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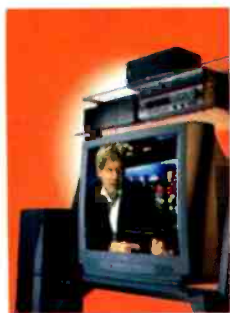


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ON THE COVER

One dealer's choice for a home-theater system costing about \$5,000 (see page 61). *Air Force One* image courtesy Columbia Tristar; AVS-800 A/V stand courtesy Bell'Oggetti.

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To the Music!

A FEW MONTHS AGO, over lunch, Julian Hirsch told me that he wanted to hang up his *Stereo Review* lab coat and retire as a columnist. And he explained, reasonably as always, that he found himself more and more reluctant to stop listening to music so that he could go to his computer and concentrate on writing his column or a test report to meet a deadline. He'd rather continue listening to the music.

How could I argue with that?

In his first "Technical Talk" column for *HiFi/Stereo Review*, in 1961, Julian introduced himself to readers and outlined principles he would observe in evaluating equipment for the magazine. "As a matter of general philosophy," he wrote, "I am for: 1. Honest, meaningful ratings and specifications. 2. The simplest approach to a given objective. 3. Any genuine advance in the art of sound production. I am against: 1. Exaggerated or unfounded claims. 2. The sacrifice of reliability or other desirable characteristics to achieve a merchandising advantage in a limited area (power output, sensitivity, etc.). 3. Gimmicks or fads that add to the consumer's cost without a corresponding improvement in the quality of sound."

Our tests show that Julian has consistently observed those principles and has met performance specifications ± 0.0001 dB — to the limits of our measurement capability! In almost forty years of writing for *Stereo Review*, he has guided millions of readers in the pursuit of good sound. He has established standards of scientific and journalistic integrity and credibility that any writer in this industry — in any industry — should aspire to meet. And he has been instrumental in setting standards for the products of this industry that have contributed to consumer trust in those products — and thus to the growth and success of consumer electronics.

Now, as Editor at Large, Julian will play a new role at *Stereo Review*. He will continue to consult with the editors and contributors of the magazine, helping us to define our test procedures and giving our equipment reviewers — David Ranada, Ken Pohlmann, Daniel Kumin, Tom Nousaine — the benefits of his experience and wisdom. But without deadlines. And, of course, he will continue to listen.

Thanks, Julian. Enjoy the music!



