduced voltage with amplifier off
- Separate play and recording source selectors for two tape decks, two video sources, tuner, CD player, and phono cartridge
- Phono preamplifier switchable for either MM or MC cartridges
- Front-panel headphone jack
- Front-panel selector switch for one or two pairs of speakers
- Center-detented control knobs for bass, treble, and balance
- Tone-control-defeat button
- Front-panel jacks and switch selection for third video source
- Rear-panel video output to monitor
- Six AC convenience outlets

LABORATORY MEASUREMENTS

1,000-Hz output power at clipping: 97 watts into 8 ohms; 106 watts into 4 ohms; amp shuts down at 28 watts into 2 ohms

Clipping headroom (relative to rated output): 0.84 dB (8 ohms)

Dynamic power output: 145 watts into 8 ohms; 190 watts into 4 ohms; less than 150 watts into 2 ohms

Dynamic headroom: 2.58 dB (8 ohms)

Frequency response: ± 0.5 dB from 20 to 20,000 Hz

Maximum distortion (20 to 20,000 Hz, 80 watts output): 0.335% (8 ohms)

Sensitivity (1-watt output): CD, 16 mV; MM phono, 0.25 mV; MC phono, 0.012 mV

A-weighted noise (referred to 1-watt output): CD, -83 dB; MM phono, -81.7 dB; MC phono, -75 dB

Phono-input overload level (MM): 130 to 208 mV, depending on frequency

Phono-input impedance (MM): 47,000 ohms in parallel with 100 pF capacitance

Slew factor: 25

RIAA equalization accuracy: +0.03, -0.01% from 20 to 20,000 Hz

nately, however, the amplifier never became warm enough to interrupt our measurements even during our high-power testing. And during normal listening periods, it remained cool and never shut down.

With both channels driven at 1,000 Hz, the outputs clipped at 97 watts into 8 ohms and 106 watts into 4 ohms. Although some of the brochures on the LV-105 indicated a dynamic power capability of 200 watts into 2 ohms, its output-current protection circuits shut it down at only 28 watts continuous output into that impedance. Our measurements confirmed that the LV-105 has a good dynamic headroom of 2.58 dB into 8 ohms, equivalent to 145 watts. Into 4 ohms, the dynamic power was 190 watts, essentially confirming the rated performance, but with 2-ohm loads the protective relay silenced the outputs momentarily even with 20-millisecond bursts at under 150 watts.

The tone-control characteristics of the LV-105 were unusual, although they appeared to conform reasonably well to the rated maxi-

mum-variation range of +8, -5 dB. The controls had a considerable effect on the midrange level, and the treble control varied the volume about as much as it did the frequency response. The RIAA phono equalization was extraordinarily accurate, varying only +0.3, -0.1 dB from 20 to 20,000 Hz.

The distortion characteristic of the LV-105 was unlike that of most amplifiers we have tested. Driving 8-ohm loads, the amplifier's distortion at rated power and half power was about 0.002 percent from 20 to 100 Hz, rising linearly at higher frequencies to a maximum of just over 0.3 percent at 20,000 Hz. At one-tenth rated power, the low-level distortion was about 0.006 percent, and the curve matched that of the higher-power characteristics above 1,000 Hz. When we drove 8-ohm loads at 1,000 Hz, the distortion was a constant 0.05 percent from 0.1 to 2 watts, decreasing to about 0.01 percent between 20 to 90 watts. With a 4-ohm load, the distortion decreased smoothly from about 0.07 percent at 0.1 watt to the range

of 0.015 to 0.02 percent between 5 and 95 watts output.

We also measured the "power envelope" of the LV-105, using burst durations (into 8 ohms) between 20 and 300 milliseconds and a total measurement interval of 500 milliseconds. From a maximum output of 145 watts during a 20-millisecond burst, the output at clipping decreased to 120 watts for 100-millisecond bursts, 115 watts for 200 milliseconds, and 105 watts for 300 milliseconds. The amplifier's slew factor was 25 (at 500 kHz, a rated-power sine wave took on a triangular shape). It was stable with simulated reactive speaker loads and had a reactive-load factor of 1.19 dB at 63 Hz.

Comments

The Luxman LV-105 is an interesting amplifier, partly because of its novel hybrid design and partly because of its highly versatile and functional audio/video control features. It is also attractively styled and has a functional panel layout. We chose to disregard the strange behavior of its tone controls, but anyone who often uses tone controls may wish to take this into account. In fact, the LV-105's limited current-output capability, evidenced by an inability to drive 2-ohm loads effectively, was the only significant performance shortcoming we discovered. On the other hand, it has a considerable short-term output power capability, demonstrated by its dynamic headroom and dynamic-power measurements, and an unusually low noise level.

We must admit to doubts about the practical significance of Luxman's "Brid" circuit design. Although the distortion characteristics of the LV-105 are unlike those of most amplifiers we have tested, they should not have any effect on its sound, and as far as we could determine, they did not. In the amounts present in any modern amplifier, ordinary nonlinear distortion is simply not a factor in sonic performance. Our "bottom line" judgment on the novel circuit configuration of the Luxman LV-105 is essentially that it is an unproven benefit, but it has no apparent negative effects on the amp's performance.

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CIRCLE NO. 9 ON READER SERVICE CARD



ALLISON LC110 SPEAKER SYSTEM

Julian Hirsch, Hirsch-Houck Laboratories

THE Allison LC110 is the smallest of the three speakers that make up the company's "Room-Matched" series. These are conventionally constructed, compact, two-way systems that are designed to achieve a proper balance of bass-to-treble energy when they are placed close to one room surface. According to Allison, the best results are obtained with the woofer end of the cabinet resting on the floor, a few feet from the nearest wall and farther away from other walls. The speakers can also be placed on stands, tables, or bookshelves.

The LC110 features the same convex-diaphragm tweeter used in every other Allison speaker. This driver—noted for its wide, smooth frequency response and excellent dispersion—is designed to simulate the motion of a pulsating hemisphere, and it is cooled and damped by ferrofluid. The tweeter crosses over at 2,000 Hz to an 8-inch acoustic-suspension woofer operating in an enclosed volume of 930 cubic

inches. The quarter-section crossover network uses an air-core inductor and a computer-grade non-polar capacitor.

The system's impedance is rated at 6 ohms nominal and 4 ohms minimum. Other specifications include a sensitivity of 90 dB sound-pressure level (SPL) at 1 meter with an input of 2.83 volts, a low-frequency resonance of 59 Hz (with the bass output down 3 dB at 46.5 Hz and 6 dB at 39 Hz), and a recommended amplifier driving power of between 15 and 150 watts.

The wooden cabinet of the Allison LC110 measures 18 inches high, 11½ inches wide, and 7½ inches deep, and each speaker weighs 16½ pounds. The cabinet is finished in walnut-grain vinyl. The removable sculptured grille, made of black perforated plastic, snaps into a groove around the speakerboard. The spring-loaded connectors recessed into the rear of the cabinet accept the stripped ends of speaker wires or dual banana plugs. Price: \$260 per pair (\$290 on the West Coast). Alli-

son Acoustics, Inc., Dept. SR, 7 Tech Circle, Natick, MA 01760.

Lab Tests

We made our room-response measurements with the Allison LC110 speakers against a wall, about 26 inches above the floor, and roughly 6 feet from the side walls. Disregarding the usual bass irregularities (below 300 Hz) caused by a room's standing waves, the averaged output of the left and right speakers was unusually free of peaks and holes and showed little sign of high-frequency "beaming."

The close-miked woofer response conformed closely to Allison's specifications; it was flat within +1.5, -2.5 dB from 180 to 2,000 Hz, with a slight rise of about 3 dB at 70 to 80 Hz. The woofer-response curve spliced easily to the room curve to form a composite frequency response that was uniform within 7 dB overall from 49 to 17,000 Hz.

Our quasi-anechoic FFT response measurements showed that the speaker's output on its axis and at 45 degrees off-axis did not diverge appreciably until the frequency exceeded 10,000 Hz, and the difference remained moderate up to nearly 20,000 Hz. The group delay varied less than 0.3 millisecond throughout the tweeter's operating range and much less than that over much of the full system's range. Within the woofer's range, the group-delay variation was about 0.8 millisecond from 200 to 2,300 Hz (a low figure for those frequencies).

The system's impedance measured about 3.5 ohms at 20 Hz and between 100 and 200 Hz, rising to 12 ohms at 1,700 Hz and to a maximum of about 17 ohms at 60 Hz. Its minimum value of just under 3 ohms occurred between 10,000 and 12,000 Hz. The measured sensitivity was 90.5 dB SPL at 1 meter with a 2.83-volt input of pink noise. The woofer's distortion at a constant input of 2.67 volts (equivalent to a 90-dB SPL midrange level) was about 0.6 percent at 100 Hz, gradually increasing to 1 percent at 70 Hz, 2.2 percent at 50 Hz, and only 5.1 percent at 30 Hz.

Our pulsed power-handling tests revealed the true mettle of this compact speaker. At 100 Hz the woofer smoothly became nonlinear, with-

out sudden rasping sounds, with about 320 watts into its 3.9-ohm impedance. At 1,000 Hz the amplifier clipped at 1,225 watts into 8 ohms without signs of distress from the speaker (whose 8-inch woofer was still the operative driver at this frequency). Finally, at 10,000 Hz the tiny, ferrofluid-cooled tweeter absorbed 2,690 watts (the clipping point of the amplifier) into its 2.9-ohm impedance without evidence of distortion.

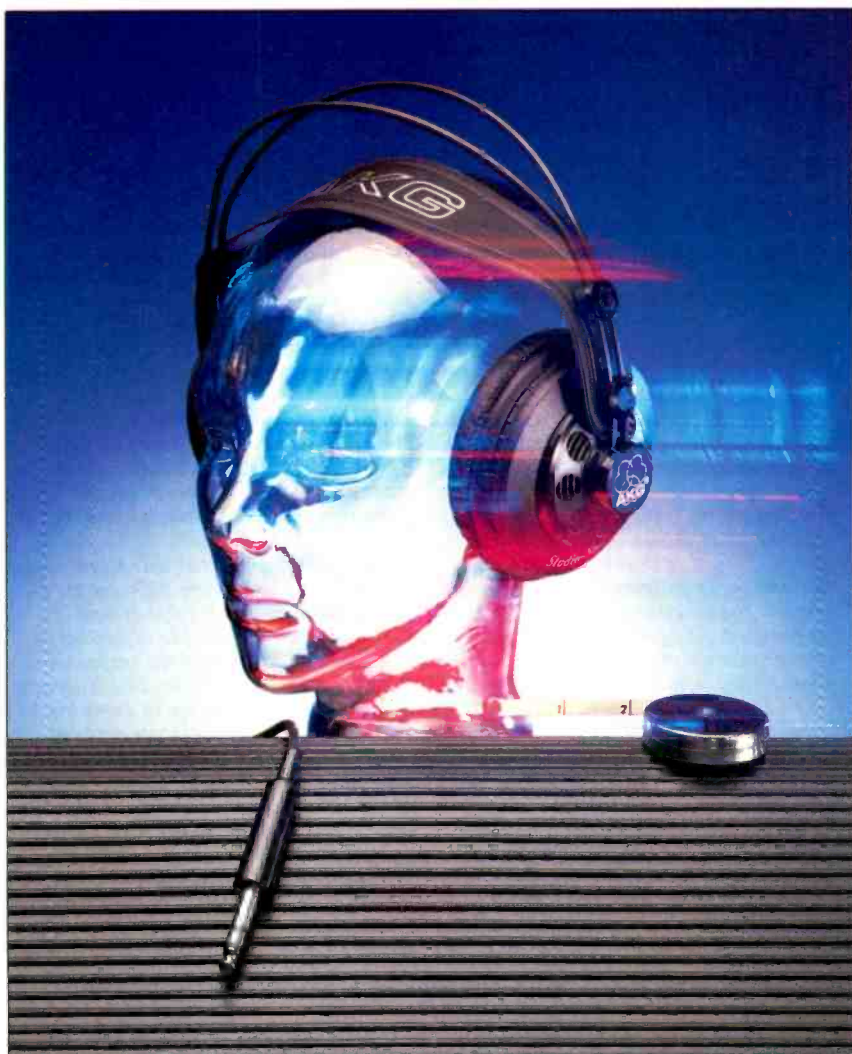
Comments

When we listened to the Allison LC110 speakers in their original position against the wall, they sounded rather bright and thin, which was not at all consistent with our measurements. Noticing that the installation instructions suggested floor placement for the best overall sound, we tried that and were gratified by a dramatic change in the speakers' sound character. They no longer sounded like minispeakers but had a balanced, full-range sound that compared favorably with that of many higher-priced systems.

We suspect that not many people will find a pair of rather small speaker boxes aesthetically ideal for floor placement, but the small size of these speakers should encourage experimentation, and we have no doubt that equivalent results can be obtained with more conventional installations in most rooms. A bonus effect of the speaker's moderate bass-resonance rise is a welcome lack of unnatural heaviness on male voices, yet it can deliver a solid output down to below 50 Hz.

Allison states that over most of the audio frequency range the LC110 can handle at least 350 watts for 0.1 second, 125 watts for 1 second, 60 watts for 10 seconds, and at least 15 watts continuously (35 watts at the bass-resonance frequency). Compact as the speaker is, our tests confirmed that it could handle hundreds and even thousands of watts for short intervals (on the order of milliseconds) without difficulty, despite being considerably more sensitive than comparable units. That adds up to a lot of clean sound from a small box. Even with a powerful amplifier, you won't have to baby the LC110.

Circle 145 on reader service card



AKG ACOUSTICS K240DF HEADPHONES

Julian Hirsch, Hirsch-Houck Laboratories

THE AKG Model K240DF is essentially an improved version of the Model K240 headphones, which have been a part of the AKG line for some time. The lightweight, circum-aural headphones use internal acoustic-resistance elements to flatten out bass peaks so as to eliminate boominess while retaining a low-bass response surpassing that of supra-aural headphones.

According to AKG, the new K240DF has a diffuse-field response that is flat within ± 2 dB

from 40 to 16,000 Hz when measured in accordance with the proposed German Institute for Radio Technology standard for studio-monitor headphones (see box, page 74). Because of this response, it is said to reproduce true instrumental sounds, and, of course, the sound is unaffected by room acoustics.

The K240DF is rated to deliver a nominal sound-pressure level (SPL) of 112 dB at 1,000 Hz (at an unspecified drive level) and to handle a maximum input of 11 volts across its 600-ohm impedance. With DIN

HEADPHONE RESPONSE EQUALIZATION

LISTENING to stereo programs through headphones is a very different experience from loud-speaker listening. Among the many reasons for this are the effects of the headphone earpiece on the frequency response of the outer ear and the elimination of listening-room acoustics from the playback process. The recording techniques also can have a considerable effect. For example, "binaural" recordings, made with close-spaced microphones mounted in dummy heads, give a totally different (and more realistic) subjective effect when heard through headphones than conventional stereo recordings designed for loud-speaker reproduction.

Since headphones are often the preferred method of monitoring studio performances in broadcasting, it is important that they convey as accurately as possible the spatial and frequency characteristics of the original environment. AKG Acoustics cites a study of this subject by the German Institute of Radio Technology (IRT), which concluded that the most realistic headphone simulation of normal hearing, whether from loudspeakers or a live performance, is made possible by a specific form of headphone response equalization.

The IRT study was conducted by inserting tiny probe microphones into the auditory canals of human subjects. The

microphones' output voltage was first measured as the subjects listened to one-third-octave bands of pink noise reproduced by a speaker. After the listeners' ear response was measured, the test was repeated using the acoustic output of headphones driven by the same test signal used in the speaker measurement. The process was performed at different locations in the test room and with a number of subjects.

Subtracting the direct response from the headphone response yielded the "diffuse-field response" of the headphones. If the two responses could be made identical through equalization, a listener should experience the same acoustic sensation through headphones as from loudspeakers.

Tests were conducted using twenty-four subjects and seven different types of headphones. Each listener had a switch that could provide either no equalization, flat free-field response, or flat diffuse-field response. The listening panel, consisting largely of experienced listeners from the broadcast and recording industries, was asked to assess the "naturalness" and "pleasantness" of the sound. In every case, the panel's choice was in favor of diffuse-field equalization. Although the degree of preference was dependent on the test material, the equalization preference was independent of the headphone model or source material. J.H.

weighting, rated total harmonic distortion is less than 1 percent (0.3 percent at 95-dB SPL).

The headphones have a light, flexible wire headband with an adjustable, soft plastic strap that rests comfortably on the wearer's head. Foam-filled pads surround the ear, and each earpiece pivots for a self-adjusting fit. The lightweight cable, 8½ feet long, is terminated in a standard ¼-inch phone plug. The headset (without the cable) weighs 8½ ounces. Price: \$125. AKG Acoustics, Dept. SR, 77 Selleck Street, Stamford, CT 06902.

Lab Tests

Since our headphone measurements are made on a standard coupler instead of with a probe microphone and/or a dummy head, we could not duplicate the diffuse-field performance ratings of the AKG

K240DF phones. We did, however, confirm that they are relatively smooth, wide-band headphones whose sound-pressure-level (SPL) response varied only ± 3.5 dB from 20 to 5,600 Hz. Above 5,600 Hz, the internal resonances of the coupler cavity tend to obscure any headphones' response. Even so, the K240DF's maximum output, in the 8,000- to 13,000-Hz range, was about 10 dB above the average mid-range level and remained strong up to 17,000 Hz.

At a 1-volt drive level, the output of the phones was about 90 dB SPL from the low-bass range to above 5,000 Hz. At that level, the distortion was only 0.27 percent at 1,000 Hz, and it increased smoothly with decreasing frequency to 2 percent at 100 Hz and 5.6 percent at 30 Hz. Higher drive levels resulted in increased distortion, and at 3 volts

(100 dB SPL) it measured 2 percent at 300 Hz and about 10 to 11 percent from 30 to 40 Hz. The impedance was a nearly constant 600 ohms from 20 to 20,000 Hz.

Comments

The AKG K240DF phones were very comfortable to wear for extended periods. Although their circumaural design fully encloses the ears, the back of each driver diaphragm is vented through the plastic earpiece (as part of its internal equalization), so external sounds are not fully excluded.

The nature of headphones makes A/B comparisons virtually impossible, although we tried to compare the K240DF with our regular

The AKG K240DF phones were very comfortable to wear for extended periods, and their sound had a highly pleasing open quality in addition to a beautifully balanced coverage of the audio range.

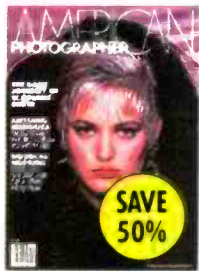
phones (AKG's top-of-the-line K340). The K240DF has less low- and mid-bass response but otherwise seems fairly similar to the K340. And despite not being able to make a rigorous comparison between them, we could appreciate that the K240DF has a highly pleasing open quality in addition to its beautifully balanced coverage of the audio frequency range.

In general, mono recordings seemed to come from within the head (as with any other phones), and stereo recordings with an exaggerated separation (sometimes referred to as "two-channel mono") sounded no more realistic on these phones than any others. Good stereo programs, however, were reproduced with a spatial quality surprisingly close to that of loudspeakers. As far as we could tell, these phones do just about what is claimed for them. Combined with their comfort and overall sound quality, that makes them one of the better values in high-quality stereo headphones.

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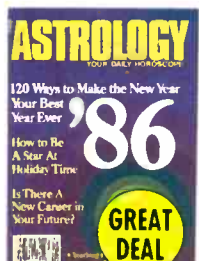
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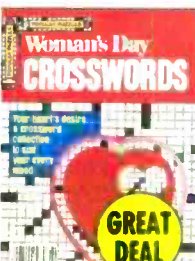
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HOW TO BUY AN

Whether you're choosing an integrated amplifier or a separate power amp and preamp, there are certain things to bear in mind when you go shopping by Peter W. Mitchell



Conrad-Johnson's vacuum-tube amplifier separates are priced at \$1,485 each. The MV50 power amplifier, right, is rated at 50 watts per channel. The PV5 preamplifier is at left, under the violin.

IN principle, the amplifier should be the easiest part of a stereo system to select. Unlike loudspeakers, which sound obviously different from one another, amplifiers sound pretty much alike. So you won't go seriously wrong by choosing an amplifier on the basis of its power, features, and price.

That does not mean that the choice is trivial. The performance of a stereo system may be influenced as much by the compatibility of components—their favorable or detrimental interaction—as by the individual quality of each product. Since the amplifier is connected to everything else in the system, questions of compatibility should be considered, especially at the input from the phono cartridge and at the output to the speakers.

A power amplifier should not change the signal from input to output except to make it stronger. This is also true for integrated amplifiers, which have switching and control functions, and for receivers, which add a tuning section. Amplifiers in the real world do change the signal in unwanted ways, and these changes (especially when the amp measures poorly or is operated beyond its limits) can cause audible sonic differences.

AMPLIFIER

Powering Speakers

Amplifiers, like light bulbs, are rated in watts. But unlike a 100-watt light bulb, which runs at a constant 100 watts from switch-on to switch-off, a 100-watt amplifier must be able to vary rapidly from 0.001 watt to 100 watts and back again, faithfully reproducing every detail of an audio waveform. It must have the brute force to drive woofers in a bass-drum wallop and the delicacy to reproduce the subtle shimmer of a plucked harp string.

Invariably, the first question about amplifiers is: How much power do you really need? It is not easy to give a precise answer. One difficulty is that the relationship between power and sound level is not linear but logarithmic; doubling the power increases the volume level by only 3 dB, a subjectively small difference. (This relationship might work in your favor, since by accepting a small reduction in the maximum listening level you could cut your required power in half—at a substantial saving in cost.) The table on page 78 shows the approximate amplifier power needed to produce various sound levels, assuming speakers of average efficiency and a room of average size.

Most listening involves average power levels below 1 watt. Even the biggest symphonic climaxes produce sustained sound levels of only about 95 dB in the concert hall, corresponding to about 10 watts per channel. Why, then, does anyone need more than 10 watts? To reproduce brief musical transients, which last only a fraction of a second but reach 10 to 15 dB higher than the sustained sound—up to 110 dB at the peak of a symphonic *fortissimo*. (Higher sustained levels can be generated by the giant sound systems at rock concerts, but trying to reproduce such levels at home is likely to produce angry neighbors and temporary, if not permanent, hearing loss.)

Here are two general rules for judging how much amplifier power to buy:

1. If you listen to music mainly at background levels, either by preference or because loud music would disturb your neighbors, you don't



A pair of M300 mono power amplifiers from Audio Research. Field-effect transistors are used in the front end, vacuum tubes in the output stage. Rated output is 300 watts, price \$4,900 each.



The preamplifier section of Harman Kardon's PM665 integrated amplifier switches seven signal sources. Its power-amplifier section is rated at 100 watts per channel. Price is \$775.

AMPLIFIERS

need much power. Large, powerful amplifiers are for audiophiles who play music at live (or louder-than-life) levels. Listen to amplifiers with different power ratings in the showroom and decide whether you hear a difference that matters to you. Or take home a medium-power amplifier for a few days in a trial-purchase arrangement. If it proves unsatisfactory in your system, most dealers will give you full credit toward a more powerful model.

2. If you will be listening mainly to FM radio or cassettes, where the highest-level transients are usually somewhat compressed, you'll probably be satisfied with a modest amplifier. But if you listen to many CD's in which the full dynamic range of the transients has been preserved, you will benefit from all the power you can afford to buy.

What you are buying in a powerful amplifier is not merely the *quantity* of sound—the ability to play music loud—but a potential improvement in sound *quality*: undistorted reproduction of the transients and details in loud passages of music. And since high-powered amplifiers generally have larger power supplies and transistors, you are also buying more of the output-current capacity that controls the motion of speaker voice coils.

Keeping these points in mind, you can judge by ear whether you would benefit from greater power. First, listen to the bass line of the music. Each bass note should be clearly defined, with solidity and punch. If all of the bass notes are boomy or thumpy, try a bigger amplifier. Second, listen to a complex sound such as a choral passage. Even at the loudest moments, the chorus should continue to sound like a group of individuals. If the sound becomes congested, coarse, muddled, or harsh, try a bigger amplifier.

This emphasis on listening is not accidental. If you want to get the best value for your money, you can't pick an amplifier only by the numbers. One company's "40-watt" amplifier may play louder or reproduce transients better than another maker's "50-watt" amp, and such differences often depend on the impedance of the speakers as well as on differences in design

goals. For this reason, an amplifier and speakers should be evaluated together as a system. (This is especially important if you will be using the amplifier with low-impedance speakers or with an unusual type of speakers, such as electrostatics.)

Sales brochures are filled with descriptions of amplifier circuits and component parts, but you don't need to study circuit design to make a wise buying choice. There is no automatic advantage to the use of discrete circuitry instead of IC's, circuits that are DC-coupled rather than capacitor-coupled, or output stages with tubes or MOSFET's instead of ordinary transistors. How something is done is less important than how *well* it is done, and there are both superb and mediocre examples of virtually every kind of amplifier technology. The special ingredient that guarantees a superior amplifier is the thoughtfulness of the design engineer.

Controlling Signals

Amplifiers can differ significantly in circuitry and power output, but their most dramatic differences have to do with the design, operation, and sonic effect of their controls. A preamplifier or integrated amplifier may have as few as five or as many as forty control knobs and switches. Control features have less to do with accuracy of sound reproduction than with giving you the ability to alter the sound.

Such flexibility isn't free. As a rough rule of thumb, each knob or button (with its associated circuitry) adds about \$5 to the retail price of the product—not to mention the added potential for confusion or unintended losses in sound quality.

The core of any control section is the selection of inputs and outputs. *Phono* inputs can be used only with

the signal from a phono cartridge (usually a moving-magnet type, or MM, and sometimes also a moving-coil, or MC). In most amplifiers, the remaining inputs—tuner, CD, video, tape, auxiliary—are electrically identical, regardless of their names, and can be used with any *line-level* source (that is, one with signal levels ranging from about 0.1 to 2 volts). There's nothing special, for example, about having a CD input. In most amplifiers *all* of the line-level inputs are connected directly to the input selector and then to the volume control, with no intervening circuitry that could be overloaded by the wide dynamic range of a digital disc.

You can never have too many line-level inputs. If you want to use your stereo system to reproduce the sound from a videodisc player, a hi-fi VCR, and an MTS-equipped video tuner or stereo television receiver in addition to your audio-only signal sources, you will need every input you can find. This quest may lead you to choose an audio/video amplifier, with inputs and switching for both sound and picture from several sources. Alternatively, you could add an outboard switchbox (such as the \$60 DB Systems DBP-2J/S) to connect several program sources to one AUX input.

Will you need connections for one tape recorder or two? If two, examine the controls for tape monitoring and dubbing (copying between recorders). Are the switches arranged and labeled in a clear and logical way? Can you tell their settings at a glance? (With some short-travel pushbuttons, it's not immediately obvious whether the button is in or out, and you could spend many frustrating hours with an apparently dead amplifier just because you couldn't see that a tape-monitor button was in.) Some amplifiers have separate *input-selector* and *record-selector* controls that let you tape from any signal source while listening to any other.

An *external-processor loop* is a convenient place to connect sound-enhancing devices. It is similar to a tape-monitor loop except that, coming after the tape circuits, it won't let you process a signal before it is recorded. Integrated amplifiers that are

POWER REQUIREMENTS

	Sound level (dB)	Power (watts)
Highest transient peaks	300	110
Very loud music	30	100
Loud music	3	90
Average music	0.3	80
Average conversation	0.03	70
Quiet music	0.003	60
Distant traffic	0.0003	50
Background noise (city)	0.00003	40
Background noise (suburban)	0.000003	30

AMPLIFIERS



The vacuum tubes in Berning's EA-2100 stereo power amplifier are said to last between ten and twenty years. Output is rated at 100 watts per channel. \$2,695.



Meters on the front of the Technics SE-A5 Mk 2 power amplifier show the power being delivered to each channel. Its Computer Drive feature is said to neutralize transient cross-over distortion, and there is a "power linear circuit" designed to compensate for differing speaker impedances. The \$800 amplifier is rated at 150 watts per channel (continuous) and weighs 40.6 pounds.



Twenty LED's per channel show the power being delivered by Soundcraftsmen's Pro-Power Four amplifier. Indicators also show when the amplifier clips. The 205-watt-per-channel amplifier uses metal-oxide semiconductor field-effect transistors (MOSFET's) and will drive two pairs of speakers. \$699.

DAVID KELLEY



When the MSA-100 Dimensia integrated amplifier from RCA is used with a Dimensia TV monitor, the changing volume level is shown on the TV screen. The MSA-100 has a built-in bus system that allows up to thirteen RCA components to be hooked up and operated with a single remote control. The 50-watt amplifier is priced at \$299.

AMPLIFIERS



Power output for each channel (into 4 or 8 ohms) is shown by two display meters on Hitachi's HMA-8500 Mk II power amplifier, rated at 100 watts per channel. Price: \$650.



Akai's AM-A90 integrated amplifier, rated at 130 watts per channel, has inputs for eight program sources. Its "open-loop" circuits do not use negative feedback. Price: \$645.

equipped with PREAMP OUT and POWER AMP IN jacks offer another degree of flexibility. Equalizers, image enhancers, surround-sound processors, subharmonic synthesizers, external amps, and dynamic expanders can be connected between these jacks, leaving your tape circuits free for tape decks.

Should you buy an amplifier that is equipped with filters? If you listen mainly to CD's or tapes, you probably won't need any filtering. But phono cartridges can produce strong signals between 5 and 20 Hz from turntable rumble, disc warps, and conducted vibration, and these nonmusical signals are mechanically amplified by the infrasonic resonance of the cartridge. If you have ported or passive-radiator speakers, such signals may cause excessive motion of the woofer cones, muddying the bass. So if you listen to many records, look for a sharp *infrasonic filter* (often misnamed "subsonic") that rolls off the amplifier's output below about 20 Hz.

On many LP's, the highest octave (above 10,000 Hz) contains more noise and distortion than music, and for these a *high-cut filter* can add to the pleasure of listening. But shallow 6-dB-per-octave filters pro-

It's a rare phono preamplifier that doesn't qualify for a "good" performance rating at least.

THE PHONO PREAMP

THE phono preamp amplifies the tiny signal from the phono pickup cartridge up to line level, approximately 0.5 volt, and applies RIAA equalization to compensate for the bass cut and treble boost built into every vinyl record. If you are a CD convert, the phono stage of your preamplifier or integrated amplifier may be incidental. But if you still listen to many LP's, the quality of the phono preamp is important, and two compatibility questions should be considered.

1. Every preamplifier or integrated amplifier has an input for a conventional moving-magnet (MM) phono cartridge. Do you also need a high-gain, low-noise input circuit for low-output moving-coil (MC) pickups? The need for a special MC input has declined as cartridge makers have found ways to make "high-output" MC pickups that connect to the standard MM phono input, but some low-output MC pickups continue to be favored by audiophiles.

2. The treble response of a moving-magnet cartridge is affected by the phono preamp's input resistance (standardized at 47,000 ohms) and capacitance. If you are using an MM pickup, you may want a preamp with switch-

selectable phono capacitance so that you can fine-tune the pickup's sound.

With respect to preamp performance, virtually every amplifier now on the market fulfills the basic requirements. In terms of input sensitivity, RIAA equalization accuracy, total harmonic distortion (THD), signal-to-noise ratio (S/N), and phono overload, it's a rare amplifier that doesn't qualify for a "good" rating at least, and many are excellent. But the numbers probably won't help you make fine distinctions between good and excellent sound.

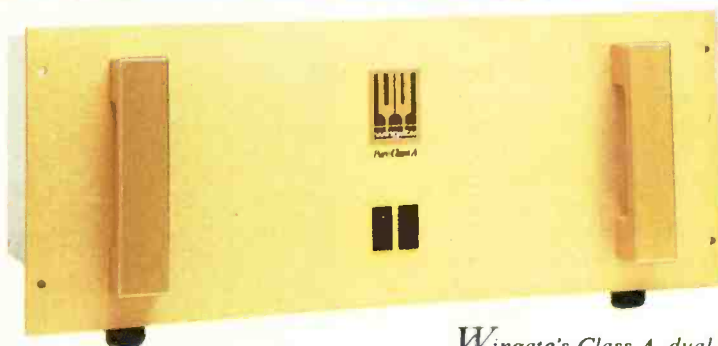
One aspect of performance that specs don't quantify is the phono preamp's vulnerability to radio-frequency interference (RFI). If you live very close to a poorly shielded computer, an airport, a radio or TV transmitter, or a CB enthusiast, look for an indication that the designer of your amplifier has paid attention to RFI. Symptoms of RFI range from increased distortion and noise to clicking noises, buzzy hum, or "Hey, good buddy!" with your Mozart. If you encounter this problem, your dealer may be willing to exchange your purchase for a less vulnerable model, or the manufacturer's service department may have a circuit modification available for installation on request. P.W.M.

AMPLIFIERS

duce nearly the same broad rolloff as a turned-down treble control, dulling the music by removing the middle treble together with the top octave. A sharp filter that remains flat to about 8,000 Hz and then rolls off at 12 or 18 dB per octave will remove more noise while preserving most of the musical harmonics in the recording.

At low volume levels, the human ear is relatively insensitive to low-frequency sounds, so in theory a switchable *loudness-compensation* circuit would be useful in maintaining a lifelike tonal balance at every volume level. In practice, however, the **LOUDNESS** button often alters the timbre unrealistically; you may obtain more useful loudness compensation by judicious adjustment of the tone controls. A few amplifiers use a two-knob circuit to provide accurate compensation—one knob to calibrate your maximum listening level and a second to add compensation progressively as the sound level is lowered.

Do you want elaborate tone controls, simple ones, or none at all? Some tone controls affect the basic tonal balance of the music, making it brighter or duller, heavier or thinner. In other designs, the bass con-



Wingate's Class A, dual-mono power amplifier, rated at 100 watts per channel, uses no negative feedback. Its price is \$3,200.



Denon's POA-3000Z, rated at 250 watts per channel, is another power amplifier designed to achieve low distortion without the use of negative feedback. Price is \$2,400.

MANUFACTURERS' specifications provide little information about the comparative sound quality of the 300-odd amplifiers on the market. According to Mitchell's Rule of Specifications, by the time the audio industry agrees on a standard specification (so that consumers can make valid comparisons), every manufacturer has eliminated the fault that the specification was intended to identify. As a result, published specifications always represent good performance.

In years past, for example, some amplifiers had audible amounts of total harmonic distortion (THD), intermodulation distortion (IM), or "transient" intermodulation distortion (TIM). But by the time the corresponding specifications came into general use, these distortions had been reduced to insignificant levels in all new amplifiers. Even the most "golden" ears can't hear THD levels below 0.1 percent, so it is irrelevant whether the measured amount is 0.01 or 0.001 percent. Once the distortion is below the ear's audibility threshold, it sounds the same. This does not mean that specifications are meaning-

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less, but it does make it a something of a challenge to extract illuminating information from them.

The task becomes still more complex when manufacturers fail to adopt a consistent way of stating the numbers. Back in 1978, the high-fidelity industry voted to adopt an improved set of standard procedures for measuring amplifier performance. These procedures became the official EIA (Electronic Industries Association) RS-490 Test Standard and are used by Hirsch-Houck Laboratories for test reports published in *STEREO REVIEW*.

Under the EIA standard, the signal-to-noise ratio of a phono preamp should be measured with a phono cartridge connected to its input, since the impedance of the cartridge influences the preamp's noise level when records are being played. But some companies still measure phono S/N with a short-circuited input, an obsolete 1966 method that produces more impressive numbers. (In most amplifiers, fortunately, the phono preamp noise is below the surface noise of records. In effect, S/N's are good enough that the exact number is unimportant.)

When consistent standards are used, valid comparisons can be made be-

tween components. But amplifiers that measure equally "good" may still sound slightly different, especially because of the ear's acute sensitivity to small differences in frequency response. Each of the several stages in an amplifier may have small departures from dead-flat response, adding up to a difference that may be audible in direct comparisons. A response rated at "20 to 20,000 Hz \pm 0.5 dB" is considered excellent. But if one amplifier is 0.5 dB up in the bass while a second amp with the same rating is 0.5 dB down in the treble, this broad 1-dB difference in response will be plainly audible in a direct comparison. The ear is easily deceived, though: such differences in tonal balance are often perceived as something else—"air," image depth, height, clarity, warmth, or even an apparent difference in distortion.

Response aberrations on this scale may seem obvious in direct comparisons (at least to some listeners), but they don't matter much in the long run. The largest response errors in an amplifier are small compared with the differences between phono cartridges, speakers, and listening rooms. P.W.M.

AMPLIFIERS

ontrol operates only on the low bass (the solid foundation, the beat) and the treble control only on the high treble (the crisp detail, the airy sparkle) without changing the tonal balance in the middle range where most of the musical sound resides.

To discover which approach was taken in the amplifier you are considering, play vocal recordings (folk ballads or soft rock, for example) and observe whether the character of the voice is substantially altered as the bass and treble controls are turned toward their limits. Some amplifiers let you have it both ways, with switches that alter the *turnover frequencies* of the bass and treble circuits.

If two tone controls are good, a third can be better, especially if the added midrange control is centered not at 1,000 Hz but in the "presence" range of around 2,000 to 3,000 Hz. A boost here can clarify an inarticulate vocal, while a cut can tame a too-forward solo or a raucous, edgy-sounding digital disc. The next level of flexibility requires a graphic or parametric equalizer, a rare feature in home amplifiers. An even rarer option is the *slope* control, which maintains a smooth overall response but tilts it up for a brighter, more "open" sound or down for mellower, smoother tone.

Often the most important question about controls concerns their *ergonomics* (human engineering). Do the controls work logically, or do they invite errors? Are they confusingly identified? Will you be able to read the front-panel lettering at home, without the store's bright track lighting? If some of the controls are sliders, can you set them as precisely as you can a round knob? Do the controls feel smooth and solid, or stiff, uncertain, or flimsy? Try out a variety of designs, and pick an amplifier that not only *sounds* good in your system but one that also *feels* good to you. □

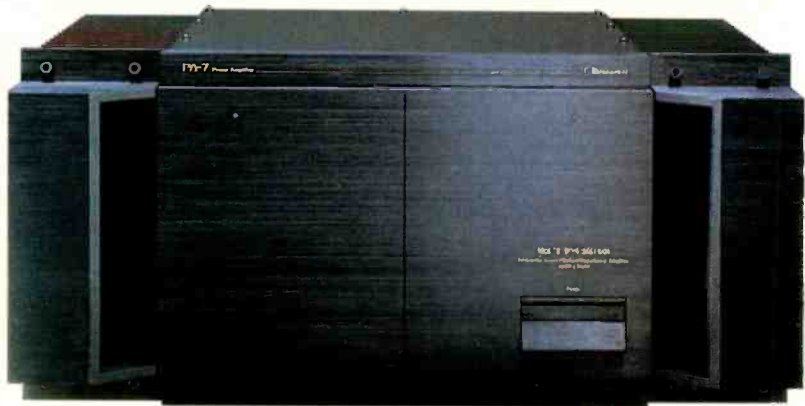
Nakamichi's CA-7A preamplifier, shown with its remote control, has six inputs and will route commands to other Nakamichi components. Price: \$2,195. The massive Nakamichi PA-7 power amplifier uses Stasis topology for driving speakers presenting difficult loads. Rated at 200 watts per channel, it is priced at \$1,750.



Onkyo's Grand Integra P-308 preamplifier (top) has inputs for ten signal sources. Price: \$600. The matching dual-mono M-508 power amplifier is rated at 200 watts per channel and costs \$1,100.



Sansui's AV-G99X integrated amplifier, rated at 160 watts per channel, has inputs for eight sources and a pre-preamplifier for moving-coil phono cartridges. Its price is \$1,000.



STEREO TV: THE NEW SEASON

by William Livingstone



"On Stage at Wolf Trap," a series of prime-time concerts broadcast in stereo on PBS, began with Swan Lake performed by the Kirov Ballet of Leningrad. Funding is supplied by EIA's Consumer Electronics Group to promote stereo on TV.

STEREO sound has finally come to American broadcast television in a significant way. It's surprising that it has taken a quarter of a century after stereo LP's revolutionized the record industry and the hi-fi equipment market, but it is here at last. In addition to the continuing efforts of the Public Broadcasting Service, this season ABC, CBS, and NBC will broadcast in stereo more than thirty hours a week of widely varying programs—sports, situation comedies, and documentaries, as well as music.

According to the Electronic Industries Association, 1986 is the greatest year in television history in terms of sales of color TV sets. One out of five TV homes in the United States will have bought a new unit by the end of the year, a total of seventeen million color sets, and three million of them will have built-in Multichannel Television Sound (MTS), a fancy way of saying stereo.

The technology to broadcast better sound—and stereo sound—has been around for a long time. Broadcasters, however, were hesitant to start transmitting in stereo if there were no sets out there to receive multichannel sound, and they were harshly critical of the consumer electronics industry for not opening a new television era by introducing home stereo equipment. But the hardware manufacturers were reluctant to put stereo TV sets on the market if there were no programs for them to receive. After a little jockeying around by both sides, a way out of that impasse has been found, probably stimulated by the success of home video with stereo sound.

Now that the hardware is available, what is there to watch that is also worth listening to?

Lots! In the same way that PBS pioneered stereo TV with FM simulcasts of the music specials that were one of its principal claims to fame, the networks will be adding stereo sound to the kinds of programs they have always counted on to keep their audiences coming back for more.

To have a stereo blockbuster to open the season for its regular Sunday movie series on September 28, ABC chose the sure-fire *Raiders of the Lost Ark*. This film has been a favorite for use in demonstrating high-quality VCR's and surround-sound devices. ABC will also be broadcasting its new Friday night series *Sledgehammer* in stereo.

CBS will broadcast stereo sound with its Saturday evening series *Twilight Zone*, and stereo will be available for selected sports and entertainment specials still to be determined. One that had already been determined at press time was Super Bowl 21 next January 25, and it is safe to expect stereo on those programs that feature enough music for stereo to make an impact that cannot be ignored, such as next winter's Grammy Awards and the Country Music Awards.

What ABC and CBS are doing may not seem like an awful lot to shout about, but that's because NBC is responsible for most of the scheduled thirty-odd hours of stereo broadcasts from the networks. Boasting stereo

every night of the week, NBC will offer twenty-three—count 'em, twenty-three—shows that add up to a whopping 24½ hours of stereo every week.

NBC made TV history with the first network stereo television broadcast of the *Tonight Show* starring Johnny Carson on July 26, 1984. The *Tonight Show* is one of NBC's sixteen returning stereo programs that were also available in stereo last season. Others are the very popular *Miami Vice*, *The Cosby Show*, *Late Night* with David Letterman, *Friday Night Videos*, and *Saturday Night Live*.

The seven new shows that will be transmitted in stereo start on Monday nights with *ALF* (which stands for Alien Life Form), a situation comedy. On Tuesdays, Andy Griffith will play a defense lawyer in *Matlock*, a dramatic series. Also on Tuesdays you can see (and hear) *Crime Story*, created by Michael Mann, who also produces *Miami Vice*. A dramatic series about the legal profession, *L.A. Law*, will be seen on Fridays. It is produced by Steven Bochco, producer of *Hill Street Blues*. On Saturdays you can see *Amen*, a situation comedy, and on Sundays, the family drama *Our House* and the situation comedy *Easy Street*. NBC made further TV history on September 22 of this year when it added the capability of broadcasting commercials in stereo full time.

At the beginning of the season stereo broadcasts were being transmitted by the five NBC-owned stations plus eighty affiliates, reaching 68.5 percent of the TV homes in the United States. By the end of the year, that total will be increased to 114 stations, reaching 81.4 percent of U.S. TV homes.

Asked why NBC was so far ahead of its competitors in stereo broadcasts, NBC spokesman Dom Giofre said, "Look at the kind of programming that we are best known for. The *Tonight Show* starring Johnny Carson and *Late Night* with David Letterman both have live orchestras performing at every show. *Friday Night Videos* is all music, and music is an important ingredient of *Saturday Night Live*. These shows cry out for stereo sound so much that it's almost overdue. That may be one reason we're ahead—our kind of programming.

"Another is the commitment to stereo on the part of Michael J. Sherlock, NBC's Executive Vice President, Operations & Technical Services." It's interesting that Sherlock's background is not the engineering side of TV or the artistic side, but finance. Evidently, some television executives see the addition of stereo sound as good business. A pioneer in campaigning for better TV sound and for stereo TV has been the Public Broadcasting Service. Since it is a nonprofit enterprise, its motives were not financial, but artistic and social.

Back in the Seventies, the National Endowment for the Arts joined PBS in developing the technology for improved TV sound. The result was a system known as Digital Audio for Television (DATE), which could enable networks to distribute to TV stations stereophonic high-fidelity audio along with the picture or video portion of a program.

Ten years ago the National Endowment's deputy chairman Michael Straight said: "The Endowment has long been committed to stimulating the use of television in making the fine arts available to all Americans. It has lent its support to such fine cultural programs on PBS as Great Performances and Live from Lincoln Center. But however splendid the programs, the full impact of a performance can only be grasped when sound matches video quality."

In 1976, however, the DATE system could not be implemented because its use was not then permitted on the telephone company's video circuits, and, of course, there were no home TV sets to receive the stereo telecasts. PBS did not sit on its nonprofit hands. Instead of waiting for approval of its DATE system, it developed the system of "simulcasting" for its fine-music specials. Simulcasting involved broadcasting the stereo audio portion of a program over FM stations while the video portion (and mono audio) were transmitted by the normal TV methods. Those of us at home put our TV sets between our stereo speakers, turned down the TV sound, and got stereo TV by hearing the audio on FM.

In the summer of 1976, the PBS telecast of the American Ballet Theatre's performance of *Swan Lake* at Lincoln Center was distributed via the largest live stereo network in broadcasting history. It involved the use of microwave, land-line, and satellite facilities. It was a thrilling show, and it won an Emmy Award from the National Academy of Television Arts and Sciences.

The DATE stereo system is now in use at PBS, and, fittingly, this past summer the Electronic Industries Association underwrote a stereo telecast on PBS of a performance of *Swan Lake*, performed this time by the Kirov Ballet of Leningrad at Wolf Trap, the national park for the performing arts near Washington, D.C. A co-production of Maryland Public Television and the Wolf Trap Foundation, this *Swan Lake* has also received an Emmy Award as the most outstanding classical program in the performing arts.

This season the EIA and Martin Marietta will underwrite half a dozen other music specials from Wolf Trap. They will include such things as a concert by the New England Ragtime Ensemble conducted by Gunther Schuller, a tribute to George Gershwin by the National Symphony Orchestra conducted by Andrew Litton, and a Windham Hill concert featuring Shadowfax, Will Ackerman, and Michael Hedges.