Louise Boundas, Editor in Chief

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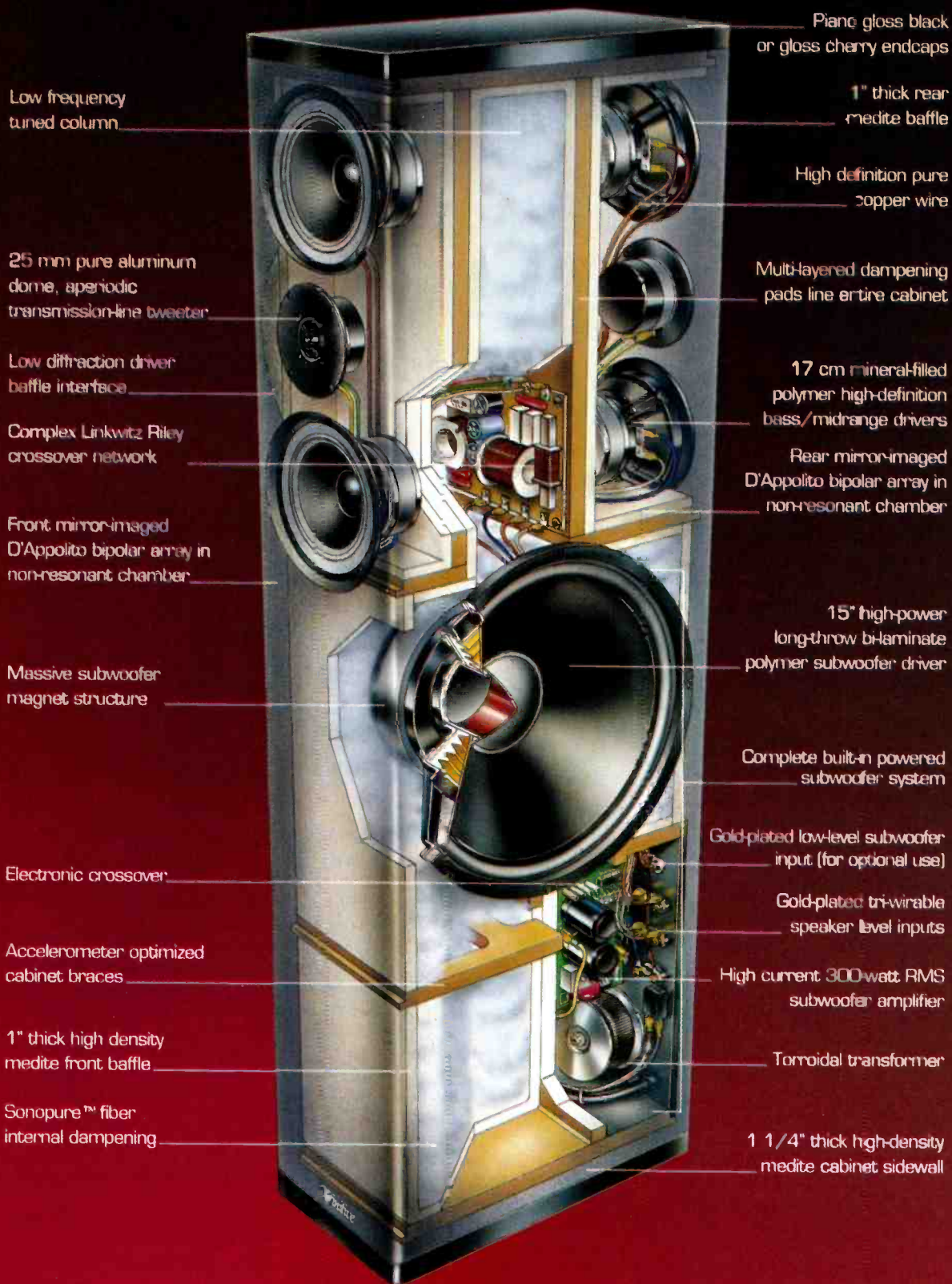
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which side are you on?

My recent purchase of the movie *Goodfellas* on DVD left me somewhat puzzled. I understand that a feature-length film, with a running time of approximately 133 minutes, can fit onto a single layer on a single side of a disc and that the capacity can be doubled by utilizing a second embedded layer on the same side. But *Goodfellas* has a running time of 145 minutes and is split between Sides A and B of the disc. For me, being interrupted in the middle of a movie and prompted to flip the disc over takes away from the pleasure of enjoying a movie from start to finish.

Why didn't this DVD use two layers on a single side? Will this inconvenience be repeated in other releases? **Bob Dutta**

Delta, British Columbia

Whether a studio resorts to a second layer or a second side for a long movie depends on manufacturing capability, capacity, and cost. There are discs on the market today that use both schemes, but we agree that the dual-layer format is far more elegant.

flat-panel-speaker update

Happy 40th anniversary! I would like to know how many other readers have the first issue of *Stereo Review* as I do. Maybe in the year 2008 I will be able to send you my congratulations on your 50th anniversary.

I have another question: I have read about NXT flat-speaker technology. Does this technology have a future?

Augusto M. Damonte
Turin, Italy

New Transducers Ltd. (NXT) of England has demonstrated prototypes of its flat-panel speakers at several trade shows over the past year or so. The demos have encompassed a variety of potential applications, including PA systems, notebook computers, car and home stereo, and home theater. Mission and Wharfedale are expected to introduce home speakers that use NXT technology in the near future, and this spring Noise Cancellation Technologies plans to introduce its own Gekko Flat Panel home speaker line, which also uses NXT patents. Whether flat-panel speakers have a future depends on many factors, not the least of which are sound quality and price.

disgraceland

When I noticed that you picked Joe Satriani, Eric Johnson, and Steve Vai's *G3: Live in Concert* as one of the worst records of the year ("Disgraceland," February), I cursed profusely. If all Parke Puterbaugh heard from this recording was speed, he didn't lis-

ten closely enough. Yes, there is some over-the-top playing, but overall the music is thoroughly enjoyable and involving.