Other PBS stereo broadcasts will include the series *Nature*, *Sneak Previews* with movie critics Jeffrey Lyons and Michael Medved, and the Great Performances series. The Great Performances will include a couple of concerts by the Boston Pops in October, *Miles Ahead* (the music of Miles Davis) on October 19, and the Diamond Jubilee concert of the San Francisco Symphony on October 25.

A four-part biography of Richard Wagner (starring Richard Burton) begins on October 24 and continues for the following three Friday nights. Leonard Bernstein's *Candide* will be broadcast in stereo on Live from Lincoln Center on November 12, and *Newport Jazz '86* on November 19 will feature Gerry Mulligan, Wayne Shorter, and Natalie Cole. On Friday, November 28, PBS will broadcast the Washington Opera's world premiere performance of Menotti's opera *Goya*, with Plácido Domingo as the painter Francisco Goya and Victoria Vergara as the Duchess of Alba.

Who gets the credit for all of this? Far too many people to list. But in September five engineering Emmy Awards were given out. They went to the programming pioneer NBC, to RCA for its stereo research, to dbx for noise reduction, to Zenith for developing the stereo transmission system, and to the engineers of the EIA's Consumer Electronics Group for their work in developing industry standards. I am going to try to remember these people with gratitude when I am at home watching stereo TV this winter. □

ANALOG TO DIGITAL



LIZZY ROCKWELL

It's the music that counts when you're choosing compact discs.

by Gerald Seligman



DURING one of my recent CD buying sprees, a record-store salesman held up my selection of compact discs, showed them to the cashier, and said scornfully, "Look, mono CD's!" They both laughed. In the salesman's hands were Miles Davis's "Bags' Groove" and John Coltrane's "Soultrane." The salesman and cashier clearly didn't know much about classic jazz, and I couldn't help thinking they didn't know much about the digital compact disc system either.

All Digital, DDD, A Digital Recording—we look for those tags on

the compact discs we purchase. It's a digital medium, and surely digital recordings should sound best. Reasonable enough. But so many music lovers stop short when they note an analog link in the recording chain. Analog? Why, I've got LP's for that. Right?

Wrong. Some of the greatest thrills in CD listening come from the older material. Ethereal highs, devilish lows, dynamics and clarity one never even knew existed suddenly come forth like unexpected gifts from your speakers. Imagine a medium that can reveal all the things that never made it out of the recording studio, all that was there on the original tape, and you'll

begin to understand the rewards of older analog recordings transferred to compact disc.

Classical producer John McClure, who describes himself as a "confirmed" digital enthusiast, still says, "A lot of remixed, remastered analog recordings put on digital tape and then released on CD's sound better than a lot of indifferently made pure digital ones. I think there's more difference, for instance, in the hall you use, the orchestra, the conductor, the mikes and recording technique than there is between analog and digital per se. Both in analog and in digital there can be an incredible variation of quality and of placement, perspec-

tive, etcetera. To me those differences are much more important than whether a master is an analog original or a digital one."

And besides, whatever the original source, CD's simply sound better. Bob Ludwig, of Masterdisk Corporation, who has mastered literally thousands of LP's, tells why. "One of the real beauties of compact discs is that even the cheapest Walkman-type CD player will produce results that only very expensive analog playback systems will produce." This is partly the result of a CD's phenomenal ability to store dynamics, those dramatic shifts from loud to soft and back again. Even on its outermost grooves an LP has a maximum dynamic range of 55 dB, compared with a CD's 90 dB. Because of these wide dynamics, Ludwig feels that a CD is "as close to hearing the master tape in your living room as we'll probably ever get,

inner grooves, from about 15 to 18 inches of vinyl per second down to about 6 inches per second. Ludwig says, "The same [analog] wave is being cut in an increasingly smaller space, and the resolution and the amount of high frequencies that can be obtained by that would slowly decrease, so a [vinyl] disc is a steadily collapsing medium." The groove undulations for those extreme frequencies become so small that the very diameter of the stylus becomes too thick to follow them. Accordingly, a cutting engineer will eliminate some of the highs simply to make the groove inscribable. The older LP's in your collection especially suffer from such manipulation.

Low frequencies can be equally troublesome. It became the habit of engineers, especially in the pop field, to balance a recording with the bass smack dab in the middle of the stereo image. It wasn't aesthetics

answers Ludwig, "that's very easy to do on a compact disc. That's not so easy to do on a [vinyl] record."

There are other, less excusable reasons why many older LP's don't come close to their CD counterparts. MCA's special products manager Steve Hoffman mentions that an LP may be many generations, or copies, removed from the master tape. One of the best CD's from MCA's long-awaited Impulse reissues is Oliver Nelson's "Blues and the Abstract Truth" (MCAD-5659). ABC Records, the first owners of the recording, made a tape copy for production. Then during a flurry of reissue activity in the 1970's, ABC struck a new master, thus making it twice removed from the original. Later, thinking the stereo image was exaggerated, the engineers made another copy and "folded the channels in so that there's really no left-right separation." It's easy to lose count here, but Hoffman can list still more copies after MCA bought ABC Records and made its own reissues.

When I suggested that this must be an extreme case, he declared it wasn't. Judging from my discussions with other engineers and producers, I'm prepared to take his word for it.

Hoffman's first move as special products manager was to relegate the LP's to the cut-out bins, discard the copies, and seek out the original masters. "So now when you compare an LP of 'Blues and the Abstract Truth' with the actual master tape or a CD, it's like night and day, totally incredible." The CD does sound better than most, and it easily rivals even some recent recordings.

Of course, we needn't blame the playback medium for the faults of the industry. So, to add final points in the CD's favor, compare the LP's surface noise with the CD's one-third higher signal-to-noise ratio and note the CD's three to four times higher channel separation, its nearly unmeasurable wow-and-flutter, and its inaudible harmonic distortion. All of this means that for those people who can't afford state-of-the-art analog systems (and perhaps even for those who can), the CD is the greatest playback medium ever to hit the retail bins.

Forecast: Continued Sunshine

All of the devious manipulations that robbed music lovers of that greatest goal—a mirror of the master tape—can indeed be eliminated. With what Steve Hoffman calls "hands-and-knees archive work"



New digital re-editing equipment is available to CD producers at Denon in Japan.

short of having higher sampling rates on the CD players." Why weren't these dynamics on the LP's?

The LP: A Steadily Collapsing Medium

Even with great advances in LP cutting techniques such as Direct Metal Mastering, there are still excursions a cutter can't make and a stylus can't follow. As a record progresses from its first bands toward its last, the speed may remain at a constant 33 1/3 rpm, but the stylus is covering significantly less ground. Like runners on a track elbowing each other for position in the innermost lane, the distance the stylus travels also decreases en route to the

that inspired them but the inability of a stylus to read differing low frequencies in stereo. If a bass drum pounded on the left, and a bass guitar walked hard on the right, the program would zap out of phase and the stylus could literally leap out of the groove in frustration.

Computerized cutting vastly improved upon this situation, but it's still only in rare cases that highs at one volume level and stereo bass at another can be inscribed with results worth listening to. And though an LP can theoretically offer a greater frequency response than a CD, 10 to 25,000 Hz compared with 20 to 20,000 Hz, again the question is, at what level? "If you wanted to put 20,000 cycles on at full level,"

and a little care, all those original frequencies and dynamics can be yours! And for the first time! PolyGram's jazz producer Richard Seidel says, "It just proves that if something was recorded well twenty-five years ago and you put it on a medium that brings out all the best in the recorded session, you can really hear the difference." Some of these older analog masters are so good, in fact, that record buyers might never have suspected just how good.

As a bonus, the advent of compact discs has given the industry just the push it needed to clean house. Says Dennis Drake of PolyGram, "It's been a tremendous shot in the arm for labels to look at their collections and assess the state and condition of their tapes." In the process they often discover unreleased tracks, even whole unreleased albums worthy of attention.

"I still defy anybody on a blind test to consistently pick out a digital over an analog," challenges John McClure, "as long as the analog is well recorded and every pain is taken to keep tape hiss at a minimum. There may be just a tiny bit of extra clarity and lower distortion to digital, but basically I don't think there's that much dramatic difference even though, as I say, I'm sold on digital technique and have been for some time."

As Leonard Bernstein's longtime producer and Bruno Walter's before that, McClure has the experience to back up his claims. "It would be insanity to just suddenly write off an entire catalog of wonderful performances just because they happen to be analog."



INSTEAD of writing them off, McClure has been steadily engaged in the transfer of older material to compact disc. The first of these projects to appear in stores was the wondrous reissue of some classic Bruno Walter CBS recordings. These older analog tapes have been transferred so well, he says, because recording and mixing equipment has been vastly improved.

"The whole digital chain is so good and so clean, you can really let the tapes speak for themselves, allow the full dynamic range, and put the bass back that the old cutters couldn't handle." But simply letting them speak for themselves took restoration and dedicated effort. After

seeking out the original three-track masters, the ones taken straight off the session recorders and as yet unhampered, unequalized, and unrestricted, McClure lived with them awhile. He also pulled out the later work copies that were used for actual disc mastering—"to see what not to do," he adds with a laugh.



WITH score in hand he prepared a "road map," taking note of all the places an engineer might have tampered with the basic recording.

If the volume of a few quiet bars had been raised to avoid being hushed away by tape hiss, McClure would now pencil in a reminder to restore the original dynamics. If improper equalization was used, he'd want to correct it.

Once he was set on a game plan, he'd often have to affix new leader tape, re-cement dried edits, even edit in moments from back-up copies where physical damage made portions of a tape unplayable. Editing is a common and necessary phase in all transfers, and it requires imagination, skill, and extreme patience. The damaged ending of Leonard Bernstein's performance of *Also sprach Zarathustra*, for instance, was replaced with bars from a quadraphonic version made a decade later.

Walter and Bernstein (whose abundant older CBS recordings McClure has also remastered) were almost single-handedly responsible for the international interest in Mahler, a fact that's easy to forget when one considers the current Mahler symphony-cycle sweepstakes. Their interpretations simply must be heard, both for their historical importance and their artistic place among the rest. Granting a small measure of leeway to older recordings, a music lover will find himself or herself happily reaching for them just for the sheer pleasure of the listening. And most of these reissues were programmed with the CD's longer playing time in mind: they contain extra overtures and other short works to make up an hour or more of music per disc.

Like John McClure, other engineers work long and hard to resuscitate old masters. Some of the best news for collectors is in the jazz domain. Labels like Prestige, Riverside, Verve, EmArcy, Impulse, Roulette, Savoy, ECM, SteepleChase, Denon, and Pablo have been selecting the best of their holdings and

The whole digital chain is so good and so clean, you can let the analog tapes speak for themselves, allow the full dynamic range, and put back the bass that the old cutters couldn't handle. But letting the tapes speak for themselves takes restoration and dedicated effort.

issuing them by the dozens. RCA has just announced its intention to reissue much of its own admirable back catalog, and Columbia will soon supplement its classic Miles Davis list with thirty-five more gems of priceless jazz. Many of the reissues are so good that a listener only thinks of their analog origins in amazement and with gratitude to the original engineers. Savoy has even gone back to old acetates of Charlie Parker for its CD of "Bird: The Savoy Sessions" (ZD 70737). Compared with the LP's there is more pronounced bass, a heart-warming presence on the sax, and a sense of depth to spare, as if you'd just walked in from the club's doorway to a center seat. The prospect of transfers from 78's is certainly something to look forward to.

Engineer Joe Gastwirt did the Prestige-Riverside jazz reissues. Dennis Drake, who has done similar work for PolyGram, says that on some of the Ella Fitzgerald "Songbooks," he went back to the session three-tracks for the transfer. By circumventing the several analog generations of the original release he was able to deliver a greater dynamic range than has ever been

heard before. He did the same on the James Brown "CD of JB" (Polydor 825 714-2). For a re-release of Rod Stewart's classic *Maggie May* (on "Sing It Again, Rod," Mercury 824 882-2), Drake constructed a composite master, each section with its own equalization settings to boost specified frequencies—say a touch more punch to the bass drum here, a little more clarity to the mandolins there.

RCA Studios' Rick Rowe has done equal wonders with the material he's worked on, like a superlative set of Elvis Presley reissues and, my own favorite, his definitive "Sam Cooke: The Man and His Music" (RCA PCD1-7127). Like the jazz catalog, there's much to recommend among pop analog recordings in the new medium.

Newer Analogs

Some people even hesitate to buy pop and jazz CD's made from recently recorded analog masters. Yet anyone who's come to appreciate older masters on CD should consider that more recent ones were probably recorded at twice the tape speed and on tape twice as wide. This means that an even greater sig-

nal-to-noise ratio was achieved with simultaneously lower tape hiss. Most contemporary pop is still recorded on analog recorders, and I dare say the results are nothing to despise.



RY last year's Talking Heads release, "Little Creatures" (Warner Brothers 25305-2), if you're still skeptical, and then try to pinpoint what, if anything, is missing. These CD's should be bought for the same reason as any all-digital one: because you want the music on the best-possible playback medium, one that will sound superior from start to finish, the first time it's played and the thousandth. Of course, some labels cut corners occasionally by transferring from something other than the original master for their compact discs. The results add fuel to many antidigital fires, but such instances, happily, are becoming increasingly rare.

Reissues will, of course, continue to improve with further technological refinements. Though many CD's boast an all-digital process, some production steps may still be done

RECOMMENDED ANALOG REISSUES ON CD



Leonard Bernstein

Classical

I'd say that it's safe to try almost any of CBS Masterworks' Bruno Walter and Leonard Bernstein reissues or the CD's in the CBS Great Performances series, but I particularly like the following:

- Beethoven: *Symphony No. 6* ("Pastoral"); *Leonore Overture No. 2*. Columbia Symphony, Walter. MK 42012.
- Bruckner: *Symphony No. 4*

("Romantic"). Columbia Symphony, Walter. MK 42035.

□ Mahler: *Symphony No. 3; Four Rückert Lieder; Seven Lieder und Gesänge aus der Jugendzeit*. Martha Lipton; Dietrich Fischer-Dieskau; Schola Cantorum; New York Philharmonic, Bernstein. M2K 42196.

□ Mahler: *Symphonies Nos. 7, 9, and 10 (Adagio)*. New York Philharmonic, Bernstein. M3K 42200.

□ Mendelssohn: *Symphony No. 4* ("Italian"); *A Midsummer Night's Dream, excerpts*. Cleveland Orchestra, George Szell. MYK 37760.

□ Mendelssohn: *Violin Concerto in E Minor*. Tchaikovsky: *Violin Concerto in D Major*. Isaac Stern; Philadelphia Orchestra, Eugene Ormandy. MYK 36724.

London/Decca's ADRM series, which stands for Analog Digital Re-Mastering, has the company's usual high standards to recommend it. Try the following London and Argo CD's:

- Brahms: *Ein deutsches Requiem; Variations on a Theme by Haydn*. Kiri Te Kanawa, Bernd Weikl; Chicago Symphony Orchestra and Chorus, Georg Solti. London 414 627-2.
- Handel: *Water Music; Royal Fireworks Music*. Academy of St. Martin-in-the-Fields, Neville Marriner.

Argo 414 596-2.

□ Vaughan Williams: *Tallis Fantasia; "Greensleeves" Fantasia; The Lark Ascending; Five Variants on "Dives and Lazarus."* Academy of St. Martin-in-the-Fields, Marriner. Argo 414 595-2.

□ Wagner: *Der Ring des Nibelungen*. Nilsson, Flagstad, Crespin, Ludwig, Windgassen, King, London, Hotter, Frick, others; Vienna Philharmonic, Georg Solti. London 414 100-2 (fifteen CD's). I especially like Solti's *Die Walküre* (414 105-2).



Kiri Te Kanawa

Angel/EMI and Philips also have some treasurable reissues:

- Beethoven: *Violin Concerto; Romances for Violin and Orchestra Nos. 1 and 2*. Henryk Szeryng; Concertgebouw Orchestra, Bernard Haitink. Philips 416 418-2.

in the analog domain—even on digital recordings. Equalization is usually an analog process, though Denon in Japan has developed one of the first all-digital mastering and mixing consoles capable of digital equalization and level adjustments. It's even programmable, so complex processing can completely avoid added analog noise and signal deterioration. The console can also be directly interfaced with a digital recorder for mixing classical music.

I had the opportunity to visit Denon (Nippon Columbia) in Tokyo, where a maze of studios large and small share space with the company's offices. Since collaborating on the development of the first commercial digital recorder in 1972, Denon has gone on to introduce many more digital components, such as an editing system that can access a specified musical moment in an instant.

All these advances will help insure even higher-quality analog transfers and still better all-digital recordings in the years to come.

The Test of Time

For those shoppers who don't know the recorded catalog special-

ly well, choosing an older recording offers the bonus of a few decades' worth of weeding out. Like filmgoers who wonder why so many foreign films are so good without realizing that the worst were left behind, a CD buyer who selects an older performance often gets the absolute cream of the crop. Which *Carmen* should you buy? Well, there is the Maria Callas version (Angel CDCC-47312). Which Brahms Fourth Symphony? It can be argued that no one will ever top Bruno Walter's (CBS MK 42013). Which *Eroica*? Many believe you've never really heard the symphony until you've heard Erich Kleiber's highly esteemed 1955 mono rendition (London 414 626-2).



OR jazz the same argument can be made. What makes it onto CD has withstood that discriminating test of time. You like bluesy alto sax? Try Verve's "Duke Ellington and Johnny Hodges: Back to Back" (823 637-2). The verdict's been in on that outing for quite some time. Want Motown? There's a label that finds seemingly infinite

ways to recompile its worthy catalog. Whether it's artist and songwriter compilations or greatest-hits packages, Motown has something for everyone.

This isn't to say that what makes it onto compact disc is always artistically best. But so much is so good that there's some safety in those numbers. And no LP version of the ones I've mentioned came close to capturing what these CD's reveal in abundance: depth, dynamics, and clarity. Best of all, in CD format, the recording, like the music itself, will last forever.

So if you're in the market for a CD and can't decide on which to buy, go for the music, not the recording method. As Bob Ludwig of Masterdisk says, "I have the [digital] Telarc Chopin CD's, and I've got this [analog-origin] Rubinstein CD. Believe me, I play the Rubinstein CD when I want to hear real Chopin."

And we're not going to get John Coltrane to rerecord "A Love Supreme" or the Beatles to redo "Rubber Soul" or Erich Kleiber to rerecord the *Eroica*, or . . . well, I could go on. Now, where are those scoffing salesmen? □

- Chopin: *Nocturnes*. Claudio Arrau. Philips 416 440-2.
- Gershwin: *Rhapsody in Blue; Concerto in F*. Katia and Marielle Labeque. Philips 400 022-2.
- Mahler: *Symphony No. 5; Symphony No. 10, Adagio*. London Philharmonic, Klaus Tennstedt. Angel CDC-47103.
- Mozart: *Exsultate, jubilate; Ave verum corpus*; other sacred works. Kiri Te Kanawa; London Symphony Orchestra and Chorus, Colin Davis. Philips 412 873-2.
- Rachmaninoff: *Symphony No. 2*. London Symphony, André Previn. Angel CDC-47159.

Jazz

- Cannonball Adderley: *Know What I Mean?* Riverside VDJ 1518.
- Louis Armstrong: *Singin' n' Playin'*. Denon 33C38-7685.
- Chet Baker Quartet: *No Problem*. SteepleChase SCCD-31131.
- Count Basie and the Kansas City 7. MCA/Impulse MCAD-5656.
- Clifford Brown and Max Roach: *At Basin Street*. EmArcy 814 648-2 (mono).
- Miles Davis: *Sketches of Spain*. Columbia CK 08271.
- Bill Evans Trio: *Sunday at the*

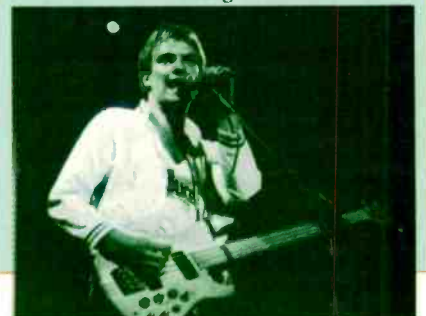
- Village Vanguard*. Riverside VDJ-1519.
- Gil Evans Orchestra: *Out of the Cool*. MCA/Impulse MCAD-5653.
- Ella Fitzgerald and Louis Armstrong: *Porgy and Bess*. Verve 827 475-2.
- Duke Ellington Meets Coleman Hawkins. MCA/Impulse MCAD-5650.
- Billie Holiday: *Songs for Distinguished Lovers*. Verve 815 055-2.
- Coleman Hawkins Encounters Ben Webster. Verve 823 120-2.
- Thelonious Monk with John Coltrane. Riverside VDJ-1510 (mono and stereo).
- Gerry Mulligan Meets the Saxophonists. Verve 827 436-2.
- Sonny Rollins: *Way Out West*. Mobile Fidelity Sound Lab MFCD 801.

Pop, Rock, and Soul

- Brian Eno: *Desert Island Selection*. EG EGCD 65.
- Marvin Gaye: *Compact Command Performances*. Tamla TCD 06069.
- Van Morrison: *Live at the Grand Opera House, Belfast*. Mercury 818 336-2.
- Procol Harum: *A Salty Dog*. Mobile Fidelity Sound Lab MFCD 823.
- Roxy Music: *Avalon*. Warner Bros. 23686-2.

- Rod Stewart: *Gasoline Alley*. Mercury 824 881-2.
- Sting: *The Dream of the Blue Turtles*. A&M CD 3750.
- The Temptations: *Compact Command Performances*. Gordy GCD 06125.
- *The Greatest Songs Ever Written by Holland, Dozier, Holland*. Marvin Gaye, the Supremes, the Four Tops, and others. Motown MCD 06138.
- *New Acoustic Sampler*. David Grisman, Bela Fleck, Tony Rice, and others, from the Rounder Records catalog. Rykodisc RCD 20002.
- *Out of the Blue*. Rhythm-and-blues from the Rounder catalog. Rykodisc RCD 20003.
- *Rock and Roll: The Early Days*. From Big Mama Thornton to Elvis Presley to Chuck Berry, and all points between. RCA PCDI-5463.

Sting



TALKING HEADS

BY ANN FERRAR



**"I deal with stuff that's too dumb for people to have bothered to formulate opinions on."
—David Byrne, speaking of his film *True Stories*.**

THE ordinary as avant-garde. Class from classlessness. These are very American concepts, but very few of our artists can handle them convincingly. Andy Warhol did it when he made pop art from the image of the Campbell's soup can. The Talking Heads group—David Byrne, Jerry Harrison, Tina Weymouth, and Chris Frantz—did it last year with "Little Creatures," their collection of simple, imaginative pop/rock songs about simple but weird people. First there was the suburban woman in the song *And She Was* who levitated in the backyard. And then there was the "cute, cute . . . lit-tel baby" who was a teaser's playmate in *Stay Up Late*.

If the scenarios in "Little Creatures" seemed like a *Rear Window* view of American backyards, then "True Stories," the latest Talking Heads album, plays like a rock-and-roll *Real People*. The songs on the new LP were written by lead vocalist Byrne for his current narrative feature film, also called *True Stories*, which was inspired by tabloid stories with headlines like "Lonely Bachelor Hungers for Love" and "Your Pants Can Kill You."

Ever since their debut as a quartet around 1976, Talking Heads have always defied trends by keeping one step ahead of them or by ignoring them. Today the group is still somewhat aloof from the rock-music spectrum, which seems divided into

two main camps. On one side are the flashy techno-pop sounds of such groups as Duran Duran and the Thompson Twins. On the other is grassroots American music, back in vogue along with patriotism.

But Talking Heads—so serious, so cerebral, so art-school-educated—is neither flamboyant nor conservative. The new record lies somewhere between those two extremes, in Middle America, celebrating lives of people who resist change while embracing progress.

Listening to the album during an interview in New York with drummer Chris Frantz made it apparent that "True Stories," even more than "Little Creatures," is virtually a folk album. Frantz said, "It's mainly

small-town music that has an exuberant quality." It's a potpourri with ingredients drawn from gospel, Cajun, country-and-western, New Orleans jazz, Tex-Mex, and plain old bar-band rock. Interviewed later, keyboardist Jerry Harrison said, "The album brings forth a history of American music."

It's impossible to discuss "True Stories," an album by the Talking Heads group, without considering *True Stories* the film, which is David Byrne's solo project. Harrison said, "The new LP sounds the way it does largely because it needed to fit various aspects of the movie." In the film Byrne narrates slices of the lives of peculiar Texas townsfolk with names like Lying Woman and Computer Guy. They wear tacky outfits and tacky hairstyles and live in a tacky but friendly environment, a panorama of shopping malls and other consumer monuments separated by vast empty landscapes.

"The movie freed David to write songs that perhaps would've seemed stupid for him to sing normally," said Harrison. "But because they were written with a certain character's vision of the universe in mind, all the songs had to do was to be consistent with that vision. He found that a useful tool in pushing back the usual strictures."

Just what are the usual strictures? Well, for one thing, the expectation that Talking Heads must live up to their reputation as "the thinking person's rock band." Fans and critics might be surprised to hear them singing lines like "We don't want freedom. We don't want justice. We just want someone to love." But that's just what they do in the new LP's *People Like Us*.

"When we all got involved in arranging and playing the music," Harrison said, "the movie freed the band as musicians in the same way it freed David as a songwriter. We just played what fit in without worrying if it was 'deep' or 'ground-breaking.' We played parts that reflected our love for those styles and tried to get across the feelings of people who normally play that music. And the strength and character of the band are so well formed that we can use clichés without being overtaken by them. The songs are still quite identifiably Talking Heads songs." So this earnest, brainy group can take even garage-band stuff, add dashes of this and that, and—*voilà*—it's art rock.

Since Frantz, Harrison, and bassist Tina Weymouth have some-

times expressed resentment over Byrne's getting most of the credit for everything they do, it's surprising that the whole group didn't choose to collaborate on the film. Harrison said, "At first all of us were going to be involved, but later we realized that it was better for David to be the sole director of the film and for us to work on just the music. We knew the film would take an awful lot of time, and if everyone didn't feel challenged enough, it would be hard to feel that way for two years."

Byrne wrote the script in collaboration with playwrights Beth Henley and Stephen Tobolowsky. He also compiled an accompanying paperback and produced a separate soundtrack album featuring actors in the film. The other three Heads make brief appearances in the movie, but during its filming they concentrated on solo projects.

Weymouth and Frantz, who are married, have recorded a third album with Tom Tom Club, their spin-off band, which includes Weymouth's two sisters and several Jamaican musicians. Tom Tom Club tends to sound like Blondie's Debbie Harry backed by the Chipmunks doing reggae. The new album, tentatively called "Street Virgins," will be featured in *Siesta*, a film about a female daredevil.

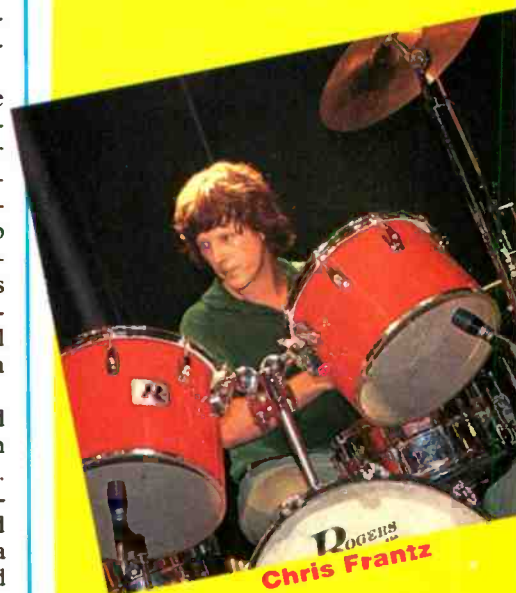
Harrison is completing his second album, with the working title "Man with a Gun," due out early in 1987. He says it's funky but not as complex as his first effort, "The Red and the Black." He also moonlights as a producer for Violent Femmes and other bands from his home town, Milwaukee.

When the solo projects are completed, the Heads will probably tour and then think about the direction of their next LP. Their earlier albums didn't leave many roads uncharted, so where can they go next? "We'll cross that bridge when we come to it," said Frantz. "We have to figure out a five-year plan so we all know what's expected of us. Then we can decide what kind of music it's going to be."

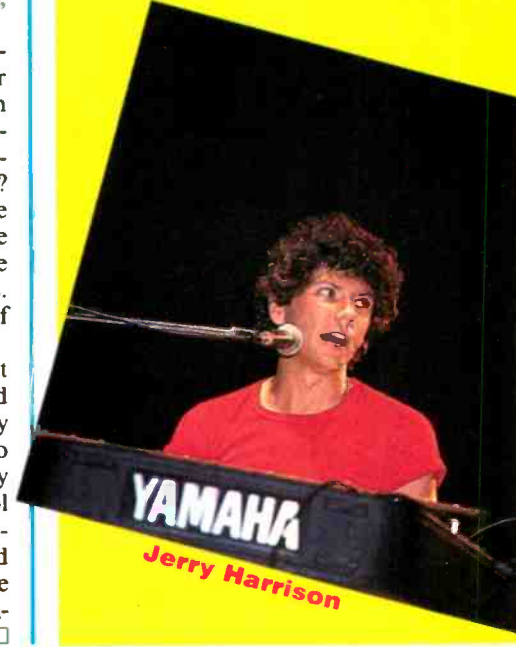
No matter what they concoct, it will probably be cult, classic, and mass-appeal at the same time. They will no doubt continue even to attract people who don't generally care for rock. Like Andy Warhol and the Campbell soup cans, Talking Heads is an artsy, popular, and undeniably American product. The next thing you know, they'll be singing about Mom and apple pie. □



Tina Weymouth



Chris Frantz



Jerry Harrison



UNIFIED REMOTE CONTROL

*Getting it together for
an audio or
audio/video system*

by William Burton



UNTIL RECENTLY, dreams and science-fiction novels were the only places you could find a complete audio/video entertainment system that could be controlled from the comfort of an easy chair, bringing the sights and sounds of real and imaginary worlds to your living room at the touch of a button. But now some of the dreams have come true, and fantasies of science fiction have become science fact.

The new home entertainment systems are often called unified remote-control systems because a single remote control unifies the functions of the separate remote controls that each component would otherwise have. Some of the systems contain only audio components; others include video components. All the components in such a system, from cartridge to cabinet, are usually made by the manufacturer whose name appears on the units. Because the systems have many components, they are not cheap, but if you are looking for the kind of convenience they offer, you can probably find one you like at a price you can afford.

Many unified remote-control systems can be built a piece at a time, so you can add components according to your needs and budget. Options also allow you to choose between different models of television sets, amplifiers, compact disc players, and other components.

It is possible to customize an audio or audio/video system by replacing any component with one made by a different manufacturer. This is most often done with the speakers, which are rarely remote controlled—and sometimes the speakers that come in unified systems are not of the highest quality. Remember, however, that replacing a component in a unified system with one that has its own remote control will add another unit to the clutter on your coffee table.

Many people like the unified appearance of these systems as well as their convenience and built-in operating compatibility. They are generally compact, too. A unified remote-control system may not have better sound or a better picture than another system, one that you put together yourself, but it can certainly make it easier for you to enjoy Mozart, Madonna, Miami Vice, or Star Wars. And an all-in-one remote control is even handier than a light saber.

The components that can be operated with Sansui's RS-1500AV remote control (facing page) are available separately, which allows a wide range of choice in selecting the types and models of units for the system. The remote control, which shows an alphanumeric readout of selected operations, can be used for a CD player, a turntable, a tuner, and an amplifier, and it controls such video functions as power, volume, channel selection, and tuning. Prices of Sansui systems range from \$2,500 to \$5,000, depending on the components included.



Slide the cover of the ADS RC1 remote control to the name of the component you want to operate, flip open the cover, and the controls—with the appropriate commands—are there before you. Nine ADS components, including some that aren't even available yet, can be operated from your Mies van der Rohe chair. The audio system shown above consists of the ADS C3 (\$800) and C2 (\$500) cassette decks, A2 integrated amplifier (\$550), T2 tuner (\$400), P4 turntable (\$500), and CD3 CD player (\$1,250). The RC1 remote control, shown with ADS cubical wooden storage modules (\$100 to \$150 each), has a list price of \$100.

Kyocera's RT-102 remote control, working with the RC-101 remote-control center (top), operates Kyocera cassette decks (such as the R-811), CD players (such as the DA-610), and receivers (such as the R-861 at bottom). With the RS-103 remote sensors and additional speakers, the central system can be remotely controlled from any room in the house. Kyocera says the system will please "the ardent audiophile [with] pushbutton convenience to impress even the jaded sybarite." Prices: RT-102, \$50; RC-101, \$250; RS-103, \$75.



The remote control for the A-32B integrated amplifier in Yamaha's CS-142CD Concert System operates the tuner, cassette deck, turntable, and CD player as well as the amplifier. The system is housed in a cabinet made of real oak, and the speaker cabinets are also finished in oak. With the GE-30 ten-band equalizer, the system is priced at \$1,999. Other Yamaha Concert Systems at lower prices have simulated-oak cabinets and lack a CD player.

Pioneer's PD-X909M six-disc CD player is the star of the Foresight AV900 system (\$1,714.75), which also includes the F-X707 tuner, the A-X1010V A/V integrated amplifier, the CT-X707WR autoreverse double cassette deck, and the EG-X707 graphic equalizer and video enhancer (the last is not remote-controlled). The PL-X505 turntable (\$139.95) that is shown with the system here is optional, as are the S-V909X speakers (\$359.95 a pair). The Foresight AV900 has connections for two pairs of speakers and for additional audio and video components.



Because the audio/video components in NEC's ES-2600 system can be purchased individually, the system can be assembled one piece at a time. A liquid-crystal display on the remote unit makes it easier to operate the A-1300E surround-sound amplifier, T-601E tuner, K-700E cassette deck, CD-500E CD player, N955U VHS Hi-Fi VCR, and CT-2610A stereo TV receiver/monitor. The RS-500 speakers (designed and made by JBL) and the VR-500 rack are the only parts of the NEC system that are not remote-controlled. Expected price of the entire system is \$3,999.

The Technics AV-300 audio/video system has a surround-sound processor (with an amplifier for rear speakers) for Dolby Surround videotapes played on the VHS Hi-Fi VCR. The processor has an ambience control, for sources that are not encoded for Dolby Surround, and bass boost to increase low-frequency output. Other components in the system are a TV receiver/monitor, an integrated amplifier, a tuner, a CD player, a cassette deck, a turntable, and speakers. The remote control has forty-five buttons that operate almost everything. The system's suggested retail price is \$3,000.



Control of Sony's AV-XBR audio/video system becomes unified when the remote unit for the audio components locks into the remote unit for the video components, creating a single remote control. The Sony system includes the TA-AX520 A/V integrated amp, ST-JX520 tuner, TC-W5 double cassette deck, PS-LX340 turntable, SEQ-120 seven-band equalizer, KV-25XBR TV receiver/monitor, SL-HF600B SuperBeta VCR, and the SS-U870 speakers. Price of the entire system: \$3,800. The system's remote control can also be used for an optional CD player (the CDP-70, shown, or the CDP-302).



Digital Command audio components from RCA can be combined with a number of compatible RCA TV sets and VCR's to create a unified remote-control system. This system has a Color-Trak 2000 stereo TV receiver/monitor, a VHS Hi-Fi VCR, a programmable turntable and CD player, a 50-watt receiver with a five-band graphic equalizer, an autoreverse cassette deck with Dolby B and Dolby C noise reduction, and acoustic-suspension speakers. And, of course, the remote control that comes with the audio receiver operates all the components. The system shown would retail for approximately \$3,800.

The remote control for RCA's Dimensia system, which was one of the first unified remote-control systems on the market, will also operate Digital Command components such as the ones shown above. Dimensia systems are even more comprehensive than Digital Command systems, including your choice of large video receiver/monitors or projection televisions.



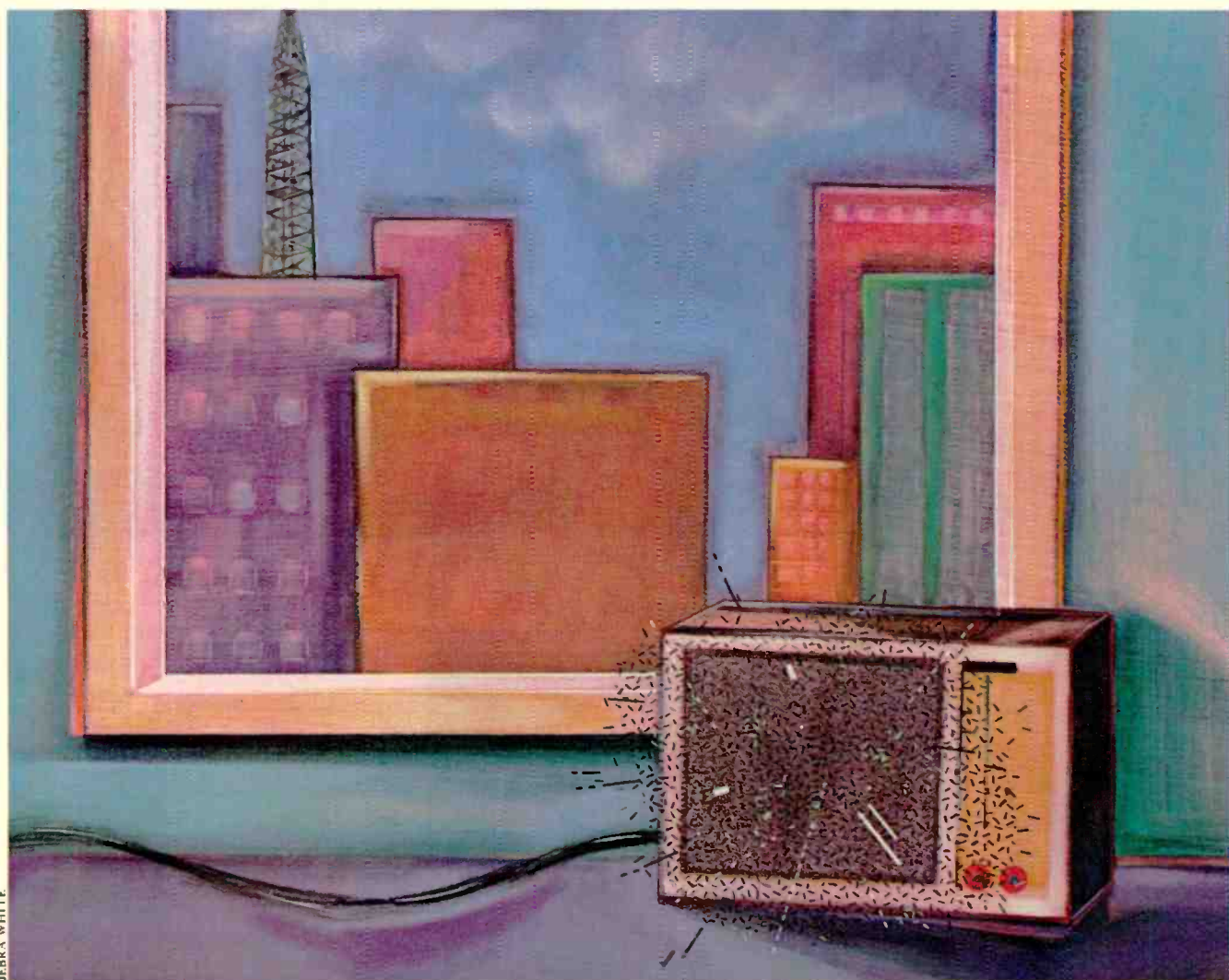
The flowers don't come with the system, but almost everything else does: Sanyo's 960 has a remote control for its integrated amplifier, AM/FM tuner, double cassette deck, and automatic turntable. The graphic equalizer, the speakers, and the cabinet are not remote controlled. The Sanyo 960 system is priced at \$899.95.



In Mitsubishi's AV-2600 system, an on-screen mode display verifies functions and settings selected with the remote control for the CS-2667R TV receiver/monitor and the HS-430UR VHS Hi-Fi VCR. The system also includes a 50-watt-per-channel amplifier, a digital tuner, a cassette deck, and a linear-tracking turntable in an oak-veneer cabinet. Price of the complete system, with the three-way floor-standing speakers, is \$3,200.

FM MULTIPATH

How to lessen its effect without moving mountains or leaping tall buildings



DEBRA WHITE

by Larry Klein

DISTORTION

ONCE when I was doing a series of hi-fi question-and-answer broadcasts for a New York FM station, the station engineers asked me to devote a program to FM multipath. They said that although listeners seldom identified the problem by name, multipath distortion was the *major* cause of irate letters and phone calls. Invariably, the station was blamed for overloading its transmitter, failing to clean its turntables' cartridge styli, or generally poor maintenance procedures. The trouble is, a bad case of multipath can *sound* very much like any of those problems!

Unlike most of the technical jargon that confuses hi-fi novices, the term "multipath" is almost self-explanatory. Multipath distortion occurs when the *same* FM broadcast signal reaches an antenna from two or more different directions—in other words, over *multiple paths*. This comes about—and far more often than we would like—because FM (and TV) signals often behave like radar signals in being reflected both by geographical features (mountains, for instance) and by man-made objects (buildings, water towers, even aircraft).

If the reflected and direct-path signals arrived in step, there would be no problem. Unfortunately, there's a geometric law that insists that the shortest distance between two points—in the present case, the transmitting antenna and the receiving antenna—is a straight line. A reflected signal, following a longer path, lags behind the direct signal and arrives at the receiving antenna delayed sufficiently to cause out-of-phase cancellations of the direct-path signal.

Antenna Solutions

What can be done about multipath, short of relocating the transmitting antenna, your receiving antenna, or the reflecting water tower, mountain, or whatever? The best solution is for you to use an antenna that is directional enough (when faced in the right direction) to discriminate between the direct and the reflected signals. In the old days this almost always meant a roof-mounted antenna with a rotator that would allow you to position it optimally for each station.

With modern tuners, however, an ordinary simple TV-type rabbit-ears antenna with its broad figure-8 pickup pattern is usually directional enough to do the job, provided that it is repositioned as necessary for each station of interest. The flat-wire, 300-ohm, T-shaped antennas that come with most receivers and tuners *can* serve equally well, but they are somewhat more difficult to reposition for individual stations.

Tuner Solutions

Is there anything that can be done at the FM tuner itself to reduce its sensitivity to multipath? There are two conventional tuner specifications of interest: *capture ratio* and *AM (amplitude-modulation) suppression*. Capture ratio measures a tuner's ability to reject the weaker of two signals arriving at the same broadcast frequency. A 1-dB capture ratio (an excellent figure) indicates that a secondary signal at least 1 dB weaker than the stronger one will be totally rejected. Since multipath problems also result from two separate signals (although from the same station) arriving at the same

tuned frequency, a good capture ratio can be helpful if the delayed signal is sufficiently weaker than the direct one. Unfortunately, there are times when the delayed signal is as strong or stronger.

A good AM-suppression specification (50 dB or higher) is said to be helpful simply because multipath causes severe amplitude variations in the received FM signal.

Car Stereo FM

It should be no news to most readers that car stereo FM is terribly troubled by multipath. The rapidly changing reception environment encountered by a moving vehicle can produce disagreeable fluttering and sputtering noises as the tuner reacts to multipath combined with large swings in signal strength. The tuner design innovations of Bob Carver and Larry Schotz (they use different approaches) have significantly lessened the impact of multipath problems in home units and produced some improvement in car stereo FM reception as well. However, the most effective technique for on-the-road reception (it is of little benefit at home) is the use of two antennas spaced several feet apart and a circuit that automatically keeps switching to the one that provides better reception. Sony and Audia (by Clarion) use this differential-reception approach in their top-of-the-line cassette/tuners.

Thanks to improved solid-state devices and circuits, most of today's FM tuners and receivers are capable of superb performance. Ultimately, though, they remain dependent on whatever signal is fed to their antenna inputs—and that is where you come in. □

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CIRCLE NO. 5 ON READER SERVICE CARD

Stereo Review's critics choose the outstanding current releases

KATHLEEN BATTLE'S TRIBUTE TO MOZART

KATHLEEN BATTLE'S new Mozart album is devoted mostly to lesser-known arias by Mozart, and what a pleasure it is! The pleasure is enhanced by the true and lustrous clarity of Battle's expressive soprano and by her fine musical sensitivity. These qualities, as well as her involvement with the material at hand and her appealing personal style, make for performances of unusual distinction.

"*Exsultate, jubilate*" is probably the best known of the arias included here, particularly its final "*Alluia*," often used by sopranos as a coloratura showpiece. In Battle's hands, this "vocal concerto" becomes a paean of worshipful joy,

both exuberant and quietly reverent. The other familiar piece, "*L'amerò, sarò costante*," from the infrequently performed opera *Il re pastore*, was always one of Mozart's favorite arias, undoubtedly for its quiet simplicity and unqualified purity of line. Battle's singing pays tribute to both. The other selections, written to be interpolated into Mozart's own operas and those by other composers, or for performance in concert, are examples of his finest writing for voice. Battle sings them all with musical polish and communicative care.

No quibbles? Well, perhaps one—a high E that Mozart unkindly includes with little or no preparation for the singer is the one unlovely note in this recording. Far outweighing this single instance, however, are Battle's trills, which are as smooth and shimmering as quicksilver. The admirably recorded performance shows the Royal Philharmonic Orchestra to good advantage, providing refined accompaniments under the empathic leadership of André Previn. Enthusiastically recommended. *Robert Ackart*

MOZART: *Arias. Vorrei spiegarvi, oh Dio* (K. 418); *Exsultate, jubilate* (K.

165); *L'amerò, sarò costante* (K. 208); *Basta, vincerai . . . Ah non lasciarmi, no* (K. 486a); *Un moto di gioia* (K. 579); *Ch'io mi scordi di te . . . Non temer, amato bene* (K. 490); *Misera, dove son? . . . Ah! non son' io che parlo* (K. 369). Kathleen Battle (soprano); Royal Philharmonic Orchestra, André Previn cond. ANGEL ◉ DS-38297 \$11.98, © 4DS-38297 \$11.98.

SMITHEREENS: A GREAT ROCK BAND'S DEBUT

EVERY now and then—increasingly rarely in an era when the very idea that pop music might change anybody's life is likely to be greeted with uncontrollable laughter—an album comes along that reminds you of why you fell in love with rock-and-roll in the first place. "Especially for You," the first LP by the Smithereens, is one of that kind.

The 'Reens, who've been the best-kept secret of the New York City club scene for far too long, is the kind of band that wears its influences on its collective sleeve, and the basic sound here—a canny mixture of everything from rockabilly to Brill Building pop to California surf to Merseybeat—will doubtless be dismissed by professional cynics as hopelessly retro. That's what happens when a band plays this way without a trace of camp. But the truth is that within the fairly rigorous confines of their Sixties-in-a-Cuisinart approach, the Smithereens have a voice and identity all their own. The sense of craft here is so strong that the echoes of older records seem less an homage than simply a fact of life.