Albert Madariaga
Richardson, TX

yes, they take bananas

In the January test report on the B&W DM305 speaker, Julian Hirsch stated that the recessed binding posts can only accept stripped wires, but that is not correct. I own a pair of these speakers, and in the center of each binding post is a small plug. When these are removed, the posts will accept single banana plugs.

C. Nolan Carson III
Lincoln, NE

unplayable dolby digital?

I read with great interest David Ranada's review of the Toshiba SD-3107 DVD player in January. While I was impressed that he mentioned audio problems involving CD playback, he did not note that the player also has DVD audio problems.

Toshiba's DVD players have a history of problems playing the 5.1-channel Dolby Digital soundtracks on DVDs having selectable audio tracks, such as *GoldenEye* and *My Best Friend's Wedding*. These problems are documented on the Internet, and I encountered them with the new SD-3107 that I purchased. I returned the player to Toshiba and received a new unit that had exactly the same problems.

Peter F. Mysing
Kenai, AK

David Ranada replies: I have tested two different Toshiba DVD player models without encountering the kind of problem Mr. Mysing had, though not with the specific DVDs he mentions. It is impossible for us to test each player with every available disc, and there is no test DVD that will exercise every possible function on every player. It is possible that Mr. Mysing was not switching the Toshiba player correctly between its audio modes, but we have found occasional incompatibilities between discs and players that apparently both follow the standard.

more on DVD vs. Divx

I'll make this quick. I have a simple way to sum up the DVD vs. Divx issue once and for all. Divx = 4:3 aspect ratio, only good for standard TVs. DVD = letterboxed 1.85:1, widescreen 16:9, and, on some select films, even anamorphic 2.35:1.

Divx cannot provide the widescreen aspect ratios of standard DVDs. Most movies are filmed in a widescreen format. When the studios have to reformat a film to 4:3, a lot of the original is lost. I'll be glad when this