The key figure in the group is leader Pat DiNizio. Besides being one of the more expressive vocalists now working, he's also a songwriter capable of everything from neo-psychedelia (*Groovy Tuesday*, a fabulous song that deserves points for nerve, for the title alone) to the kind of smoky mood jazz (*In a Lonely Place*) that might once have been recorded by Julie London (the guest vocalist on this song is the equally cool and blonde Suzanne Vega, a masterstroke of casting).

Battle: an expressive soprano of true, lustrous clarity





ENIGMA RECORDS

The Smithereens: impressive

The rest of the band is equally impressive and fully capable of keeping up. Drummer Dennis Diken, in particular, has the flash and musicality of a young Keith Moon, and there are moments, as in the astonishing bass-and-guitar breakdown that punctuates *Blood and Roses*, when the 'Reens' instrumental firepower is all but overwhelming. Any way you slice it, this is a great, great band.

Fortunately, the music has been captured with exemplary depth and sonic sheen by producer Don Dixon. Among other virtues, "Especially for You" is a textbook example of how to make a record that sounds thoroughly up to date without resorting to synthesizers or drum machines. Of course, as I hinted earlier, there will probably be some critical grumbling about the songs' distinct lack of subtext. That's true, certainly, but it's also probably irrelevant. "Meet the Beatles" was pretty short on subtext, too, and when you're faced with music as exquisite as the Smithereens make here, the only sane response is to shut up and enjoy it. That's what I've been doing since "Especially for You" first crossed my desk, and I suggest you do the same without delay.

Steve Simels

THE SMITHEREENS: *Especially for You*. The Smithereens (vocals and in-

strumentals); other musicians. *Strangers When We Meet; Listen to Me Girl; Groovy Tuesday; Cigarette; I Don't Want to Lose You; Time and Time Again; Behind the Wall of Sleep; In a Lonely Place; Blood and Roses; Crazy Mixed-Up Kid; Hand of Glory; Alone at Midnight*. ENIGMA/CAPITOL ST-73208 \$8.98, © 4XT-73208 \$8.98.

ANDRÁS SCHIFF'S WELL-TEMPERED BACH

ALMOST like the succession of the Dalai Lama, the emergence of András Schiff as the outstanding Bach pianist of his generation, and perhaps of our time, came shortly after the death of Glenn Gould in October 1982. Actually, Schiff had made a handsome recording of three Bach concertos with George Malcolm and the English Chamber Orchestra for Denon in 1979, but it was his *Goldberg Variations* for London in 1983 that both announced and confirmed his special status in this repertoire. Reconfirmation appeared in the form of the subsequent Two- and Three-Part Inventions and a splendid set of the six partitas, also for London. In the newest installment of his Bach survey, Book I of *The Well-Tempered Clavier*, Schiff not only maintains the heady standards he set for him-

Schiff: exhilarating



self in those earlier recordings, but also, I would say, pushes them still higher. He makes us feel that the modern concert grand is not only "acceptable" in this music but is absolutely its preordained ideal medium.

In the very opening of the Prelude in C Major, it is gloriously clear that sound and substance are of equal concern to Schiff, and throughout the sequence his unfailingly beautiful tone, far from calling attention to itself at the expense of the music, seems simply an inseparable part of it. An effect of exhilarating flexibility and freshness is achieved over a rock-firm rhythmic base in every one of the pieces. Nothing is allowed to get in the way of the music's basic purity. Stylistic validity is manifest without any concession to mere archaism, and the poetry, intellectual vitality, and expressive range of the work seem to come from the preludes and fugues themselves rather than any interpretative overlay. I might cite in particular the quasi-syncopated Prelude No. 6, the playful fugue in No. 9, the truly culminating statement of No. 24, but the level of delight and enrichment in this set is as consistent as Schiff's rhythmic steadiness. The sound is just fine, too, and Eric Wen's exceptionally comprehensive annotation is fully worthy of the performance it introduces.

Richard Freed

BACH: *The Well-Tempered Clavier, Book I (BWV 846-869)*. András Schiff (piano). LONDON ● 414 388-1 two discs \$19.96, © 414 388-4 two cassettes \$19.96, © 414 388-2 two CD's no list price.

VAN MORRISON GOES BACK INTO THE PAST

THROUGH twenty years of psychedelia, hard rock, country rock, heavy-metal, art rock, disco, AOR, punk, New Wave, and synth pop, Van Morrison has stood apart. He's avoided the chic, the trendy, and the hackneyed to pursue his own musical vision, which has origins in

LAURA LYNN MINER/CAMI

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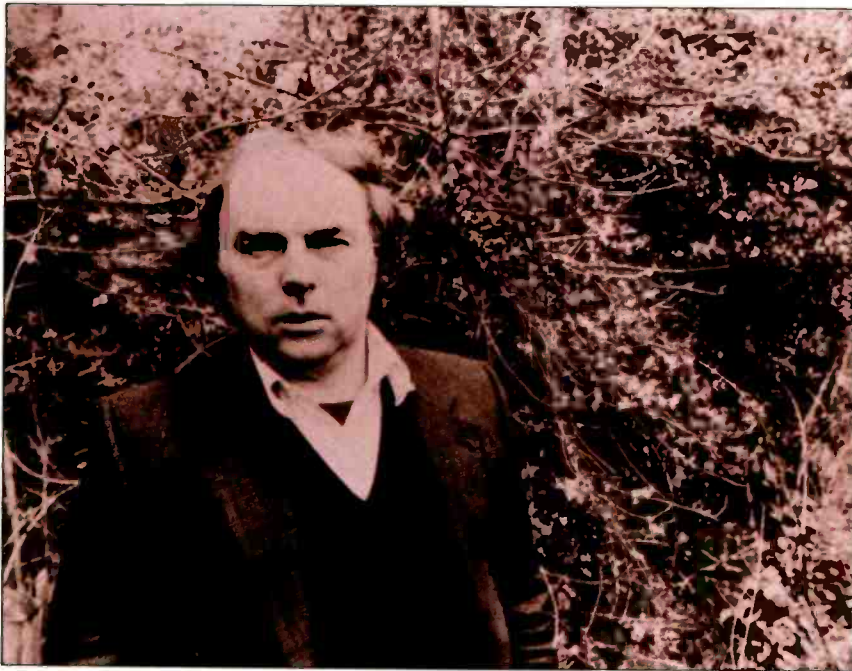
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CIRCLE NO. 62 ON READER SERVICE CARD



Morrison: a quiet, introspective reaching into the past

his native Irish music and in the American blues tradition of Leadbelly, John Lee Hooker, and Ray Charles.

After a string of brilliant, synthesizer-based albums ("Common One," "Beautiful Vision," "Inarticulate Speech of the Heart"), Morrison returned to laid-back, acoustic soul-mantras and Celtic mysticism of albums like the mid-Seventies' "Veedon Fleece" on 1985's "A Sense of Wonder." His new "No Guru, No Method, No Teacher" sustains the same kind of feel. It's quiet, introspective, and devotional, with soaring oboe, piano, and acoustic guitar cloaking his smoky, gnomic vocals. But something happens in the middle of side one that is arresting and wonderful: Morrison recalls his great masterpiece, "Astral Weeks," the album that many feel is not only his greatest record but one of the five or ten greatest rock albums ever.

Three tracks on "No Guru"—*A Town Called Paradise*, *In the Garden*, and *Tir Na Nog*—could easily have been called "Astral Weeks Revisited." To begin with, they feature the work of two musicians who haven't played with Morrison since his Woodstock days in the early Seventies—Jeff Labes on piano and synthesizer, and John Platania on

guitar. Platania's distinctive, jig-like cadences and clean, sharp attacks were what first sent me to recheck "Astral Weeks." Sure enough, he was there. Listening to his playing on "No Guru" is like going through an old scrapbook. There are lots of specific references to "Astral Weeks," too—the loping bass figure of *A Town Called Paradise*, the string arrangement on *Tir Na Nog*, the repeated lyric references ("in the garden all wet with rain").

This kind of reaching into his past isn't unusual for Morrison—his first half-dozen or so albums always made reference to turning up the radio, a source of great amusement to my friends and me at the time. But it raises "No Guru, No Method, No Teacher" from the ordinary—and "ordinary" with reference to Van Morrison means exceptional—to the essential. *Mark Peel*

VAN MORRISON: *No Guru, No Method, No Teacher*. Van Morrison (vocals); vocal and instrumental accompaniment. *Got to Go Back*; *Oh the Warm Feeling*; *Foreign Window*; *A Town Called Paradise*; *In the Garden*; *Tir Na Nog*; *Here Comes the Knight*; *Thanks for the Information*; *One Irish Rover*; *Ivory Tower*. POLYGRAM 830 077-1 \$8.98, © 830 077-4 \$8.98, © 830 077-2 no list price.

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- **ELTON JOHN: *Captain Fantastic and the Brown Dirt Cowboy***. MCA MCAD-1613. "Vitality and loony impertinence" (September 1975).
- **DIANA ROSS: *The Boss; Diana***. MOTOWN MOTD-8002. "Sensational" (October 1979).
- **THE VELVET UNDERGROUND: *VU***. VERVE/POLYGRAM 823 721-2. "Lovely work by a great American rock-and-roll band" (May 1985).

CLASSICAL

- **BEETHOVEN: *Symphonies Nos. 1 and 3***. Toscanini. RCA RCD1-7197. Extended-play coupling of two of Toscanini's historic Nine in RCA's 60+ series.
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- **DONIZETTI: *Lucia di Lammermoor***. Callas, Tagliavini; Serafin. ANGEL CDCB-47440 (two CD's). Callas's second studio recording of one of her signature roles.
- **MOZART: *Piano Concertos Nos. 20 and 27***. Curzon, Britten. LONDON 417 288-2. "Immense vitality and passionate commitment" (Best of Month, August 1983).
- **RAVEL: *Shéhérazade; Trois poèmes de Mallarmé; Chansons madécasses***; other songs. Harper, Gomez, Norman, Van Dam; Boulez. CBS MK 39023. "Magnificent" (July 1984).
- **WAGNER: *Wesendonck-Lieder***. **MAHLER: *Kindertotenlieder; Lieder eines fahrenden Gesellen***. Flagstad, Knappertsbusch/Boult. LONDON 414 624-2. Catalog classics.

The dealer said, "Surround Sound" is the difference between okay and Akai.

And every Akai receiver has "Surround Sound."

So I surrendered.
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Wouldn't you buy a receiver that wrapped you in a saxophone sound so big it made you shiver and so real it woke up your cat?

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CIRCLE NO. 46 ON READER SERVICE CARD

1200 Baud Smart Duck

If it walks like a duck, sounds like a duck, and looks like a duck, it darn well better act like a duck. And ADC's new Hayes Compatible 1200 baud auto-answer/auto-dial modem is one heck of a duck. And, it's a market buster at just \$169.

By Drew Kaplan

Hats off to Hayes. They've just about written the book on specs and protocol for the 1200 baud modem market.

Every professional modem bills itself as 'Hayes Compatible'. But the big question is, how much does it really cost to make a top-of-the-line 1200 baud modem? Or, who's getting rich?

ADC's modem is made in the same factory, by the same people, as one of Hayes's biggest competitors. And, ADC is a division of BSR, the enormous half-billion dollar electronics giant.

So for \$169, you'll not only be getting a duck that quacks properly to Hayes modems, but sings like a nightingale to your pocketbook. It can save you a fortune in time with its extra features.

Don't forget. Now you'll get the \$39 value (DAK sold it for \$24) complete CompuServe Subscription Kit, including \$25 worth (Yes, that's twenty five dollars. Wow!) of on-line time, added by DAK, when you buy ADC's Modem.

DUCK SOUP

Any computer with an RS232 standard serial port, will work flawlessly with this modem. And, virtually any modem or terminal software that's compatible with Hayes, will be compatible with ADC.

We've even got intelligent programs, cables, and interfaces (if you need them) to activate your IBM PC or Clone, and your Apple IIE or IIC. Of course, you can supply your own cables and modem programs for these computers or for any other computer you may own.

I've owned a Hayes 1200 baud modem for about 2 years. I just unplugged it and plugged in ADC's to operate my Hewlett-Packard dumb terminal which I use at home to monitor DAK's computer.

The only differences I noted were improved monitor sound, more screen displays and a help menu. And oh yes, one last extra. I use a few local data bases whose phone lines are always busy.

Well, ADC's intelligent modem recognizes a busy signal, hangs up and keeps retrying the number every 30 seconds.

There are less important (to me) extras like day, date and time, an extra phone jack and auto tone/pulse switching. So, you'll love it for discount services.

DO YOU NEED TO KNOW?

Just think, you can transform your PC into a terminal that can interact with main-frames. You can download information from your main office computer and run Lotus, Wordstar, or you name it. It's all possible with your PC and modem.

You can exchange information with other computers. Say you're a writer, you can send a chapter from your home or office in Los Angeles to New York, have it edited and sent back to you.

You can even send it directly to typesetters and have a book or a newsletter prepared from your transmitted file.

It's really great when drafts of contracts are flying back and forth. Why retype everything over and over again?

Electronic mail lets you type in your message and you won't have to worry

NOW WITH \$25 COMPUSERVE ON-LINE BONUS

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about playing telephone tag any longer.

You can get the weather in Baltimore, the latest quote on your company's stock, or even reserve a seat on the next flight to Las Vegas. You can upload public domain software (there's an enormous amount of free software) or sample the newest programs before you buy.

There are pay data bases like CompuServe and The Source that have information about anything, and thousands of free bulletin boards about everything from Ham Radio to Parapsychology.

There's even a book that lists and describes such diverse data bases as one with 6500 references about coffee, to one with 2,000,000 on agriculture.

Of course, economics, medicine, law and computers are all well represented.

THE TECHNICAL SIDE OR, WHY 1200 BAUD?

The ADC Modem will communicate at 1200 baud (about 120 characters per second) or 300 baud (about 30 characters per second) automatically, depending on the link at the other end.

So, it's clearly a decision of money and time. 1200 baud is roughly 400% faster than 300 baud, so if you transfer data across the country, you save 400% on your phone bill. And think of the time \$169 can save you!

If you can download material from pay data bases, even though some charge more for 1200 baud, you still come out way ahead because of the amount of information you get per dollar.

It comes with a modular phone cord that you simply connect to any standard modular jack. And, it uses standard Bell 103 and 212A protocols. It operates in half or full duplex.

Its built-in microprocessors let you automatically answer in-coming (auto-answer) calls & act on all Hayes commands.

It even waits for dial tones and phone network tones during auto-dial. The modem is 9½" X 5½" X 2". It's backed by ADC's standard 1 year limited warranty.

HOOKING IT UP MADE EASY

All you need is a serial output, a cable and a modem program. Use your own for any computer. Or you can use ours for the computers below. All our modem programs on disk let you save, upload

and download files. Look how easy it is.

If you own an IBM PC or a Clone, usually you'll find an RS232 serial port already built-in. All you need is our cable and modem program on disk, which we've packaged together for just \$29 (\$3 P&H). But, before you order your cable, you may need a short sex education course.

Sex Education 1A. You need to determine whether your computer's RS232 connector is male or female.

If you look at the picture below, you'll note that ADC's RS232 Modem connector has holes going in. It's a female. If it had copper pins sticking out, it would be a male. Now wasn't that simple?



So, if yours is female, order our male cable and modem program Or. No. 4353. If you have male pins sticking out, order our female cable, Order No. 4354.

If you don't have an RS232 port, we have a serial interface card for your IBM or Clone, complete with cable and modem program for \$99 (\$4 P&H). Or. No. 4355.

For your Apple IIC, your serial interface is built-in. All you need is our cable and modem program on disk. They are just \$29⁹⁹ (\$3 P&H). Order No. 4356.

For your Apple IIE, you'll need a serial interface with an RS232 port, a cable and a modem program. It's all yours for just \$89 (\$4 P&H). Order No. 4357.

1200 BAUD SMART DUCK RISK FREE

For business or pleasure, you'll communicate, gather information and save time. If you aren't 100% satisfied, simply return it in its original box to DAK within 30 days for a courteous refund.

To Order Your ADC 1200 Baud Intelligent Modem, now including CompuServe's Complete Subscription Kit (nothing else to buy), with \$25 worth of on-line time, risk free with your credit card, call toll free or send your check for DAK's market busting price of just \$169 plus \$6 P&H. Order No. 4334.

The OnLine Directory of over 1,100 Data bases, complete with descriptions
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...Modem Continued
is just \$14⁹⁵ (\$2 P&H). Order No. 4358.

The ducks be will sure to be quacking up a storm when they see BSR's factory direct, through DAK, price on this state-of-the-art 1200 baud intelligent modem.



A LOOK AT COMPUSERVE & MORE

Get a date, check your stocks, leave E-Mail, or post messages on Electronic Bulletin Boards. Transfer files or download public domain programs. Let your computer bring you the wealth of elec-

tronic information that's on-line.

Imagine dialing a number and hooking up to a free Electronic Bulletin Board where people post messages about everything, from new jokes (I've signed onto a joke bulletin board.) to computer equipment they want to sell.

Most are free, some cost money. But until you are on-line yourself, no brief description that I can give you will even scratch the surface of what's available.

But, let's take a brief look at part of the menu (index) that you'll have at your fingertips when you log onto CompuServe. I've used CompuServe's names or descriptions. This is by no means complete. And CompuServe is just one of many data bases available to you.

No matter what your interests are, you'll spend hours on-line learning about things, making plane reservations or even playing logic games. And, on most bulletin boards, you'll find the numbers of other bulletin boards.

PARTIAL COMPUSERVE INDEX

AIRLINES, ARTS (Art & Literature), ATARISIG (Atari Forum), AVIATION (Aviation Forum), BANK (Home Banking), BANSHI (Ban-shi Game), BROKER (Brokerage), Business (Business Menu), CB4SIG (Commodore 64 Forum), CASTLE (Castle Telengard Game), CBIG (CB Interest Group), CBMSIG (Commodore Programming Forum), Clarke school (For the Deaf), COCO (Color Computer Forum), COM-MODITIES, CP/M, COOTE (Current Quotes), DEMOGRAPHICS (SuperSite), DISCLOSURE (Public Company Details), EARNINGS (Earnings Projections Menu), EASY (EasyPlex), ECONOMICS, EDUCATION, EMAIL, ENCYCLOPEDIA (On-Line Grolier's Academic American Encyclopedia), ENGINEERING (Engineering Menu), ENTERTAINMENT (Entertainment Menu), ENVIRONMENT (Environmental Forum), EPIE (EPIE Forum), FINANCE, FINTOL (Personal Finance), FLGHTS (Travel Menu), FOOD, FORUMS (Menu of Forums), GAMES (Menu of Games), GOURMET (Electronic Gourmet), HEALTHUSERS (Health Users Group), HOBBIES (Hobbies Menu), HOLLYWOOD (Hollywood Hotline), HOME (Home Menu), HOTELS (A to Z Hotels), IBMNOVICE (IBM Novice Forum), IBMSIG (IBM Users Forum), INSURANCE, INTERESTS (Other Interests), INTERFACE, INVESTMENTS (Investments Menu), IQINTERFACE (IQ Interface Program), LAWSIG (Law Forum), LEGAL (Legal Menu), LEISURE (Leisure Travel Menu), LIBRARIES (Home Reference Menu), LOTUS (World Of Lotus), LOVE (Love Messages), MAGAZINES (Electronic Publishing Menu), MAUG (Apple Users Group), MEDICAL (Medical Menu), MCVIES (Movie Reviewettes), MSOFT (MicroSoft Users Group), S&P (Standard & Poors), SCI-FI (Science Fiction Forum), SCIENCE (Science Education Forum), SHOWBIZ (Showbiz quiz), STATE (Department of State), SPORTS (Sports Menu), TECHNOLOGY, TICKET (Ticket retrieval), VACATION, VIDEO, WEATHER (NOAA Weather Wise), WINEFORUM (Bacchus Wine Forum), and MUCH MORE.

On one board, I found the numbers of 40 other boards. Wow, there's so much information, education and entertainment.

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Protect your computer and 5 peripherals from spikes, turn everything on and off from the front & swivel your monitor.

By Drew Kaplan

It's great. Now you don't have to reach around the back of your computer to turn it on. And not only can you turn on each peripheral separately, you can turn them all on or all off with one switch.

But there's more. This all new Power Director is much more than just a fancy 'octopus' that supplies you with 6 outlets to get rid of cumbersome tangled cords.

It aids in the prevention of damage caused by voltage surges and spikes. It then goes on to filter your AC to help protect your equipment and data from line noises caused by power disturbing air conditioners, refrigerators and the like.

And look at this. It protects your equipment from itself. There are 4 separate filtered sections. So, your computer will be protected from your printer, modem or other peripherals.



BUT IT'S CONVENIENT

There are 6 protected 3-wire outlets

on the back. 5 are switched from the front. One is unswitched but spike protected so you can leave a peripheral on.

Each of the 5 switched outlets has a non-glare status light so you know what's on. Push a button for on/off control.

You can swivel the monitor from side to side. So, if you have a separate keyboard, you can really type in comfort.

Above, you can see The Power Director between the Visual IBM® Compatible Computer and its monitor. It is 1 3/4" high, 13 3/4" wide and 12 3/4" deep.

You can use it with virtually any computer. (It can hang off the back up to 3 1/2 inches with no problem.) It's a perfect combination of convenience and protection for your computer system. It's backed by a limited warranty.

PROTECTION & CONVENIENCE RISK FREE

I've only had my data wiped out once by a power surge. But, I had over 2 hours of irreplaceable 1st draft copy in my computer when it happened.

Now, I'm using my new Power Direc-

tors with 4 different computers. With this added protection, maybe I won't lose data again. And, I've learned to save my data much more often since my loss.

If you're not 100% satisfied, simply return it to DAK within 30 days in its original box for a courteous refund.

To order your 6 outlet Power Director with Spike Protection, Line Filtering, Circuit Breaker and a 10' 3-wire grounded power cable risk free with your credit card, call toll free or send your check for DAK's blockbuster price of just \$79 (\$6 P&H). Order No. 4623. CA res add tax.

I like the convenience. It's something that helps me every day. But, I'm thrilled with the added protection. If it even helps once, it's worth many times the cost.



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When you are at rest, so is your heart. A low resting heart rate usually means you're in good condition. Have you checked yours?

When you exercise, you should reach your heart's target zone. But, have I reached my exercise target zone, or just had too much coffee?

Heart Window

Now you can exercise, rest, swim or go out to dinner wearing the latest in computer pulse takers on your wrist. Plus, it's a talented sports watch and a formal dress watch too.

By Drew Kaplan

It's a fact. You can tell a lot about yourself from your heart rate. You can evaluate the condition you are in, how much stress you're under, and how hard you should be exercising.

Think about it. How fast does your heart beat when you climb a flight of stairs? And how long does it take for your heart rate to return to normal?

Well, if you're at all like me, you may be a little out of shape. While I'm only 37, several friends of my own age have recently had heart attacks. And frankly, I'm getting just a bit worried.

You see, I am getting past the point where I can simply say, "I'll get back into shape next year."

So, whether you're a long distance runner (this is the ultimate jogging companion), or just a few pounds overweight like I am, your heart rate will give you a picture of your heart and body's condition.

Now you can take your heart rate anytime, anywhere with the newest in sophisticated electronic pulse takers.

And best of all, this heart computer is contained in a beautiful 24 hour alarm, 24 hour chronograph, LCD watch, that you will be as proud to wear with a coat and tie as you are when you're running.



YOUR HEART'S TARGET ZONE

Your heart, just like any other muscle in your body, requires exercise. Unfortunately, unlike your arms, you can't see your heart's condition just by looking.

The type of exercise called aerobic exercise is specifically designed to exercise your heart. The purpose of aerobics is to reach your heart's target zone.

So what is your target zone? Your target exercise zone is between 60 and 80% of your maximum heart rate. And here's an easy way to figure it out.

Simply subtract your age from 220 beats per minute. So, for me at 37, my maximum heart rate is (220-37) or 183.

So when I exercise I should get my

heart rate up to at least (183 X 60%) or 110 beats per minute, and no higher than (183 X 80%) or 146 beats per minute.

With the Heart Window to help me, I can be sure that my workouts are valuable for my heart and neither dangerous escapades or total wastes of time. Of course, before beginning any exercise program you should consult your own doctor. Note: The Heart Window is designed to indicate your pulse rate and aid your exercise, not to make medical diagnoses. **BUT ISN'T EVERYONE DIFFERENT?**

Here's the really exciting part. The worse shape you're in, the faster you'll reach the target zone and the less work you'll have to do to stay in the zone.

You see, as you get in shape, your heart doesn't have to beat as hard to do the same amount of exercise. Just as when you work out with weights your arms become stronger, your heart becomes stronger with aerobic exercise.

So the Heart Window is safe for the beginner or the athlete. And, you'll really see your improvement as you exercise.

But you don't have to exercise. Just wearing the Heart Window and using it at the office when you're under stress, after you've walked up some stairs or around the block, will make and keep you aware of your body's physical condition.

And look at this. Sit down at your desk and take your pulse. Then drink a couple of cups of coffee and take your pulse again. You'll see just what your morning 'pickup' actually picks up, and if, God forbid, you smoke, take your pulse before and after a cigarette. Wow!

ALL ELECTRONIC

With Innovative's new Pulsemeter watch, you'll have supreme accuracy. It's like a direct electronic line to your heart.

You see, unlike other pulseimeters that use a light shining through your finger, or a microphone to take your pulse, this instrument actually measures the electrical impulses that cause your heart to beat.

The back of the watch is one receptor, and the metal touch sensor on the front of the watch acts as the other sensor. Just touch the sensor, and you'll see your pulse on the large LCD Display. **IS IT A DRESS OR SPORTS WATCH?**

Innovative Time thinks that everyone interested in their pulse must be a pro-



fessional athlete. So, they've built this watch with all the athletic extras.

It's not only water resistant, it's guaranteed to 60 feet (although you can't actually take your pulse underwater). It has a stopwatch, a lap timer, and dual finish mode. Its band is made of very tough polymers. So, it's a sports watch.

But wait, I don't like black watches for dress. So, I've gotten Innovative to add a deluxe matching stainless bracelet to the watch. It's rendered in stainless and black and is a perfect high fashion choice. So, it's a dress watch.

Plus, there's a 24 hour alarm and an hourly chirp. The stainless band is great for sports or dress. So, you'll get the watch with the black band on it and the high fashion band packed with it, compliments of Innovative Time's superb engineering and DAK's good taste.

The Heart Window is backed by Innovative Time's 1 year limited warranty and comes with a 1 year battery in place.

TRY THE HEART WINDOW RISK FREE

Now you can look at your heart as easily as the time. You'll see how you react to stress, foods and exercise. Don't let DAK's low price confuse you. Take this pulse watch to your own doctor and have him test it.

Try the Heart Window risk free. Try exercising and then check your cardiac recovery rate. If you don't like what you see, you'd better keep the watch. But if you just don't like the pulse watch, simply return it within 30 days in its original box for a courteous refund.

To order your Heart Window, Pulse Sports/Fashion Watch, complete with 2 bands risk free with your credit card, call toll free or send your check for just \$49.50 plus \$3 for postage and handling to DAK. Order No. 9844. CA res add sales tax.

In the gym, at the track or at the office, you'll have a direct connection to the condition of your heart.



DAK

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Fat Watcher Plus

Now you can walk or jog around the block, walk around the office or even around a trade show, and know how far you've traveled and how many calories you've burned. Use the alarm to set calorie and distance goals.

By Drew Kaplan

No, you don't have to be fat. And no, you don't have to be a marathon runner. However, if you are, you're going to marvel at the feedback you'll get from this new electronic Body Monitor.

Before we explore how you can use this Body Monitor's capabilities to aid you in losing weight (as it is me) and to measure your training achievements, let's look at some interesting curiosities.

If you're like me, you've probably wondered just how far you go when you walk around the block. And, every year I attend the Consumer Electronics Show and I've always wanted to know how far I walk.

Since my plane always seems to be at the last gate at every airport, I've wondered just how far I go. I've also been curious about how much ground I cover in an average day at the office.

Well now, not only will I know how many steps I've taken, I'll know how many miles or hundredths of miles I've gone and how many calories I've burned.

Now we will know it all. And, with the ability to set goals, we can use this monitor to help achieve our desired fitness.

ONE STEP AT A TIME

It all starts out with one small step. Just clip the Body Monitor on your belt or waist band and away you go.

First it counts your steps. As you can see below, I've taken 1544 steps.



It knows how far you've gone because you set it to your particular stride length. As you can see, I've got mine set at 2½ feet. But you can set yours from 0 to 7'.



Because it knows your stride length, it automatically calculates the distance you travel. Just touch a button, and as you can see, I've traveled 0.58 miles.



Push the button again, and you can see how many calories you've burned. The Body Monitor has a built-in table that calculates an average of how many calories you've burned, based on the number of steps you've taken.

And, you can be even more accurate by adding your exact weight to the body meter's reading. A formula is included.



What's really great is that you can set a target for yourself to achieve. Here I've set 2500 steps. When I reach 2500 steps, an alarm will sound to tell me that I've achieved my goal.



But steps aren't very interesting, so you can set the alarm to let you burn 100 calories or go 3 miles. It's all calculated through the steps, so it's really easy.

Let's say I want to eat an ice cream sundae. It has 260 calories. So, I'd have to walk 5200 steps. I'm forgetting the ice cream sundae, but I may have a piece of cheese or maybe even a cookie.

Using the Body Monitor for running or walking lets you see just what you've accomplished. And while I can't speak for you, I personally work and play best when I set goals.



The Body Monitor lets me set and achieve goals. So, it's been a terrific aid in my personal fitness program.

By the way, it's 1.03 miles around my block and I burn about 105 calories.

I'm really excited about finding out just how far I walk at the Consumer Electronics Show, but I'll have to wait till it opens in January to find out.

SO MUCH MORE

It may look small, but it has so much inside. It has a built-in clock with hourly chime, so you don't have to wear a watch.

It has a stopwatch, accurate to 1/100th of a second resolution. And not only does it have a lap timer, it has first and second place finishes.

But, with all its frills and all its great curiosity satisfiers, it's really a precision fitness aid.

So, if you walk, jog or exercise, the Body Monitor can aid in measuring what you've accomplished. It comes with a one year battery, and it's backed by a one year limited warranty by Innovative Time, the Pulse Watch People.

SATISFY YOUR CURIOSITY RISK FREE

I've been dieting and exercising for years. I use my pulse watch all the time and it tells me how I'm doing. Now the new Body Monitor gives me feedback as to what I'm accomplishing.

And, I particularly like the goal setting alarms. Now, instead of watching my watch to see when I've run enough, an alarm sounds when I'm through. Plus, it's really neat to know how much ground you've covered around the office or around the block.

If you're not 100% satisfied, simply return it to DAK in its original box within 30 days for a courteous refund.

To order Innovative Time's Body Monitor with Step Counter, Mileage Counter, Calorie Counter, Stop Watch and Goal Setting Alarm, call toll free, or send your check for DAK's breakthrough price of just \$39⁹⁰ (\$3 P&H) Order No. 4651. CA res add tax.

It's great for fitness, but I'm wearing mine to work and even around the house. It's small in size, but it sure feeds back a lot of exciting information.



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8200 Remmet Ave., Canoga Park, CA 91304



BSR's Endangered Colossus

Prepare for bone jarring bass and dramatically clear highs from these newly developed 15" 3-way 5 speaker systems that nearly missed their chance to charm an audiophile's ear. BSR moved its dbx and ADC divisions into one facility and these speakers almost became orphans. So now, they're yours at a close-out price.

By Drew Kaplan

It's a shame. But, it's also a great opportunity to get a pair of 15" audiophile loudspeakers with the newest in stereo imaging at a market-breaking price.

Imagine a precisely matched mirror image pair of top-of-the-line BSR speakers that can effortlessly recreate the cataclysmic impact of a full orchestral crescendo at full volume and yet offer flawlessly subtle sound detail to 21,500hz.

You'll thrill to thunderous bass all the way down to 26hz. Incredibly rich, full, vibrant sound at low volume will explode with life as you increase the volume.

But before we examine the front speaker complement, the twin overlapping crossovers and the top mounted sonic placement and **ambience speakers**, let's see why they were almost orphaned.

You see, BSR, the half billion dollar electronics giant, is the parent company of two of the best names in up-scale audio, dbx and ADC.

Last year dbx developed a new multi-thousand dollar speaker system called the Soundfield One which lets you sit virtually anywhere in your room and have full stereo imaging and terrific sound.

BSR decided to consolidate ADC and dbx into one building (still 2 companies) and put all its speaker efforts into dbx.

POOR JACK

Well, while dbx's engineers were off designing their multi-thousand dollar masterpieces, BSR's Senior Acoustical Engineer (he had been Fisher's Chief Engineer for 10 years during its top end component stereo days), was designing BSR's radically new speaker line.

The revolutionary top of the line 15" stereo imaging pair pictured above will let you enjoy superb stereo imaging without sitting directly in front of your speakers.

But unfortunately, in the consolidation move, BSR's speakers went by the wayside, and so did Jack.

Enter DAK. After a few fearful negotiations and considering the engineering costs BSR had already expended, they agreed to make the speakers just for DAK.

Because there's virtually no BSR overhead left on these speakers, and the R&D was all but complete, we've gotten these speakers for virtually the component costs plus a little BSR labor.

And don't worry about Jack. BSR had him finish the engineering (they really are great people) and they'll pay him a royalty on each speaker we sell. Besides, by the time you read this, Jack is sure to be snapped up as the Chief Engineer at another esoteric audio company.

WHAT'S STEREO IMAGING?

Stereo imagery is the logical separation and interaction between channels. It's the successful creation of a panoramic wall or stage of music rather than the confined, easily located 2 speaker sound. **IT'S WHAT'S INSIDE THAT COUNTS**

Imagine the full thunder of a kettle drum, or the pluck of a string bass being explosively recreated in your living room. BSR's 15" sub-bass acoustic suspension driver will revolutionize your concept of

low clean bass.

Its magnetic structure weighs a thundering 48 ounces. But that's not all. The magnetic field is developed by the rare earth metal Strontium for state of the art massive but flawlessly controlled bass.

A 38mm voice coil with a 200° centigrade temperature capacity, will handle the most demanding digital or analog recordings. And, a new super rigid cabinet design virtually eliminates coloration due to uncontrolled cabinet resonance.

At low volume, the bass will fill in and envelop you. At high volume, your room, your walls and your neighbors will shake. (Not for apartment dwellers please.)



MATCHED PAIRS

The mid-range and high end of BSR's speakers are truly unique. Front mounted 8" polypropylene mid-range drivers provide rich sound while top mounted 5" polypropylene mid-range drivers provide an open, lifelike ambience.

Front mounted exponential horn tweeters provide awesome brilliance to 21,500 hz, while top mounted tweeters enhance separation because they are mounted to the outside edge of each speaker.

So, this system has a specific left and a specific right speaker. You'll find wide, but interactive separation that will vastly widen your ideal listening area.

The imagery will give the illusion of musicians actually playing in front of you. Your music will take on a three dimensional quality. You'll enjoy superb stereo imagery regardless of each speaker's specific placement in your room.

MORE SPECIFICS

The exponential horn tweeters, both in front and on the top of these systems, employ 25mm rigid phenol diaphragms for stability and accurate response.

Polyamid-imid binders and ferro-fluid coolant allow for a 300% increase in heat dissipation so you can drive the voice coils up to 200° centigrade.

Now, the mid-range. Both the 8" front firing and the 5" top firing polypropylene drivers reproduce the mid-range frequencies like no ordinary speakers.

It's amazing that so many speaker manufacturers simply slap in 5" paper mid-ranges to reproduce what's really the major portion of the sound spectrum.

BSR's 8" and 5" polypropylene mid-ranges are rigid, exacting drivers that deliver incredibly pure uncolored sound.

They have matched 25mm voice coils, also protected by ferro-fluid and polyamid-imid to 200° centigrade. They are driven by powerful barium ferrite magnetic fields.

NOT QUITE FINISHED YET

To prevent phase shift and cancellation, two totally separate crossover networks are employed in these speakers.

All frequencies below 800 hz are directed to the 15" woofer. The front system routes frequencies above 800hz to the 8" mid-range to take full advantage of its superb reproduction capabilities. Frequencies above 3400hz are routed to the horn tweeter.

The top mounted system routes only frequencies above 1200hz to the 5" polypropylene ambience mid-range driver, and frequencies above 3400hz are routed to the top sonic placement tweeter.

There are level controls for both the top and front mounted speakers so that you can voice the speakers to match your musical taste and environment.

Note: Only the top tweeters are mounted at the the edges. The front mounted tweeters are conventionally mounted for acoustical symmetry.

Each speaker is fuse protected for up to 200 watts peak, 150 watts continuous power. You can operate these super efficient speakers with as little as 20 watts.

AND OH WHAT A PRETTY FACE

The speaker systems are 30" tall, 19½" wide and 10½" deep. Their lovely oak wood-grain appearance is enhanced by the dark removable grill cloths that beautifully contrast with the rich wood-grain tones. They're a statement of audio elegance when placed in any room. They're backed by BSR's 2 year limited warranty. **A COLOSSAL DREAM COMES TRUE**

RISK FREE

You'll hear depth of sound at low levels that was previously unobtainable. And yes, when you crank up the volume, your music will explode with realism and drama.

Try these speakers in your own system. Then compare them at any Hi-Fi Store with any pair of speakers up to \$1000. If they don't beat all the competition hands down, simply return them to DAK in their original boxes within 30 days for a courteous refund.

To order your matched pair of BSR top-of-the-line 15" 3-way 5 speaker systems with unique stereo imaging risk free with your credit card, call toll free or send your check for DAK's market-breaking price of just \$298 for the **MATCHED PAIR** plus \$22 for Postage and Handling. Order No. 4352. CA res add tax.

It's a dream system for an audiophile. Sonically pure, thunderously powerful, these BSR speakers will make your future listening years an on-going fabulous, if not earthshaking experience.



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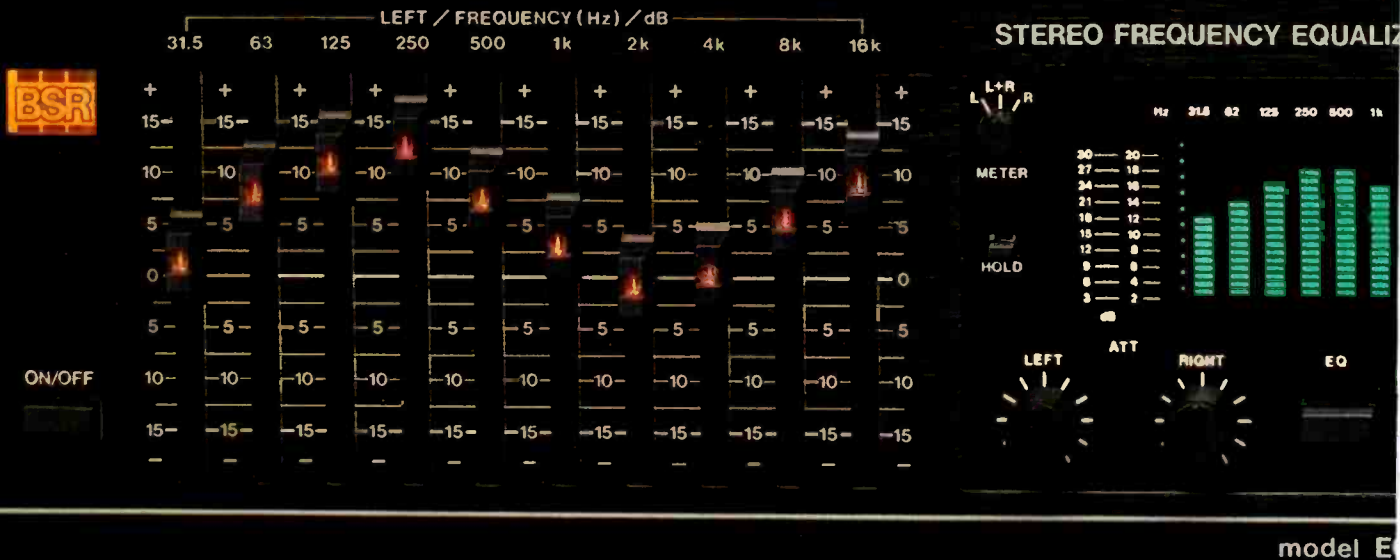
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Any Other Inquiries... 1-800-423-2866

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Smart Sound Detonator

Obliterate the wall between you and the individual instruments in your music. Infuse your own stereo system's sound with a breathtakingly vibrant 30 to 50% improvement in sound quality that you can measure with this superb BSR Equalizer/Spectrum Analyzer limited \$149 close-out.

By Drew Kaplan

Close your eyes. Touch a button. And you'll hear your stereo system literally explode with life.

You'll hear the gentle brushes on a snare drum, the startling bone-jarring realism of a thunder clap, or the excitement of a full cymbal crash.

You'll hear string basses and other deep low instruments emerge from bass (that will sound murky by comparison), with such clarity and such definition that you'll feel you can almost touch each instrument.

This astoundingly distinct yet powerful bass adds such a full bodied warm feeling to your music, you'll feel as if you've been lovingly wrapped in a warm soft blanket on a cold winter's night.

But don't take my word for the sound quality improvement. With the Pink Noise Generator, Calibrated Electret Condenser Mike and the 220 Element Spectrum Analyzer, you can instantly measure each and every improvement you make.

Plus, there's more. A subsonic filter effectively adds the equivalent of many watts onto the power of your amplifier.

Plus, with its provision for two separate tape decks including two way dubbing, you'll have much more than just greatly improved sound.

You can count on great sound from this top of the line Equalizer/Analyzer. It has a frequency response from 5hz to 100,000hz ± 1 db. And, it has an incredible 100db signal to noise ratio.

BSR, the ADC equalizer people, make this super Equalizer/Analyzer and back it with a 2 year standard limited warranty. Our \$149 close-out price is just a fraction of its true \$379 retail value.

FIRST THE EQUALIZER
YOUR STEREO'S HIDDEN SOUNDS
 Your stereo can sound incredibly bet-

ter. Just a 5db roll-off at the high end, up around 14,000hz to 16,000hz, can just decimate the harmonics that give you the open feeling you'd experience at a live concert. A similar roll-off at 60hz, causes the fundamental bass notes to just fade away into the 'murk'.

An equalizer isn't some magical device that manufactures sounds that don't exist. Most of the frequencies that will make your music really vibrant, are actually already recorded in your music.

You'll be able to prove this with a few simple tests we'll try when we discuss the Spectrum Analyzer.

You see, certain frequencies are simply not reproduced with as much volume as are the mid-range frequencies which stretch from about 800hz to 2,000hz.

An equalizer simply lets you establish accurate control of all frequencies to fit your equipment, your recordings, your taste, and your listening environment.

TOTAL MUSICAL CONTROL

And, what a job it can do. It's totally unlike bass and treble controls which simply boost everything from the mid-range down for bass, or everything up for treble. You can boost the low-bass at 31.5hz, 63hz and/or 125hz to animate specific areas or instruments.

And, when you boost the part of the bass you like, you don't disturb the mid-range frequencies and make your favorite singer sound like he has a sore throat.

The high frequencies really determine the clarity and brilliance of your music. The problem is that highs are very directional. Wherever you move in your listening room, you'll find a big difference in high end response, as you'll see when we test the Analyzer.

No recording engineer or equipment manufacturer can even begin to control your listening environment.

You can control the highs at 4,000hz, 8,000hz and/or 16,000hz, to bring crashing cymbals to life at 16,000hz while at the same time you can cut tape hiss or annoying record scratches at 8,000hz.

But there's more. Don't leave out the mid-range. You can boost trumpets at 300 to 500hz or a clarinet at 1000hz. You can boost or cut any part of the frequency spectrum a full ± 15 db.

TAPE DECK HEAVEN

You can push a button and transfer all the equalization power to the inputs of two tape decks. Now you can pre-equalize your cassettes as you record them and get all the dramatically enhanced sound recorded right on your cassettes.

This is an especially great feature when you play your cassettes on bass-starved portables or high-end starved car stereos.



SIMPLY PLUG IT IN

Use your tape monitor circuit, but don't lose it. Now your one tape monitor circuit lets you connect two tape decks.

Just plug the equalizer into the tape 'in' and 'out' jacks on your receiver or preamp. We even supply the cables.

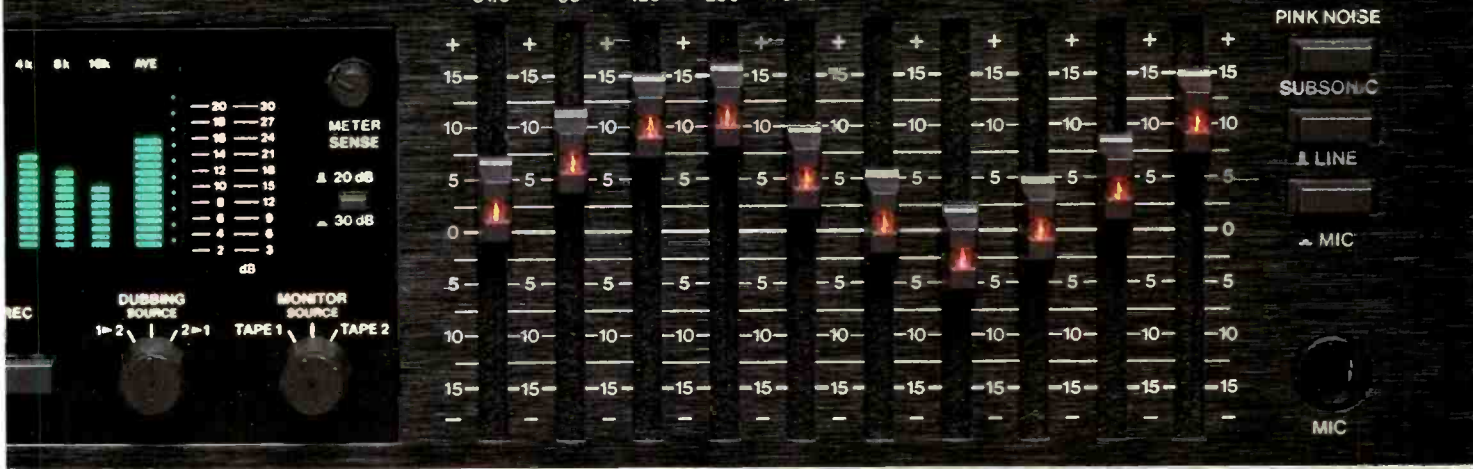
As you listen to your records, FM or any 'Aux', any time you push the tape monitor switch on your receiver you'll hear your music jump to life.

The output from your receiver is always fed directly to your tape deck(s) for recording, and with the touch of a button, you can choose to send equalized or non-equalized signal to your deck(s).

When you want to listen to a tape deck, just select which tape deck you want, turn the switch on the equalizer,

\$149 CLOSE-OUT

EQ / SPECTRUM ANALYZER



and your tape deck will work exactly as it did before. Except, now you can listen with or without equalization.

Look at this. You can dub tapes from deck 1 to deck 2, or from deck 2 to deck 1 with or without equalization.

THE SUBSONIC FILTER

Much of the power drawn from your amplifier is used to drive your woofers. When you drive the amplifier too hard, it clips and you end up with distortion.

A subsonic filter removes a lot of non-musical material you can't hear that exists below 20hz. So, it relieves your amplifier of a lot of work. It doesn't actually create more watts (Please, no letters from my 'technical' friends) for your amplifier.

But, it's like turning off the air conditioning in your car. It saves you using about 7hp of what you have. And therefore, you'll have more watts for clean powerful sounding music.

THE SPECTRUM ANALYZER

Now you can scientifically analyze your stereo listening room and test your equipment by using BSR's Real Time Frequency Spectrum Analyzer.

Plus, you'll see your music not as a single level on a VU meter, but as a kaleidoscopic parade of 10 individual 20 element VU meters.

Each is tuned to a specific octave of the sound spectrum. An eleventh 20 element meter averages all levels.

The effect is awesome. You can visually isolate a string bass or cymbal, and actually see each individual instrument almost as a wave moving across the 220 individual florescent elements.

THE MOUTH AND EARS

It talks. The Analyzer speaks with a voice of pure calibrated Pink Noise. Pink Noise is the standard composite 'sound' of all frequencies used for testing in labs around the world. All frequencies from 20hz to 20,000hz are generated at the exact same level at the exact same time.

It listens too. If you are testing a cassette or a component in your system, use the 'Line Button'. If you're testing your whole system with speakers, use the matched calibrated electret condenser

microphone (included). Either way, you'll have a quick, easy and accurate way to evaluate the total sound of your system.

HOW TO TEST

SPEAKERS, EQUIPMENT AND TAPE

Testing your speakers in your listening room is the really crucial test. Simply place the calibrated microphone where you normally sit to listen to your stereo.



At the end of an 18 foot cord is the ear of the system. Just clip the mike wherever you sit and test your room.

Turn on the Pink Noise. You can switch to Left Channel, Right Channel or both. There's a meter range button, a sensitivity control, and even a switch that lets you freeze the meter.

Just sit down at the equalizer. Start with one channel. You'll see all 10 octave bands on the meter. Just slide the corresponding controls to increase or decrease any area that needs help.

You have now set up your system to its maximum capability. But as you'll see, location is very important. Move the microphone 5 feet to the left or right.

Then turn on the Pink Noise and check the Spectrum Analyzer. Now you can see why the specifications that come with your system are only a starting point.

Here's a way to test your tape deck and tape. First record Pink Noise for 3 minutes at -20VU. Then play it back and note the readings on the meters.

Now, record the Pink Noise again at 0VU or +3. Wait till you see how much the high end falls off. Now you'll see why all specifications are listed at -20VU.

With the Equalizer/Analyzer you can enjoy the finest stereo sound from your system and be a test lab too.

WHY SO CHEAP

BSR now only sells equalizers under their ADC name. Well, as Detroit comes out with new cars each year, ADC comes out with new equalizers. We got them to supply us with just 30,000 of last year's

ADC model before they shut it down.

They had already paid for all the tooling, all the research and design, so we were able to buy these for less than half the normal price, for cold hard cash.

THE FINAL FACTS

There are 20 slide controls, each with a bright LED to clearly show its position. Each control will add or subtract up to 15db. (That's a 30db range!)

There are separate sound detonation slide controls for each channel at 31.5hz, 63hz, 125hz, 250hz, 500hz, 1,000hz, 2000hz, 4000hz, 8000hz, and 16,000hz.

BSR backs this top of the line Graphic Equalizer/Spectrum Analyzer with a 2 year standard limited warranty. It is 1 7/8" wide, 3 1/2" tall and 8 3/4" deep.

MAKE YOUR MUSIC EXPLODE RISK FREE

It's startling. Music so vibrant with life you'll swear it's 3 dimensional. Sculpture your music any way you want it. If you're not 100% satisfied for any reason, simply return it to DAK within 30 days in its original box for a courteous refund.

To order your BSR EQ3000 Smart Sound Detonator 10 Band Graphic Equalizer with Real Time Spectrum Analyzer and Calibrated Mike, with Subsonic Filter and Two Way Tape Dubbing risk free with your credit card, call toll free, or send your check, not for the \$379 retail value. Don't even send the \$227.97 dealer cost. Send just \$149 plus \$8 for postage and handling. Order No. 4100. CA res add sales tax.

The sound of your stereo will explode with life as you detonate each frequency band with new musical life. And, you can see and measure exactly what you've done.



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Surround Sound & More Explained

Journey into space, down mountains or through meadows as you sit in front of your TV. Now the bigger than life sound of a movie theater comes to your living room. Just wait till a space ship warps right through your couch!

By Drew Kaplan

It's awesome. Cars will race out of your TV and through your room. You'll jump because gun shots are so real. And, if you're walking through a meadow, you'll hear crickets and birds all around you.

This is just the tip of the iceberg of the effect that you can expect when you connect this Surround Sound Processor to your stereo VCR or even monaural VCR.

WHAT IT IS

There's just no two ways about it. You are right in the middle of the action. If you're watching an avalanche, you're in it.

If there's a storm, you'd better get your rain coat. Battles will be waged and you'll be right in the middle. And, it's all in your grasp, now!

This new Surround Sound Processor takes the stereo signal from your VCR (read on for monaural) and produces dramatic sound through its two front, shielded 2-way speaker systems.

Well, big deal. That's what you get from stereo. Ah, but hold on to your chair. Because, there are over 700 movies that have Dolby® Stereo Surround Sound encoded on them. **Note:** Most tapes just say Dolby® Stereo, not 'Surround' on them, but wait till you hear the effect.

Surround Sound has infused movies with life when you have been at a theater. But, now you can decode them at home.

The Surround Sound signal is obtained by matching the Left and Right Channel Phase relationships and sending the difference to the rear.

The engineers create these phase differences to provide the special effects from the rear. And let me tell you, it will knock you right out of your easy chair.

You'll also have variable rear delay to add to the rear speakers' effect. You'll have massive 3 dimensional movement.

So, unlike stereo where things only move from side to side, now they can also move from the front to the back.

Moving from 2 to 3 dimensional sound is mind boggling. There's absolutely no limit to the locations in your room from which any specific sound can come.

FIRST FOR STEREO

Switch in Surround. You'll hear the movements begin all around you. You'll

hear laser blasts from the left, applause from all around you when you're at a ball game, or a freight train approaching you from the rear. Watch Out!

If the movie you are watching doesn't have Surround or you're watching Stereo TV, switch to 'Stereo'.



You'll receive a very powerful version of Surround that is created by this processor. You'll still have full front stereo.

Plus, you'll have the variable ambiance and movement cues from the rear. In fact, in many cases you'll find 'Stereo' to be even more powerful than Surround.

There's a second stereo button called 'Music' that is especially designed to add only ambiance to the rear, for musicals and music videos.



BUT IS MONAURAL DEAD?

You haven't been left out. There's a third switch which infuses your monaural VCR or TV station with resounding life.

It's a highbred stereo synthesizer. First it synthesizes stereo for the front speakers. Then it synthesizes a third channel for the rear action effect.

Add the variable ambiance delay and you'll have sound all around you. It's amazingly full and rich.

You'll have all the effect of a star ship going through your room. But, it won't be with the precise location detail of the Surround Signal itself.

Don't despair. It's terrific. It's full and alive. If you don't have a stereo deck for direct comparison, you'd swear that you had real Surround Sound.

It's amazing. Your viewing of TV or video will never be the same again.

EASY INSTALLATION

It's easy. Just put it on top of your VCR or TV. Then connect the audio output(s) from your monaural or stereo VCR to the decoder. And look at this. You can switch between two video sources.

Anyway, the rest of the installation consists of hooking up the 4 speakers. Put two in front and two to the side or rear (wire included) and you are ready for thrilling, throbbing AV excitement.

ALL THE CONTROLS

You'll have control of everything. Of course you can select input 'A' or 'B'. And you can select Surround Sound, Stereo, Synthesized Stereo or Music.

There's a master volume control. Plus, there's an input level control. And, there's a rear effects level control.

You can also delay the amount of ambient delay from 10 to 30 milliseconds. Plus, there's balance, bass and treble.

The speakers are a specially sealed acoustic suspension design. You'll be amazed at the massive sound created by the 4 woofers and 4 tweeters. It's made by Universal, the cable specialists, and it's backed by their limited warranty.

EXPLODE YOUR CONCEPT OF VIDEO RISK FREE

The realism of a space ship warping through your living room is unparalleled. If you aren't 100% enthralled, simply return it to DAK within 30 days in its original box for a courteous refund.

To order Universal's Video Surround Sound, Stereo, Synthesized Stereo and Music decoder and enhancer that will explode your concept of the capabilities of home video risk free with your credit card, call toll free or send your check for DAK's breakthrough price (including all 4 speaker systems) of just \$199⁹⁰ (\$12 P&H) Order No. 4690. CA res add tax.

Move from one or two dimensional video viewing to live, center of the action, thundering, 3 dimensional video sound.



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8200 Remmet Ave., Canoga Park, CA 91304

SAME OLD DOG, BRAND NEW SUBWOOFER

15" Thundering Subwoofer

Man's best friend meets the audiophile's best friend at an earthshaking bone jarring new price. Now you can add the impact of a 15" subwoofer to any stereo system for just 99⁹⁰.

By Drew Kaplan

A puppy may be man's best friend. Woof, Woof. . . But, now I've got a new friend you can add on to your stereo system. It doesn't need to be taken on walks, washed or fed. But, it makes a great cocktail table for you when you're being fed. And, oh what a woof it has.

GREAT SOUND FOR EVERYONE

It's called a subwoofer. And, normally it is the beloved pet of only the most ardent audiophiles.

It's not generally understood that it can be used with virtually any speaker system in any stereo. And, in addition to substantially increasing and perfecting the bass response, it has a significant impact on the mid-range clarity too.

Before I tell you exactly how marvelous your stereo will sound when you connect this subwoofer to it, there are two things you should know.

First, you'll be getting your new friend at a phenomenal price. DAK has sold over 10,000 of Cerwin-Vega's 12" subwoofers. They had a retail price of \$332, but we sold them for \$164⁹⁰.

Second, your new friend comes complete with a paid up health insurance policy in the form of a 2 year limited warranty from its father, BSR.

By the way, the puppy sitting on top of the subwoofer is the same puppy I used with Cerwin-Vega's, but wait till you hear what's under him now. You'll have BSR's 15" massive infusion of explosive bass, added to your system for just \$99⁹⁰.

But don't be misled. BSR bass is clean and tight; never sloppy or overpowering. It adds a feeling of depth and fullness to your music that you simply can't get with two or 3-way speaker systems.

HERE'S WHAT IT DOES

Basically, the problem with most speaker systems is that the bass overpowers the system. In a 3-way system, a woofer may be crossed over at about 800hz. And, in a 2-way system as high as 3000hz.

So, the woofer must handle movements of up to an inch at frequencies below about 80hz, while at the same time attempting to reproduce the very fine vibration type movements of the mid-range frequencies.

It is this difference in movements that causes both the bass to be weak or not precise, and the mid-range to become muddy (intermodulation distortion).

Even the best 3-way systems fall prey to these problems. And, it's why a subwoofer can do so much for your mid-range clarity as well as your bass.

PROBLEM SOLVED

BSR's subwoofer has a specially engineered crossover network that sends frequencies above 120hz to your regular speakers and reproduces just the mammoth movement frequencies from 120 hz down to 22hz with a special floor firing dual wound super subwoofer.

If you have downstairs neighbors, this subwoofer isn't for you. The woofer is a very special hybrid. It has a mammoth one and one half inch voice coil which allows the speaker to make the very large



movements required to reproduce the very low frequencies.

But, it would do a lousy job of reproducing mid-range, which is why, cost aside, manufacturers don't put big voice coils in normal 10" or 12" woofers.

To make the massive movements accurate, this woofer has a very large magnetic structure. This magnetic structure also makes the subwoofer system extremely efficient. (The sensitivity is 91.5 db at 1 watt at 1 meter.)

So, whether you have two or three-way speaker systems, with 8", 10" 12" or even 15" woofers, you'll find the sonic improvements staggering.

You'll hear and feel the awesome effect of thunder rumbling through your home. You'll hear a depth and dramatic fullness to your music that won't be heavy but will thrill you with its massive strength.



Here's a "floor's eye view" of the subwoofer. You'll feel and hear bass so alive, you'll think it is.

EASY HOOKUP

It's easy to connect. Simply run the right and left speaker wires from your amplifier to the input terminals of the subwoofer. It works with any system from 20 to 150 watts per channel.

Then, you simply connect the speaker

wires from your two standard 8 ohm stereo speaker systems to the output terminals on the subwoofer. They receive the exact signal that they did before except that everything from 120hz down is routed only to the subwoofer.

Placement of your regular speakers is just as critical as usual for stereo imaging, but the subwoofer can be placed anywhere because low frequency material is totally non-directional.

The subwoofer makes a perfect cocktail or end table. Its rich wood-tone appearance matches any decor. It is 24 1/2" long, 16 1/4" high and 20" wide.

TRY AUDIOPHILE'S BEST FRIEND RISK FREE

The fullness, richness and depth is awe inspiring. Wait till you connect this subwoofer to your system and experience truly massive force from your music.

If you aren't 100% satisfied, simply return it to DAK in its original box within 30 days for a courteous refund.

To order BSR's Thundering Subwoofer with its dramatic 15" Dual Wound Voice Coil Subwoofer risk free with your credit card, call toll free, or send your check for DAK's breakthrough price of just \$99⁹⁰ (\$14 P&H). Or. No. 4514. CA res add tax.

You can't replace the love and softness of a warm puppy. But, wait till you experience the richness and depth this subwoofer will add to your bass and the clarity you'll hear in your mid-range.



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For Toll Free Information, Call 6AM-5PM Monday-Friday PST
Technical Information. . . . 1-800-272-3200
Any Other Inquiries. 1-800-423-2866
8200 Remmet Ave., Canoga Park, CA 91304

Remote Control Blowout

Command Consoles, Modules & Computer Interfaces

Burglars will think you've got a family of 10 at home when you're out. And, you'll feel like you've got a butler, 2 maids and a security guard when you're home. And now, for just \$19⁹⁰ you can interface your computer.

By Drew Kaplan

It's late at night. You're in bed. The lights are romantically low. The stereo that is playing in the background, as well as your lights, will be automatically turned off after you're asleep.

As you peacefully drift off, you'll be secure in the knowledge that to a burglar on the prowl, your family still appears to be moving about.

CHEAP THRILLS

Romantic lighting, burglar deterrents and energy saving controls, are just the beginning of this remarkable, installation free, remote control system.

Now you can remotely turn on, off and dim your lights, thwart burglars, and even turn the lights on or off in an unattached garage or barn.

It's exciting. Just imagine effortlessly retrofitting your home for remote control without running a single wire.

From my own nightstand, I can dim the lights in the bedroom, turn off my son's TV and turn on our outside security lights or all the controlled lights in the house. Wow!

This instant remote control system simply plugs-in in seconds and consists of inexpensive space age control modules and command centers.

It actually uses your existing house or office wiring. And if you can plug in a lamp, you can plug-in this system.



super low price, you can put Command Consoles in as many rooms as you wish.

No matter where a Command Console is, you can control lights, fans, TVs, and stereos anywhere in or around your home.

HERE'S HOW IT WORKS

As you push each button on the command console, a powerful but silent, encoded signal is sent down its AC cord into your home or office wiring.

This safe, silent encoded signal, travels throughout your electrical system. And, it won't disturb your TV or your FM.

It can even reach your unattached garages, barns, sheds and even your pool light, porch lights and yard lights.

Wherever you want to control a light or appliance, all you have to do is plug-in one of the system's controller modules.

Each module has a rotary dial numbered from 1 to 16. Just dial in a number to match one of the 16 number buttons.

Then, just plug the module into the wall and the lamp or appliance into the module for instant remote control.

Important note: You will still have local control of all your lights and appliances by just using their normal switches, even though they are plugged into modules.

Each module actually senses when you turn the controlled unit's switch and automatically relinquishes control.



to place or change their code numbers in seconds. And of course, if you move, your system goes with you.

THE TIMER

This sophisticated electronic brain can perform 32 tasks. Just plug it in and you're in operation.

Select the module number you want to control, then decide if you want the controlled device to come on or off.

If you only want something to happen once, just push the 'Once' button.

There is a 'Daily' button that lets what you've programmed occur every day.

There's a 'Security' button. You can program lights and radios to give your house a lived-in look when you're away.

With The Timer, you can set your window air conditioning to come on an hour before you return from work.

Or, you can have your porch lights come on so you'll never enter a dark house. You can set your hall light to come on at 11PM and off at 6AM. And you can have your electric blanket shut off at 7AM and come back on at 10PM.

TELEPHONE CONTROL TOO

You can even phone home and control anything. Just plug it into both your AC line and any modular phone jack in your home or office.

Then just call your regular phone number, hold up its 'beeper controller', give your 3 digit code that you set yourself, and start controlling.

You can call home and turn on your lights before you leave work or before you leave a midnight party. It's a great security device.

SOME NEAT IDEAS

You'll find the system changes and bends to meet your exact needs. You can set several modules to the same number so that the front and rear lights can come on together.

Or, you can set all the lamps in a room to come on and even dim together.

You're sure to want a module in your dining room. Eating by subdued light is a real pleasure. And it's important to remember that not only do you get full remote control, you get 0% to 100% brightness control of your lights.

It's like getting free dimmers thrown
...Next Page Please



THE COMMAND CONSOLE

Imagine that you're watching TV. You can dim the lights from your easy chair. If you hear a noise, touch a button and your outside flood lights jump to life.

It's all easy when you have this top of the line Command Console, shown above, sitting next to you. It can let you control up to 16 different lights and appliances.

You can turn each on or off. You can dim or brighten lights. And look at this. You can turn all your controlled lights on or off for instant security with the 'All On' and 'All Off' buttons on the console.

You can even move it from room to room because its total installation consists of simply plugging it in. Or, at DAK's



... X10 Continued in with your remote control system. So, for bedside lamps, swag lamps, ceiling lights, track lights and garage lights, you'll be in full command.

And, you'll automate your fans, coffee-maker, humidifiers, and crock-pots.

With a little imagination, you can adapt other electronic devices that will let you water plants, control green houses, and of course, make use of audio cassette decks with 'timer ready' switches.

And, if you own a second home, now you can activate pipe heaters if there's an early frost, or 'switch on' the house so it's warm or cool and lit when you arrive.

QUITE A SYSTEM

As you get into bed tonight, think about what you'd do if you heard a noise outside or downstairs. Just push a button.

Think about how nice dimmed lights would be in your bedroom or living room. If you're at all like me, you'll love all the 'plug-in' things you can do with X10.

IS⁹⁰ COMPUTER CONTROL TOO

It's amazing. Look at your computer screen. Pick a lamp anywhere in your home and touch a button. Both the lamp on the screen and the 'real' lamp will jump to life. And, it's yours for just \$19⁹⁰.

You can choose 10% to 100% intensity. And, not only can you turn anything you choose 'on' or 'off' right now, you can program the device to come 'on' or turn 'off' multiple times today, tomorrow, or any day(s) you wish during the week. **USE YOUR COMPUTER-DON'T LOSE IT**

What's really neat is that you can operate the system directly from your computer, but you store all your programmed instructions in X10's 80C48 microprocessor based Control Center.

And look at this. The Control Center instantly connects and disconnects from your computer without tying it up.

The control center has battery back up (9V battery not included), and you can back up all your stored commands on the copyable X10 master disk.

So, not only is your programming protected, but you can store summer, winter, and vacation schedules on disk.

In fact, although the included software supports at least 95 devices (minimum, depending upon which computer you own), you'll have access to 256 command capabilities. So, you can program anything you like. **Imagine all the excit-**

ing things you can program your computer to do. Wow!

FULLY COMPATIBLE

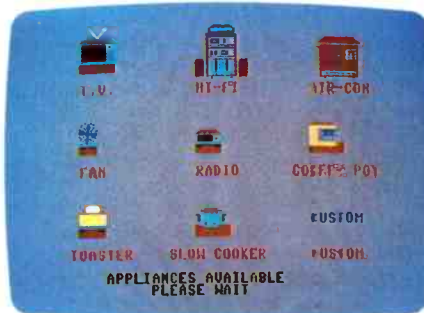
DAK has over 70,000 customers with X10 systems. The standard modules that you already own are 100% compatible. So, for \$19⁹⁰, how can you go wrong?

How is it done? Well, your computer tells the Command Center what you want done. The Command Center then sends a silent encoded signal throughout your home's electrical system.

If it says, "Number 7 module turn on to 40%", only number 7 will respond. Of course, groups of modules can be controlled and you can assign several lights, such as outside flood lights, to the same number. It's all easy. It's all flexible.

BACK TO THE ACTION

OK, you're sitting at your Commodore or Apple IIE or IIC Computer. You'll see pictures of a variety of rooms. Just tell your computer what types of devices you'd like to control.



Whenever you would like to place a lamp or appliance, just choose one from a screen like the one shown above. These pictures, or ICONS as they are called in computerese, will appear. **There are many types of devices to choose from.**

If you were at your IBM PC you'd see text. (You can even control your whole office or factory.) If you were at your Macintosh, you can draw your own rooms, even using Macpaint. **Wow!**

So, with Command Consoles or with your computer, or with both, you'll have control never before possible of electrical devices in your home or office.

Wait till you feel the power of your computer surging through your home. A security mode can make your lights come on and off at random times for security. You can even manually control 8 devices

\$19⁹⁰ BLOWOUT

Computer Interfaces were originally \$129 for:

● IBM ● MACINTOSH
● APPLE ● COMMODORE



from the Console itself.

All Command Consoles, Modules and Computer Interfaces are backed by X10's standard limited warranty.

FINAL CLOSE-OUT RISK FREE

It's simply thrilling to use. It's security. It's convenience. And, it's fun.

If you aren't 100% satisfied, simply return any component to DAK in its original box within 30 days for a refund.

To order Any Combination of Command Consoles, Modules and Computer interfaces call toll free, or send your check for the amounts shown below.

Order any combination of Command Consoles and modules you desire.

1) The Control Console-Lets you control up to 16 different modules. On/off/dim/all on/all off. Just \$19⁹⁰ (\$2 P&H). Order No. 4622.

2) 32 Event Clock Timer-Lets you control 8 modules with up to 2 on and 2 off commands to each. Also acts as a command base plus sleep and security extras. Just \$26⁹⁰ (\$2 P&H). Or. No. 9777.

3) Telephone Responder-Phone home and control 8 devices. It's also a base. It's just \$39⁹⁰ (\$3 P&H). Order No. 9778.

4) Lamp Module-Controls/Dims lamps up to 300 watts plugged into walls. Just \$11⁹⁰ (\$1 P&H). Order No. 9779.

5) Wall Switch Module-Controls/Dims lights now controlled by wall switches. 500 watt capacity. Just replace your wall switch with this automated module. Just \$12⁹⁰ (\$1 P&H). Order No. 9780.

6) Appliance Module-Control stereos, TVs, or anything with motors. 15 amps, 500 watts, 1/3hp rating. Just \$11⁹⁰ (\$1 P&H). Order No. 9781.

An X10 Computer Home Controller complete with Appropriate Software Disk and Cable is just \$19⁹⁰ (4 P&H).

7) For your Commodore 64 or 128, it simply plugs in. Use Order No. 4378.

8) For your Apple IIE or IIC, use Order No. 4379. Note: For the Apple IIE only (the IIC has one built-in), you'll need a serial interface (same as for a modem). It's just \$79 (\$2 P&H). Order No. 4380.

9) Most IBM PCs & Clones have a serial port, so X10 should simply plug in. Use Order No. 4410.

10) For your Macintosh, the X10 simply plugs in. Use Order No 4411.

Commodore, Commodore 64 & 128 and Apple, Apple IIE, IIC, Macintosh & Macpaint, IBM & IBM PC are registered trademarks of Commodore Electronics Ltd and Apple Computer and International Business Machines.

Answering Attack Phone

Let's vanquish the problem of bulky complicated answering machines. And let's conquer the problem of lost beepers. Now when you're out, just the sound of your voice is all you need to retrieve your messages.

Stamp out beepers. Here's a microprocessor controlled answering machine that's so smart it will give you your messages without using a beeper.

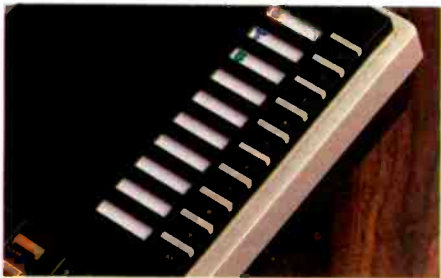
But, before we explore just how easy it is to use and all of its sophisticated features, such as, toll saver, 2-way record, and remote saving or erasing of messages, let's take a look at the phone.

Like the answering machine, the phone has attacked wasted motion, complicated commands and uncomfortable fit with the latest in technology.

Here's a phone that will dial any of your 10 most frequently called numbers with the touch of a single button. Just touch another electronic button and the phone will operate in Tone or Pulse.

Another button gives you instant redial. And, as for comfort, well just wait till you cradle the great sounding Phone Company style handset on your shoulder.

This phone which can be desk or wall mounted, is no larger than a conventional feature phone. It's just 9" deep and 8½" wide. And, a standard instantly changeable audio cassette (included) is concealed just to the right of the handset.



VANQUISH THE REST

Easy to use. Forget cumbersome 'fixed time' outgoing announcements. Most machines make you fill a 20 second continuous loop cassette.

If you've ever tried to do this, you know just what a pain it is to make your message just the right length. With the Attack Answerer, just push 'Record Announcement' and talk into the built-in microphone from 2 seconds to 50 seconds.

After you've recorded your announcement, the machine will automatically play it back for your approval.

When you get your first call, it will be answered on the 4th ring. (Read on to see why.) If you're at home, you'll hear the message being left by the caller over the built-in speaker if you desire.

If you wish to talk to the person, just pick up the receiver and start talking. If you don't, you've just experienced the privacy protection called 'call screening', which lets you hear who's calling before you decide to answer.

This machine will let your caller leave any length message up to one minute long. If they hang up in 20 seconds, that's how long the message will be.

If they don't choose to leave a message, the machine will ignore the call. So, when you play back your messages, all you'll hear are messages, no dead space. And of course, you won't have to listen to your own announcement between each message you receive.

TOLL SAVER, OR THE 4TH RING

If you're across town or out of town, why invest a dime or pay for a toll call if you have no messages?

Each time you reset your machine, it will answer the first call on the 4th ring. After it's taken its first message, it automatically starts answering on the second ring. So, when you call in, just hang up if you get to the third ring. You'll automatically know that you have no messages.

If you do have messages, just give the machine a special signal with your own voice, and you'll receive your messages. Then you can have the machine save or erase the messages that you have heard.

MISSILE GUIDANCE

This machine is so smart that it electronically marks each message's location. It knows precisely where your outgoing announcement as well as each message that has been left is located.

The action is fascinating to watch. First, it plays your outgoing announcement. Then, it sounds a tone as it zips to the end of the last message it took.

It then beeps and starts taking the new message. Finally, it rewinds back to the precise start of your outgoing announcement, prepared to start again.



MORE SMARTS

If you want to record both sides of a call, just touch the 2-way record button

and you'll have a record of the call.

Everything is automated. Just touch one of the full logic controlled buttons and this computer answers with a confirming beep and jumps into action.

To play back messages at home, just touch the 'Message Report' Button. A flashing message light even tells you at a glance if you've received any messages while you were out.

EASY INSTALLATION

Just plug in the modular phone jack and the included AC adaptor. Then, just record your announcement.

The Answerer Attack Phone is ready to take messages or act as your super automated office or home telephone. It's made by Unitech and backed by their standard limited warranty.

THE ANSWERER ATTACK PHONE RISK FREE

It's new. And, it will set you free. From its Phone Company feel handset to its electronic convenience extras to its state of the art answerer, you'll have incredible convenience and simply great sound.

If you're not 100% thrilled, simply return it to DAK within 30 days in its original box for a courteous refund.

To order your Unitech Answerer Attack Phone with totally automated telephone features and easy to use answering machine risk free with your credit card, call toll free or send your check for DAK's breakthrough price of just \$99 plus \$7 P&H. Order No. 4359. CA res add tax.

Wait till you hear the phone. Wait till you use the 1 touch dialing. And, wait till you hear the sound quality and enjoy the convenience of this answering machine.



DAK

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For credit card orders call 24 hours a day 7 days a week
CALL TOLL-FREE. . . 1-800-325-0800
8200 Remmet Ave., Canoga Park, CA 91304

\$99⁹⁰ EARTHSHAKER



Crooning Titan Plus

You'll experience melodious but thunderous sound at home or on the road from this bi-amplified audiophile portable with subwoofer, 7-band equalizer and dual high speed dubbing cassette decks.

It's rich. It's deep. And it's powerful. This portable has the sound and features you'd expect from home stereo.

In fact, when you are at home or at the office, it makes a great second stereo system, with its rich thundering bass and vibrantly alive highs.

You'll have superb sounding FM stereo, AM and sequentially playing cassettes.

COLOSSAL SOUND

Forget boom box sound. Now you can have bi-amplified, equalized and enhanced deep bass sound wherever you are.

The Equalizer. Most portables have 'Tone' controls or, at best, some have bass and treble controls.

Now you can infuse your bass with life at 50hz for the very low bass and at 100hz for mid-low bass. String basses, drums and orchestral crescendos will literally throb with life.

the low bass, and not letting it clip (overload) the left and right channel amplifiers, you can maximize the acoustical detail of your mid-range and high-end sound while you infuse your bass with life.

Because this electronic crossover allows some frequencies as high as 400hz to reach the mid-range amplifiers, it may be pushing credibility to call it a true subwoofer. But, you'll be amazed at the power, punch and tightness of the bass.



EVEN BIGGER THAN IT LOOKS

The speakers across the front provide a continuous 22½" wall of sound. The woofers in the center don't affect stereo separation, because very low frequencies are totally non-directional.

The outer mid-range speakers produce clean, solid mid-range that will let you enjoy your favorite music without coloration. And outermost, are the powerful piezo tweeters which widen your perception of stereo and produce crystal clear, vibrant highs.

ALL THE MUSIC

Powerful AM and FM tuners with a large slide rule dial, let you pull in even distant stations. At home or away, you're going to have great reception.

Dual Cassette Decks. Now you can copy cassettes at normal or high speed. Now you can listen to one cassette and then another, automatically.

The twin decks in this portable are perfectly matched for great sounding recording and playback.

You can make great sounding recordings from its built-in tuners or from its built-in mike. You can also plug in your own external mikes. You'll also have

One Touch Record, Auto-Stop, Automatic Level Control and a Tape Counter.



And don't forget, these decks play sequentially. Just put tapes in decks 'A' and 'B'. When the first tape is finished, the second tape will automatically begin.

You can operate this portable on AC (cord included), by standard D batteries (not included), or by 12V DC from your car (cord not included). It's made by Unitech and backed by their limited warranty.

A DUAL CASSETTE CROONING TITAN RISK FREE

This silver-tongued music maker will amaze you with both its purity and its power. It's perfect for the bedroom, den, office or out in the yard.

If you're not 100% satisfied, simply return it in its original box within 30 days for a courteous refund.

To order Unitech's Crooning Titan Plus Portable with 7-Band Equalizer, Bi-Amplified Subwoofer, and High Speed Dubbing, Sequentially Playing, Dual Cassette Decks, risk free with your credit card, call toll free, or send your check for DAK's earthshaking price of just \$99⁹⁰ (\$7 P&H). Order No. 4637. CA res add tax.

Why be tied down to one room to listen to your favorite cassettes or radio stations? Now you can have really great sound and high speed dubbing anywhere in your home or in the great outdoors.



Cymbals, or brushes on a snare drum, will take on life and excitement as you boost this equalizer's 15,000hz control.

And best of all, you won't make your favorite singer's voice sound raspy when you boost the highs or muddy when you boost the lows, because an equalizer lets you sculpture just the areas of the frequency spectrum you want to enhance.

The 7-band EQ lets you sculpture the sound at 50hz, 100hz, 300hz, 1,000hz, 3,000hz, 7,000 hz and 15,000hz.

Thundering Subwoofer. Just switch in the separate electronically crossed-over amplifier & 'super woofers' to add earthshaking depth and fullness.

By separately amplifying (bi-amplifying)



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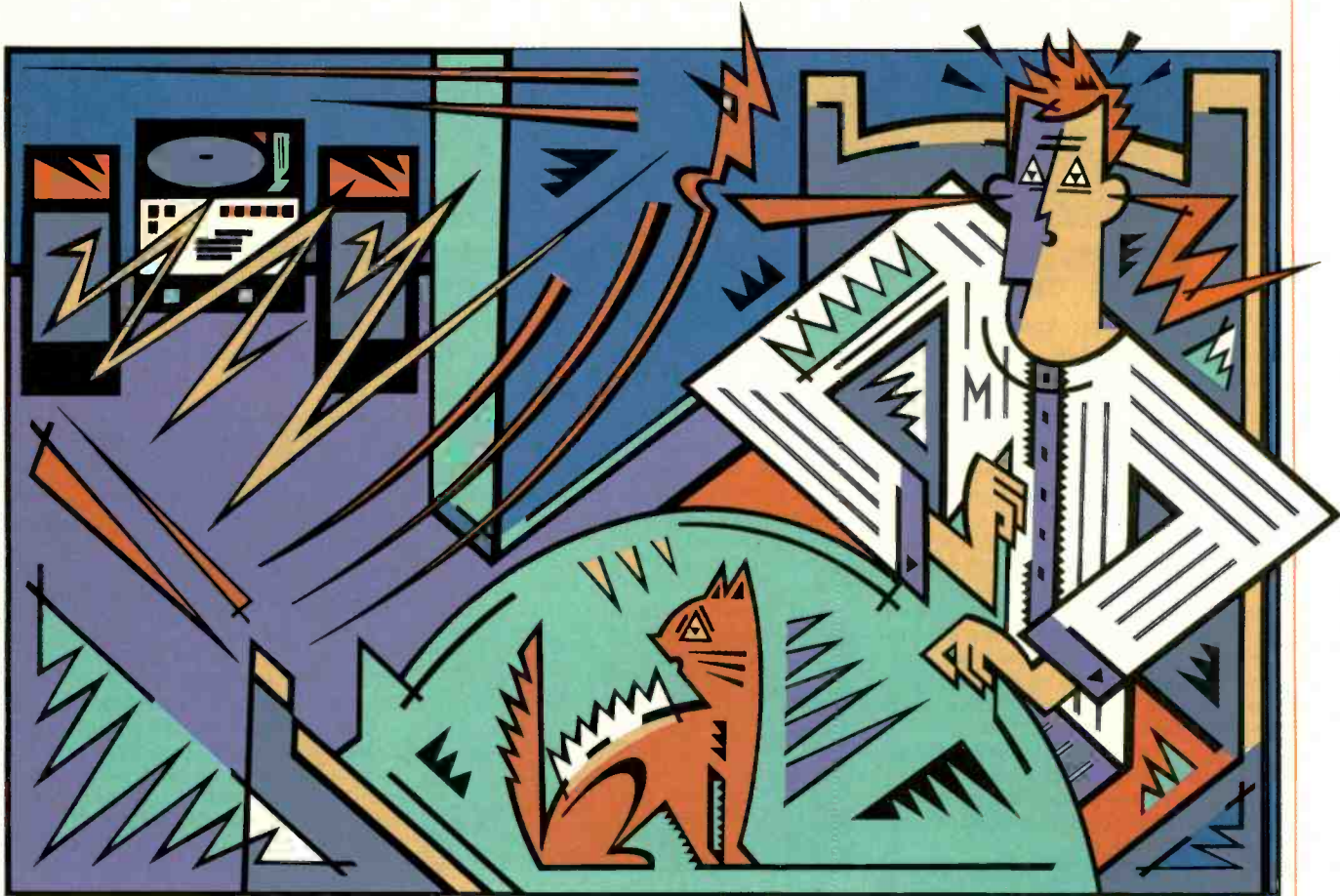
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HAUNTED HI-FI

THE CASE OF THE MYSTERIOUS NIGHTTIME VOICE



BY MYRON BERGER

IT is the dead of night. You are drifting into a dream (perhaps of a totally digital audio/video system) when suddenly your mind snaps alert: you hear an unexpected sound in your living room. Holding your breath, you listen but hear only the crashes of your heart pounding. Suddenly, there it is again—a single male voice. Summoning all your courage, you grab a baseball bat and head toward the room. You reach it and flip on a light. Nothing. But then there's the sound again. And you realize that it's coming from your speakers, and

your system isn't even turned on!

What is this? Aliens? Ghosts? Mice? Relax. It's only audio rectification. It may be difficult or expensive to undo, but at least it won't attack you or steal your silverware. Audio rectification, simply put, is when unwanted radio-frequency (RF) signals are getting into your audio system. Or, to put it more technically, it's when a nonlinear device in your system has become a rectifier—a nondiscriminating (frequency-independent) antenna—and is receiving RF signals sent from somewhere near your home. The

device must be nonlinear because it is modulating the radio frequencies it receives into audible audio frequencies. The phenomenon is identical in principle to the way crystal radios work—and to the way dental work occasionally receives radio broadcasts.

Ironically, you may be more vulnerable to radio-frequency interference (RFI) if you have taken care to assure yourself of the best possible components. In the experience of Jude Mansbach, an electronics engineer in the enforcement division of the Federal Communications Com-

JEAN TUTTLE

mission's New York field office, "The better the equipment, the better its chances of receiving RFI." He explains that better components are electronically more sensitive, so they might pick up something a less sensitive device would not.

The good news about audio rectification is that the signal being rectified is coming from nearby, so the source should be fairly easy to track down. The bad news is that, in the worst possible case, you may need either to have one of your components rebuilt or to replace it completely. The device that is acting as an unintended radio receiver may be a transistor, tube, diode, solder joint, or some other internal component in your amplifier, tuner, cassette deck, or signal processor, and it can only be "repaired" by replacement or redesign.

Most commonly, however, the audio-rectification receiver is merely a cable or connector. Virtually all audio wires and cables designed for home use are unshielded; that is, they are insulated against electrical exposure but unprotected against the reception of RF signals. Cables that are unduly long or, by chance, are simply lying in a receptive position can receive radio signals and pass them innocently into your amplifier, which, just as innocently, will process them and pass them to your speakers.

If you are receiving interference (whether speech, music, or noise), the first step in eliminating it is identifying it. If you get the interference when your audio tuner is off and your television set gets clear reception on all channels, the chances are excellent that it is audio rectification. Once the interference has been identified, the next step is tracking down the source and the receiver. Finding the source should not be difficult, since it is probably within 100 feet of the receiver. The most common cause is citizen-band (CB) radios. Other frequent villains are amateur (ham) radios, mobile radios (taxis, tow trucks, etc.), radio/TV transmitting towers, cordless telephones, garage-door openers, major appliances, thermostats (particularly dangerous because their wires may run near the audio-rectification receiver), car motors, hospital equipment, and any other device that generates or uses radio-frequency signals.

Locating the audio-rectification receiver is likely to be considerably



Audio rectification, simply put, is when unwanted radio-frequency (RF) signals are getting into your audio system. The phenomenon is identical in principle to the way crystal radios work—and to the way dental work occasionally receives radio broadcasts.

more difficult. Almon Clegg, general manager of the Matsushita Technology Center at Technics and a past chairman of the Electronic Industries Association's Audio Systems committee, recommends the following procedure: with your system on and the interference audible, "Disconnect everything, including the power line. If the interference dies instantly, then the power line is bringing it in. If it fades out—the amp's capacitors will keep it working a few seconds after the power is cut—then something else is the source. The next thing to do is to reduce volume to a minimum level. If that eliminates the interference, then we know it's getting in ahead of the volume control—from one of

the preamp inputs, a peripheral component, or within the amplifier or preamp circuitry; if it doesn't, then it's coming in afterward." After the volume control means the audio-rectification receiver is either in the amplification circuit or the output stage. If the interference is heard even with the system off, the culprit must be the speaker leads or the speakers themselves. In the case of the mysterious nighttime voice I described at the beginning of this article, speaker cables are receiving the signals and sending them directly (unamplified) to the drivers.

Once the speakers and power line have been eliminated as possible sources, Clegg says, "the next thing to do is to operate the function switch. If you receive RFI from only one input, that probably isolates the component. If not, then pull out all component leads. Push up the volume control and see if it's still there. If it isn't, plug in the components one at a time."

If the audio rectification appears after, say, your cassette deck is plugged in, remove all other components to make sure it is the tape deck alone that is the culprit. Sometimes, Clegg notes, the problem will appear only when two components are connected. If the source does not make itself immediately obvious, vary the order in which components are reconnected. According to Clegg, "The turntable is probably the most notorious source of interference because of the tonearm ground."

After isolating the audio-rectification receiver, you can often eliminate interference by shortening the leads (if possible), substituting shielded cables, replacing corroded connectors, or grounding all components. Or, suggests the FCC's Jude Mansbach, try moving your system. Even changing its orientation may help. If this fails, install RFI filters, which can be obtained from the equipment's manufacturer or at electronics stores.

Further solutions for the technically adept are offered in a free FCC publication called "How to Identify & Resolve Radio-TV Interference Problems." The very technical can obtain the "Consumer Electronics System Technician Interference Handbook—Audio Rectification" from the Electronic Industries Association, 2001 Eye St., N.W., Washington, DC 20006. □



**Our secret ingredient
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BANANARAMA: *True Confessions*. Bananarama (vocals); Tony Swain (keyboards); Steve Jolley (guitar); other musicians. *True Confessions*; *Ready or Not*; *A Trick of the Night*; *Dance with a Stranger*; *A Perfect World*; *Venus*; and five others. LONDON 828 013-1 \$8.98, © 828 013-4 \$8.98.

Performance: *Variable*
 Recording: *Good*

Inspired by this album, a good friend and I started talking about covers. Our conclusion was that there ought to be more of 'em. Look at it this way: The classical orchestral repertoire consists of maybe three hundred or so essential works, and most classical recording involves major conductors and orchestras re-interpreting those works. Then there's jazz. Few of the greats, from Louis Armstrong to Charlie Parker, felt that they had to write all their own stuff. Their best work came when they improvised on popular standards.

But rock music's different. A band that's just getting started usually does a lot of covers—local clubs want someone who can do the Top 40. But these bands can't wait to bore the crowd with their own material, which is when most of the kids head outside for a smoke. In the major leagues, someone like Bruce Springsteen will throw a half-dozen covers into his live act, but when it comes time to record, it's all Springsteen. Or all Iron Maiden. Or all R.E.M. What a waste! The rock-and-roll archives are filled with thousands of great songs that get recorded one time and that's it.

I have the feeling a lot of people think Bananarama "cheated," or at least took the easy way out, by releasing *Venus* as a single. But it's not only the best thing on "True Confessions," the group's new album, it's better than the original. Bananarama lacks a strong lead vocalist, and the trio is kind of anonymous-sounding, but under the guidance of synth master Tony Swain and guitarist Steve Jolley, these three girls could become one of the greatest cover bands since Manfred Mann. And since they

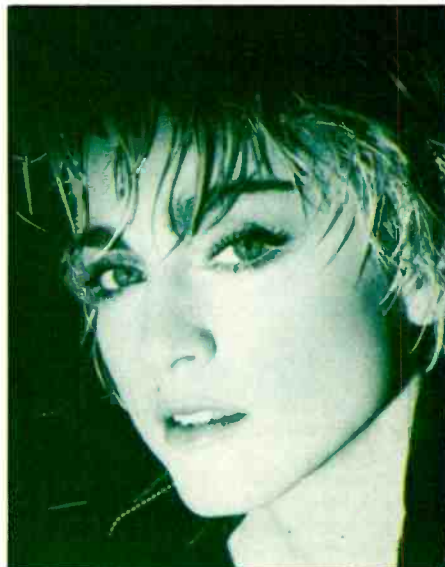
THE TRUE MADONNA

I DOUBT if the Right to Life movement ever expected to find an ally in Madonna, but *Papa Don't Preach*, from her new album, "True Blue," articulates the "pro-life" argument with more honesty and realism than the issue usually receives from either side. *Papa Don't Preach* is the kind of song Madonna should be doing more of—songs that allow her to get outside her pin-up persona and into the flesh of a real, honest-to-goodness human being.

Madonna has always been and will always be a better actress than singer. For her music to work, she's got to play a character that's likable, or at least one you can relate to. On character alone, "True Blue" is a much more appealing album than last year's off-putting "Like a Virgin." Instead of material girls and coy coquettes, "True Blue" finds Madonna playing the girl in trouble—an unwed mother, a teen in love with the bad boy in school, a woman scarred by a deceitful lover. But it's not that her appeal stems from playing the victim—she triumphs in every case.

The music on "True Blue" is several giant steps up from the glitzy, vacuous, MTV funk of "Virgin." It's true that Madonna's voice tends to disappear at times, and it's also true that the music isn't so much the work of Madonna as of Madonna Industries, Inc. (the songwriting credits are a crash course in copyright law and tax and royalty strategy). But producers Stephen Bray and Pat Leonard have teamed up to give Madonna material that's more melodic, less cluttered, and just plain more fun to listen to.

The Brill Building feel of *True Blue* and *Jimmy Jimmy*, corny but playful, the manic electronic dance beat of *Where's the Party*, the epic heartbreak of *Live to Tell* all cast Madonna in the



A singing actress who is pro-life, pro-love

right light. Even the second-rate stuff, like the muddled funk of *White Heat*, a good idea (Madonna as gangster of love) that she doesn't quite have the vocal agility to pull off, is better than the best of "Virgin." The only real clunkers are the phony Caribbean schlock of *La Isla Bonita* and the unconvincing, Madonna-does-Bob-Geldof throwaway *Love Makes the World Go Round*. Let's hope the Madonna of "True Blue" is in for a long run.