AK- Alaska Audio; Juneau•Pyramid; Anchorage.
AL- Cohen's Electronics; Montgomery•Mincald's TV; Tuscaloosa•
Likis Audio; Birmingham, Homewood•Palm Audio Video; Huntsville.
AR- Custom Audio Video; Little Rock.
AZ- Jerry's Audio Video; Phoenix, Tucson, Scottsdale.
CA- Access to Music; Larkspur•Accurate AV; S. Lake Tahoe•
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CO- Listen Up; Denver, Boulder, Colorado Springs•
Soundtrack; Denver & Suburbs, Boulder, Ft. Collins, Colorado Springs.
CT- Al Franklin's; Greenwich•Audio Etc.; Orange•Carstons Stereo/Video;
Danbury•Roberts Audio Video; New London•The Sound Room;
Westport•Stereo Shop; Hartford.
DC & Washington Suburbs- Myer-Emco.
DE- Sound Studio; Wilmington.
FL- Absolute Sound; Winter Park•Audio Advice of NW Florida;
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Palm Audio; Destin•Sound Components; Coral Gables•Sound Ideas;
Gainesville•Sound Insights; Ft. Pierce•Stereotypes; Daytona Beach.
GA- Laser Disc Enterprises; Atlanta•Merit TV; Columbia
Stereo Connections; Valdosta•Stereo Festival; Atlanta.
HI- Honolulu Home Theater; Honolulu.
IA- Ultimate Electronics; Cedar Rapids, Des Moines•
Archer Audio Video; Ft. Dodge•Audio Video Logic; Des Moines•
Audio Visions; Sioux City•Hawkeye Audio; Iowa City, Cedar Falls.
ID- Ultimate Electronics; Boise•Wise Buy; Idaho Falls.
IL- Absolute Audio; Rockford•United Audio Centers; Chicago &
Suburbs•Good Vibes; Champaign•Jon's Home Ctr.; Quincy•
Sound Forum; Crystal Lake•Sundown AV; Springfield.
IN- Classic Stereo; Ft. Wayne, Mishawaka•Kings Great Buys;
Evansville•Ovation Audio; Clarksville, Indianapolis, Lafayette.
KS- Accent Sound; Overland Park•Advance Audio; Wichita•
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KY- Ovation Audio; Lexington, Louisville.
LA- Alterman Audio; Metairie•Mike's Audio; Baton Rouge•
Wright's Sound Gallery; Shreveport.
MA- Cookin'; Chestnut Hill, Saugus•Goodwins Audio; Boston,
Shrewsbury•Nantucket Sound; Hyannis•Northampton Audio;
Northampton•Pittsfield Radio; Pittsfield.
MD- Gramophone; Baltimore, Ellicott City•Myer-Emco; Gaithersburg,
Beltsville, Rockville•Sight & Sounds; Eastern Soundscape; Baltimore.
ME- Cookin'; Portland.
MI- Pecar's; Troy•Classical Jazz Holland•Sound North; Iron Mt. •
Stereo Center FRAV; Flint•Court St. Listening Room; Saginaw.
MN- Audio King; Minneapolis & Suburbs, Rochester, St. Cloud•
Audio Designs; Winona.
MO- Independence AV; Independence•Sound Central; St. Louis.
MS- Ideal Acoustics; Starkville•McLelland TV; Hattiesburg•
Players AV; Ridgeland.
MT- Avitel; Bozeman•Rocky Mt. Hi-Fi; Great Falls.
NC- Audio Video Systems; Charlotte•Audio Visions; Wilmington•
Now AudioVideo; Durham, Greensboro, Raleigh, Winston Salem•
Tri City Electronics; Conover.
NE- Custom Electronics; Omaha, Lincoln.
NH- Cookin'; Nashua, Manchester, Newington, Salem, S. Nashua.
NJ- Hal's Stereo; Trenton•Monmouth Stereo; Shrewsbury•
Woodbridge Stereo; West Caldwell, Woodbridge.
NM- Ultimate Elect.; Albuquerque•Sound Ideas; Albuquerque.
NV- Ultimate Elect.; Las Vegas•Upper Ear; Las Vegas.
NY- Audio Breakthroughs; Manhasset•Audio Den; Lake Grove•
Clark Music; Albany, Syracuse•Stereo Exchange; Manhattan•
Hart Elect.; Vestal•Innovative Audio; Brooklyn•Listening Room;
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Paragon Sound; Toledo•Stereo Visions; Columbus•
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RI- Stereo Discount Ctr.; Providence.
SC- A/V Design; Charleston•Custom Theater & Audio; Myrtle Beach•
Upstairs Audio; Columbia.
SD- Audio King; Sioux Falls•Sound Pro; Rapid City.
TN- College HiFi; Chattanooga•Hi-Fi Buys; Nashville•Now Audio Video;
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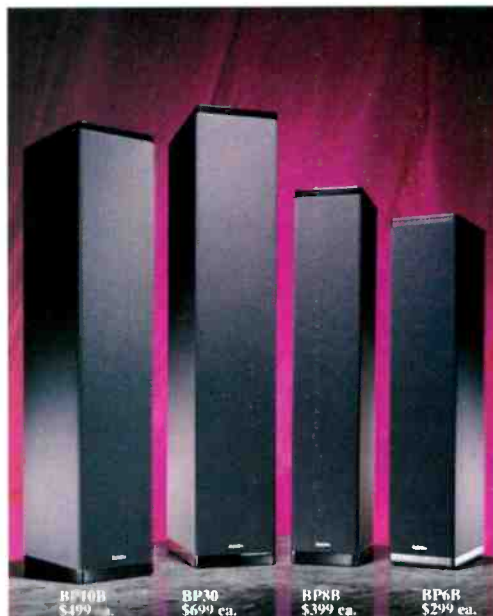
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whole debate is over and we can go back to enjoying our movies. Until then, I'm looking forward to HDTV.

P. Scott
Roselawn, IN

Actually, the Divx system can deliver wide-screen aspect ratios, but the company has chosen initially to offer movies formatted only in the 4:3 format. Divx told us that it will consider offering the widescreen option in the future if people ask for it.

The idea of a format in which you throw away the disc when you're done watching it is obscene. What world do these media people live in?

Second, if you care at all for your privacy, the idea that the Divx central computer will know every movie you watch should be astounding. But it's much like the digital satellite systems (DirecTV, PrimeStar, etc.) that are so popular, only they record every program you watch. And the corporations make us pay for their gathering of the data. Wake up, America!