Mark Peel

MADONNA: *True Blue*. Madonna (vocals); Stephen Bray (drums, drum machine); Pat Leonard (drum machine, synthesizer); vocal and instrumental accompaniment. *Papa Don't Preach*; *Open Your Heart*; *White Heat*; *Live to Tell*; *Where's the Party*; *True Blue*; *La Isla Bonita*; *Jimmy Jimmy*; *Love Makes the World Go Round*. SIRE 25442-1 \$8.98, © 25442-4 \$8.98, © 25442-2 no list price.

SIRE/HERB RITTS

don't write their own material anyway (Swain and Jolley do), it wouldn't be a cop-out.

There are three solid originals here—the title track, a midtempo dance number with great tribal percussion; the eerily romantic *A Trick of the Night*; and *More Than Physical*, a sexy, girl-group funk number that could have been a hit for Love Unlimited. The rest is merely adequate. It would have been improved by substituting a few more covers, like *Crimson and Clover*, *New Girl in School*, and (*My Baby Does*) *The Hanky Panky*. M.P.

NANCY BLAKE: *Grand Junction*. Nancy Blake (vocals, cello, mandolins,

guitar, bass, accordion, fiddle); Norman Blake (guitars, mandola); James Bryan (fiddle); Tom Jackson (banjo). *Florida Rag*; *Things Are Funny*; *In Russia (We Have Parking Lots, Too)*; *My Love Is Like a Red, Red Rose*; *The Chrysanthemum*; and seven others. ROUNDER 0231 \$8.98, © C-0231 \$8.98.

Performance: *Charming*
 Recording: *Very good*

Nancy Blake is part of the Rising Fawn String Ensemble with her husband, Norman, a fine acoustic guitarist. In "Grand Junction," her first solo album, she guides her listener on a tour of scenic side roads, shelters, and lay-bys, stopping occasionally for the odd animal in

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The Cure: practically defining the last years of punk

the road—*In Russia (We Have Parking Lots, Too)*—and for conversation with the unexplainable Eskimo god of frivolity, who inspired the tune *Mahnuknuk*. It's obvious that Ms. Blake, who provides vocals for only one of the cuts, has a sense of humor to match her considerable multi-instrumentalist skills. After this excursion with her, you come away perky, placated, and a little bemused, but you're not really sure you've been anywhere. Still, though, it's a pleasant little outing. *A.N.*

BOX OF FROGS: *Strange Land*. Box of Frogs (vocals and instrumentals). *Get It While You Can; You Mix Me Up; Average; House on Fire; Hanging from the Wreckage*; and four others. EPIC BFE 39923, © BFT 39923, no list price.

Performance: *Impressive*
Recording: *Very good*

Given that Box of Frogs consists of the rhythm section of the deservedly legendary Yardbirds plus assorted famous guests, you'd expect this album to be a gigantic indulgence by a bunch of Boring Old Farts. In fact, however, it's a very impressive piece of work in a chilly, state-of-the-art way. The production, by bassist Paul Samwell-Smith, is wonderfully vivid, a terrific aural wallow, and the guest soloists all do exemplary jobs—particularly Graham Parker, who sings his tush off on the opener, *Get It While You Can*, and Roger Chapman (formerly of the Seventies cult band Family), who wails with flair on a remake of *Heart Full of Soul*.

The problem with the album, not surprisingly, is a lack of focus. As a demonstration of what these guys can do in the studio, "Strange Land" is great stuff, but there's no cohesive vision, and if BOF is ever going to be anything more than a highly listenable novelty act, they're going to have to figure out who the heck they are. In the meantime, though, it sure sounds great, which I guess is not to be sneezed at. *S.S.*

T. GRAHAM BROWN: *I Tell It Like It Used to Be*. T. Graham Brown (vocals); vocal and instrumental accompaniment. *Say When; Don't Go to Strangers; I Wish That I Could Hurt That Way Again; I Tell It Like It Used to Be*; and six others. CAPITOL ST-12487 \$8.98, © 4ST-12487 \$8.98.

Performance: *Hot stuff*
Recording: *Good*

Raised on Percy Sledge, Clarence Carter, Aretha Franklin, and reruns of *The Andy Griffith Show*, T. Graham Brown bounded out of Arabi, Georgia, with ants in his pants, ready to knock their socks off in Nashville. He's done it. Brown, who dresses with the kind of panache you don't see on many white performers today—fake-leopard lapels on his jackets, for example—pretty much sings the way he looks, with bold, devil-may-care abandon. This is full-steam-ahead, blue-eyed Southern soul, and it never lets down for a second. It may not be as lyrically interesting as the stuff that Delbert McClinton does, but it carries an emotional wallop that McClinton rarely gets around to. A terrific debut LP, full of pain and passion. This could make the boy a star. *A.N.*

PETER CASE. Peter Case (guitar, harmonica, vocals); vocal and instrumental accompaniment. *Echo Wars; Steel Strings; Three Days Straight; More Than Curious; I Shook His Hand; Small Town Spree*; and six others. GEF-FEN GHS 24105 \$8.98, © M5G 24105 \$8.98.

Performance: *Energetic*
Recording: *Excellent*

I like the chest-thumping shock of 10,000 amps blasted from a Stratocaster as much as the next guy, but there are times when the only sound that's right is the sound of a pick rippling across steel strings. That's how Peter Case must have felt after leaving a Los Angeles punk band, the Plimsouls, to record his first solo album.

Armed with a twangy acoustic guitar and harp, and backed by a decidedly unelectric West Coast consort that includes Roger McGuinn, Jerry Marotta, Richard Green, Van Dyke Parks, and Fred Tackett, Case has come up with one of the most intimate, intelligent, and energetic records I've heard in a while. Case is too young to be as craggy and wise as he seems here, but the music doesn't lie. His folk- and blues-inspired tunes have a lean economy and urgency, his lyrics a flinty kind of smarts—skeptical but never jaundiced.

Case likes to spin tales (*Three Days Straight* is about a mining disaster, *Small Town Spree* about a man gone berserk), and they're told with wry humor. By the time the Pogue's *Pair of Brown Eyes* rolls around, you feel as if you've spent the better part of an afternoon with an old drinking buddy just back from driving cross-country. T-Bone Burnett's production adds a jolt of energy—guitar, acoustic bass, and drum kit are all the accompaniment Case needs to make things smoke, whether it's for the Bo Diddly backbeat of *Steel Strings* or the rockabilly shuffle of *I Shook His Hand*. Even when Case uses strings (on the Van Dyke Parks arrangement of *Small Town Spree*), the sound is simple and direct. A winner. *M.P.*

THE CURE: *Standing on the Beach—The Singles*. The Cure (vocals and instrumentals). *Killing an Arab; Boys Don't Cry; Jumping Someone Else's Train; A Forest; Primary; Charlotte Sometimes*; and seven others. ELEKTRA 60477-1 \$8.98, © 60477-4 \$8.98.

Performance: *Raw*
Recording: *Good*

The Cure must surely rank as one of the most obscure successful bands in rock history. They've released no fewer than seven LP's in this country, but their cumulative sales probably wouldn't add up to those of one release by Toto. They get zero airplay, and unless you're a serious Anglophile you've probably never heard one of their albums, never mind owned one. Here's your chance to correct that situation.

"Standing on a Beach—The Singles" collects thirteen U.K. singles and one previously unreleased track in an anthology that's probably more consistently interesting—and listenable—than any single LP the band ever released. The Cure's music practically defines the last years of punk: simple, raw, peevish, and adolescent, redolent of black jeans and white T-shirts, dark, sweaty, crowded clubs, stale cigarette smoke, and pierced earrings swaying in rhythm under streaked mohawks.

Robert Smith's staccato guitar thrums the same angry chords over and over and over, a suitably defiant accompaniment to a voice drenched in frustration. Lawrence Tolhurst's drumming is as basic and unadorned as a black-jack. But this isn't merely head-banging, pogo-inciting stuff. In fact, it's not even particularly loud. There's a strong me-

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lodic sense, and in songs like *A Forest* Smith even anticipated the elemental guitar technique that U2's Edge and others would make popular.

You can hear the Cure grow less brutal and somewhat more musical as they begin to add electronics in 1982, but they never lost the rough edges and outraged attitude that marked early hits like *Killing an Arab*, *Boys Don't Cry*, and *Jumping Someone Else's Train*. In an age given over to machine-made rhythms and electrified emotions, "Standing on the Beach" is rock that's ragged, snotty-nosed, a little whiny—and *human*. *M.P.*

LACY J. DALTON: *Highway Diner*. Lacy J. Dalton (vocals); Philip Donnelly (guitars); vocal and instrumental accompaniment. *Working Class Man; Changing All the Time; Taking It All in Stride; This Ol' Town; Up with the Wind;* and five others. COLUMBIA FC 40393. © FCT 40393, no list price.

Performance: *Back on track*
Recording: *Excellent*

After a rocket-hot launch in 1979, Lacy J. Dalton, one of the most original and powerful singer-songwriters in modern country music, made several solid albums with producer Billy Sherrill before descending into a depressingly bland Nashville formula. Part of the problem was that as Dalton became a bigger star, she had less time to write, and as Sherrill took on more acts to produce, he had less time to find material to suit Dalton's strong-but-sensitive style.

On her last album, Dalton began finding her way back with the help of producers Marshall Morgan and Paul Worley, but it has taken Walt Aldridge to set her back on the trail proper—back to songs of substance and integrity, the kind Dalton wrote when she wasn't having to worry about her career as a performer. On "Highway Diner," Dalton, the true product of a blue-collar town in Pennsylvania, addresses the working-class ethic with a freshness that has gone stale for so many of the Haggar and Cashes, and as a woman with a stint as a short-order cook in her past, she sings (in her own *Changing All the Time*) about small-town life and a waitress who has seen too many dawns creeping over dirty windows with un sentimental realism.

There are a couple of throwaways here—*Can't See Me Without You* (a kind of bubblegum rocker by Journey's Jonathan Cain) and a neo-rockabilly ditty thrown in to pick up the pace. But on the whole, this is a solid package, and Dalton sings as if there's no tomorrow. To paraphrase what Jon Landau once wrote about Elvis Presley, there is something magical about watching a woman who has been lost so long find her way back home. *A.N.*

CHRIS DE BURGH: *Into the Light*. Chris De Burgh (vocals, guitar); vocal and instrumental accompaniment. *Last*

Night; Fire on the Water; The Ballroom of Romance; The Lady in Red; Say Goodbye to It All; The Spirit of Man; and six others. A&M SP-5121 \$8.98, © CS-5121 \$8.98.

Performance: *Polished*
Recording: *Excellent*

Chris De Burgh is Britain's answer to Barry Manilow—a pleasant pop vocalist and a skillful songwriter and arranger who has a tendency to slip into melodrama and sentimentality. "Into the Light" is probably the most sophisticated and least sentimental album De Burgh has released in the U.S. to date, but it's still a bit much. The sound is up to the minute, brimming with pulsing electronic rhythms, eloquent guitar embellishments, and a generally well-toned muscularity with no rough edges anywhere—the sort of cheery, squeaky-clean pop the Moody Blues do so well.

De Burgh has a ballad singer's fondness for strong melodic lines—a distinct pleasure, although some of the uptempo songs tend to sound a bit hurried. But it's his lyrics that sometimes get him into trouble. You can't quarrel with him on technical grounds. His writing is precise, never lazy, and filled with inventive, often painterly images. But given half a chance, De Burgh will opt for the big scene and the grand gesture when a small, telling detail would have served just as well. And so a woman of surpassing beauty enters a crowded ballroom and absolute silence falls as she walks up to our hero and whispers, "Do you want to come with me?" Or a young man escapes across enemy lines and is reunited with his lover at a nursing station. Or a man and a woman having an affair tremble as they look at one another across a crowded room and imagine making love in an ancient fortress high above the city. Unless you're moonstruck or a compulsive reader of paperback romances, "Into the Light" can be... well, embarrassing. *M.P.*

DIO: *Intermission*. Ronnie James Dio (vocals); Vivian Campbell (guitar); Craig Goldie (guitar); Vinny Appice (drums); Jimmy Bain (bass); Claude Schnell (keyboards). *King of Rock and Roll; Rainbow in the Dark; Sacred Heart;* and three others. WARNER BROS. 25443-1 \$8.98, © 25443-4 \$8.98.

Performance: *Unparalleled*
Recording: *Memorable*

On the cover of this EP, recorded live, Ronnie James Dio stands slaying a giant worm (or maybe it's a dragon). Well, *trying* to slay one. It's too tall for the diminutive Dio to reach. On the back cover, Ronnie and the band, all ex-members of Rainbow and Black Sabbath, stand like a police lineup of hung-over Conans—except for Ronnie, who stands pointing threateningly. Now, is that any way to win friends?

Inside as well as outside, "Intermission" represents some kind of low-water mark for music—the *One Million B.C.* of heavy-metal. Ronnie Dio snarls

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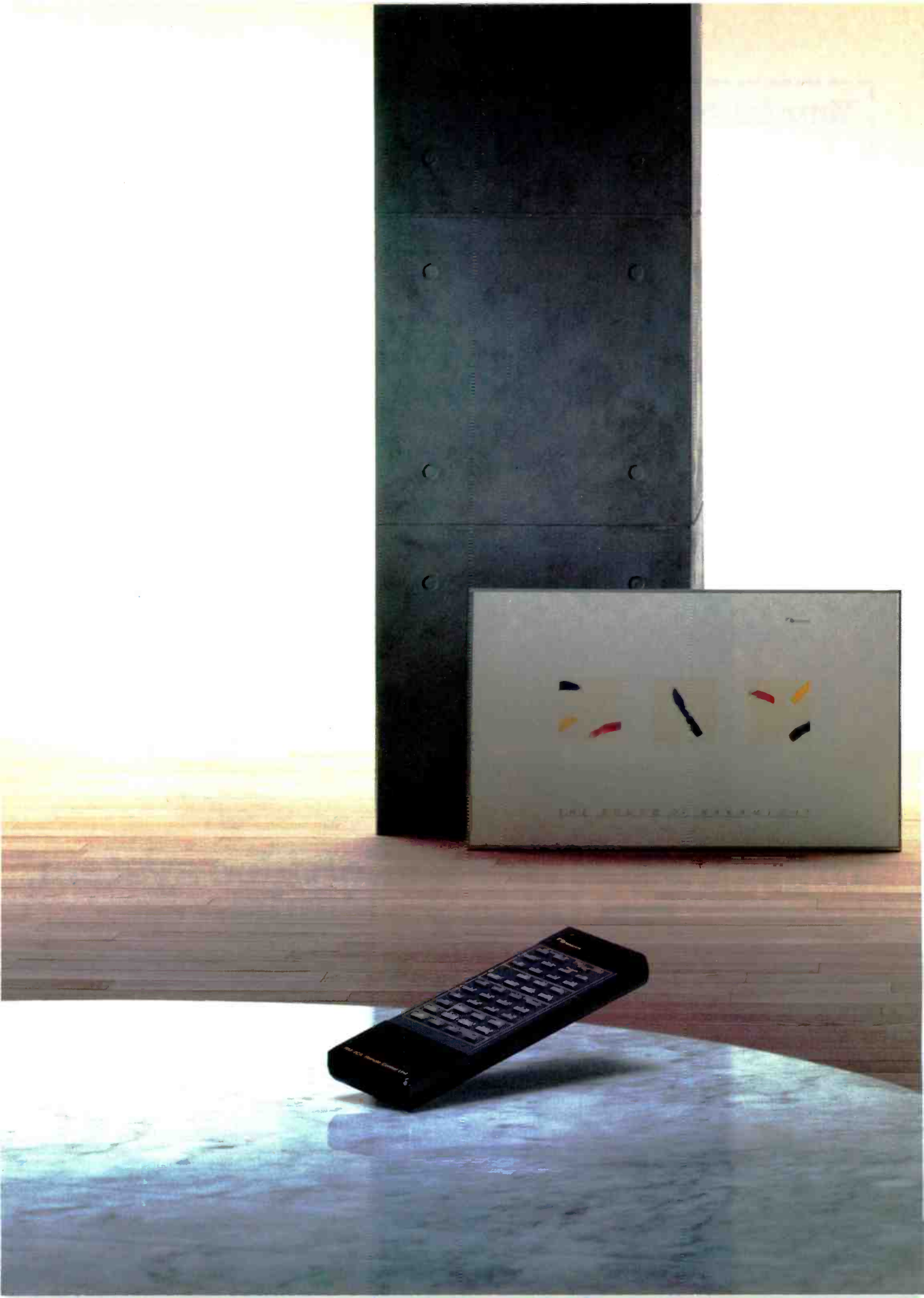
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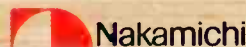
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his way through six tracks of mind-numbing, incomprehensible noise. His voice is an amazingly durable instrument considering the rough treatment it's given. If his mom heard him scream like this, she'd have a conniption. Meanwhile, the heavy-metal guitar bangs away with frightening predictability while Ronnie wails about blood-and-guts and rock-and-roll.

Perversely, I recommend that you buy this one. After all, anyone can make a mediocre record, but an album *this* bad doesn't come along every day. "Intermission" is an achievement in the truly awful. As such, it merits a place in any serious rock collection. *M.P.*

BOB DYLAN: *Knocked Out Loaded*. Bob Dylan (vocals, guitar); Tom Petty and the Heartbreakers (vocals and instrumentals); T-Bone Burnett (guitar); Al Kooper (keyboards); other musicians. *You Wanna Ramble; They Killed Him; Driftin' Too Far from Shore; Precious Memories*; and four others. COLUMBIA OC 40439, © OCT 40439, © CK 40439, no list price.

Performance: *Not his best*
Recording: *Okay*

They say you can't judge a book by its cover, but in the case of a record album—specifically, this latest effort by Bob Dylan—maybe you can. The first thing you notice about "Knocked Out Loaded" is perhaps the ugliest cover art to have graced a major artist's LP since Van Morrison's "Hard Nose the Highway." And if you can get past that and actually play the damn thing, you soon realize that the cover is, in many ways, the album's high point.

Actually, things aren't quite that bad. The eleven-minute *Brownsville Girl*, which Dylan co-wrote with playwright Sam Shepard, holds your interest despite some occasionally overheated Western imagery, and some of the bluesier throwaway tracks, particularly *You Wanna Ramble*, which reunites Dylan with *Like a Rolling Stone* organist Al Kooper, work up an appealing head of steam. But most of Dylan's new songs here sound as if they were written on automatic. The production, with its annoying over-reliance on chorus-girl back-ups, suffers from terminal woo-woo, and the tune that Dylan wrote with Carole Bayer Sager, *Under Your Spell*, is every bit as Beverly Hills greeting-card trite as you'd expect. Unless you're a fanatical Dylan completist, pass this one by. *S.S.*

JIMI HENDRIX: *Johnny B. Goode*. Jimi Hendrix (guitar, vocals); Billy Cox (bass); Mitch Mitchell (drums). *Voodoo Child; Johnny B. Goode; The Star Spangled Banner*; and two others. CAPITOL MLP-15022 \$5.98, © 4LP-15022 \$5.98.

Performance: *The one and only*
Recording: *Great for the times*

Jimi Hendrix released five and a half albums in the U.S. during his lifetime



Jimi Hendrix: electrifying

(six and a half in the U.K.). Since his death, more than forty albums of reissues, recompilations, and previously unreleased studio and live tracks have been released on domestic and imported LPs—most of them at best unnecessary and at worst unlistenable. "Johnny B. Goode," bringing together five electrifying and definitive Hendrix performances, is probably the exception. Recorded at the Atlanta Pop festival and in concert in Berkeley, California, they feature Hendrix's first Band of Gypsies trio (Billy Cox had replaced Noel Redding on bass, but Buddy Miles was still waiting in the wings). No one had ever played guitar like Hendrix—in spite of all the gimmicks and sleight of hand, his unorthodox, huge-fisted chordal playing was the most *melodic* guitar work of its time—and no one has played guitar like that since.

"Johnny B. Goode" is Hendrix without the self-indulgence that would prove his undoing. Even though it has the worst-looking jacket of any Hendrix reissue yet, this one's worth putting on your record shelf next to "Are You Experienced" and "Axis: Bold as Love" and "Electric Ladyland." *M.P.*

TEENA MARIE: *Emerald City*. Teena Marie (vocals, guitar, percussion, synthesizers); other musicians. *Emerald City; Once Is Not Enough; Lips to Find You; You So Heavy*; and four others. EPIC FE 40318, © FET 40318, © EK 40318, no list price.

Performance: *Mixing it up*
Recording: *Very good*

Whatever Teena Marie does, she does with a passion, and "Emerald City," her new album, is true to form. Yet it is a strange hybrid, with an opening side so raucously rockish that her vocals are all but buried beneath a barrage of thunderous instrumental effects. It's obviously what she wanted, since she wrote, arranged, and produced the al-

bum as well as doing most of the performing, both vocal and instrumental. It is not until the second side that she settles into a more satisfying musical groove. *Batucada Suite* is an utterly delicious samba with Brazilian percussion, and *Love Me Down Easy* cloaks her in a sort of sultry sensuality. The final cut, *Sunny Skies*, is a jazzy ballad to which she brings the most inventive vocal improvisation on the album. Teena Marie is so gifted that she is capable of doing just about anything she wants to, and with all its wildly veering directions, this set does hold your interest. You might not like everything she offers here, but none of it is dull. *P.G.*

VAN MORRISON: *No Guru, No Method, No Teacher* (see *Best of the Month*, page 102)

JEFFREY OSBORNE: *Emotional*. Jeffrey Osborne (vocals); vocal and instrumental accompaniment. *We Belong to Love; You Should Be Mine (The Woo Woo Song); Soweto; In Your Eyes; Room with a View*; and five others. A&M SP-5103 \$8.98, © CS-5103 \$8.98, © CD-5103 no list price.

Performance: *Sensational*
Recording: *Very good*

The essential appeal of any record from Jeffrey Osborne lies in the exceptional quality of his voice—a warm, resonant instrument that he uses with great expressiveness—and this latest one comes close to total realization of his potential. Admittedly, a few of the numbers offer more bluster than bliss, especially the title song, but most of the material is quality stuff. The range is startlingly broader than what we have come to expect from him, while the arrangements and instrumental accompaniments are absolutely resplendent. Best of all are the romantic ballads, and the best of these is *In Your Eyes*, which Osborne sings with extraordinary sensitivity and lustrous tone. Also appealing are *You Should Be Mine (The Woo Woo Song)* and a George Duke delicacy called *A Second Chance*.

The most surprising entry is *Soweto*, a protest song addressing the South African struggle against apartheid. Rhythmically insistent and searing in its message, it contrasts Osborne's assertive baritone with a children's chorus, creating a riveting tension. It is a daring number, serving notice that Osborne is not just another beautiful voice but a thoughtful man as well. *P.G.*

RED CLAY RAMBLERS: *It Ain't Right*. Red Clay Ramblers (vocals and instrumentals); other musicians. *It Ain't Right; Valley of the Dry Bones; Dust and Nothing Else; Merchant's Lunch; Old-Fashioned Girl*; and seven others. FLYING FISH FF-334 \$8.98.

Performance: *Eclectic fun*
Recording: *Good*

The Red Clay Ramblers, who have been carrying on (well, okay, *rambling*) since

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1972, recently got some well-deserved press when playwright Sam Shepard chose them as the featured musical performers in his Off-Broadway production of *A Lie of the Mind*. There's a lot more to the Ramblers than what they got to display there, however. College educated and near-musicological in their approach to old-time music, the five-piece band moves fluidly from blues to bluegrass to ragtime to gospel, with sojourns to straight country on command, and they play it all with uncommon, but never excessive, polish. In fact, one of the Ramblers' trademarks is that they've managed to preserve the loose-jointed *fun* of what old-time music is supposed to be.

If you've never heard these guys, you've got a treat in store. With the increase of retrograde hillbillies "discovering" their roots on a major label, the Ramblers, who hail from North Carolina, play the real snuff-and-such stuff. *A.N.*

THE SMITHEREENS: Especially for You (see Best of the Month, page 101)

SPARKS: Music That You Can Dance To. Ron Mael (synthesizers); Russell Mael (vocals); instrumental and vocal accompaniment. *Music That You Can Dance To; Rosebud; Fingertips; Change;* and four others. MCA MCA-5780 \$8.98, © MCAC-5780 \$8.98.

Performance: *Superstuffed*
Recording: *Saturated*

The Maels have been trying to sell out for so long that it's hard to remember when Sparks was seriously funny. "Music That You Can Dance To" is yet another of the nudge-nudge, wink-wink, machine-made dance parodies the brothers keep hoping will make the charts—and you can't even dance to all of it. The title track, which opens the album, has an enormous beat and lots of electronic, contrapuntal elbow jabs, and it could sound good on your next party tape. But it's all downhill from there. Ron Mael unloads a dumptruck full of synth on top of his brother's animated vocals, each new layer of sound careening wildly into the one preceding it to create an ear-splitting electromess, and the lyrics themselves have been reduced to the obvious, like "shopping malls of love." To their credit, Sparks can get some amazing sounds in the studio, but they also produce some amazingly ugly ones. If they could only learn to tell the difference. *M.P.*

THE STATLER BROTHERS: Four for the Show. The Statler Brothers (vocals); instrumental accompaniment. *Count on Me; You Oughta Be Here with Me; We Got the Memories; Forever;* and six others. MERCURY 826-782-1 \$8.98, © 826-782-4 \$8.98.

Performance: *The usual*
Recording: *Okay*

The reason the Statler Brothers' records aren't reviewed here very often is that

WINWOOD'S BACK

A LONG with Van Morrison, Steve Winwood is one of rock's great white soul singers. It's a mark of his unmistakable, distinctive sound that he can make an immensely popular record laced with the kind of fashionable horn arrangements that have propelled Phil Collins to the top of the charts, add singers like Chaka Khan and James Taylor, and run a dozen top session players in and out of the studio like substitutes in a football game, and still come up with an album as personal as his new "Back in the High Life." Winwood and lyricist Will Jennings tackle the big issues—religion, lifestyle, individualism and freedom, the inner self versus the public self—and manage to stay upbeat and optimistic about the whole thing.

"Back in the High Life" weds Winwood's sure sense of melody to gospel, r-&-b, African polyrhythm, and Philly soul grooves. It's *Lite Soul*, but Russ Titelman's production and the outstanding recording job bring out every instrument with a bite and clarity that are often spectacular. Beneath the bright but rather obvious synthesizer horns of *Higher Love*, for instance, is a jungle alive with ringing percussive sounds. When Winwood sings about "burning up on midnight oil" in *Freedom Overspill*, his voice is carried higher and higher on a rising Hammond organ chord, then pushed over the top by a nifty slide guitar fill furnished by Joe Walsh—a small but very exciting moment.

The thoughtful tone of the album is typified in the title cut, an old-timey hymn scored for mandolin, synthesizer, and drums in which Winwood admits, "My life ran on too fast/And I had to take it slowly/Just to make the good parts last." While having James Taylor do back-up vocals is almost like wearing a sign saying "sincere," there's something right about the way Winwood's

most of them sound pretty much the same. They've got their formula—four-part, gospel-based harmony applied to largely inoffensive, old-fashioned-sounding country tunes (and a pop oldie, of course)—and, by gosh, they're gonna stick with it, no matter what. The one good thing about this latest album is that they've cut down on the excruciating corn-pone that sneaks into so much of what they do. Still, there's nothing that original here, and "Four for the Show" turns out to be utterly forgettable. *A.N.*

ROD STEWART. Rod Stewart (vocals); other musicians. *Here to Eternity; Another Heartache; A Night Like This; Who's Gonna Take Me Home (The Rise and Fall of a Budding Gigolo); Red Hot in Black; Love Touch; In My Own Crazy Way; Every Beat of My Heart;* and



Lite Soul with bite and clarity

and Taylor's voices leapfrog one another at the song's end. There are lots of great moments like this on "High Life," among them the day-tripping synth break of *The Finer Things*, as though Winwood were running a hickory stick along a picket fence, and the Philly sound of *Split Decision*, a song that the O'Jays could have done a bang-up job with.

It doesn't seem possible that six years have passed since Winwood's "Arc of a Diver" and four years since his last album, "Talking Back to the Night." But it's great to have him back.

Mark Peel

STEVE WINWOOD: Back in the High Life. Steve Winwood (vocals, synthesizers, drum machine); vocal and instrumental accompaniment. *Higher Love; Take It As It Comes; Freedom Overspill; Back in the High Life Again; The Finer Things; Wake Me Up on Judgment Day; Split Decision; My Love's Leavin'.* ISLAND 25448-1 \$8.98, © 25448-4 \$8.98. © 25448-2 no list price.

two others. WARNER BROS. 1-25446 \$8.98, © 4-25446 \$8.98.

Performance: *Perfunctory*
Recording: *Very good*

In a way, it's appropriate that this Rod Stewart release is titled simply with the artist's name, for it reinforces the basically generic feel of the product itself. "Rod Stewart" is more or less interchangeable with all the other Rod Stewart albums over the last few years, and the soul, wit, and humanity that characterized his early work remains barely a memory. The format is familiar—a little Stones-like raunch, the usual fool-for-a-pretty-face romanticism, even a hit single (*Love Touch*, the thoroughly undistinguished theme from the recent Robert Redford movie *Legal Eagles*), all served up by a competent but faceless group of backing musicians. Only



Sylvia, Diane, and Vicky Villegas of the Triplets

on the album's final track, a lovely streetcorner-gospel version of John Lennon's *In My Life*, is there the slightest hint of involvement. S.S.

38 SPECIAL: *Strength in Numbers*. 38 Special (vocals and instrumentals). *Somebody Like You; Like No Other Night; Last Time; Once in a Lifetime; Just a Little Love*; and five others. A&M SP 5115 \$8.98, © CS 5115 \$8.98.

Performance: *Likable*
Recording: *Slick*

If 38 Special had come to our attention in, say, 1975, we probably would have hailed them as Keepers of the Flame. The band's basic formula—ringing guitars, memorable tunes derived from various Brit-Pop models, a dash of Southern soul, and near Cinemascope production—is so likable you almost don't mind that it *is* a formula, and back in the dog days of the Seventies that kind of no-nonsense rock was something of a lost art. These days, however, there are lots of better bands working the same basic territory, and 38 Special sounds somewhat simple-minded in comparison. Still, there are songs here—*Somebody Like You*, for example—that will stick in your head no matter how devoutly you wish they wouldn't, and the album, beautifully produced by Keith Olson, has a certain integrity that is hard to resist. These guys may be writing for radio play, but clearly they're also writing for themselves, which cannot be said of too many other bands of comparable commercial stature. File "Strength in Numbers" under Guilty Pleasures. S.S.

RICHARD THOMPSON: *Daring Adventure*. Richard Thompson (vocals, guitar); Jerry Scheff (bass); Mitch

Froom (keyboards); Mickey Curry (drums); other musicians. *A Bone Through Her Nose; Valerie; Missie; How You Let Me Down; Dead Man's Handle; Long Dead Love; Lover's Lane*; and six others. POLYDOR 829 728-1 \$8.98, © 829 728-4 \$8.98.

Performance: *Bracing*
Recording: *Excellent*

Richard Thompson returns here with a new album that, if not exactly sunny, will not make you want to slash your wrists the way his earlier exercises in morbidity and great guitar playing so often have. There are, indeed, some extremely bitter songs here, and one in particular, *Missie, How You Let Me Down*, is as heartbreakingly beautiful a study of faithless love as you are ever likely to encounter. Mostly, though, the songs reflect more wry cynicism than bleak despair, as in *Nearly in Love*, in which Richard can't decide if he's head over heels or just down with the flu. The combination of this almost positive outlook and a musical idiom that often suggests Celtic rockabilly makes "Daring Adventure" perhaps Thompson's most accessible album yet. Pick to click: *Valerie*, a masterly, roaring rocker with great lyrics about a girl friend's conspicuous consumption and a fabulous, stinging guitar blitz to top it off. S.S.

THE TRIPLETS: *Break the Silence*. Vicky, Sylvia, and Diana Villegas (vocals); instrumental accompaniment. *Boys; Message of Love; Win Your Love; Translate; It's a Crime*. ELEKTRA 60455-1 \$6.98, © 60455-4 \$6.98.

Performance: *Benatar clones*
Recording: *Messy*

The Triplets are a trio of quite attractive Joan Jet lookalikes whose homegrown

video, "Boys," placed first in MTV's Basement Tapes contest. Their prize was getting to make this EP—a Pat Benatar album without Benatar's cocksure, hip-slinging vocal power or the text-book AOR hooks and guitar fireworks Neil Geraldo pulls off. I hesitate to blame it all on the Villegas sisters (they *are* triplets, by the way), since the record was produced by Bernard Edwards (Chic and Power Station), perhaps the most overrated producer of our time. Everything he touches turns ugly. The music on "Break the Silence" probably sounds okay when you're watching the girls' video, but the record-buying public would have been just as well off had the Triplets won a date with ZZ Top instead of this recording session. M.P.

ROSIE VELA: *Zazu*. Rosie Vela (vocals, synthesizer); Donald Fagen (synthesizer); Walter Becker (guitar); Rick Derringer (guitar); other musicians. *Fool's Paradise; Magic Smile; Tonto; Sunday; Taxi*; and four others. A&M SP 6-5016 \$8.98, © CS 6-5016 \$8.98.

Performance: *Seductive*
Recording: *Excellent*

You know right off that somebody thinks Rosie Vela is something special. Her debut LP was produced by Gary Katz, the former producer of Steely Dan, who persuaded Donald Fagen and Walter Becker to come in as *sidemen*, for gosh sake. Vela, a Texan who grew up in Little Rock and later became a New York high-fashion model (no, I am not making this up), writes and arranges all her own stuff, which are jazz-based and alternatively flirty, pouty, sultry, and cool. Most of her songs are more montage of mood and feeling than anything else, though, leaning heavily on blues and percussive synthesizer riffs—the title tune, whose words are reproduced here, shows her to be an embarrassingly pretentious lyricist.

Regrettably, the sum total of this package is a collection of New Wave ditties that emerge as fleshless as stray dogs, since none of the songs deliver what they promise up front. Nevertheless, Vela puts on a good tease, and sometimes that's good enough. A.N.

WALK THE WEST. Walk the West (vocals and instrumentals). *Living at Night; Backside; Too Much of a Good Thing; Sheriff of Love; Think It Over*; and five others. CAPITOL/EMI ST-12494 \$8.98, © 4XT-12494 \$8.98.

Performance: *Goin' places*
Recording: *Very good*

Walk the West, one of the new rock-and-roll bands operating out of Nashville, comes striding upon the western-rock plateau with the impact of a smoking pistol. Creating an original rock-and-roll that is something of a cross between the dark and moody sensuality of the BoDeans and the beat-and-blues motif of the Beat Farmers, the four-piece band—all young sons of Nashville

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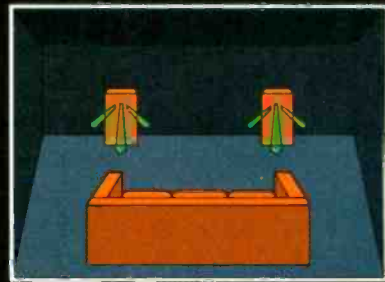
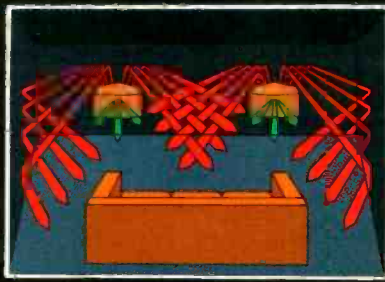


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session players and songwriters—write, play, and sing with a vision and maturity far beyond their years. The instrumentals, in particular, are so polished that I wonder if there are not uncredited musicians on board. (Who is the unnamed harmonica player, for example, who adds so much punch and flow?)

The album's principal asset, nevertheless, is the writing, which chronicles a young man's search for self in a decadent world ("Too much of a good thing ain't right," says one lyric) and draws from the motherlode of Dylan, Tom Petty, the Beatles, and the Byrds.

If the band really does have its country influences, as it claims to ("Hank Williams, Merle Haggard and Aerosmith," insists leader Paul Kirby), they have taught Walk the West to keep the songs simple, straightforward, and melodic. All in all, this is a debut of remarkable promise. *A.N.*

THE WHITEHEAD BROTHERS. Kenny and Johnny Whitehead (vocals and raps); instrumental accompaniment. *Can You Dig It; You Lift Me Up; I'll Always Love; Stylin'; Teenage Desire;* and four others. PHILADELPHIA IN-

TERNATIONAL ST-53028 \$8.98, © 4XT-53028 \$8.98.

Performance: *Fresh and appealing*
Recording: *Good*

The cover photo on the new album by Kenny and Johnny Whitehead shows two carefree teenage boys in jackets and sweat pants. While they are attractive and clean-cut, you might suspect this is just another tedious record by a couple of hip-hoppers making the empty sounds that dominate commercial black radio.

Wrong. The Whitehead Brothers are two of the most refreshing talents to make their way out of the vinyl jungle in many a season. Their youthful sound is firmly rooted in the best rhythm-and-blues tradition, yet they remain true to the spirit and energy of their emerging generation. They have drawn from both sources to create an impressive assortment of songs that shimmer with the impressionable excitement of adolescence, songs so carefully crafted and skillfully executed that it comes as a surprise to learn that Johnny is sixteen and his brother Kenny is only thirteen.

The Whiteheads didn't exactly come out of nowhere. Their father, John Whitehead, was half of the excellent r-&-b duo of a few years back known as McFadden and Whitehead. He wrote hits for groups like the O'Jays and Harold Melvin and the Blue Notes while introducing his sons to a rich musical heritage. That background is readily apparent in the boys' first recording.

The lyrics of *Teenage Desire* ring true in their innocence and are enhanced by the appealing voices of these two youths, who sing at least as well as any of the Jacksons did at a comparable age. There's no hype here. These are songs they have created themselves, from sweetly melodic ballads like *I'll Always Love* and *Don't You Know You Let Me Down* to the exuberant uptempo rhythms of *Jumped Out of My Skin* and *Stylin'*. It is a joy to hear talent of such promise at this stage: the future of black popular music seems somehow less bleak now than it did before. *P.G.*

DENIECE WILLIAMS: *So Glad I Know.* Deniece Williams (vocals); other musicians. *So Glad I Know; What You Do for Me; My Soul Desire; Wings of an Eagle;* and four others. SPARROW/CAPITOL SPR 1121 \$8.98, © SPC 1121 \$8.98.

Performance: *Heavenly*
Recording: *Very good*

Although Deniece Williams customarily includes an inspirational selection on each of her popular albums, this is the first time she has devoted an entire album to contemporary gospel music. I say "contemporary" because the message she conveys in her lyrics and her artistic intent are all that distinguish much of this music from her strictly pop offerings. As a result, "So Glad I Know" can be enjoyed by everyone,

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regardless of personal beliefs, and there is indeed much to savor.

Williams is in splendid voice, soaring heavenward with bird-like flutters, twists, and daring high notes. The album would be a pleasure for the quality of her singing alone, but she is accompanied by an impressive array of pop-oriented musicians who provide settings full of flash, fire, and rhythmic pulse that also command attention. Several selections would make excellent dance music, but Williams's purpose is best served in songs of a more direct inspirational nature, such as *Wings of an Eagle*, *My Soul Desire*, and *They Say*, the last of which she previously recorded with Philip Bailey on her "I'm So Proud" album for Columbia in 1983. This time Sandi Patti, an accomplished gospel singer, steps in to help Williams reshape the song with equal intensity. All told, this one simply should not be missed. P.G.

ROBERT WYATT: *Old Rottenhat*. Robert Wyatt (vocals, drums, keyboards, percussion). *Alliance; The United States of Amnesia; East Timor; Speechless; The Age of Self*; and five others. GRAMAVISION 18-8604-1 \$9.98, © 18-8604-4 \$9.98.

Performance: *Reflective*
Recording: *Simple*

Robert Wyatt can't carry a tune, his songs sound like the work of a Hare Krishna writing for Mel Tormé, and if you play his records for guests, you're not likely to entertain many repeat visitors. But listening to "Old Rottenhat" is good for you—like listening to an irascible old eccentric who's somehow got things figured out better than you do. Wyatt was a founding member of the Sixties jazz-rock group Soft Machine and one of the prime movers in the British progressive movement that produced Gong, Henry Cow, Hatfield and the North, and, most notably, Virgin Records.

Recorded in 1984 and 1985 and available in the U.K. for some time, "Old Rottenhat" is a difficult but strangely engaging record. Wyatt plays all the instruments himself—chiefly percussion, synth, piano, and organ. What he lacks in technique (and he lacks a good deal), he makes up for in utter conviction. The music is a strange hodgepodge of Eastern scales, jazz ballads, and drone music, and Wyatt takes most of it at a pretty slow pace. He frequently sounds as though he's still working a song out at the keyboard.

Nonetheless, he reaches levels of feeling that lots of bands wouldn't even understand, as on *Gharbzadegi*, a chant based on a simple piano figure repeated over and over again with what amounts to heartbreaking, totally unwarranted hopefulness. Wyatt's songs take on the art establishment, American imperialism, the rise of a new middle class and the decline of the working class, and media freedom and manipulation, but this is basically the voice of a lonely

man whose perspective was shaped by isolation. His vision may be more acute, but it's much sadder too. By the time the final track rolled around—*P.L.A.*, whose lyrics are simply "Poor little Alfie, trying to draw / Poor little Alfie, trying to sleep"—I found myself wishing Wyatt hadn't been alone when he recorded this album, that he'd at least had the company of other musicians. This isn't a rock record. It's a very private revelation that's disturbing and painful, and somehow a privilege to share. M.P.

NEIL YOUNG: *Landing on Water*. Neil Young (vocals, guitar, synthesizer); Steve Jordan (drums, synthesizer, vocals); Danny Kortchmar (guitar, synthesizer, vocals). *Weight of the World; Violent Side; Hippie Dream; Bad News Beat*; and six others. GEFEN GHS 24109 \$8.98, © M5G 24109 \$8.98.

Performance: *Odd*
Recording: *Stark*

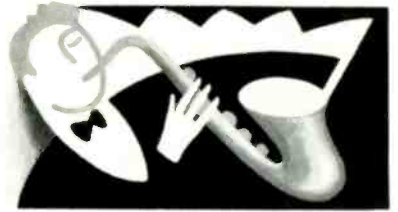
Unlike Neil Young's other recent albums, which seemed to imply that you didn't have to take them seriously if you didn't want to, "Landing on Water" takes itself very seriously, what with Young crooning about such subjects as carrying the weight of the world on one's shoulders and the end of Sixties idealism. But ironically, and probably unintentionally, it's the funniest of the bunch. Which is to say, it's a dumb album, for all the return-to-form hype it's been getting.

It's a largely electronic effort, and it tries so hard to sound modern that when Young isn't center stage, it could almost pass for warm-up sessions by Tears for Fears. The dirge-like songs (nothing new there, actually) are mostly collections of extremely cornball blues riffs tarted up with studio effects in a strangely stark sonic environment, then overlaid with Young's trademark dog-in-hat vocals and whiplash guitar. For all the synthesizer hoo-hah, the strategy isn't all that different from Young's more familiar stuff with Crazy Horse—to suggest a crank crying in the wilderness.

The trouble is, a crank in the wilderness merely sounds silly with this kind of high-tech aural backdrop. Whether Young is kvetching about his personal demons (*Violent Side*) or the dehumanizing effects of television (*Pressure*), this time out he seems less of a cultural observer and more like a Whoopi Goldberg takeoff. To paraphrase Oscar Wilde, you would need a heart of stone not to laugh.

In fairness, though, at least one of the songs here, *Touch the Night*, catches Young on a good day, and it features some pretty impressive guitar noodling. I suppose you also have to give "Landing on Water" points for sheer eccentricity. Mostly, however, I'm reminded of a friend's comment on Neil Young some years ago: "He may be a bozo, but he's such a great bozo." On this album, unfortunately, he's just a bozo. S.S.

JAZZ



DAVE BRUBECK: *Reflections*. Dave Brubeck (piano); Bill Smith (clarinet); Chris Brubeck (electric bass, bass trombone); Randy Jones (drums). *A Misty Morning; Blues for Newport; My One Bad Habit; We Will All Remember Paul*; and four others. CONCORD CJ-299 \$8.98, © CJ-299-C \$8.98.

Performance: *Very Brubeck*
Recording: *Excellent*

Dave Brubeck's sixth Concord album, "Reflections," conjures up images of the Brubeck sound that went to college over thirty years ago. Let me hasten to add, however, that the album only partly reflects the past: the present is also strongly represented, and the blend is good. Anyone whose ears remain tuned to the rhythmic excitement of *Balcony Rock* and *Blue Rondo à la Turk* of the Fifties might find the current quartet relatively tame, but there was always a lyrical side to Brubeck, and that—as several selections here demonstrate—is an aspect of his music that time has enhanced. C.A.

RODNEY FRANKLIN: *It Takes Two*. Rodney Franklin (keyboards); other musicians. *Motion; Look What's Showing Through; Broken Wings; The Eagle and the Condor; Rollin' in Our Love*; and three others. COLUMBIA FC 40307, © FCT 40307, no list price.

Performance: *First-rate fusion*
Recording: *Excellent*

Fusion has one of its best friends in the composer and keyboard artist Rodney Franklin, who's found the perfect balance between electronic techniques and more traditional instrumentation. His creations are usually built on a foundation of sturdy contemporary rhythms, but he mixes them far more interestingly than most and builds up complex structures that are musically substantive and melodically inviting. The instrumental selections here range from the explosive insistence of *Motion*, in which Jeff Lorber and Michael Columbia join Franklin in pulling out all stops on a battery of synthesizers, to the lilting seduction of *Broken Wings*. On the last track, *Let There Be Peace*, Franklin returns to his first instrument, acoustic piano, for some semi-classical ruminations. *Look What's Shining Through* and *Rollin' in Our Love* are vocals in a lighthearted pop vein, but *My Wish*, another plea for peace, has inspirational overtones. *The Eagle and*

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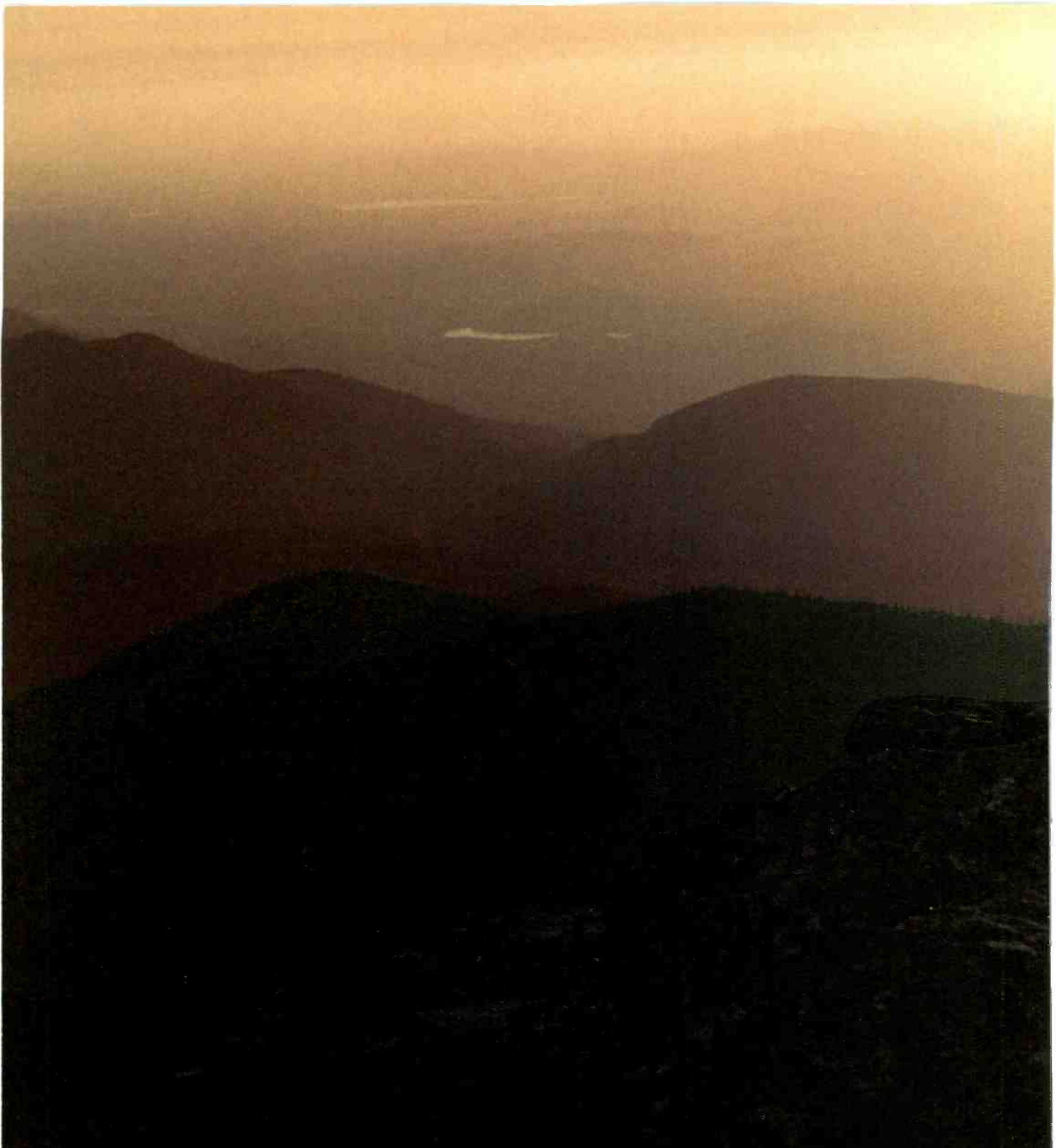
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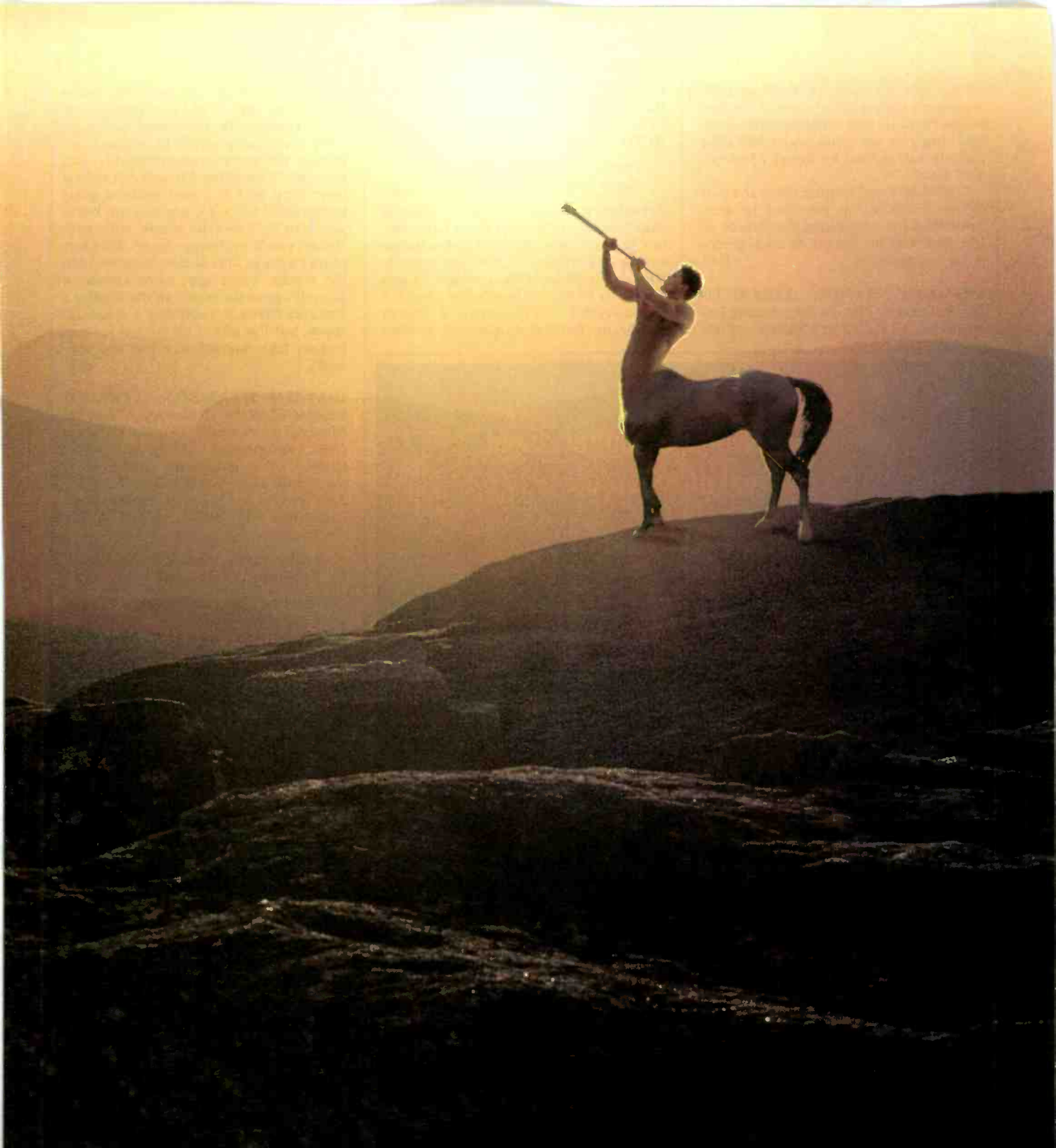


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the *Condor*, a national anthem of quite a different sort, is simply one of the best songs Franklin has written, with lyrics that linger in the mind and a haunting melody highlighted by Frank Musker's lead vocals.

"It Takes Two" is quite likely the best album Franklin has recorded to date, indicating his continuing fulfillment of the potential he hinted at as a precocious youngster. P.G.

FREDERIC HAND'S JAZZANTIQUA. Frederic Hand's Jazzantiqua (instrumentals). *Rose Liz; Chaconne; Toby*

and *Lynn; Lady Carey's Fantasy*; and three others. SKYLARK/RCA AMLI-7126 \$9.98, © AMK1-7126 \$9.98, © RCD1-7126 no list price.

Performance: *Mood olio*
Recording: *Excellent*

Translating actual classical material into the jazz language is not a new idea, nor is applying a blend of Renaissance and Baroque styles to new jazz compositions. The latter is what we hear in this album by Frederic Hand's (do I smell a pseudonym?) Jazzantiqua, a sextet combining flutes and lutes with synthe-

sized instruments—the better to obtain the desired mix of old and new, I suppose. Technically, the sound is fine on both the analog and CD releases, although the latter, understandably, has the edge. The music? It will not offend your ears, and it might make a good background for a TV production, but if you like to listen to music with substance, you'll be disappointed. This sort of mix always falls somewhere between the cracks. Years ago, when Gershston Kingsley gave the music of the Beatles a Baroque flavor, it worked as a delightful spoof, but I'm afraid Hand and his colleagues take themselves a little too seriously. C.A.

DONALD HARRISON, TERENCE BLANCHARD: *Nascence.* Terence Blanchard (trumpet); Donald Harrison (alto saxophone); Mulgrew Miller (piano); other musicians. *Guardians of the Flame; Let's Go Off; She's Out of My Life; Heritage Call*; and three others. COLUMBIA BFC 40335, © BFT 40335, no list price.

Performance: *Excellent*
Recording: *Very good*

Considering the artistic success of their Concord Jazz albums, it was only a matter of time before a major label snapped up the young team of Terence Blanchard and Donald Harrison. I suppose Columbia is looking to repeat the success it has had with Wynton Marsalis, and this duo certainly has the talent for it. They share with Marsalis their youth, a New Orleans origin, and tenure with Art Blakey. They don't play Haydn on the side, but they do outdo Marsalis in the jazz department, and this quintet date is superb—their best recorded effort yet. Both leaders are in top form, exhibiting the same fresh approach in their compositions that marks their playing. I particularly recommend Blanchard's *Tacit Approval* (of *Desmond's Plight*) and Harrison's *Guardians of the Flame*, but the entire album is alive with creative vitality. C.A.

WOODY HERMAN: *50th Anniversary Tour.* Woody Herman and His Big Band (instrumentals). *What's New; Central Park West; Blues for Red; Fried Buzzard; Epistrophy*; and three others. CONCORD JAZZ CJ-302 \$8.98, © CJ-302-C \$8.98.

Performance: *Eternal flame*
Recording: *Excellent remote*

Ten years ago, Woody Herman celebrated his fortieth anniversary as a band leader with a concert at Carnegie Hall. It was an exciting evening that united a new Herman band with distinguished members of past Herman Herds. A cheering crowd even threw money at the feet of Jimmy Giuffre, Stan Getz, Al Cohn, and Zoot Sims during their rendition of the famous *Four Brothers*.

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to his present band. Ten years from now, we will probably still remember the star-studded 1976 concert, which appeared on a Gryphon double album, and it may take some digging around in the old memory bank to come up with "50th Anniversary Tour," but that is only because we are essentially nostalgic creatures. There is actually a lot to enjoy and remember on the newer album. The band is well oiled, the arrangements are eventful, and the soloists are inspired. While the tunes aren't the same as those from past Herds, the spirit with which they're played should trigger something in an old fan's memory. C.A.

SHELLY MANNE TRIO: In Zurich. Shelly Manne (drums); Frank Collett (piano); Monty Budwig (bass). *La Valse; Good Bait; All of You; Solar; My Foolish Heart; Song from "Moulin Rouge"/La Vie en rose/Chloe/Nardis.* CONTEMPORARY ● 14018-1 \$8.98, ● 14018-4 \$8.98.

Performance: *Impressive*
Recording: *Excellent*

Having, like so many of us, lost faith in the way the National Academy of Recording Arts and Sciences awards the Grammys, drummer Shelly Manne decided one year not to renew his membership in the organization. "Why have we not received your dues?" asked the head of the Los Angeles chapter. "Because this year I decided to support the blind rather than the deaf," Manne replied.

Manne first reached a wide audience in 1956, when he collaborated with André Previn and Leroy Vinnegar on a trio album on the Contemporary label that featured the music from *My Fair Lady*. The album started a trend. Soon everybody was doing a jazz version of this or that show, but few other efforts could compare with Manne's, for it captured the flavor of the Lerner and Loewe classic beautifully while retaining the group's integrity as a jazz unit.

Now, almost exactly thirty years later, here is another trio album by Manne, again on Contemporary. Recorded at a 1984 club date in Zurich, Switzerland, it has no particular theme, but it offers a Shelly Manne Trio interpreting some fine songs with grace and perception. The rapport between Manne, pianist Frank Collett, and bassist Monty Budwig is extraordinary, and this album, among the last of Manne's live recordings, is a fine example of his musicianship, taste, and, considering his instrument, remarkable restraint. C.A.

THELONIOUS MONK AND HERBIE NICHOLS. Thelonious Monk (piano); Gigi Gryce (alto saxophone); Percy Heath (bass); Art Blakey (drums). *Nica's Tempo; Brake's Sake;* and two others. Herbie Nichols (piano); Chocolate Williams (vocals, bass); possibly Danny Barker (guitar); Shadow Wilson (drums). *Who's Blues; Nichols and*

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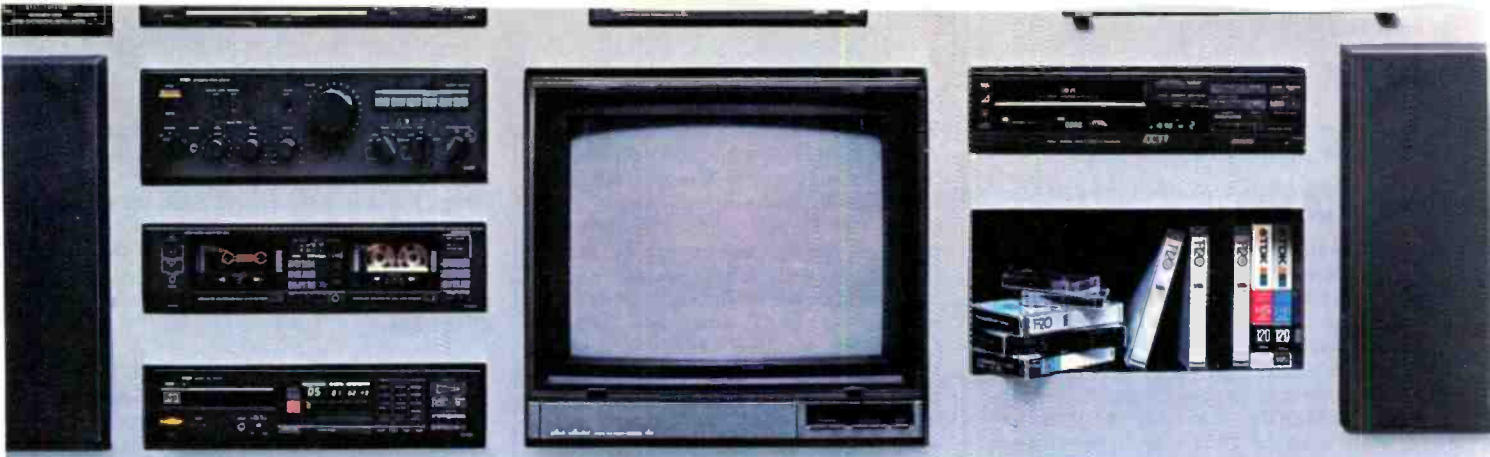
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Performance: *Golden nuggets*
Recording: *Fine mono*

This reissue album is devoted in equal measure to two jazz players who had little in common other than that they both played the piano and came out of the postwar transition period that led to modern jazz. Why they have been combined here is anybody's guess. Thelonious Monk's marvelously visionary work with the 1955 Gigi Gryce Quartet bears little stylistic relationship to the

flip side's relatively traditional 1952 session with Herbie Nichols and singer/bassist Chocolate Williams and His Chocolateers, but I enjoy both.

While it is now clear that Monk's music never was as bizarre as many thought, at one time some people would have considered the four selections here to be "way out," especially *Gallop's Gallop*. What they are is extraordinary. With Percy Heath and Art Blakey completing the quartet, the group was awesomely rich in talent, and it performed accordingly.

Herbie Nichols never reached the lev-

el of fame that Monk did, and comparing their sides of this album makes it easy to understand why. The Nichols tracks are unadventurous, even somewhat predictable. They are typical of the Forties' slick, pleasant, middle-of-the-road jazz fare, only occasionally hinting at what were then the "modern" sounds of the day. C.A.

GERRY MULLIGAN AND SCOTT HAMILTON: *Soft Lights and Sweet Music.* Gerry Mulligan (baritone saxophone); Scott Hamilton (tenor saxophone); Mike Renzi (piano); Jay Leonhart (bass); Grady Tate (drums). *Noblesse; I've Just Seen Her; Port of Baltimore Blues; Ghosts;* and three others. CONCORD JAZZ CJ-300 \$8.98, © CJ-300-C \$8.98, © CCD-4300 \$16.98.

Performance: *Reedy and right*
Recording: *Excellent*

Take an original like Gerry Mulligan, add the Hawkins/Webster-flavored tenor of Scott Hamilton, lay it on a fine rhythm section, and sprinkle liberally with Mulligan compositions. It's a good recipe, and it works on this new Concord album. The misleading title is taken from one of the tunes, an Irving Berlin song, but—with one exception, *Noblesse*—the tempo and mood of this album are neither soft nor sweet. You might try dancing to it, however. C.A.

JIMMY SMITH: *Go for Whatcha Know.* Jimmy Smith (organ); Stanley Turrentine (tenor saxophone); Kenny Burrell (guitar); other musicians. *No Substitute; Fungii Mama; Bass Face;* and three others. BLUE NOTE © 85125-1 \$8.98, © 85125-4 \$8.98.

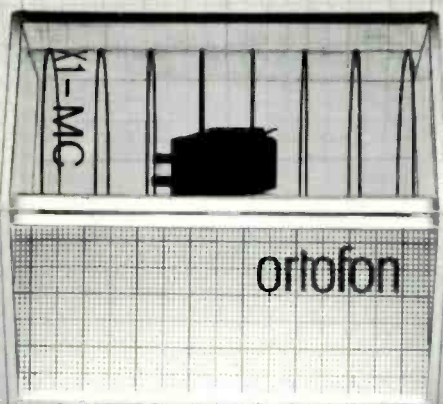
Performance: *Infectious*
Recording: *Excellent*

When Jesse Crump and Fred Longshaw lent harmonium accompaniments to Ida Cox and Bessie Smith on now-classic Twenties recordings, the organ was not considered a jazz instrument. Later, Fats Waller and Count Basie took it into the Swing Era, Wild Bill Davis picked it up from there, and Bill Doggett rode it to the fringes of rhythm-and-blues. It was Jimmy Smith who explored the instrument's full potential, brought it into the modern jazz arena, and launched a fad that had pianists all over the country switching instruments.

Smith's rise to the top began in 1956, with a series of Blue Note albums, and it is no coincidence that his increasing popularity paralleled that of the organ itself. In 1962, when he moved to Verve and began making highly commercial recordings with big-band accompaniments, Smith reached successfully into the broader pop market.

I always preferred the more intimate settings of Smith's early years at Blue Note, so I applaud the rejuvenated label's decision to bring him back to square one. Well, not exactly square one, for "Go for Whatcha Know" teams Smith with guitarist Kenny Burrell and

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**CARVER TUNER TECHNOLOGY
TAKES TO THE ROAD.**

Each deck employs the same Asymmetrical Charge-Coupled FM Detection circuitry as Carver's revolutionary TX-11a home tuner, along with an ingenious automatic computer logic-controlled antenna switching system that further vanquishes multipath distortion.

In point of fact, no other autosound tuner/cassette decks in the world — regardless of price — even begin to approach the TX-Seven and TX-Nine's ability to maintain a hiss-free,

glitch-free, interference-free FM listening environment in your car.

Both also possess a multitude of other useful, state-of-the-art features which will recommend them to the most discriminating autosound audiophile.

COLLIDING WITH MULTIPATH DISTORTION.

By its very definition as a moving reception point, a car's FM tuner constantly falls prey to signal reflections from hills, skyscrapers, bridges and even other vehicles. These extra phase modulating signals trick conventional tuners into producing audible sounds we call multipath.

Startling outbursts of clicks, pops, "picket fencing" and other rude and indescribable sounds.

The trouble is, by its very nature, multipath distortion cannot be cured by conventional circuit "improvements." In fact, the better an autosound tuner is, the more faithfully it is deceived into converting phase modulation into ghastly-sounding interruptions in your favorite station.

COMPUTER LOGIC-CONTROLLED DIVERSITY ANTENNA SWITCHING DRIVES AROUND MULTIPATH.

One way to get temporary relief from interference at home is to move the antenna around slightly. That is in effect what the Carver TX-Seven and TX-Nine do with sophisticated circuitry in your car. Instead of physically moving one antenna, they turn your rear defroster into a second *separate antenna*, 180 degrees out of phase with the first. When multipath occurs, a special smart circuit automatically switches (at the speed of light) to the other antenna, automatically correcting phase and eliminating the multipath before you ever hear it. In serious cases, the circuit actually uses both antenna inputs at once, deriving a signal through sum and difference principles.

ASYMMETRICAL CHARGE-COUPLED FM DETECTION CIRCUITRY BRINGS IT ON HOME.

What little multipath distortion gets through the TX-Seven and TX-Nine's unique smart antenna system runs headlong into the remarkable tuner innovation *High Fidelity Magazine* described as "distinguished (by) its ability to pull clean, noise-free sound out of weak or multipath-ridden signals."

It specially treats the critical, multipath-prone left-minus-right (L-R) signal with a Charge-Coupled circuit that detects "dirty mirror image" signals and cancels them before they can reach your ears. Then the Leading Edge Detector circuit processes the final 5% of the L-R and interleaves it with the tuner's receiver matrix.

Alone, without antenna diversity switching, the TX-Seven and TX-Nine's Asymmetrical Charge-Coupled FM Detection Circuit

delivers a *net noise and distortion reduction of 92.9%*. Together, they set a new standard for clear, clean FM autosound reproduction.

THE MULTIPATH MARATHON: REAL WORLD CONFIRMATION IN THE MISTS OF THE NORTHWEST.

Bob Carver is both a theorist and a practical inventor. Circuits that work on paper get exhaustively tested in the field before release.

So he assigned a hapless engineer to map out the ultimate multipath-ridden route for confirmation of the TX-Seven and TX-Nine's special circuitry. With mountains, hills, huge evergreen trees, skyscrapers, large steel bridges, good robust traffic jams and a few assorted six-story-tall Boeing hangars, it didn't take long to map out a 6-mile course that could regularly deliver at least *287 separate multipath occurrences*.

Engaging the Asymmetrical Charge-Coupled FM Detection circuit and automatic antenna switching reduced occurrences to an average of *two* during the same 6-mile course while listening to the same stations!

Although results may vary in your locale, the same 90+% reduction in multipath has been confirmed in other widely diverse portions of the U.S.: The TX-Seven and TX-Nine work, and work well.

OTHER REMARKABLE TUNING FEATURES, TOO.

First, the TX-Seven and TX-Nine also receive Long Wave and Short Wave stations. And of course, both tuner/cassette decks have plenty of random presets... you can tune any fifteen AM, FM, SW or LW stations quickly for instant recall. Plus auto-scan and manual tuning.

But they also have a system that makes setting up all fifteen presets virtually instantaneous. Just press the button marked BEST and the tuner's logic circuitry will *automatically select* the fifteen cleanest, strongest signals and lock them in on the presets!

And that's *in addition* to your fifteen individual random presets.

As with all Carver products, the TX-Seven and TX-Nine do not sacrifice ease of use for useless, complicated frills. Instead, they answer every possible need without resorting to elf-sized buttons or glitzy flashing light displays.

Their metal-compatible, Dolby® NR, auto-reverse cassette sections rival any in the world. Both the TX-Seven and TX-Nine have separate bass, treble, balance and loudness

and four-way fader controls and a full-function LCD display with night illumination.

All operations are signaled with a gentle "beep" that keeps your eyes on the road, not on the compact, ergonomically-styled deck.

There's even a security code system that renders the TX-Seven or TX-Nine inoperable to anyone but you (and a window sticker to impart this discouraging information to others).

Or, if you prefer, use the quick removal system that slips out your TX-Seven or TX-Nine in seconds for storage in trunk or house.

THE BEGINNING OF THE PERFECT AUTOSOUND LISTENING ENVIRONMENT.

Out of the hundreds of tuner/cassette models currently available, only the TX-Seven and TX-Nine deliver home-stereo quality FM in your car. They achieve it with unique technology. And they are built to outlast your car, no matter what kind of climate you live in.

Coupled with a clean amplifier, such as The Carver M-240 Car Amplifier and state-of-the-art speakers, your ability to transform your car into a concert hall is almost unlimited.

We urge you to audition the TX-Seven and TX-Nine at your Carver dealer soon. They can put you in the driver's seat of a unique, interference-free musical experience.



THE TX-SEVEN AND TX-NINE

TUNER: ♦ Asymmetrical Charge-Coupled FM Stereo Detector ♦ Automatic Computer-Controlled Diversity Antenna Switching ♦ AM, FM, Long Wave and Short Wave Bands ♦ 15 Random Presets ♦ BEST Circuit for Auto-Selection of 15 Strongest Stations (in addition to 15 individual presets) ♦ Preset Frequency Auto-search ♦ Auto-scan Tuning ♦ Manual Tuning ♦ LCD Frequency Read-out
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SPECIFICATIONS: ♦ Tuner S/N: -7.6dB ♦ S/N: -65dB with Dolby B NR: 7.0dB with Dolby C NR ♦ Tape Frequency Response 20 Hz - 15 kHz ♦ Dimensions: 180mm W x 51mm H x 160mm D (DIN mount)

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MUSICAL

ACCURATE

tenor saxophonist Stanley Turrentine (among others), a truly winning combination of talent. On the album's title tune Smith and Burrell demonstrate their affinity for the blues, making way for Turrentine to lock it into memory with an extended solo. It works. *C.A.*

SONNY STITT: *Symphony Hall Swing.* Sonny Stitt (alto and tenor saxophones); Fletcher Peck, Dolo Coker (piano); John Simmons, Edgar Willis (bass); Jo Jones, Kenny Dennis (drums). *They Say It's Wonderful; Blues for Yard; Harlem Nocturne; Why Do I Love You;* and five others. SAVOY JAZZ © SJL-1165 \$8.98.

Performance: *Routine*
Recording: *Fine mono*

Of the twelve cuts on "Symphony Hall Swing," four appear in duplicate takes—well, not *exact* duplicates, but close enough to make this release of Sonny Stitt material from the old Roost label an item for the serious collector and scholar rather than someone looking for musical enjoyment. There *are* noticeable differences in the versions of *Blues for Yard*, and the tempo *does* vary from take to take, but most listeners will get the feeling that the turntable is stuck in the repeat mode. I mean, you really have to listen very closely to distinguish a take from its alternate.

If you are a Sonny Stitt fan, however, this set of 1952 and 1956 quartet sessions is a must, mainly because some of the material has not previously been released. Stitt plays tenor on one side and alto on the other but neither with much inspiration. In the Sixties he became a master of let's-get-it-over-with affairs like this, euphemistically called "blowing sessions." These tracks indicate that he got an early start. *C.A.*

DAVE VALENTIN: *Light Struck.* Dave Valentin (flute); other musicians. *Miss V; Can't Change My Heart; Prelude to a Kiss; The Village; AM-FM;* and three others. GRP ● 1028-1 \$8.98, © 1028-4 \$8.98.

Performance: *Linear*
Recording: *Excellent*

Dave Valentin's new album is a plodding bit of predictable background music that will probably soon turn up in your favorite elevator. Valentin is a fine musician, and there are moments here when he appears ready for take-off, but he is hopelessly grounded by inferior accompaniments and arrangements. Pianist Bill O'Connell contributes three trite tunes and plays with all the soul of a robot. The four percussionists sound like one Casio unit, bassists Lincoln Goins and Francisco Centeno have been listening to too many TV sound-

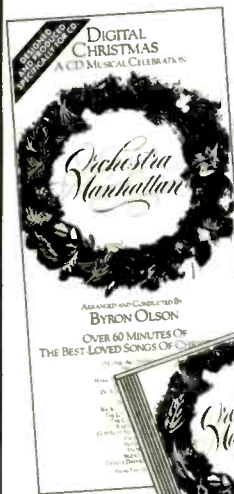
tracks, and Angela Bofill delivers Ivan Lins's *Can't Change My Heart* in a water-thin monotone. I'm getting off on the next floor. *C.A.*

WEATHER REPORT: *This Is This.* Weather Report (vocals and instrumentals). *Face the Fire; China Blues; Consequently; Update;* and four others. COLUMBIA FC 40280, © FCT 40280, © CK 40280, no list price.

Performance: *Stable weather*
Recording: *Very good*

"This Is This" is the fifteenth Weather Report album since 1971, when the group was formed by pianist Joe Zawinul and saxophonist Wayne Shorter. In the beginning, its fusion of electrified instruments and acoustic know-how was quite often exciting, and it spawned a rash of imitations—which, from a jazz viewpoint, range from the decidedly awful to the mildly interesting. Many people will disagree with me, but I believe that the fusion explosion ignited by Weather Report and Miles Davis is in large measure responsible for the stagnation of jazz, though perhaps they only expedited the process. As for Weather Report itself, the new album lacks the bite that Shorter used to give the group. "This Is This" is yet another well-crafted entry from the masters of fusion. And that is that. *C.A.*

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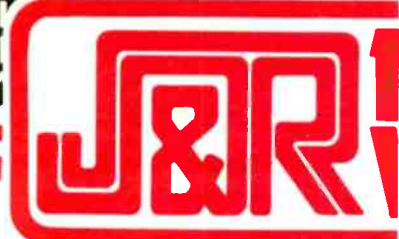
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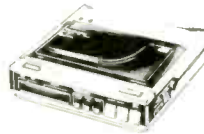
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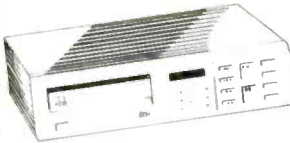
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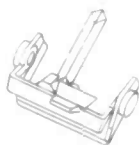
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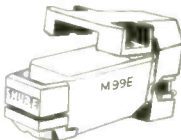
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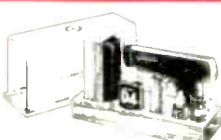
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CIRCLE NO. 39 ON READER SERVICE CARD

by Alanna Nash

THE morning after his two sold-out showcase appearances in Nashville, country/rockabilly artist Steve Earle is being made up for a television interview in a studio off Music Row.

"Oh, boy, I'm a lovely shade of green," says Earle, admittedly hung over and "industrial-strength nauseous." Dressed in jeans and a black T-shirt with the sleeves rolled greaser-style, Earle throws a look at his publicist and smiles a capped-tooth grin. "I'm doing my Keith Richard impersonation today," he cracks.

Although Earle insists that he's a country singer, he looks more like John Cougar Mellencamp than Porter Wagoner. Earle's MCA debut album, "Guitar Town," a stunning synthesis of country, rockabilly, bluegrass, and root-level rock-'n'-roll, has earned him glowing critical reviews and respect not only from the country audience but from some of the biggest names in rock. Mellencamp now performs *Guitar Town* in his concert set, and, according to *Billboard*, Earle's LP was one of two that Bruce Springsteen bought on a recent trip to the record store.

Yet, as is often the case, before the showcase concerts—where Earle and his longtime band, the Dukers, performed "Guitar Town" in its entirety—the thirty-one-year-old singer-songwriter was hardly a prophet in his own land. In fact, a number of industry honchos who attended the first Earle performances came, according to one publicist, "to see if he could really pull it off."

After that night, however, even Nashville had to agree with reviewers in New York, Houston, Los Angeles, and Atlanta who said that Earle is one of the most exciting—and perhaps important—new artists of the decade. Certainly he is the most promising of his genre since Joe Ely in the Seventies.

"Yeah," Earle would say a couple of hours later, at lunch at a West Nashville eatery. "Things are startin' to look pretty good for a change."

It was, however, a long time coming, since Earle has been bouncing around Nashville off and on for twelve years now without attracting much attention as an artist. From 1982 to 1985 he cut some rockabilly tracks for Epic and the independent LSI label, showing up in his jacket photos in pink-and-black outfits with string ties. Like the photographs, the early records never seemed quite "real," sounding more like the product of a record-company hunch that if the Stray Cats could do it, Nashville could too. But at the same time Earle allowed himself to be shrink-wrapped and delivered to the public, he



STEVE EARLE

Songs about Americans that are clear, concise, funny, and heartbreaking

had begun to build a name around town as a writer of merit—even if the early records failed to show it.

With "Guitar Town," however, Earle lives up to that reputation, proving himself to be a singer of far greater depth and sensitivity than any of his previous records hinted. In a voice that recalls the wry, plaintive sparseness of John Prine and the tender tough-guy bravado of Mellencamp, Earle moves through the personal sagas of small-town dreamers, big-love losers, and day-to-day existers hanging on by their fingernails and praying for change.

All ten songs in the album deal, in one way or another, with the lure and the loneliness of the road and with the hope, the disappointment, and the salvation it brings. There's the trucker in *Guitar Town* who couldn't make it as a country singer but loves the music his steel belts make on the asphalt, the gas-pump attendant of *Someday* who

spends his life counting out-of-state plates, the Southerners who take the *Hillbilly Highway* north to find work in the factories, and the father who calls home to talk to the *Little Rock 'n' Roller* who is growing up without him. On the whole, the songs paint a bleak portrait of white working-class America. But most of them are also more autobiographical than they seem.

Born in Virginia, where his father was stationed in the Army (his Texas grandfather sent a can of Lone Star dirt to be placed under the delivery table so the boy could be close to his roots), Earle grew up in San Antonio under the spell of what would become his two main influences: the music his Uncle Nick hammered out of an old guitar and the Elvis Presley records he started buying in the first grade.

At fourteen, Earle ran away from home to play music in Houston, eventually hooking up with such songwriters as Townes Van Zandt and Richard Dobson—performers who had achieved cult status in the region for their lyrical, literate writing. In 1974 he hitchhiked to Nashville, where he played in various bands and eventually wrote songs recorded by Carl Perkins and Johnny Lee.

But Earle's career as an artist never really happened, and every few years, like the characters in his music, he would take to the road again, "trying to get control over my career, over my life. I had classic anxiety about everything."

The songs on "Guitar Town" were written in Nashville, in Alabama, in Mexico, in Los Angeles, and in San Antonio while Earle was getting a divorce and living with friends. ("I was just sort of doin' a couch tour.") *Little Rock 'n' Roller*, the song about a father's phone call home to his son, is based on a real-life experience from his days of living in San Miguel de Allende. ("I was industrial-strength morose.") *Someday*, the portrait of the gas attendant caught in small-town isolation, came from a late-night encounter at a Jackson, Tennessee, filling station.

But the most startling and impressive aspect of "Guitar Town" is that the writing—clear, concise, funny, and heartbreaking—is unlike anything Earle has done before.

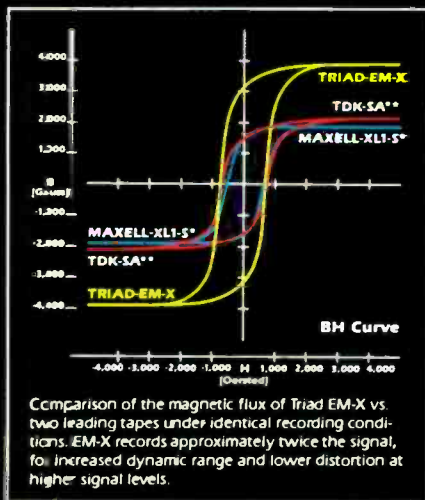
"It really is a mystery to me," he admits. "But the main thing is, I got to a point where I was feeling good about myself as a writer again, and I was determined to make a record that you could put on the turntable and listen to. Lyrics were always the most important thing in country music until real recently, and now there's a movement toward lyrics again. I just want to be a part of bringing that back. I really think that I was born to do this." □

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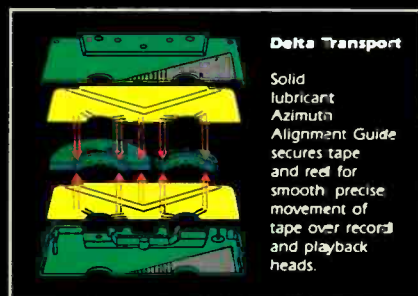
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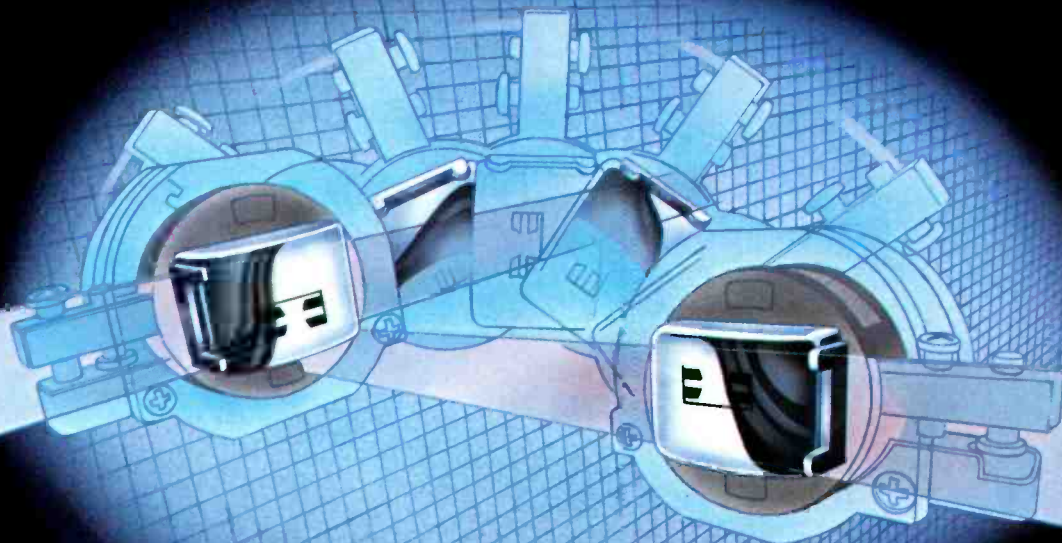
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Discs and tapes
reviewed by
Robert Ackart
Richard Freed
David Hall
Stoddard Lincoln

BACH: *The Well-Tempered Clavier, Book 1* (see Best of the Month, page 102)

BARTÓK: *Divertimento for String Orchestra; Romanian Folk Dances.* **JANÁČEK:** *Mládí.* Orpheus Chamber Orchestra. DEUTSCHE GRAMMOPHON ④ 415 668-1 \$10.98, © 415 668-4 \$10.98, © 415 668-2 no list price.

Performance: *Good*
Recording: *Good*

The Divertimento for Strings was the last work Béla Bartók composed before he left Europe. Its three movements are in turn bittersweet, darkly funereal, and wryly humorous, displaying much of the contrapuntal craft familiar to us from the Concerto for Orchestra, which was written in the United States. The Romanian Dances have long been among Bartók's most popular works, whether in the original piano version or in later arrangements for small orchestra or violin and piano. The Orpheus Chamber Orchestra does a polished job with the Divertimento, and the Romanian Dances come off with enormous verve.

The Orpheus ensemble's wind players get a fine chance to show their mettle in the charming, evocative *Mládí* (*Youth*), a wind sextet Leoš Janáček composed at age seventy. The reading is pert and lively, graced by a lovely bloom of overtones on the recorded sound, whose ambience is just right for a small wind group. The string sound in the Bartók works is full and bright. *D.H.*

BEETHOVEN: *Piano Sonatas: No. 8, in C Minor, Op. 13 ("Pathétique"); No. 14, in C-sharp Minor, Op. 27, No. 2 ("Moonlight"); No. 23, in F Minor, Op. 57 ("Appassionata").* John O'Connor (piano). TELARC ④ DG-10118 \$10.98, © CD-80118 no list price.

Performance: *Elegant*
Recording: *Excellent*

John O'Connor has made a fine impression in his recordings of all the John Field concertos on Fidelio and some of

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- ④ = DIGITAL-MASTER ANALOG LP
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RACHMANINOFF'S SECOND CONCERTO

CRISTINA ORTIZ'S new London CD of Rachmaninoff's Second Piano Concerto follows Vladimir Ashkenazy's remake with Bernard Haitink by only a few months. Ashkenazy's recording, also on London, is splendid, and the only reason for considering any competing CD, I'd think, would be the question of what comes with it. I may be considered perverse for finding Rachmaninoff's Fourth the most intriguing of all his concertos, but it makes the Ashkenazy package all the more appealing to me. The three short pieces that precede the Second Concerto on Ortiz's disc, though, may be more broadly appealing.

First up is Richard Addinsell's *Warsaw Concerto*. Since it is a direct imitation of the very Rachmaninoff work with which it is packaged, it is all to the good that it is separated from it as far as possible in the layout. But it does make for very pleasant listening. For what this music was intended to be—a condensed Rachmaninoff-type concerto to make a dramatic point—it's darned effective, and it's certainly well crafted. I imagine there will always be an audience for it (even if not in the concert hall), and I think it's foolish to be condescending about it.

The Addinsell is followed by the piquant Litolf Scherzo, which seems to turn up only in recorded grab bags of one sort or another. Ortiz and the Royal Philharmonic under Moshe Atzmon give both the Litolf and the Addinsell absolutely top-drawer performances—very tasteful as well as very brilliant. The Rachmaninoff Second gets a very good performance, too, if not quite in the Ashkenazy/Haitink class. Atzmon, who made a fine recording of the concerto with Agustin Anievas about twenty years ago, has the work well in hand, and so does Ortiz.

What could be the sleeper here is Gottschalk's Grand Fantasy on the Brazilian National Hymn, and it's all the more of a surprise for not even being listed on the front of the CD box (or booklet) with the three other titles. Gottschalk composed it in 1869, at the end of his life, for piano solo, and the late Eugene List commissioned Samuel

Mendelssohn's *Songs Without Words* on Denon, as well as on his U.S. tour with the New Irish Chamber Orchestra in 1985. In recording Beethoven's most popular piano sonatas he takes on a huge list of competing recordings, including his own of the *Moonlight* and *Pathétique* on Denon, and he comes off more than honorably. I especially like



Cristina Ortiz: top-drawer playing

Adler to arrange it for piano and orchestra for the Turnabout "Gottschalk Festival" recording released to mark the centenary of the composer's death. London's annotation advises: "Both Chris Hazell (the producer of this recording) and Cristina Ortiz (herself Brazilian) felt [the Adler arrangement] missed too much of the composer's style, and per-versely relegated the piano to a back-ground role. Together they have re-created this Lisztian fantasy with suitable aplomb . . ."

Well, questions of graciousness aside, it would appear that Hazell's arrangement is based at least in part on Adler's, and Ortiz plays it handsomely, topping off a most agreeable issue. The sound itself is up to London's standards, even if the labeling is not. *Richard Freed*

RACHMANINOFF: *Piano Concerto No. 2, in C Minor, Op. 18.* **ADDINSELL:** *Warsaw Concerto.* **LITOLFF:** *Scherzo from Concerto symphonique No. 4, Op. 102.* **GOTTSCHALK** (arr. Hazell): *Grande fantasia triomphale sur l'hymne national brésilien, Op. 69.* Cristina Ortiz (piano); Royal Philharmonic Orchestra, Moshe Atzmon cond. LONDON © 414 348-2 no list price.

his restraint in the *Appassionata*. He does not open floodgates of power and emotion but flows with a degree of elegant understatement and subtlety. What he achieves in the first movement could stand as a lesson worth copying in how to build a credible climax. The middle movement is similarly a model of Classical simplicity, and what comes

out of the final movement is no empty thundering but real music. The same clear-eyed virtues are evident in O'Connor's performances of the two shorter sonatas, which seem remarkably fresh—almost unbelievably so in the slow movements—and well balanced. His tone production is invariably and unselfconsciously beautiful, as is the recording itself. *R.F.*

BERWALD: Symphonies: No. 1, in G Minor ("Sérieuse"); No. 2, in D Major ("Capricieuse"); No. 3, in C Major ("Singulière"); No. 4, in E-flat Major. Gothenburg Symphony Orchestra, Neeme Järvi cond. DEUTSCHE GRAMMOPHON ◊ 415 502-1 two discs \$19.96, ◊ 415 502-2 two cassettes \$19.96, ◊ 415 502-2 two CD's no list price.

Performance: *Razor-sharp*
Recording: *Splendid*

Sweden's nineteenth-century symphonist, Franz Berwald, was born in 1796, a year before Schubert, and died in 1868, the year in which Wagner's *Die Meistersinger* had its première. The Sweden in which Berwald grew up and served an apprenticeship in the violin section of the Royal Opera Orchestra had no symphonic organization worthy of the name. Nevertheless, though he did write some operas, none of them successful, it is the orchestral music he composed between 1841 and 1845, along with the chamber music of his later years, by which he is remembered.

The symphonies Berwald wrote in 1842, the *Sérieuse* and the *Capricieuse*, have strong themes and remarkably powerful linear slashes of orchestral coloration. The *Sérieuse* is almost late-Classical in style, in the manner of Cherubini. The somewhat more lightweight *Capricieuse* is of most interest in its first movement, whose swinging pulse anticipates the symphonies of Carl Nielsen. The finale is rather flat and harmonically predictable.

The two symphonies from 1845, the *Symphonie singulière* and the Symphony No. 4, are both real masterpieces. Their characters are quite different, but in both Berwald was in complete command of his craft, especially with regard to the handling of key shifts and harmonic texture.

The *Singulière* has a fine, rugged opening movement that is followed by an ingeniously combined slow-movement/scherzo with a haunting adagio section. The finale, with its ferociously jagged main theme, is altogether gripping. Small wonder that this has become the most performed and most recorded of Berwald's symphonies. The Fourth Symphony, like the *Sérieuse*, is in the Classical four-movement mold. Serene but never bland, it is as subtle in its own way as something Haydn might have written had he lived on into the mid-nineteenth century.

There have been distinguished recordings of Berwald's orchestral repertoire by Igor Markevitch, Sixten Ehrling, and others, but Neeme Järvi and



Alfredo Kraus: exemplary tenor

the Gothenburg Symphony sweep the field with the dynamism and beauty of their performances, and the sonics are superb as well. Järvi's tempos are a bit faster than usual, but not disconcertingly so, and they help to make the *Capricieuse* more arresting listening than I have ordinarily found it. Highly recommended. *D.H.*

BIZET: La jolie fille de Perth. June Anderson (soprano), Catherine; Alfredo Kraus (tenor), Smith; Gino Quilico (baritone), Duke of Rothsay; Gabriel Bacquier (baritone), Glover; José van Dam (bass), Ralph; Margarita Zimmermann (mezzo-soprano), Mab; others. Choirs of Radio-France and Nouvel Orchestre Philharmonique, Georges Prêtre cond. ANGEL ◊ DSC-3989 three discs \$35.89, ◊ 4D3S-3989 three cassettes \$35.98.

Performance: *Good*
Recording: *Well-focused*

Taking its title, but not much else, from Sir Walter Scott's novel *The Fair Maid of Perth*, Bizet's opera has a lot going for it: a carnival as setting for its action, a drinking song, a ballet, mistaken identities, a masquerade in a ducal manor, a momentary loss of memory (if not sanity) on the part of the heroine, passionate jealousy (which might have been set to rest at once if anyone had asked an intelligent question or two), and a happy ending. The score also contains some very pretty music. It is an eclectic piece, with passages that are reminiscent of Massenet, Offenbach, other nineteenth-century French composers, and, yes, Bizet himself—though without the identifying signature that had already marked his *Les Pêcheurs de perles* and with which he triumphed in *Carmen*.