Steve Self
Durango, CO

panning forward

Reviewers of surround-sound decoders generally fail to comment on something every enthusiast should deem important and be on the lookout for: the ability to portray *back-to-front* movement convincingly. I do not mean the fast jet flyovers but rather the slow, gradual transition of sound from the rear to the front, as in some of the submarine scenes in *The Hunt for Red October* or the opening scenes of *The Empire Strikes Back*. About 10 to 11 minutes into side one of the *Red October* laserdisc, the submarine gradually fills the picture frame and then slowly disappears into the distance ahead. Most decoders portray this with a diffuse enveloping rumble followed by a hard frontal sound. A properly designed decoder, however, would initially present a distinct surround image that would grow in intensity and then make a gradual, seamless transition to the front, thus helping the viewer imagine that the submarine had passed overhead.

Leopold Tamakloe
New York, NY

Technical editor David Ranada replies: The correct effect will be conveyed only if the speakers are balanced properly, hence the importance of using a sound-level meter during setup and of getting the speaker levels balanced within 1 dB of each other.

We welcome your letters. Please address correspondence to Editor, Stereo Review, 1633 Broadway, New York, NY 10019. You should include your address and telephone number for verification. Letters may be edited for clarity and length.

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NEW PRODUCTS

Carver The Carver DD-5.1 Dolby Digital processor can add digital surround capability to existing five- or six-channel systems when inserted in a receiver's pre-out/main-in loop. The DD-5.1 has two coaxial digital inputs, one optical digital input, and one RF digital input. It can act as a system's master volume control and is fully operable from its remote. The processor's chassis has rack-mount handles, which can be removed for placement in a 17-inch-wide cabinet. Price: \$1,300. Carver Corp., Dept. SR, P.O. Box 137, Woodinville, WA 98702. Phone, 800-521-4333. Web, www.carver.com.



Sharp The DV-550U, Sharp's first DVD player, is distinctively sized to fit on top of a standard minisystem component stack. The player has a built-in Dolby Digital/Pro Logic decoder and component-video outputs. A digital gamma-correction circuit is said to increase contrast in a video image's dark areas without affecting the bright ones, while a "digital super picture" circuit is said to provide greater edge detail and other picture enhancement. A proprietary Virtual Surround mode is said to provide three-dimensional sound in a two-channel A/V system. Price: \$750. Sharp Electronics, Dept. SR, Sharp Plaza, Mahwah, NJ 07430. Phone, 800-237-4277. Web, www.sharp-usa.com.



Thiel The Thiel CS2.3 three-way floor-standing speaker features coaxial tweeter/midrange drivers that share the same voice coil. The drivers' structure is said to act as a mechanical crossover, eliminating the midrange/tweeter section of the crossover network. The 42-inch-tall CS2.3, available in real wood veneer as shown or black laminate, also has an 8-inch long-excursion woofer and a 9-inch passive radiator. Frequency response is given as 35 Hz to 20 kHz ± 3 dB. Price: \$3,300 a pair. Thiel, Dept. SR, 1026 Nandino Blvd., Lexington, KY 40511. Phone, 606-254-9427. Web, www.thielaudio.com.



Harman Kardon The AVR55 Dolby Digital receiver from Harman Kardon is rated to deliver 55 watts to each of its five output channels (into 8 ohms). It is said to have an output-current capability of 35 amperes. The receiver features four audio-only inputs, including phono, and five A/V inputs, including a convenience set on the front panel. Price: \$1,199. Harman Kardon, Dept. SR, 250 Crossways Park Dr., Woodbury, NY 11797. Phone, 800-422-8027.

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NEW PRODUCTS



JVC The JVC RX-1024VBK Dolby Digital receiver is rated to deliver 100 watts to each of its five channels into 8 ohms. It has one coaxial and two optical digital inputs, each of which can be assigned to any input source. All five A/V inputs, including the front-panel set, support S-video connections. Three audio-only line-level inputs are also provided. All speaker outputs accept banana plugs. Price: \$900. JVC, Dept. SR, 41 Slater Dr., Elmwood Park, NJ 07407. Phone, 800-252-5722. Web, www.jvc.com.



TDS The TDS-II two-channel analog audio processor from True Dimensional Sound is said to enhance the fidelity of any music source by restoring "harmonic loss" that occurs during the recording and playback of an audio signal. The processor has a single on/off pushbutton and two RCA inputs and outputs. The black, anodized, brushed-aluminum cabinet measures 8 x 1 1/4 x 4 1/2 inches. Price: \$295. True Dimensional Sound, Dept. SR, 1450 Madruga Ave., Suite 404, Coral Gables, FL 33146. Phone, 305-668-9198. Web, www.tdsaudio.com.

AcouSTech

AcouSTech's PH-1 phono preamplifier can be set up for moving-coil (MC) or moving-magnet (MM) cartridges. In its MC configuration, it provides a gain of 61.5 dB, resistive loading of 100 ohms, and capacitive loading of 10,000 picofarads (pF). In its MM configuration, gain is 42 dB, resistive loading is 47,000 ohms, and capacitive loading is 220 pF. The PH-1 measures 18 1/4 x 2 1/2 x 12 3/4 inches and weighs 20 pounds. Price: \$1,200. AcouSTech Electronics, Dept. SR, 1000 W. Elm St., Salina, KS 67401. Phone, 785-825-8609. Web, www.acousticounds.com.



Dantax The Vision line of Danish-made Dantax speakers includes the 27 1/2-inch-tall Vision R bookshelf speaker, the 85-inch-tall Vision One (center above), the 100-inch-tall Vision Two (right), and the Vision C center speaker (not shown). All feature soft-dome tweeters and bass-reflex cabinets finished in cherry veneer. The Vision One and Two are three-way designs with dual woofers. Prices: Vision Two, \$1,200 a pair; Vision One, \$1,000 a pair; Vision R, \$500 a pair; Vision C, \$300 each. Dantax, distributed by ETC. Technologies, Dept. SR, 5809 Coldcreek Ct., Plano, TX 75093. Phone, 972-612-3329.



Cinepro The Cinepro Power Station II combines a power conditioner, a surge protector, and a line-voltage monitor in one rack-mountable package. A single front-panel switch controls eight rear-panel outlets. Two slide-out lamps (with dimmer) illuminate components below the unit. Price: \$349. Cinepro, Dept. SR, 1030 Vicente, San Francisco, CA 94116. Phone, 800-395-1222. Web, www.cinepro.com.



Onkyo The Onkyo DV-S501 DVD player provides component-video, composite-video, and S-video outputs and both optical and coaxial digital audio outputs. A 4X picture-magnification feature allows viewers to zoom in to one of twenty-five user-selectable screen zones. The player's 10-bit video signal processor is said to provide pristine, glitch-free play at six speeds other than normal: 30X, 8X, 2X, one-half, one-eighth, and one-sixteenth. All player functions can be operated through front-panel controls or the supplied remote. Price: \$850. Onkyo, Dept. SR, 200 Williams Dr., Ramsey, NJ 07446. Phone, 201-825-7950. Web, www.onkyo.co.jp.