In the firmament of this recording, the brightest star is Alfredo Kraus, now nearly sixty years of age, who continues

to be the exemplary tenor in terms of style, diction, musical polish, and identification with the material at hand. To the lyric role of Smith, Kraus brings a sense of youth and impetuosity; whenever he is part of the scene, the performance takes on added vitality. Gino Quilico makes an appealing Duke. His warm, clear baritone meets all the demands of the score, and he manages to create a believable character despite the artificial trappings of the plot. Gabriel Bacquier and José van Dam are more than adequate to their assignments and fulfill them expertly, as does Margarita Zimmermann, whose Mab, Queen of the Gypsies (yes, that's right), is enriched by her limpid, warm mezzo-soprano.

June Anderson, in the title role, has a big, brilliant voice that is capable of great agility, as she impressively demonstrated in the Philips recording of Rossini's *Maometto secondo* released last year. In this performance, however, her high notes are a bit brazen and her ornamentation, when it occurs, sounds less secure than in the earlier recording. She is still a major talent, though, and I hope she does not continue performing roles imperfectly suited to her vocal qualities.

The chorus sings with animation, and the Nouvel Orchestre Philharmonique plays crisply under Georges Prêtre's capable leadership. The sound is rich and well balanced throughout. *R.A.*

BRAHMS: Symphony No. 1, in C Minor, Op. 68. NHK Symphony Orchestra, Lovro von Matačić cond. DENON ◊ 33C0-1003 no list price.

Performance: *Solid*
Recording: *Full-bodied*

The conductor Lovro von Matačić (1899-1985) is associated as a recording artist chiefly with opera, but he also conducted in a scattering of concerto recordings for Angel and some Beethoven and Bruckner with the Czech Philharmonic for Supraphon. This CD of the Brahms First with a Japanese Orchestra, from a March 1984 performance, is unexpected, certainly, and it will hardly displace the recordings on CD and LP by major Western conductors and orchestras. Nonetheless, it is an interesting document, for it is, to my knowledge, the first recorded Japanese performance of a Brahms symphony to achieve general international release.

Matačić's reading is in the solid Central European tradition that veteran record collectors would associate with Felix Weingartner, particularly in the opening movement. The pacing of the *Andante sostenuto* strikes me as a bit fast, but the third movement comes off perfectly in terms of "quietly flowing motion," to borrow a tempo description from Mahler. Despite a rather impulsive timpanist, the grand finale is just that, and the sonics are excellent. *D.H.*

DELIBES (tr. Dohnányi): Waltz from Coppélia (see DOHNÁNYI)



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DELIUS: *Florida Suite; North Country Sketches.* Ulster Orchestra, Vernon Handley cond. CHANDOS • ABRD 1150 \$12.98, © ABTD 1150 \$12.98, © CD 8413 \$18.

Performance: *Superb*

Recording: *Demonstration quality*

Vernon Handley, whose name has become a reliable assurance of first-rate performance to collectors of English music on various British labels, was appointed conductor of the Ulster Orchestra in Belfast last season, and this is the first recorded issue of that new affil-

iation. It is by all odds the most striking Delius release since the death of Sir Thomas Beecham, the composer's earliest proponent. Handley's way with the music differs a bit from Beecham's but is equally persuasive. While Beecham brought his great personality to bear (and great genuine affection as well), Handley seems determined not to let himself get in the way of the music. That is an oversimplification, of course, but in these performances one is not aware of a conductor "bringing the music to life" but simply of the music itself proceeding with unforced spontaneity.

The sweetness of the early *Florida Suite* fairly glows in Handley's performance, and the more impressionistic quality of the *North Country Sketches*—a later, far more sophisticated work that ought to be welcome in American concert halls—shows its freshness and originality with thrilling conviction and clarity in his expansive reading. The orchestra, as we know from its earlier recordings, is a good one, able to give Handley all the brilliance and subtlety he asks for, and the recording itself is of demonstration class, as so many on the Chandos label are. R.F.

DOHNÁNYI: *Serenade in C Major for String Trio, Op. 10; Piano Quintet in C Minor, Op. 1.* Barry Snyder (piano); Cleveland Quartet. PRO ARTE © CDD-238 no list price.

DOHNÁNYI: *Violin Sonata in C-sharp Minor, Op. 21; Cello Sonata in B-flat, Op. 8.* Peter Salaff (violin); Paul Katz (cello); Barry Snyder (piano). PRO ARTE © CDD-239 no list price.

DOHNÁNYI: *Concert Etudes, Op. 28, Nos. 1 and 4; Rhapsody in C Major, Op. 11, No. 3; Variations on a Hungarian Folk Song, Op. 29; Ruralia Hungarica, Op. 32a, Nos. 2 and 6.* DELIBES (tr. Dohnányi): *Coppélia, Waltz.* Barry Snyder (piano). PRO ARTE © CDD-240 no list price.

Performances: *All excellent*
Recordings: *Good to superb*

Ernst von Dohnányi (1877-1960), the grandfather of the Cleveland Orchestra's Christoph von Dohnányi, was a superb pianist, a fine conductor, a highly capable administrator, and a composer of music imbued with wit, urbanity, and beguiling lyricism. Insofar as his Hungarian heritage plays any significant role in his musical language, it is as a coloristic element rather than being of the essence (as it was in the cases of his younger, ultranationalist compatriots Bartók and Kodály).

These three Pro Arte CD's add up to a fine cross section of Dohnányi's chamber music and solo-piano output. The Op. 1 Piano Quintet of 1895 is a capable graduation essay in the best Brahmsian manner. The *Serenade for String Trio in C Major*, from 1902, is quite a different matter—full of verve, wit, and effective instrumental and contrapuntal writing throughout.

The *Violin Sonata*, after another Brahmsian opening movement, comes to life with a brilliant central variation-scherzo and a finale notable for piano writing of Lisztian virtuosity. The Brahmsian element is more evident throughout the earlier *Cello Sonata*, but it remains a fine piece on its own terms, and it is topped off by a handsome theme-and-variations finale.

The piano selections are all fun to listen to. The *Pastorale* from 1921 is perhaps the loveliest thing on the solo-piano disc, but I also especially liked the harmonic texture of the first Concert



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The recorded performances are without exception of sterling musical quality, and the performance of the Op. 10 Serenade is outstanding. The recordings, which were made at the Eastman School of Music between September 1984 and January 1985, are remarkably consistent in their excellence. My only reservation, a minor one, concerns what seems to be either closer miking or less room ambience in the Piano Quintet and in the solo-piano disc. A bit more tonal richness would have been welcome. *D.H.*

DVOŘÁK: *String Quartet No. 12, in F Major, Op. 96* ("American"); *Cypresses*. Cleveland Quartet. PRO ARTE © CDD-237 no list price.

Performance: *Pleasing*
Recording: *First-rate*

The Cleveland Quartet's performance of the well-loved F Major Quartet is, in general, a pleasing one, and the charming but fairly unfamiliar twelve *Cypresses* are most welcome. I found the Clevelanders' phrasing a little fussy in the quartet's opening theme and in the dance-like theme of the finale, and their pacing seems just a bit fast in the best-known of the *Cypresses*, Dvořák's transcription of his song "Nature lies peaceful in slumber and dreaming," but these are admittedly personal reactions. In any case, I'd much rather the players press on as they do here than go too slow and milk the piece. The playing is consistently on the high level we expect from this ensemble, and the recording itself is first-rate in every respect. *R.F.*

JANÁČEK: *Mládí* (see BARTÓK)

HANDEL: *Music for the Royal Fireworks; Concerto a due cori No. 2; Ariodante, Overture*. La Grande Écurie et la Chambre du Roy, Jean-Claude Malgoire cond. CBS ● M 42123, © MT 42123, © MK 42123, no list price.

Performance: *Raucous*
Recording: *Fine*

It takes real talent to destroy the nobility of Handel's *Music for the Royal Fireworks*, but Jean-Claude Malgoire succeeds. A pushy tempo and exaggerated rhythmic mannerisms transform the sublime to raucous skittishness. The concerto and the *Ariodante* Overture come off somewhat better, but not nearly enough better to warrant an investment in this recording. *S.L.*

KOECHLIN: *The Jungle Book, Symphonic Suite*. Rhine Palatinate Philharmonic Orchestra, Leif Segerstam cond. CYBELIA CY 679-680 two discs \$25.96.

Performance: *Good*
Recording: *Adequate*

Cybelia is a French label that is devoted to French music of the twentieth century, and this release may well be its most intriguing presentation to date.



Yuri Egorov: graceful Mozart

More than thirty-five years after his death in 1950, Charles Koechlin remains, as the English writer David Drew put it, "one of the great unknowns of modern music, even in his native France . . . a shadowy figure, better known for his theoretical works . . . than for his compositions."

Koechlin's current American discography is a small one, made up almost entirely of small works. The big ones, such as the *Seven Stars* Symphony and *Les Bandar-Log*, fared too poorly at the retail equivalent of the box office to be kept in the active catalog. Well, *Les Bandar-Log* is back now, for it is one of the four symphonic poems that constitute this "symphonic suite" based on Kipling's *Jungle Book*. The other components of the suite, composed between 1926 and 1940, are *The Law of the Jungle*, *The Meditation of Purun Baghat*, and *The Spring Run*.

Les Bandar-Log (Kipling's name for the jungle monkeys) is by all means the strongest of these four tone poems, and that probably explains why it is also the only one to have been recorded before. Leif Segerstam's performance lacks some of the pungency and virtuosity of Antal Doráti's with the BBC Symphony (long gone now), but it has a fine sense of momentum and is impressive enough to give us a good idea of the piece. It is good to have the other pieces with it, for they are all worth hearing, and Segerstam and his capable orchestra bring them off with a good deal of conviction.

The recording itself is adequate but a little lackluster by today's standards, and it is decidedly uneconomical to have sides as short as 9'55" and 16'20", and to have the half-hour *Spring Run* split between two sides. (The entire suite would fit on a single compact disc.) The documentation is pithy, and while the English translation is hardly idiomatic, enough information does come through to be helpful. *R.F.*

LISZT: *Dante Symphony*. Helmond Concert Choir; Rotterdam Philharmonic Orchestra, James Conlon cond. ERATO/RCA ● NUM-75245 \$10.98, © MCE-75245 \$10.95, © ECD-88162 no list price.

Performance: *Grandiose*
Recording: *Splendid*

In calling this performance of Liszt's *Dante* Symphony "grandiose," I mean it in the best sense of that word. After all, how could a Lisztian version of Dante's *Divine Comedy* be anything but grandiose? Howls and groans serve as background for the agonies of Francesca and Paolo in *Inferno*, a sinuous fugue threads its way through *Purgatory*, and a Magnificat for women's voices dispenses the divine odor of *Paradise*. Although not as well known as Liszt's *Dante* Sonata for piano or his similarly programmatic *Faust* Symphony after Goethe, the *Dante* Symphony can hold its own, especially in such a luminous performance as this one. James Conlon brings out all the work's drama and beauty. Fine sound, too. *S.L.*

MOZART: *Arias* (see *Best of the Month*, page 101)

MOZART: *Piano Concerto No. 17, in G Major (K. 453); Piano Concerto No. 20, in D Minor (K. 466)*. Youri Egorov (piano); Philharmonia Orchestra, Wolfgang Sawallisch cond. ANGEL ● DS-38276 \$11.98, © 4DS-38276 \$11.98.

Performance: *Sensitive*
Recording: *Okay*

Youri Egorov is very much at home in the Mozart G Major Piano Concerto, which calls for fleet passage work, melodic charm, and grace. When it comes to the brooding D Minor Concerto, however, his playing lacks the starch and drive to match the drama of the orchestral writing, which Wolfgang Sawallisch and the Philharmonia Orchestra give the full works. *S.L.*

MOZART: *Requiem in D Minor (K. 626)*. Kathleen Battle (soprano); Ann Murray (mezzo-soprano); David Rendall (tenor); Matti Salminen (bass); Chorus and Orchestra of Paris, Daniel Barenboim cond. ANGEL ● DS-38216 \$11.98, © 4DS-38216 \$11.98, © CDC-47342 no list price.

Performance: *Lush*
Recording: *Excellent*

Despite the recent flurry of interest in who it was who really fleshed out and completed the Mozart Requiem, Daniel Barenboim has chosen to record the version attributed to Süssmayr, the one most of us are most at home with and which to my mind is entirely satisfactory. Barenboim's approach is purely twentieth century—clean, straightforward, and filled with dynamic details that not only bring out the meaning of the ancient text but are in themselves musically effective.

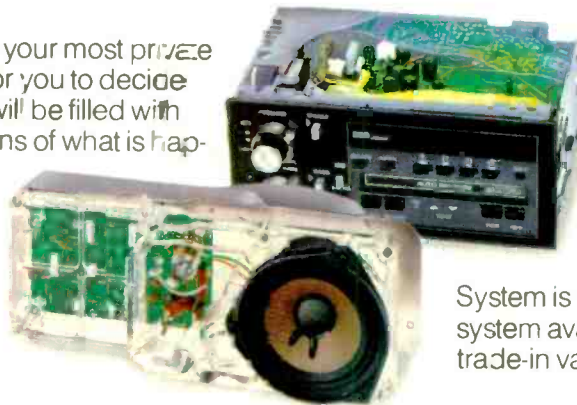
(Continued on page 170)



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ALICIA DE LARROCHA IN BEETHOVEN CONCERTOS



The De Larrocha style is warm, mellow, lyrical, and at times even playful

IF you were hiring a pianist to play Beethoven with your local orchestra, Alicia de Larrocha would probably not be the first name to come to mind. And yet there is something quite wonderful about these muscular, showcase concertos performed in the graceful, mellow De Larrocha style.

Beethoven arrived in Vienna at a time when the big modern grand piano was just beginning to evolve, and his growing reputation was closely connected with the development of that musical product of the Industrial Revolution. The piano then was like the synthesizer today—everyone was trying to build a bigger and better model. The instrument was coming out of the salon and going public. New ways of playing and writing were being developed, and the rising star of this new, powerful piano style was a swarthy, volatile young musician from Bonn.

Beethoven dazzled the public and made the young ladies faint with the violent contrasts and sheer power of his performance style. Shortly after he arrived in Vienna in the 1790's, he wrote two piano concertos for himself to play. During his playing days, he wrote a new concerto every few years, each a bit more heavyweight than the one before.

In those days, the distinction between performer and composer was not what it is today. The bridge between the two was improvisation, and Beethoven was famous for his extemporizing. Some of his solo material—including most of the piano parts for the earlier concertos—was originally not even written down.

Beethoven wrote his Piano Concertos Nos. 2 and 1, in that order, in the eighteenth century, No. 3 at the very beginning of the nineteenth. Concerto No. 4 appeared in 1805 and No. 5, the *Emperor*, three or four years later. By and

large, the piano concertos are the most superficial of all Beethoven's works, with a smaller percentage of real musical content in proportion to their length than any of his others. They are about Beethoven at the piano on public display. They are long, surprisingly old-fashioned, and filled with neo-Classical passage-work and filigree in the "Empire" style. The aim is to show off the performer in an intense, nervous, elevated, and virtuosic manner.

Even the *Fantasia in C Minor*, or *Choral Fantasy*, of 1808, usually thought of as a precursor of the Ninth Symphony, is really a very traditional set of variations on an early song. What makes the *Choral Fantasy* different is not only the choral setting of the original song at the end but that it begins with a long piano introduction that is basically a written-out improvisation—giving us a rare glimpse of the kind of ad lib music for which Beethoven was famous during his lifetime.

Alicia de Larrocha has taken on the *Choral Fantasy* and all five piano concertos in her new set for London, and in so doing she has challenged almost everything implied by what I've said above. The conventional wisdom about how these pieces should be played has to do with structure through strength. Every contemporary account of Beethoven's playing stresses the controlled power, the eccentricity, and the violent contrasts of his playing. Heaven-storming? De Larrocha is mellow, lyrical, even laid-back. Tempos are moderate and flexible. The long spinning out of figuration is gentle, even playful. The main themes are rarely shouted in the rhetorical style but set forth in a warm, almost confidential manner.

The most successful of these performances is, without a doubt, the Fourth Concerto. This is the most widely ad-

mired of these works and the one that is the most intimate and poetic. De Larrocha's lyrical and confiding style works best here, and so does her collaboration with Riccardo Chailly and the Berlin Radio Symphony. While the other concertos are flashy, urban entertainments, No. 4 is one of Beethoven's very personal pastorales, and De Larrocha's quite personal interpretation of it is very moving.

De Larrocha has a different kind of solution for the earlier concertos. All three clearly derive from the Classical tradition. Most performers nowadays tend to treat them in a firm, etched, neo-Classical manner. But there is a gentler, more old-fashioned side to Classical style, and it is this earlier, more lyrical kind of Classicism that the pianist evokes. Neo-Classical tempos are fast; phrasing is nervous and taut. Here the tempos are relaxed, and so is the phrasing. Even the endless streams of sixteenth-note decorative fill seem positively lyrical.

The same qualities extend to the *Choral Fantasy*, which, despite the extraordinary entrance of the voices (here the RIAS Kammerchor and soloists), is really an intimate parlor piece in style. It is curious that the qualities that Beethoven's contemporaries regarded as eccentric, Romantic, and even avant-garde now seem lyrical and Classical in the hands of an artist like De Larrocha.

The *Emperor* Concerto is, without a doubt, the most problematic performance in the set. The *Emperor* is truly "Empire" in style—grand, Napoleonic, closely related to the neo-Classical art of the painter David, the sculptor Canova, or the architect Winkel. We are used to hearing it in slick, muscular, macho performances, and this one is not slick, not muscular, and not macho. There are extraordinary moments of insight and feeling in De Larrocha's performance, but it perhaps holds up—technically as well as interpretively—less well than the others.

The Berlin Radio Symphony is a good, not a great, orchestra. Chailly and De Larrocha are, for the most part, in harmony interpretively, and the digital recording, made in the Jesus Christus Kirche in West Berlin, conveys a beautiful perspective between the soloist and the orchestra. *Eric Salzman*

BEETHOVEN: *Piano Concertos: No. 1, in C Major, Op. 15; No. 2, in B-flat Major, Op. 19; No. 3, in C Minor, Op. 37; No. 4, in G Major, Op. 58; No. 5, in E-flat Major, Op. 73 ("Emperor"). Fantasia in C Minor, Op. 80 ("Choral Fantasy").* Alicia de Larrocha (piano); Berlin Radio Symphony Orchestra, Riccardo Chailly cond. LONDON ◻ 414 391-1 three discs \$29.94, © 414 391-4 three cassettes \$29.94, © 414 391-2 three CD's no list price.

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The quartet of soloists, headed by the soaring soprano of Kathleen Battle, is extremely effective. The orchestral sound is lush but clear in texture, and the choral sound is sumptuous though somewhat lacking in the clarity that distinguishes the other forces. In the end this version is for anyone frustrated by the lack of warmth and humanity in the so-called "authentic" performances of the Requiem that have flooded the market of late. *S.L.*

MOZART: *Symphony No. 29, in A Major (K. 201); Symphony No. 33, in B-flat Major (K. 319).* English Baroque Soloists, John Eliot Gardiner cond. PHILIPS 412 736-1 \$10.98, © 412 736-4 \$10.98, © 412 736-2 no list price.

Performance: *Sparkling*
Recording: *Excellent*

This is Mozart's music on period instruments as it should be. You're simply not aware of the fact that old instruments are being played, but you *are* struck by the bright clarity of instrumental textures and the fine musicianship that John Eliot Gardiner and the English Baroque Soloists bring to these splendidly recorded performances. Highly recommended. *S.L.*

MOZART: *Symphony No. 36, in C Major (K. 425, "Linz"); Symphony No.*

38, in D Major (K. 504, "Prague"). English Chamber Orchestra, Jeffrey Tate cond. ANGEL 4AE-34468 \$6.98, © 4AE-34468 \$6.98, © CDC-47442 no list price.

Performance: *Elegant*
Recording: *Excellent*

MOZART: *Symphony No. 36, in C Major (K. 425, "Linz"); Symphony No. 38, in D Major (K. 504, "Prague").* Vienna Philharmonic Orchestra, Leonard Bernstein cond. DEUTSCHE GRAMMOPHON 415 962-1 \$10.98, © 415 962-4 \$10.98, © 415 962-2 no list price.

Performance: *Dynamic*
Recording: *Excellent*

The pairing of Mozart's two mature "city" symphonies is a most felicitous one, but these two sets of Mozart performances, aside from the titles they have in common, present a study in contrast. The interpretive differences are the more striking in the *Linz* Symphony. Even though Jeffrey Tate generates crackling tension in his first-movement allegro, you never have the sense that the pulse is being driven. Indeed, the hallmarks of his reading are elegance, poise, and utter clarity. A large part of the clarity derives from Tate's use of a chamber orchestra, which helps the wind sonorities sound crisper and

more effective in choral textures. The woodwind articulation in the finale is quite breathtaking.

Leonard Bernstein's *Linz* is unashamedly "big-orchestra" Mozart, with clearly dominating strings. The outer movements are set forth with intensely vital urgency, and the dominance of the strings is offset by the Vienna Philharmonic's supremely elegant wind playing in those episodes where the winds have more to do. The players' response to Bernstein's baton is unerring. The pacing in the slow movement is only marginally faster than Tate's, with somewhat more emphatic dynamic pointing and contrast, and Bernstein omits the exposition repeat.

The contrast in performance style is not quite so obvious in the *Prague* Symphony. Bernstein tends toward faster pacing in the opening and slow movements, and in the latter he again omits the repeat that Tate provides. Tate's finale goes like the wind, while Bernstein's is somewhat more deliberate, with repeats in both the exposition and development. In general, the orchestra's response to Bernstein is less mercurial here than in the *Linz*. In both cases, the sonics on CD leave nothing to be desired. I confess, however, to a special liking for the combination of intimacy and clean brightness achieved in the Tate recording. *D.H.*



Sony just extended the range of

NIELSEN: *Symphony No. 3, Op. 27* ("*Espansiva*"); ***Clarinet Concerto, Op. 57***; ***Maskarade, Overture***. Olle Schill (clarinet, in concerto); Gothenburg Symphony Orchestra, Myung-Whun Chung cond. BIS ● LP-321 \$12.98, © CD-321 no list price.

Performance: *First-rate*
Recording: *Crystal clear*

This is the second installment in the Swedish Bis label's projected cycle of Carl Nielsen's orchestral works with Myung-Whun Chung conducting the Gothenburg Symphony. It is a generous helping, almost seventy minutes in all, comprising the life-asserting *Sinfonia espansiva* of 1910-1911, the wryly satanic Clarinet Concerto composed in 1928, and the sprightly overture to the 1905 comic opera *Maskarade*. I don't think I've ever heard the overture recorded and played more cleanly than it is here. A bit more lilt in the second theme would not be amiss, but the delineation of the brilliant polyphonic development comes off superbly, and the sound is of demonstration quality.

In the *Espansiva*, Chung may not offer quite the visceral excitement of Leonard Bernstein's 1965 Danish recording for CBS or the uninhibited romanticism of Yuri Ahronovitch's 1981 Danish Radio Symphony performance on Unicorn-Kanchana, but

we do get a magnificently controlled reading that lays bare both the architecture and the brilliantly linear writing that suffuses the first and third movements. The idyllic second movement with its offstage solo soprano and baritone loses some of its poetic effect, I feel, because the soloists here (Pia Raa-noja and Knut Skram) seem closer at hand than usual. The final movement, with its striding march tune, has always been a problem to bring off, partly because Nielsen, having stated the melody, wasn't altogether sure of what to do with it beyond some polyphonic fun and games. The finale's musical deficiencies can be covered up with the right choice of tempo and careful handling of dynamics and texture. Chung succeeds in this respect, and the performance is fully convincing.

The Clarinet Concerto is another tough nut to crack, particularly for the soloist, who must cope not only with his own part's extraordinarily demanding leaps and passage work but also with the snarling of the solo snare drum, which plays the role of a kind of Mephistophe-lian foil who finally gets put in his place. The Gothenburg Symphony's first-chair clarinetist, Olle Schill, does himself proud all the way, making this recording yet another of the several distinguished versions that have gone in and out of the catalog since the middle Fif-

ties. I confess particular partiality to the 1967 recording that Stanley Drucker and Leonard Bernstein made with the New York Philharmonic, but those who prefer a slightly less acerbic treatment of the score will find this one very satisfying. As a whole, this release combines an outstanding program, first-rate performances, and exemplary sonics. *D.H.*

RIMSKY-KORSAKOV: *Scheherazade, Op. 35*. Berlin Philharmonic Orchestra, Lorin Maazel cond. DEUTSCHE GRAMMOPHON ● 415 512-1 \$10.98, © 415 512-4 \$10.98, © 415 512-2 no list price.

Performance: *Mixed bag*
Recording: *Good*

I have not had much luck with the *Scheherazade* recordings that have crossed my desk in recent years, and this one by Lorin Maazel with the Berlin Philharmonic is also less than fully satisfying. A warmly limned *Young Prince and the Princess* section is the high point. The rest strikes me as fairly routine, marred by slack solo trombone work in the first fanfare episode of the *Kalendar Prince*. The all-important solo-violin role is competently played but is hardly beguiling or characterful. The sound is good but not good enough to seize the attention the way it should in this music.

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razzle-dazzle, I find myself still turning to my aging LP's by such old-school conductors as Monteux, Beecham, Ansermet, and even Stokowski, for all his garishness. *D.H.*

SCHUBERT: *Fantasy in C Major, Op. 15 ("Wanderer")*. **SCHUMANN:** *Fantasy in C Major, Op. 17*. Murray Perahia (piano). CBS © IM 42124, © IMT 42124, © MK 42124, no list price.

Performance: *Superb*
Recording: *Exemplary*

It is reassuring to hear the *Wanderer-Fantasy* open with a lyrical impulse instead of empty bluster, and I don't mean to indicate any sort of shortfall in Murray Perahia's sense of drama either. This is a large-scaled, hearty, sweepingly communicative performance, much in the same spirit as Perahia's earlier recordings of Beethoven's Opp. 7 and 22 sonatas and Third and Fourth Piano Concertos. Dozens of lambent phrases here remind us that subtlety is not always manifest in the form of reticence or understatement. Schubert's fantasy suits Perahia down to the ground, and so does Schumann's, which comes across in something like pristine condition, its unique character realized in full, with an abundance of poetry but without any obtrusive interpretive overlays.

On LP the recording is a model of realism and balance. I would have expected an added degree of vividness on the CD, but not as dramatic a difference as the CD in fact discloses. The compact disc is absolutely stunning, and its exceptional quality puts the dramatic character of Perahia's playing (in the Schubert especially) and the sheer beauty of his tone in a still more remarkable light. When this year's short list of outstanding releases is drawn up, this one will surely be near the top. *R.F.*

SCHUBERT: *Schwanengesang*. Hermann Prey (baritone); Philippe Bianconi (piano). DENON © C37-7906 no list price.

Performance: *Unique*
Recording: *Excellent*

Hermann Prey's performance of the *Schwanengesang* appears to be unique in including a fifteenth song. This collection is normally understood to comprise seven settings of poems by Ludwig Rellstab, six of Heine's poems, and a single poem by Johann Gabriel Seidl (which has its own Deutsch number, 965a), all composed a few months before Schubert's death. However, Schubert composed another Rellstab setting earlier the same year, *Herbst* (D. 945), published as an appendix to the *Schwanengesang* in the Peters score.

This very lovely song, which seems not to have been recorded very frequently and appears to be otherwise unavailable at present, conforms to the general mood of the others in the cycle, and Prey feels it belongs with them. He inserts it as No. 8 in his sequence, coming at the end of the opening Rellstab segment (just after the *Abschied* and before *Der Atlas*), where it fits in seamlessly—perhaps more so than the concluding *Taubenpost*, the solitary Seidl setting.

The inclusion of the "extra" song is a real plus, because the recording as a whole is so appealing. Prey is well up to his reliable standard, Philippe Bianconi is a splendid partner, and the sound—rich, warm, and ideally balanced—could hardly be better. Denon has provided excellent annotation as well as full texts and translations. *R.F.*

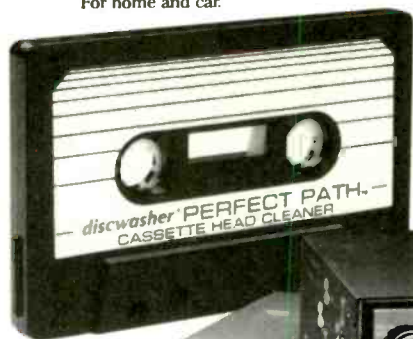
SCHUBERT: *Symphony No. 3, in D Major (D. 200)*; *Symphony No. 5, in B-flat Major (D. 485)*. Berlin Philharmonic Orchestra, Daniel Barenboim cond. CBS © IM 39671, © IMT 39671, © MK 39671, no list price.

Performance: *Easygoing*
Recording: *Good enough*

I did not discern any overwhelming sense of conviction on Daniel Barenboim's part in his readings of these two

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youthful Schubert symphonies, at least compared with the pert and wonderfully turned performances Neville Marriner and the Academy of St. Martin-in-the-Fields recorded for Philips or the remarkably supercharged execution of No. 3 by Carlos Kleiber and the Vienna Philharmonic on Deutsche Grammophon. Barenboim treats both works in an easygoing but hardly arresting fashion, and the Berlin Philharmonic responds accordingly. The recording is good but not in a class with the brightness and warmth of Marriner's. I'd pass on this one. *D.H.*

SCHUBERT: Piano Trio No. 1, in B-flat Major, Op. 99 (D. 898); Piano Trio No. 2, in E-flat Major, Op. 100 (D. 929); Notturmo in E-flat Major, Op. posth. 148 (D. 897); Sonata in B-flat Major (D. 28). Beaux Arts Trio. PHILIPS 412 620-1 two discs \$19.96, © 412 620-4 two cassettes \$19.96, © 412 620-2 two CD's no list price.

Performance: *Trio No. 2 better*
Recording: *Very good*

The Beaux Arts Trio covered a good deal of the "basic" repertoire on records back in the Sixties, before Isidore Co-

hen replaced Daniel Guiet as the group's violinist. While that change in personnel was without question a strengthening one, the subsequent remakes of the trio's earlier recordings have not in every case been improvements. In the case of Schubert's endearing B-flat Trio, I would certainly opt for the earlier Beaux Arts recording, which exuded much more life and freshness. The remake here is played with both elegance and warmth, but it simply does not come to life with the same sense of joy. With the E-flat Trio, however, this general shift in style is all to the good. This one is a different sort of work—still filled with Schubertian songfulness, to be sure, but altogether weightier and more serious. Here the Beaux Arts manages to leaven the sobriety with the radiant lyricism that would have been so welcome in the B-flat, maintaining a marvelous musical and emotional balance. Both the *Notturmo* and the one-movement sonata are set forth most agreeably, and the sound itself is very good, if a little less mellow than one might wish.

If Philips makes the two CD's available separately, I'd have no hesitation in recommending the one of the E-flat Trio with the sonata, but I would wait for a more winning version of the B-flat. At present there are more persuasive accounts of both works on LP, and the earlier Beaux Arts set is apparently still circulating on cassette. *R.F.*

SCHUMANN: Fantasy in C Major, Op. 17 (see SCHUBERT)

SHOSTAKOVICH: Symphony No. 13, Op. 113 ("Babi Yar"). Marius Rintzler (bass); Concertgebouw Men's Choir; Concertgebouw Orchestra, Bernard Haitink cond. LONDON 417 261-1 \$10.98, © 417 261-4 \$10.98, © 417 261-2 no list price.

Performance: *Fine, but . . .*
Recording: *Impressive*

Bernard Haitink began his Shostakovich symphony cycle for London nearly a decade ago, and with this recording of the great symphony-cantata on five poems by Yevgeny Yevtushenko it has reached completion. As far as I know, Haitink's is the first integral traversal of the fifteen Shostakovich symphonies to be recorded outside of Russia.

Symphony No. 13 is not music for the faint-hearted. Music and text both deal with major human and moral issues, which are stated either implicitly or explicitly in the titles of the five movements. The first, *Babi Yar*, sets Yevtushenko's famous poem on the 1941 Nazi massacre of 100,000 men, women and children, most of them Jews, in the ravine of that name near Kiev. The scarifying poem points an indignant finger at anti-Semitism in Russia. *Humor*, the savagely sarcastic scherzo, speaks of humor's persistence even in the face of the most ferocious tyranny. *In the Store* is a moving tribute to the patience and resilience of the Russian woman. *Fears*,

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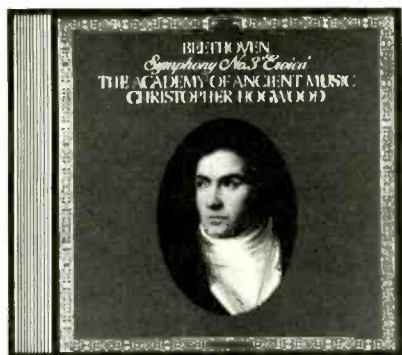
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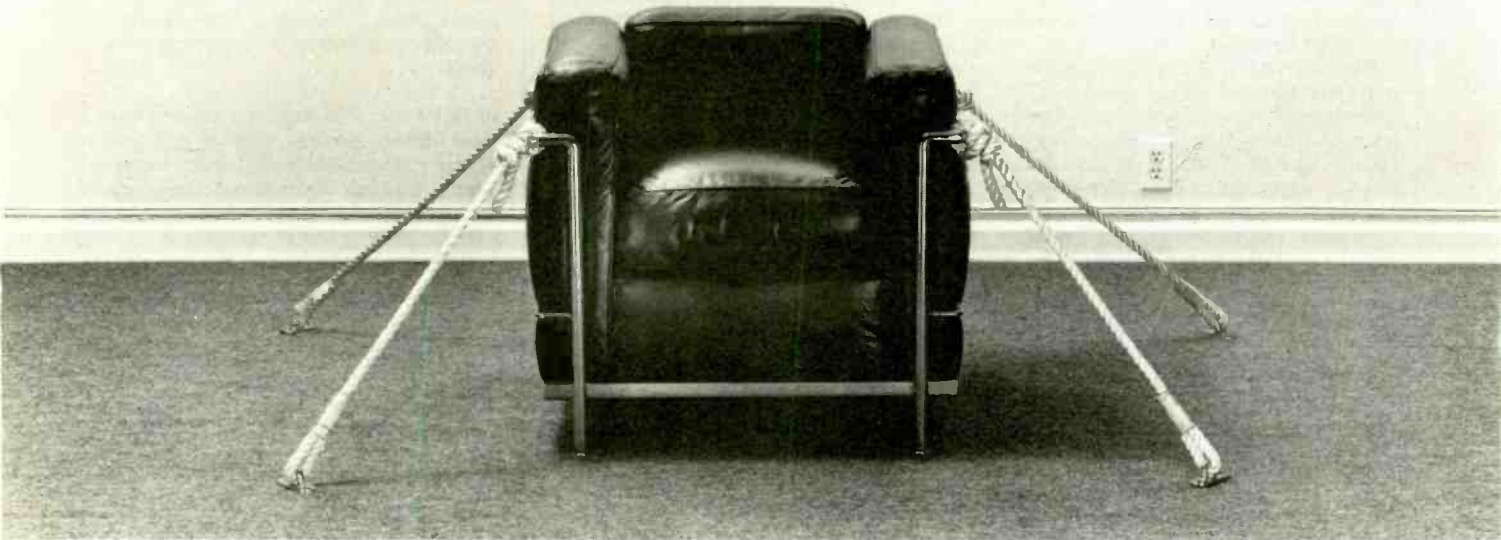
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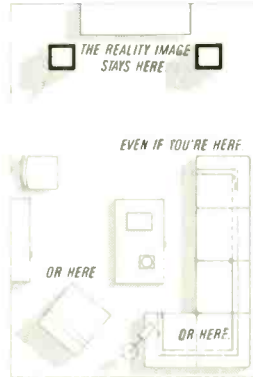


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with its creepy opening tuba solo, speaks all too eloquently for itself, as does the finale, *A Career*, which deals with the virus of opportunism and moral corruption. One would have to have a heart of stone not to be profoundly stirred by this music.

Shostakovich's score requires not only a vocal soloist of superior eloquence and power but a top-drawer male chorus and a virtuoso orchestra. Haitink and his choral-orchestral forces turn in an excellent job, and London has provided powerful and wide-ranging sonics. The weak link in this record-

ing is the soloist, Marius Rintzler, whose essentially lyrical style seems inappropriate much of the time. Rintzler does well by *At the Store* and *Fears*, but I am at a loss to understand how the text of the *Babi Yar* movement could elicit such bland singing!

I have not heard the well-received 1981 André Previn recording of the Symphony No. 13, but both recordings by Kiril Kondrashin, who conducted the work's world première, are well worth searching out. The recording he made for Melodiya in Russia was issued here by Angel, and after his emigration

he recorded the symphony again, for Philips, with the Bavarian Radio Symphony and bass John Shirley-Quirk. The later recording, especially, is a blazing interpretation, somewhat faster paced than Haitink's, and Shirley-Quirk's contribution is surpassingly eloquent. *D.H.*

SMETANA: *The Bartered Bride: Overture; Dances. String Quartet No. 1, in E Minor ("From My Life," orch. George Szell)*. London Symphony Orchestra, Geoffrey Simon cond. CHANDOS ◉ ABRD 1149 \$12.98, © ABTD 1149 \$12.98, © CHAN 8412 \$18.

Performance: *Adequate to excellent*
Recording: *Reverberant*

Most recordings of the orchestral music from Smetana's delightful rural comedy include the showpiece overture and the Polka, Furiant, and Dance of the Comedians. Geoffrey Simon also offers the Dance of the Villagers from Act I and the amusing circus Fanfare. His readings are neat but too strait-laced. Only in the Fanfare and Dance of the Comedians do he and the London Symphony players loosen up a bit.

I remember well the 1941 NBC Symphony première under George Szell's direction of his orchestral version of Smetana's autobiographical E Minor String Quartet. I enjoyed it then, and I also enjoyed his later Cleveland Orchestra recordings of it. Comparing this new recording of Szell's transcription, in state-of-the-art sound, with the superb digital recordings of the original version, I find myself preferring the latter. There is no gainsaying the utter integrity and musicality of the transcription, which gets a fine performance here, but the orchestral palette actually diminishes rather than enhances the impact of the work, particularly at the point where the high E sounds, signaling the onset of the composer's tragic deafness. Sonics for the quartet performance seem more vivid than for the *Bartered Bride* sequence, though perhaps the acoustics of the recording locale contribute a shade more reverberance than some tastes would prefer. *D.H.*

TCHAIKOVSKY: *Symphony No. 3, in D Major, Op. 29 ("Polish")*. Oslo Philharmonic Orchestra, Mariss Jansons cond. CHANDOS ◉ ABRD 1179 \$12.98, © ABTD 1179 \$12.98, © CHAN 8463 \$18.

Performance: *Strongly individual*
Recording: *Very good*

Latvian-born, Leningrad-trained Mariss Jansons has undertaken a Tchaikovsky symphony cycle for Chandos with the Oslo Philharmonic Orchestra. Being aware of the more than usually interested critical reaction to the initial releases of Nos. 1, 4, and 5 last year, I put the CD of No. 3, the most balletic of Tchaikovsky's symphonies, on my player with keen anticipation.

Most striking was the enormous improvement in ensemble, brilliance, and



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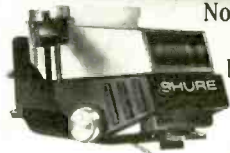
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power that Jansons has achieved with what has been heretofore a good, competent, but provincial orchestra. The use of a first-rate new concert hall as recording locale has also helped.

Brilliance and maximal contrast in both dynamics and differentiation of episodic elements are the hallmarks of this interpretation of Tchaikovsky's youthful not-quite-masterwork. In this respect Jansons follows in the footsteps of most of the Soviet Tchaikovsky interpretations I have heard in the past. The ultra-*espressivo* approach to the second strain in the *Andante elegiaco* third movement is a typical instance. On the plus side is the brilliant and precise execution of the following scherzo, which was inspired by Mendelssohn and anticipated the *Fairy of the Alps* scherzo in Tchaikovsky's own much later *Manfred* Symphony. The sound throughout is resplendent. *D.H.*

TCHAIKOVSKY: *Symphony No. 5, in E Minor, Op. 64.* Vienna Philharmonic Orchestra, Herbert von Karajan cond. DEUTSCHE GRAMMOPHON 415 094-1 \$10.98, © 415 094-4 \$10.98, © 415 094-2 no list price.

Performance: *Passionate*
Recording: *Very good*

TCHAIKOVSKY: *Symphony No. 6, in B Minor, Op. 74 ("Pathétique").* Vien-

na Philharmonic Orchestra, Herbert von Karajan cond. DEUTSCHE GRAMMOPHON 415 095-1 \$10.98, © 415 095-4 \$10.98, © 415 095-2 no list price.

Performance: *A bit wayward*
Recording: *Good, but . . .*

Herbert von Karajan's very first Tchaikovsky recording, with the Vienna Philharmonic, was of the *Pathétique*. Recorded in 1949, on 78's, it was a truly hell-for-leather treatment. In this, his fifth version of the work in stereo, Karajan has gone back to Vienna, giving us in the first two movements a performance comparably passionate to his first but with less violent contrasts of dynamics and tempo. For my taste it verges on the wayward in terms of a slackening of tension for the big lyrical episodes and in a somewhat heavy-handed pacing of the middle section in the 5/4 movement. In the final two movements, however, Karajan is in peak form, with a really fierce Russian-quickstep treatment of the march movement and an almost laceratingly plangent reading of the finale.

My major criticism of the recording has to do with details of production, which mar the gorgeous performance by the Vienna Philharmonic, in the string department particularly, with extraneous noises, such as just before the pis-

tol-shot attack that begins the first-movement development (dropped sheet music?). Like some of Karajan's recent Beethoven symphony recordings, this *Pathétique* was taped for video as well as audio, and I suspect that the production team gave more attention to video than audio considerations. Unless you must have the work on CD, I would recommend Karajan's fine 1977 analog DG disc with the Berlin Philharmonic instead.

The Fifth Symphony, which Karajan has recorded here for the fifth time, strikes me as interpretively more consistent than the new *Pathétique*. The reading is broad-gauge throughout the first half, highlighted by a slow movement wonderfully rich in sentiment but not cloying. A bit more lilt in the waltz would have been welcome, but in the finale Karajan pulls out all the stops in terms of pacing and dynamics, working up to a coda of barbaric excitement. The recording is free from odd noises and offers some fine orchestral playing and an impressive acoustic surround. Again, though, unless the CD format is a major determining factor, I see no reason for anyone who has Karajan's 1978 Berlin recording to replace it. *D.H.*

VERDI: *Quattro pezzi sacri.* Cecilia Gasdia (soprano); Chorus and Orchestra of the Gulbenkian Foundation, Lis-

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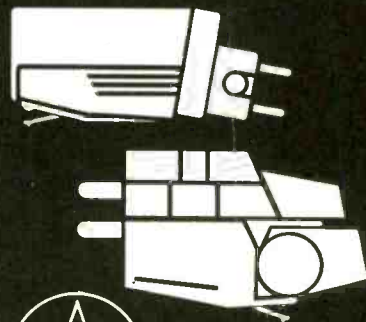
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bon, Claudio Scimone cond. ERATO/RCA • NUM-75249 \$10.98, © MCE-75249 \$10.98, © ECD-88170 no list price.

Performance: *Good*
Recording: *Atmospheric*

Claudio Scimone is quite inside this music. The performance he leads here lacks neither conviction nor polish, and the recording, made in a Lisbon church, conveys a fine sense of atmosphere that is eminently suitable to the essentially "spiritual" character of his reading. On balance I think I prefer Riccardo Muti's Angel recording, with the Berlin Philharmonic and two splendid Stockholm choruses, for its overall greater dramatic tension and a more vivid recording, but Cecilia Gasdia's solo performance goes a long way toward evening the balance. Her singing is a good deal more impassioned than Arleen Augér's for Muti. Both versions get bad marks in terms of value, thirty-four minutes being less than half the capacity of a CD. Surely the sensible thing to do is to package this work with the Verdi Requiem, which is a bit too short for the two CD's it has been occupying. The Erato presentation, I'm afraid, earns a further demerit by failing to provide the texts. R.F.

WOLF: *Songs from Italienisches Liederbuch.* Ileana Cotrubas (soprano); Thomas Allen (baritone); Geoffrey Parsons (piano). CHANDOS • ABRD 1130 \$12.98, © ABTF 1130 \$12.98.

Performance: *Honest, unaffected*
Recording: *Good presence*

This selection of songs from Wolf's *Italian Songbook* was recorded in performance at the Royal Opera House, Covent Garden, on June 23, 1984. The songs, shared by soprano and baritone, describe various aspects of love as experienced by simple Italian peasants and create complete and unified vignettes, sometimes in less than a minute.

Temperamentally, the two artists here are ideally suited to their material. Ileana Cotrubas and Thomas Allen, both in fine voice, treat the songs on Wolf's terms as communications of feeling rather than as shows of vocal technique, and accompanist Geoffrey Parsons plays with deftness and sensitivity. Warmly recommended, therefore, on all counts. R.A.

Collections

EDITION LOCKENHAUS. Franck: *Piano Quintet in F Minor. Caplet: The Mask of the Red Death. Poulenc: Mon cadavre est doux comme un gant; Fleurs. Janáček: String Quartet No. 1 ("The Kreuzer Sonata"). Stravinsky: L'Histoire du soldat, Dances; Concerto in D for String Orchestra. Shostakovich: Two Waltzes; Two Pieces for String Octet, Op. 11. Christine Whittlesey (soprano); Gidon Kremer (violin); Ursula Holliger (harp); Hagen String Quartet; others. Chamber Orchestra of the Junge*

Deutsche Philharmonie, Heinz Holliger cond. ECM 1304/5 two discs \$14.98.

Performance: *Appealing*
Recording: *Good*

This set of recordings from the Lockenhaus Festival, taped between 1981 and 1984, leaves a great deal to be desired in the way of documentation but offers a great deal of variety, novelty, and all-round listening pleasure. The bilingual annotation includes an interview with Gidon Kremer, the festival's director, and a separate article by Peter Cossé on the Lockenhaus philosophy of concert

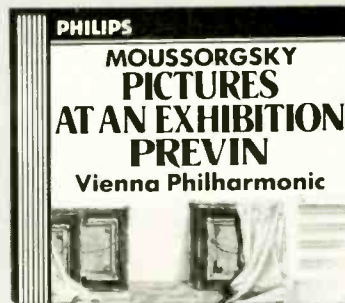
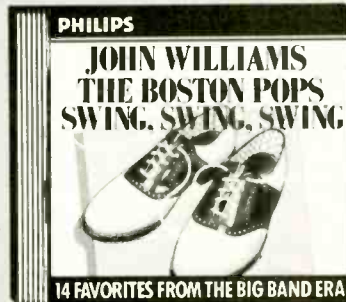
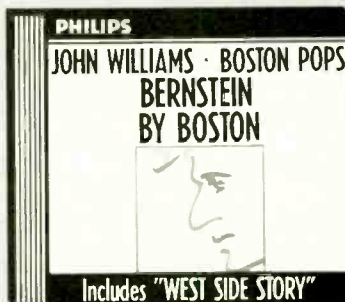
programming and recording, but there is really no information on the music, some of which is quite unfamiliar. While the lapse in documentation is hardly trivial, it must be acknowledged that what is recorded on these four sides is unusually appealing.

Kremer himself appears in only a single item, a six-minute sequence of dances from *L'Histoire du soldat* that is done to a turn but with piano accompaniment instead of the original percussion. The Franck Piano Quintet receives a performance that is more than competitive with any recorded in a stu-

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dio, though the applause and cheering at the end break the mood and would surely become tiresome after the first hearing. Caplet's *The Mask of the Red Death* was included on a recent Angel LP in the original orchestral version of 1908; what is given here is the somewhat more successful chamber version prepared fifteen years later, and it's quite stunning.

While Ursula Holliger is heard as the harp soloist in the Caplet, Heinz Holliger's participation in this set is not as oboist but as conductor of an ingratiating performance of the Stravinsky Concerto in D. The splendid young Hagen Quartet, only half of which is heard in the Franck quintet, plays with associates in the Shostakovich octet pieces and on its own in a pungent performance of Janáček's First Quartet. The Poulenc songs are probably the weakest part of the collection, but that may be the fault of the recording, which is far less well defined here than in the other material. The shortest entry, at five minutes, is the pair of waltzes for flute, clarinet, and piano by Shostakovich—a delightful discovery, and so downright delicious that many listeners may find that this very smoothly recorded segment is reason enough for buying the whole set. **R.F.**

SIMON ESTES: *Spirituals. Ride On, King Jesus; Swing Low, Sweet Chariot; Ezekiel Saw the Wheel; City Called Heaven; Plenty Good Room;* and ten others. Simon Estes (baritone); Howard Roberts Chorale; orchestra, Howard Roberts arr. and cond. PHILIPS 412 631-1 \$10.98, 412 631-4 \$10.98, 412 631-2 no list price.

Performance: *Glorious, but . . .*
Recording: *Excellent*

For the classically trained singer, the black spiritual presents a most difficult challenge. Deceptively simple, these gem-like creations, anonymously shaped from the sufferings of slavery, are the crowning achievements of a rich folk tradition. The emotions they express range from the almost unimaginable desolation of *Sometimes I Feel Like a Motherless Child* to the majestic jubilation of *Ride On, King Jesus*.

Simon Estes certainly possesses the vocal equipment to do full justice to the spirituals he sings here—in splendid arrangements by Howard Roberts, which range from colorful full orchestrations to a *cappella* backing by the superb voices of his chorale. The soloist's full, resonant baritone is a joy to hear, and the album can be appreciated on that level alone. But Estes errs on the side of restraint, and he too often fails to stir the soul with his readings. What distinguished the greatest interpreters of this repertoire—such as Marian Anderson, Paul Robeson, and Roland Hayes—was their ability to reach beyond the words, and even the haunting music, to capture the profound feeling underlying them. Estes, unfortunately, doesn't dig that deep. **Phyl Garland**

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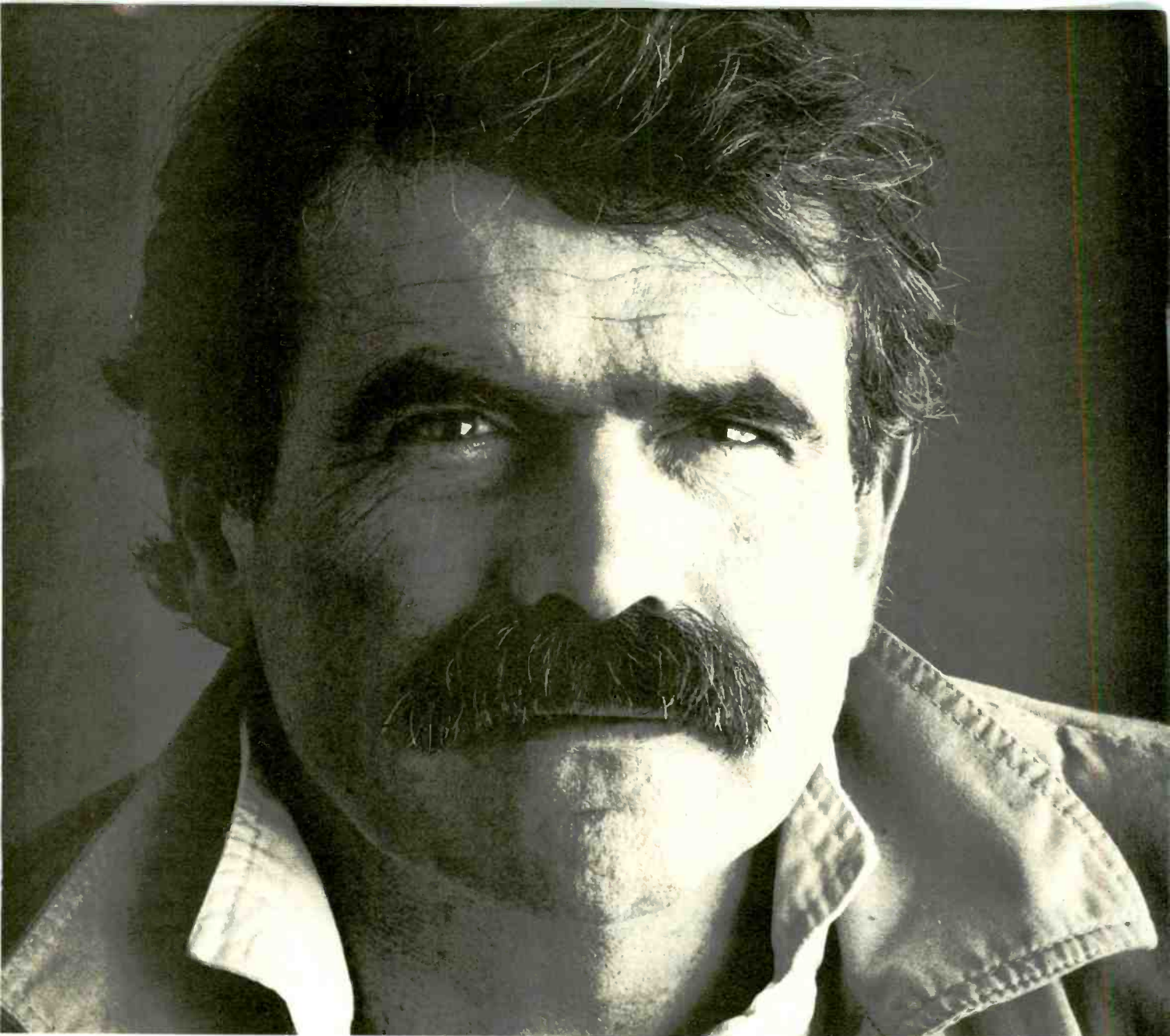
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VIDEO REVIEWS

Discs and tapes reviewed by
Robert Ackart
Chris Albertson
Louis Meredith
Alanna Nash

BRING ON THE NIGHT. With Sting, Branford Marsalis, Omar Hakim, Miles Copeland, others. KARL-LORIMAR 344 VHS Hi-Fi and Beta Hi-Fi \$79.95.

Performance: *Music yes, talk no*
 Recording: *Fine*

This documentary look at ex-Policeman Sting getting his new band and solo career off the ground is meant to be suspenseful: Will the star make a fool of himself and bankrupt A&M Records in the process? Unfortunately, since Sting's album, "Dream of the Blue Turtles," and tour were wildly successful, we already know the ending. Sting himself comes off as a superb musician but also something of a bore, and the supporting players, particularly Branford Marsalis, who has a jazzman's chip on his shoulder that can perhaps be excused on account of his youth, also seem a little full of themselves.

The band, of course, is a wonderful one, and the scenes of their rehearsals are fascinating even for a layman, but the endless chatter gets to you after a while. The concluding Paris concert premiere, in which all concerned seem understandably nervous, is something of a letdown. In fact, when you get right down to it, "Bring On the Night," despite the input of director Michael Apted, is just another concert film with backstage glimpses (including fairly graphic footage of the star's girl friend giving birth). But I'd say it's worth a rental, anyway. *L.M.*

DARYL HALL AND JOHN OATES: *Live at the Apollo.* Daryl Hall, John Oates (vocals and instrumentals); Eddie Kendricks, David Ruffin (vocals); other musicians. *You Make My Dreams; Get Ready; Ain't Too Proud to Beg; The Way You Do the Things You Do; My Girl;* and two others. RCA/COLUMBIA PICTURES 60558 VHS Hi-Fi \$19.95, 20558 Beta Hi-Fi \$19.95.

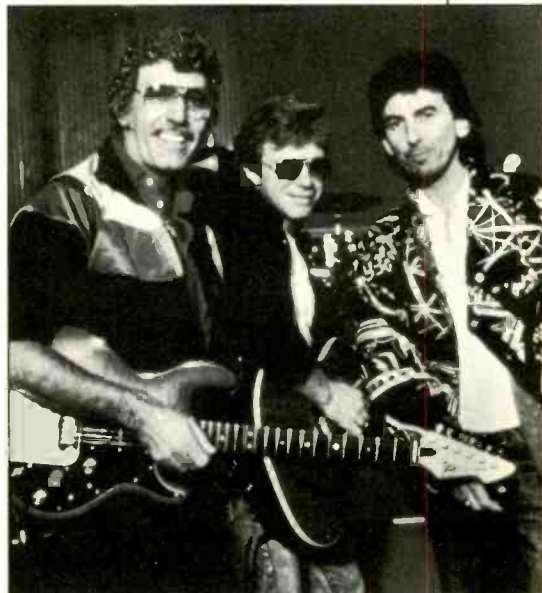
Performance: *Brash and beautiful*
 Recording: *A bit overbright*

Longtime historians of pop culture will recall that of all the original Motown acts the Temptations were by far the coolest—and that the Temptations' most frequent lead singers, Eddie Kendricks and David Ruffin, were the coolest of the lot. It is a pleasure to report that while Kendricks's falsetto is a little frayed and Ruffin's sharkskin suit has

"BLUE SUEDE SHOES" ROCKS

CARL PERKINS, despite his participation in some of the best rock-and-roll of the Fifties, never achieved the larger-than-life celebrity status of his Sun Records labelmates Elvis Presley and Jerry Lee Lewis, and for a simple reason. Despite being a superb singer, songwriter, and guitarist, Perkins exuded all the raw, rebellious charisma of the director of a funeral parlor in Dothan, Alabama. On MCA's new "Blue Suede Shoes" video, Perkins is still swell musically, but with a preposterous wig and clothes that can only be described as K-Mart Futurama, he's still somewhat short in the charisma department. No matter. The tape is an absolute delight, one of the least egocentric and most genuinely exciting celebrity jam sessions ever staged for the cameras.

The format is simplicity itself. Backed by a core band that includes Dave Edmunds, rock's foremost performing historian, and two former Stray Cats, Perkins runs down various rockabilly standards (many of them his own songs, of course), and along the way he duets with such guest luminaries as Eric Clapton, Ringo Starr, and George Harrison. (The last two, naturally, are strongly identified with a couple of Perkins songs, *Honey Don't* and *Everybody's Trying to Be My Baby*, that they recorded as Beatles.) Everyone involved seems to be having a terrific time, even the usually dour Harrison, and the performances, particularly Clapton's surprisingly soulful take on the jaunty *Matchbox*, have a coiled-spring intensity that often verges on the extraordinary. Add to all this some nicely straightforward direction and an audio mix with terrific punch and clarity, and you



Perkins with Edmunds and Harrison

get an exemplary tribute to a guy who may look like a moonlighting mortician but who can still rock out with the best of them. *Louis Meredith*

CARL PERKINS: *Blue Suede Shoes.* Carl Perkins (vocals, guitar); Ringo Starr (vocals, drums); George Harrison, Dave Edmunds, Eric Clapton (vocals, guitar); Rosanne Cash (vocals); Slim Jim Phantom (drums); Lee Rocker (bass); other musicians. *Boppin' the Blues; Cat Clothes; Honey Don't; Matchbox; Mean Woman Blues; Turn Around; Jackson; What Kinda Girl; Everybody's Trying to Be My Baby; Your True Love; The World Is Waiting for the Sunrise; That's Alright Mama; Blue Moon of Kentucky; Night Train to Memphis; Glad All Over; Whole Lotta Shakin' Going On; Gone Gone Gone; Blue Suede Shoes.* MCA 80425 VHS Hi-Fi and Beta Hi-Fi \$29.95.

been mothballed, this collaboration between the two former Tempts and Hall and Oates is as cool an event as anybody could have dared to hope.

Filmed opening night at the refurbished Harlem theater that was the Mecca of black music for decades, "Live at the Apollo" is, to be honest, mostly Daryl and John's show. Give them their due: they're slick and funny, and they work the crowd with the aplomb of vintage soul men. Still, when Ruffin and Kendricks appear for a Motown suite, the energy level goes through the roof, and when the tape is over it's their performances you'll remember.

A nostalgia package, to be sure, but a genuinely classy one. The only fly in the ointment is the sound, which is unac-

countably overbright here as it was in RCA's CD release. *L.M.*

JIMI HENDRIX: *Johnny B. Goode.* Jimi Hendrix (vocals, guitar); other musicians. *Are You Experienced?; Johnny B. Goode; Art Attack; Star Spangled Banner; Voodoo Child.* SONY RO450VH VHS \$16.95, RO450BE Beta \$16.95.

Performance: *Shoddy*
 Recording: *Diito*

"Johnny B. Goode" is the brainchild of Alan Douglas, the man responsible for a number of questionable posthumous Jimi Hendrix LP's, and this collection of video clips is in the same not-so-great tradition. A mishmash of badly filmed concert stuff (in the title clip the backing

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musicians are not even visible) and newly assembled conceptual pieces, the visuals add absolutely nothing to the music, and the overall effect is to cheapen the Hendrix legacy further. If you want to see the real Jimi Hendrix in action, pass this one by and spring for the "Monterey Pop" tape. *L.M.*

KATRINA AND THE WAVES: *Walking on Sunshine*. Katrina and the Waves (vocals and instrumentals). *Walking on Sunshine; Red Wine and Whiskey; Do You Want Crying; Que Te Quiero.* SONY 95W50022 VHS Hi-Fi \$19.95, 95W00021 Beta Hi-Fi \$19.95.

Performance: *Charming*
Recording: *Nice*

Given that Katrina and the Waves make some of the most unabashedly cheerful pop-rock on the market, and given that on the evidence of their videos they have probably seen *A Hard Day's Night* far more times than most of us would consider healthy, you might think a documentary of one of their tours would be mildly cringe-inducing. Happily, quite the opposite is true of "Walking on Sunshine." The band members are obviously likable and intelligent, and, while they are nowhere near as witty as they aspire to be, you get the feeling that these are people who genuinely enjoy what they're doing. The performance clips included here confirm my long-held suspicion that this is one of the few bands currently working in a Great Tradition, namely, the innocent, joyous, summertime car-radio music whose roots extend back to Eddie Cochran. In short, if this is bubblegum, it's highly artful bubblegum, and we could all do a lot worse. *L.M.*

MTV CLOSET CLASSICS. The Beach Boys: *Surfin' USA*. The Who: *Magic Bus*. Ike and Tina Turner: *Proud Mary*. The Moody Blues: *Nights in White Satin*. Yes: *All Good People*. The Grateful Dead: *One More Saturday Night*. Free: *All Right Now*. And eight others. VESTRON MA1043 VHS Hi-Fi \$29.95, MB1043 Beta Hi-Fi \$29.95.

Performance: *Mostly disappointing*
Recording: *Okay*

Calling this collection of old video clips "Closet Classics" is a bit overstated: junk from the archives would be closer to the mark, although the program is not without its moments. Most of the stuff here was originally shot in the late Sixties and early Seventies for a German television show called *Beat Club*, and while the show's producers obviously had good taste in booking, their visual sense left something to be desired. A lot of what's on view could be textbook examples of tacky art direction and psychedelic camera trickery—real period-piece work that in some cases renders the results just about unwatchable. Free's *All Right Now*, for example, is a good performance that's almost totally obscured by special effects.

The pre-American-stardom Cream displays a nice sense of humor as they lip-sync their way through *I Feel Free*, Keith Moon mugs magnificently on the Who's *Magic Bus*, and the unjustly underrated Steppenwolf comes across as convincing proto-punks on *Born to Be Wild*. There's also an early Black Sabbath version of *Paranoid* in which Ozzie Osbourne performs with all the abandon of a slug on Valium. The rest, including a Mungo Jerry clip that seems to last for weeks and a Jimi Hendrix segment of sub-newsreel quality, is for dedicated nostalgists only. *L.M.*

STEVIE NICKS: *I Can't Wait*. Stevie Nicks (vocals); vocal and instrumental accompaniment. *Stop Draggin' My Heart Around; Stand Back; Leather and Lace; If Anyone Falls; Talk to Me; I Can't Wait.* RCA/COLUMBIA 60524 VHS Hi-Fi \$19.95, 20524 Beta Hi-Fi \$19.98, PIONEER ARTISTS PA-86-M039 LaserDisc \$16.95.

Performance: *Feathery*
Recording: *Good*

As anyone familiar with either her music or these videos knows, Stevie Nicks is a most beguiling and perplexing performer. Listening to her—and watching her spin through her trademark fluttery bird-dance—is clearly a hallucinogenic experience, even if you haven't gotten near the stuff that normally produces such effects. This is what Nicks is after, of course, since much of her music is inherently vague and misty.

Of the six video clips here, four are conceptual videos, and two, *Stop Draggin' My Heart Around* and *Leather and Lace*, are performance clips, the former featuring some of the worst lip-sync in music-video history. As for the conceptual pieces, there is a sameness to them—lots of close-ups of Nicks doing her twirl routine in some dreamy, surrealistic setting, usually a cavernous house, with plenty of room for the hordes of attendants who drift through her fantasies. There's something silly about these videos, but they're also compelling. *A.N.*

QUEEN: *Live in Rio*. Queen (vocals and instrumentals). *Tie Your Mother Down; Seven Seas of Rhye; Keep Yourself Alive; Liar; It's a Hard Life; Now I'm Here; Is This the World We Created?*; and nine others. SONY R0090VH Hi-Fi, \$29.95, R0090BE Beta Hi-Fi \$29.95.

Performance: *Okay*
Recording: *Pretty good*

Queen, which only *seems* to have released more videos than any other rock band in the universe, is caught here in a 1985 performance in front of 250,000 natives of Rio de Janeiro (give or take a few out-of-towners). The band responds to this allegedly historic occasion with a typically bombastic display of professionalism and arena-rock theatrics, presented in reasonably straightforward visual fashion by an anonymous director.

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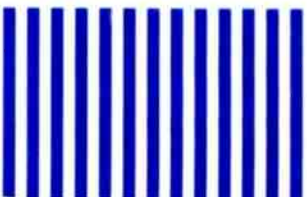
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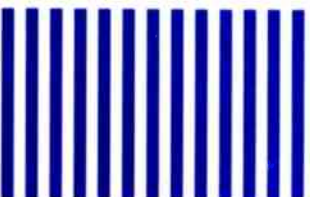
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Everybody involved, on both sides of the footlights, seems to be having a good time, but since the band can't really duplicate the production overkill of its records during a live show, the charm of this package will probably escape all but the committed fan. *L.M.*

READY STEADY GO!—SPECIAL EDITION: *The Sounds of Motown.* The Supremes: *Baby Love; Shake; Stop! In the Name of Love.* Smokey Robinson and the Miracles: *You Really Got a Hold on Me; Ooo Baby Baby.* Stevie Wonder: *Kiss Me Baby.* The Temptations: *It's Growing; My Girl.* Martha Reeves and the Vandellas: *Heatwave; Nowhere to Run.* And eleven others. SONY 96W50092 VHS Hi-Fi \$29.95, 96W00091 Beta Hi-Fi \$29.95. MGM L0781042 LaserDisc import \$50.95 (from Instant Replay, 479 Winter St., Waltham, MA 02154).

Performance: *Often electrifying*
Recording: *Typical Sixties*

This fifty-minute black-and-white video is an episode of a British television series, *Ready Steady Go!*, taped in March 1965. Back then, *Ready Steady Go!* was about as "with it" as you could get in England, and while all of the Motown artists represented were already stars in America, their appearance on the show "heralded the arrival of the Motown sound in Britain," it says in the notes.

Obviously, it all looks right out of a time capsule, and the production values are primitive compared with today's. But there are some positively thrilling performances, especially by the already anorexic-looking Diana Ross and her Supremes, the incomparable Smokey Robinson, and the late Marvin Gaye, whose presence and personal power were as great as his talent. There was a rawness to the early Motown sound that came across as dizzying energy, but the big surprise here is how good almost all of these artists were at live vocals. If any of these performers ever meant anything to you, this video will rivet you to your chair. *A.N.*

ROCK 'N' ROLL HEAVEN. With Don Kirshner, Bill Haley, Elvis Presley, Otis Redding, others. MGM/UA MV300550 VHS Hi-Fi \$29.95, MB300550 Beta Hi-Fi \$29.95

Performance: *Graveyard kitsch*
Recording: *Variable*

Just what the world needs: a documentary about people famous for being dead. Glued together by the Righteous Brothers' morbidly cornball hit of the same name and by a narration of stupefying triviality rendered by Don Kirshner in his trademark New York monotone, "Rock 'n' Roll Heaven" gives us glimpses (mostly in familiar footage) of a number of deceased rockers, from Elvis to the Beatles to Jackie Wilson. The clips themselves are mostly worth catching, even in this tacky context, but since the criterion for their

inclusion seems to have been whether Kirshner knew the artists personally, there is a certain, shall we say, revisionist bias at work. Bobby Darin, for example, gets the longest segment—apparently because he attended Kirshner's daughter's Bas Mitzvah. *L.M.*

NINA SIMONE: *At Ronnie Scott's, London.* Nina Simone (vocals, piano). *God, God, God; Mississippi Goddam; Moon Over [sic] Alabama; I Loves You, Porgy; I Sing Just to Know I'm Alive; If You Knew; My Baby Just Cares for Me;* and six others. HENDRING/JEM HEN 2017 VHS \$29.95, HEN 2017B Beta \$29.95.

Performance: *Fine but flawed*
Recording: *Dimly lit*

Nina Simone originally made her mark with a Bethlehem single that, after some twenty-five years, remains the definitive jazz vocal of Gershwin's *I Loves You, Porgy*. The success of that recording pulled Simone into the international limelight from the obscurity of a not so glamorous piano gig in an Atlantic City gay bar. Then, for a handful of years, while she enjoyed immense popularity, she exhibited an unpropitious inclination to offend her audiences verbally. As her comportment became increasingly antagonistic, fans and bookers alike began to withdraw. Now Simone is re-emerging and, in the process, demonstrating the durability of her talent. Her performances still convey a certain degree of hostility, but when she focuses solely on the music, the results can be rewarding.

"Nina Simone at Ronnie Scott's" is an imported videocassette containing an hour of music and talk by the one-time "High Priestess of Soul." Among the thirteen selections is the Gershwin song that started it all for her as well as other material from Simone's heyday, most notably the once-winning combination of *Moon of Alabama*, from the Brecht-Weill *Mahagonny*, and her own *Mississippi Goddam*. This was powerful stuff twenty years ago, but, while the civil-rights struggle certainly continues, the medley has lost its impact—a loss compounded by Simone's apathetic, let's-get-it-over-with delivery. Other songs fare much better. *The Other Woman, I Sing Just to Know I'm Alive,* and *If You Knew* are sterling reminders of the emotional power that won the singer a loyal following in the Sixties.

Visually, the recording looks as if it had been taped with a bargain-basement camera and barely available light. Granted, it is often difficult to light a live performance properly without scaring away the club's patrons, but here even the interview segments—which were conducted without an audience—look dismal. The audio is mono but acceptable. *C.A.*

THE SUN CITY VIDEO/THE MAKING OF SUN CITY. Artists United Against Apartheid: Ron Carter; Kashif; Bob Dylan; the Fat Boys; Herbie Han-

cock; Hall and Oates; Nona Hendryx; Lou Reed; Keith Richards; Bob Geldof; Bruce Springsteen; Miles Davis; Eddie Kendrick; Ruben Blades; Run-DMC; David Ruffin; Kurtis Blow; Pat Benatar; Ringo Starr; Grandmaster Melle Mel; Bonnie Raitt; Pete Townshend; others. KARL-LORIMAR 012 VHS Hi-Fi and Beta Hi-Fi \$19.95.

Performance: *The right spirit*
Recording: *Very good*

You won't find Queen or Rod Stewart in "The Sun City Video" because they actually played at Sun City, and not playing that South African resort is what this undertaking is all about. Sun City has been a lucrative stop for many top entertainers, who somehow excused their appearances there by pleading ignorance or accepting the South African government's contention that Sun City is a separate state. Of course it is no such thing, and Bruce Springsteen's sidekick Steve Van Zandt decided to make that very clear to anyone who might think of accepting a booking there. At the same time, he wanted to raise money to fight apartheid, so he assembled an impressive roster of popular-music people to record an album. As you'd expect, the album spawned a video, which in turn inspired a film on the making of the video (and even a paperback book). The royalty income

from all these items goes to the Africa Fund to support anti-apartheid causes in the U.S. and to help fight apartheid in South Africa.

Musically, *Sun City* is a rather ordinary tune consisting of the repeated phrase "I ain't gonna play Sun City." It gets to be catchy, but what makes this montage particularly engaging—apart from skillful editing and interesting special effects—is not so much the music as the spirit of the performances. This is not the song competition *We Are the World* turned out to be. Nobody here is trying to out-scream the others and participants don't seem to walk around with that aren't-we-wonderful attitude. In fact, it is impossible to single out any one of these performers.

The highlight of the video occurs at the end, when the camera slowly scans across a gathering of black South Africans and Western pop sounds give way to a mournful African hymn. I recently saw the *Sun City* video on MTV, but when this moving segment was reached, they cut to the shallow chatter of one of their so-called personalities. On tape it's intact, and I recommend the entire package.

NEIL YOUNG: *Solo Trans.* Neil Young (vocals, guitar); other musicians. *Heart of Gold; Old Man; Helpless; Ohio; Don't Be Denied; I Got a Problem; Hello*

Mr. Soul; Don't Take Your Love Away; Payola Blues; Do You Wanna Dance; Get Gone. PIONEER ARTISTS PA-85-143 131 LaserDisc \$24.95.

Performance: *Unique*
Recording: *Impressive*

Neil Young may be the most interesting stylistic chameleon in rock-and-roll, but this video excursion into the bizarre, like his early-Seventies film *Journey Through the Past*, is a mess. Directed by Hal Ashby and featuring songs and costume changes from Young's rockabilly and space-age phases, the program is intercut with utterly pointless parodies of TV documentary footage, a device both intrusive and tiresome. The concert footage, the meat of the disc, is similarly variable. The rockabilly numbers, with Young and friends billed as the Shocking Pinks, have a certain hep-cat flair, but the techno-pop stuff, in which Young is accompanied only by pre-recorded backing tracks (apparently meant to induce a Brechtian alienation effect), looks like old *American Bandstand* lip-sync jobs. The soundtracks, however, are among the best I've ever heard from a concert video, and since there is not likely to be any other documentation of Young in this last phase before his current country incarnation, I suppose that "Solo Trans" will just have to do.

L.M.

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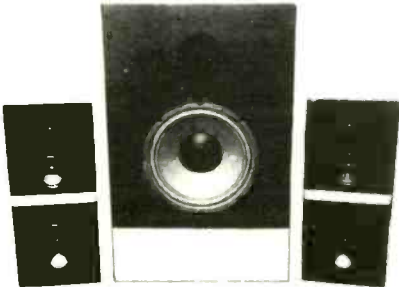
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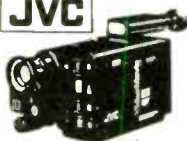
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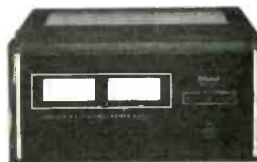
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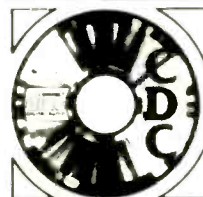
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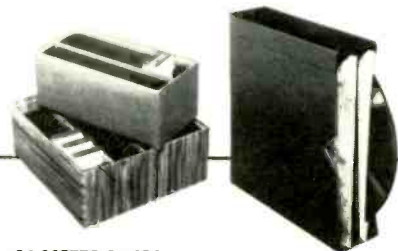


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by *Christie Barter*
& *Steve Simels*

ONE MORE TIME! Would you believe that the original home of Motown Records, the "Hitsville USA" complex that Berry Gordy started back in 1959, is now... a museum? Well, it is, and probably a good thing, too, given the dearth of civic pride in Detroit these days (the Tigers, the Lions, and the Redwings certainly haven't made many contributions in that department recently). Anyway, we mention all this because Mayor Coleman Young recently proclaimed an official "Stevie Wonder Day" in the fabled Motor



Stevie Wonder: home again

City, an occasion that brought Stevie back, if only temporarily, to the place where it (or "The Sound of Young America," as Motown used to be billed) all began. Who says you can't go home again? □

CATFISH ROW, Charleston, was exported this summer to the rolling hills of Sussex, south of London, when Glyndebourne Festival Opera launched the first professional production in England of George Gershwin's *Porgy and Bess*. It brought black-tie audiences to their feet at every performance, which is pretty rare at Glyndebourne, and it handed its *Porgy*, the Jamaican-born bass-baritone Willard White, a personal triumph of a kind rarely seen there.

Said the super-critical *Financial Times*: "[White] demands serious attention from his first entry... and rewards it with a performance of slow-

ly unfolding warmth, generosity, and final gut-wrenching heroism that stirs the audience to the depths of its being... [His] singing was subtle, lustrous, and tireless on a grand scale (is this the next British Wotan?); [his] acting moved into an area of profound identification... that one experiences very rarely on stage, let alone in the opera house."

It's unlikely that Glyndebourne's *Porgy* will be recorded. A splendid recording of the opera with White as *Porgy* is available, however, on London Records (and was recently released by that label on CD). But there is a good chance that the Glyndebourne production, co-starring the American soprano Cynthia Haymon as *Bess*, will be videotaped when it is revived next summer.

White, meanwhile, has just recorded the Mozart Requiem for Philips, John Eliot Gardiner conducting. □

PUBLIC television station WNET/Thirteen in New York launches its Live from Lincoln Center season on November 12 with the New York City Opera production of *Candide*. Telecast direct from the New York State Theater and carried by PBS stations across the country, Leonard Bernstein's Broadway musical/opera adapted from Voltaire co-stars David Eisler in the title role and soprano Eriq Mills as Cunegonde, with Muriel Costa-Greenspon as the Old Lady.

White as *Porgy* with Haymon



Mills, Costa-Greenspon, and Eisler in "Candide"

Eisler and Mills also head the cast in New World's complete recording of *Candide* released earlier this year.

On Friday, October 24, and on successive Friday evenings through November 14, the PBS network will be showing *Wagner*, an edited-down version of Tony Palmer's nine-hour film drama of the composer's life starring Richard Burton in the title role. Also in featured roles are Marthe Keller and Vanessa Redgrave, along with three great knights of the British theater—Sir John Gielgud, Sir Laurence Olivier, and Sir Ralph Richardson (in one of his last appearances). □

THE recordings of operatic soprano Maria Callas (1923-1977) continue to thrill record collectors even in the compact disc era. To supply them with biographical information Dover has now issued the first paperback edition of George Jellinek's book *Callas, Portrait of a Prima Donna*. It was originally published in 1960 at the height of Callas's artistic triumphs. For the Dover edition Jellinek has written a new prologue and epilogue. He sums up the Callas legacy by saying, "As the most influential and significant operatic personality of her age, she will continue to inspire singers, to stimulate controversies, to excite and to mystify. That is what legends are meant to do." □

FREDDIE DOES WEMBLEY. In case you're wondering what Freddie Mercury and the rest of the guys in Queen

have been up to lately, we offer the following news as proof that wretched excess (or what we used to call "decadence" back in the early Seventies) is again in style, at least in rock-and-roll. Following two sold-out shows at Britain's Wembley Stadium (combined attendance was 144,000), Queen hosted a champagne celebration in honor of their newest album ("A Kind of Magic") for sev-



Queen's Mercury on tour

en hundred of their most intimate personal friends. Highlights of the bash included male masseurs in the ladies' rooms, nude women as elevator operators, and a fireworks display. The price tag for all this foolishness? Approximately \$100,000, or \$25,000 more than the band had just donated to a Save the Children charity in Newcastle.

In a possibly related note, the Queen lads have also returned from a concert in Budapest that was claimed to

EBET ROBERTS

GUY GRAVETT/PICTURE INDEX

DON PERDUE/WNET

NEAL PRESTON/CAMERA 5



have been the largest rock show ever staged behind the Iron Curtain. □

ONE of the leading French tenors of our day is actually an American who is based in New York but performs and records more often in Europe—and most often in France. He is **John Aler**, who won a Grammy Award this year for his participation in the Telarc recording of the Berlioz Requiem.

Aler has figured prominently this fall in a number of major new recordings, the majority of them drawn from the French repertoire. First there was the EMI/Angel recording of Berlioz's *Roméo et Juliette*, released in September, in which Aler sings opposite Jessye Norman with the Philadelphia Orchestra under **Riccardo Muti**. Then came the new recording of Gluck's *Iphigénie en Tauride*, an October release from Philips, in which Aler sings the role of Pylade under the direction of **John Eliot Gardiner**. And this month Angel is releasing the first recording of an opera that few have ever heard of—Adolphe Adam's *Le Postillon de Lonjumeau*—featuring Aler in the leading tenor role.

"I've always been interested in the language and culture of France," says Aler. "I like singing in the language—and doing French operas, like the Adam, that are just not being done any more."

He's recording another rare one for EMI this season—*La Muette de Portici* by Daniel-François-Esprit Auber (whose full name you don't see around very much either).

Aler and friend in Paris



ROBERTO ESTRADA/PATHÉ MARCONI

Not one to neglect the standard repertoire, however, Aler is also participating in a new *Messiah* for EMI and a recording of Beethoven's *Missa solemnis* for Telarc. An album of Liszt songs he has recorded for the CD-only Second Hearing label should be along sometime before Christmas, and a new recording of Mozart's *Così fan tutte*, in which he sings Ferrando, is due from Angel early next year. □

IF the idea of turning Motown into a museum isn't enough to make you feel old, consider that none other than



Page, Slick, Kantner

Chyna Slick, the fifteen-year-old daughter of veteran Starship warbler **Grace Slick**, is now an MTV video jockey. Chyna and her father, **Paul Kantner**, also formerly of Starship (and soon to be reunited with old bandmates **Marty Balin** and **Jack Cassady** on a new album), went backstage to congratulate **Richard Page** of **Mr. Mister** on his group's recent sold-out show in Manhattan. Page does not, to our knowledge, have a rock-star kid, but if he does, we're checking into a retirement colony. □

TO paraphrase Waylon Jennings, don't you think this Monkees business has gotten out of hand? No? Then consider the following.

Item: The pre-Fab Four's new video (directed by **Mickey Dolenz**) is in heavy rotation on MTV. *Item:* The Monkees' greatest-hits collection ("That Was Then, This Is Now" on Arista) and brand-new single (same title, same label) have both gone Top 20. *Item:* Their recent

tour was wildly successful. *Item:* Four of their other old albums, now on Rhino, where they belong, have also re-entered the charts. (Collectors should note that the Rhino reissues mark the first official appearance of this music on cassette.)

And now, in the most mind-boggling Monkees development, comes word that one of the young hopefuls who recently auditioned for the forthcoming *New Monkees* TV show was none other than **Jason Nesmith**—son of original Monkee, now video mogul, **Michael Nesmith**. □

EVERYBODY knows what **Eddie Van Halen's** guitar work did for **Michael Jackson's** *Beat It* (an extra million in sales, probably). And now, in a similarly hopeful collaboration, **Ted Nugent** has provided his trademark heavy-metal guitar pyrotechnics on two cuts in the forthcoming album by languid electropop favorites **Berlin**, currently riding high with *Take My Breath Away*, the love theme from *Top Gun*, a filmic paean to Air Force machismo.

The Berliners were looking for a guitarist "rooted in a loose, garage-rock style," explained **John Crawford**, the group's chief songwriter and bassist. "We knew Ted was our man." Nugent apparently agrees. Said Nugent: "It was a dirty job, and Young Ted was more than obliged to do it." We'll keep you posted on further developments. □

ANTICIPATING the holidays, Pioneer Artists has released its first children's program, "Rupert and the Frog Song," on an eight-inch LaserDisc. The title track, the first of three short animated features, is based on **Rupert the Bear**, a cuddly character that has long been popular with British children (and adults, according to Pioneer)—so popular that when this program was released on cassette in England last year, it became the best-selling videotape in U.K. history.

Rupert was produced by **Paul McCartney**. The other two animations, *Seaside Woman* and *Oriental Night-*



Nugent with Berlin

fish, showcase the talents of **Linda McCartney** and **Wings**. *Seaside Woman*, in fact, won the Golden Palm Award for best short subject at the 1980 Cannes Film Festival. □

GRACENOTES. The legendary **Ronnie Spector**, who hasn't been heard from since her brief fling with the Jersey Rock Mafia (Springsteen and Southside Johnny), is back. The former Ronnettes chanteuse duets with **Eddie Money** on his new single, *Take Me Home Tonight*, and its accompanying video. About time, too. Why isn't this woman as famous as **Tina Turner**?... The new **Lionel Richie** video, *Dancing on the Ceiling*, is directed by none



Rupert the Bear

other than **Stanley Donen**, the Hollywood Musical great responsible for, among other baubles, the original *Singing in the Rain*. Fittingly, Donen once directed **Fred Astaire** (in 1951's *Royal Wedding*) in a scene where **Fred** actually danced on the ceiling... **Joe Strummer**, lead screamer with punk rock stalwarts the **Clash**, is set to star in a new comedy spaghetti western. Titled *Straight to Hell*, the flick will be directed by **Alex (Repo Man) Cox** and will feature cameo appearances by **Iggy Pop** and the **Pogues**. □

MICHAEL LEVINE

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Circle 124 on reader service card

Citizen

The CDP-120 portable compact disc player from Citizen has two headphone jacks, so that two people can listen to the player at the same time. Measuring $5 \times 7\frac{3}{8} \times 1\frac{1}{2}$ inches, the player weighs less than 2 pounds without its optional rechargeable NiCad battery pack and carrying case. A built-in AC power supply enables the player to be used directly with a home stereo system.

The CDP-120 can be programmed to play up to sixteen tracks in any order. Skip and search controls give access to any desired track or point within a track. The LCD display shows the current track number, elapsed time, the power mode, and the status of access and program functions. To save wear, the player will automatically shut off if left in pause for more than 5 minutes. Finish is black or blue. Price: \$249.95; battery pack and carrying case, \$89.95. Citizen, Dept. SR, 2999 Overland Ave., Los Angeles, CA 90064.

Circle 125 on reader service card



Kenwood

The 100-watt remote-controlled KR-V95R receiver from Kenwood has a seven-band graphic equalizer, a spectrum analyzer, two video inputs, and a stereo synthesizer. Five different equalizer settings (for different source material, listening tastes, or levels) can be programmed into memory. Twenty AM or FM stations can be preset for automatic scanning or direct access with the ten-button keypad. The power output of the

amplifier section is rated at 100 watts per channel into 8 ohms from 20 to 20,000 Hz with 0.008 percent total harmonic distortion. Price: \$480. Other new Kenwood receivers similar to the KR-V95R are the 70-watt KR-V75R (\$420), the 55-watt KR-V55R (\$330), and the 55-watt KR-V75B, without remote control (\$280). Kenwood, Dept. SR, P.O. Box 6213, 1315 E. Watson-center Rd., Carson, CA 90749-6213.

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Boston Acoustics

Designed to be flush-mounted in walls or ceilings, the Model 360 speaker from Boston Acoustics houses a 6½-inch long-throw woofer and a 1-inch dome tweeter in an enclosure only 3 inches deep. The speakers are intended for use in rooms without enough space for ordinary speakers or as unobtrusive rear speakers for surround sound. Recommended amplifier power is 5 to 60 watts. Rated frequency response is 48 to 20,000 Hz ± 2 dB. Nominal impedance is 8 ohms. The speakers are 8¾ x 11¼ inches. Price: \$400/pair. Boston Acoustics, Dept. SR, 247 Lynnfield St., Peabody, MA 01960.



Clarion Audia

The autoreverse Clarion Audia 200 cassette tuner features RCA-type outputs to make the unit compatible with car stereo components from other manufacturers. The tape section has a narrow-gap head for better frequency response, Dual Direction Auto Azimuth for consistent performance from both sides of a tape, Dolby B and Dolby C noise reduction, and equalization for chrome and metal tapes. Twelve FM

and six AM stations can be preset. The FM section has quartz-locked tuning and features the Magi-Tune system, automatic distant/local switching, automatic stereo reception, and a noise canceler. The tuner can also receive some stereo AM broadcasts. The compact chassis is said to fit most recent European, American, and Japanese vehicles. Price: \$579.95. Clarion, Dept. SR, 5500 Rosecrans Ave., Lawndale, CA 90260. **Circle 127 on reader service card**

DesignTech

The Sound Wedge from DesignTech, when it is connected between a receiver or an amplifier and speakers, and between a telephone and its wall jack, automatically reduces the volume of the stereo system when the telephone rings or its handset is lifted. When the handset is replaced, the volume returns to the previous level. The positive speaker wires for the left and right channels go into the Sound Wedge, which has outputs for the signal to go on to the speakers. Sound quality is said to be unaffected by the Sound Wedge, which is compatible with Touch Tone, rotary, and cordless phones. It can be set for activation by the phone nearest the ster-

eo system or by any extension. Price: \$29.95. DesignTech, Dept. SR, 941 25th NW, Washington, DC 20037.

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NOVEMBER

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by Christie Barter and
William Burton

AUDIO/VIDEO COMBINATION

The LaserDisc Corporation of America, part of the Pioneer Group, has developed a hybrid that combines the audio-only compact disc and the laser-read video disc. The "compact laser-disc" includes two or more music videos by a particular artist or group plus the audio contents of a compact disc by that artist, all for a list price of \$16.95. The 12-inch CLD albums are played on regular laser videodisc players.

LDC America

The first of these CLD's include recent releases by a-ha, Chicago, and the Dream Academy on Warner Bros. and by Mr. Mister and Jefferson Starship on RCA. Other record companies are expected to participate.

DIGITAL RADIO TESTS

WGBH in Boston is broadcasting digital sound, encoded by a Sony PCM-F1 processor, that can be received by listeners with a VCR, a digital processor, and a stereo system. After conversion to digital, the broadcasts are transmitted as video data on a UHF channel that can be tuned in by a VCR. If the tests are successful and other stations (such as National Public Radio affiliates) join in, Sony plans to put digital decoders into its audio receivers.

ANNIVERSARIES

America's most senior composer, Virgil Thomson, celebrates his ninetieth birthday on November 25. . . . Aaron Copland turns a mere eighty-six on November 14. . . . The Pittsburgh Symphony turned sixty in October, and operatic diva Dame Joan Sutherland does the same on November 7. Dame Joan is also celebrating the twenty-fifth anniversary of her American debut. Her frequent leading man, tenor Luciano Pavarotti, fifty-one, is celebrating the twenty-fifth anniversary of

his operatic debut in Italy. London records honored the anniversaries with special releases: "Joan Sutherland Sings Bel Canto Arias," recorded last year, and "Pavarotti Anniversary," a compilation of arias recorded between 1973 and 1985. . . . The jazz group Weather Report celebrates its fifteenth anniversary on Columbia Records with the release of "This Is This," its fifteenth album on the label.

NEW TEST RECORDS

Five direct-to-disc recordings designed for audiophiles and audio professionals have been produced by the CBS Technology Center. The new CTC Professional Series Test Records replace the STR Technical Series Test Records. The discs can be used to measure qualities such as frequency response, distortion, sensitivity, system performance, and turntable and tonearm performance. Price is \$30 each.

TECH NOTES

Pioneer will be introducing a new line of high-end car stereo components. . . . The new album from Huey Lewis and the News, "Fore," will be sold with an unique anticounterfeit card that will, if sent to inventor Light Signatures, show if the recording is genuine or counterfeit. . . . Customers who buy an Ortofon X1-MC or M3-MC cartridge and don't prefer it to their old cartridge can get a full refund of the purchase price. . . . The first video tape from Akai is the High Quality VHS T-120, priced at \$5.99. . . . The number of stations broadcasting in the Motorola C-QUAM AM stereo format has increased to 315 in the U.S., with thirty-eight in Canada, and fifty-eight in Australia. . . . Crown International has discontinued its high-fidelity product line to focus on the professional market. . . . Shure is offering a five-year warranty on the "Longlife" laser on its Model SV40 CD player. . . . New plants to manufacture compact discs in the United States include one near Dallas, Texas, being built by Mitsubishi Corp. of

Japan and ElectroSound Group (a U.S. company). Sanyo is constructing a plant to produce CD's and other laser-read discs in Richmond, Indiana.

MUSICAL NOTES

Harper's Bazaar magazine included singer and RCA recording artist Whitney Houston on its list of the ten most beautiful women in America. (Others were Lisa Bonet, Nancy Reagan, Cybill Shepherd, and Maria Shriver.) . . . A model from Czechoslovakia, Paulina Porizkova, was the only one of the beauties who also showed up on *GQ* magazine's list of the hundred smartest people in America. Along with a few writers and editors, however, the following musicians made the list on smarts: Harry Belafonte, David Byrne (of Talking Heads), composer Philip Glass, composer/lyricist Stephen Sondheim, and Frank Zappa. (Among prominent people *GQ* listed as being dumber than dolphins are Joan Rivers's voice coach and Sammy Davis, Jr.) . . . Newly published writer Tina Turner, author of *I, Tina*, has been honored with her own bronze star in the Los Angeles sidewalk right in front of the main office of Capitol Records. It is the 1,831st star in the Hollywood Walk of Fame.



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