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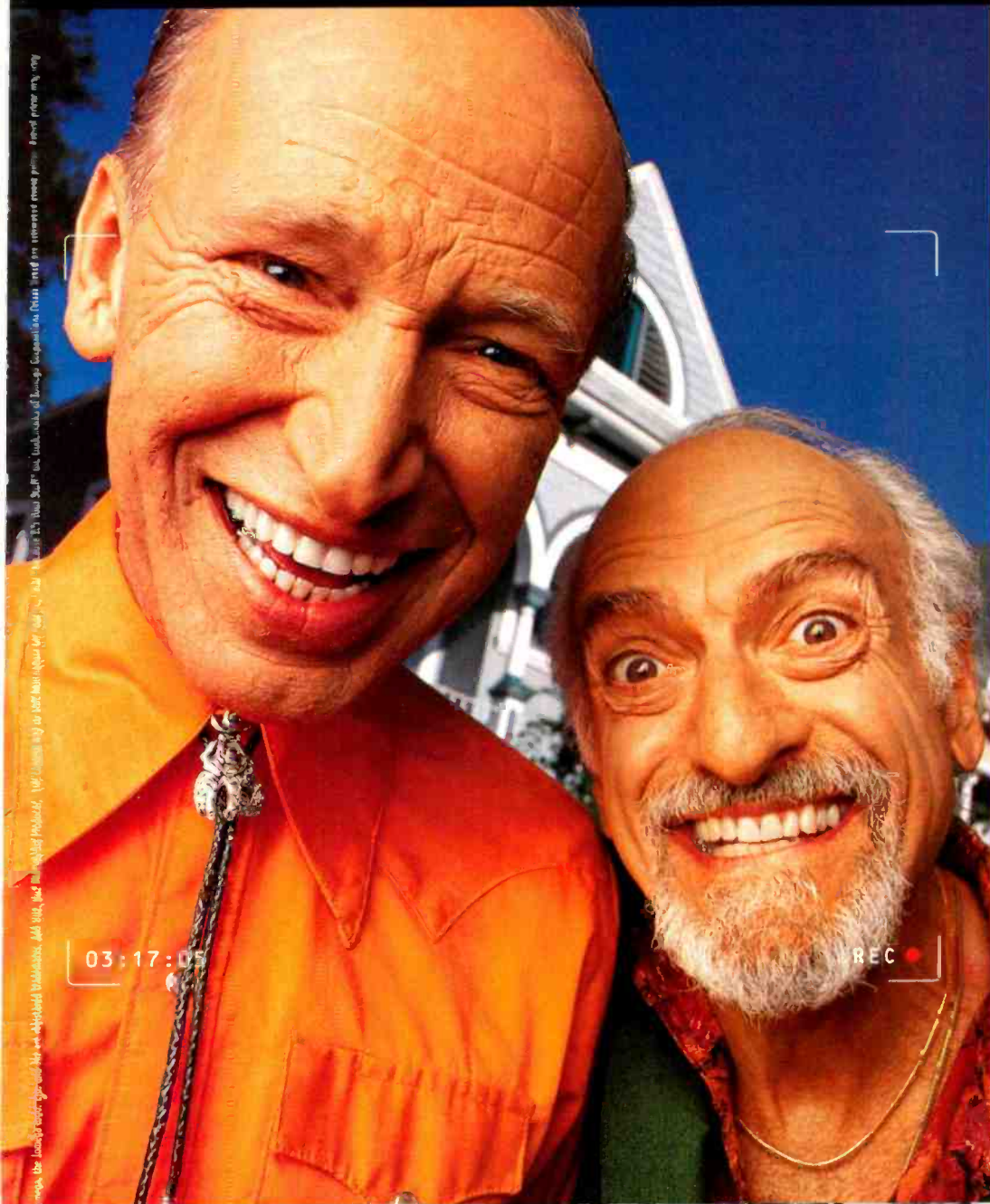


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NEW PRODUCTS



Panasonic The Panasonic DVD-A310 DVD player features built-in Dolby Digital decoding and component-video outputs. Its digital output is compatible with outboard DTS decoders. The player also has a proprietary Virtual Surround Sound mode for two-channel systems. The DVD-A310 is equipped with a remote that features a thumb-operated joystick and a jog/shuttle dial. Price: \$600. Panasonic, Dept. SR, One Panasonic Way, Secaucus, NJ 07094. Phone, 800-211-7262. Web, www.panasonic.com.

Bag End

The Bag End MM8-H bookshelf speaker is a home-theater version of the company's MM8 professional monitor. It features an 8-inch, two-way coaxial driver. Frequency response is given as 95 Hz to 24 kHz ± 3 dB and sensitivity as 84 dB. Finished in a painted soft suede with a black cloth grille, the speaker measures 16 x 11 x 6 inches. Price: \$1,132 each. Bag End, Dept. SR, P.O. Box 488, Barrington, IL 60011. Phone, 847-382-4550. Web, www.bagend.com.



Sherwood Newcastle

The AVP-9080 preamp/tuner/processor from Sherwood Newcastle (top) has built-in Dolby Digital and DTS decoding and six composite/S-video A/V inputs. The DVD input also accepts component-video signals. Optical and coaxial digital audio inputs can be assigned to any source. Five analog audio inputs are provided, including phono. The AMP-9080 five-channel amplifier (bottom) is rated at 120 watts per channel into 8 ohms. Prices: \$1,200 each. Sherwood Newcastle, Dept. SR, 14830 Alondra Blvd., La Mirada, CA 90638. Phone, 714-521-6100. Web, www.sherwoodusa.com.



Wright Audio The Wright 16-I two-channel integrated tube power amplifier has solid-oak side panels and features a low-feedback, Class A, single-ended design. Its two 12AX7WXT and two 6L6 tubes are operated in partial triode mode. Because of its cathode-biased design, no user adjustment of bias is required. Power output is rated at 8 watts per channel into 8 ohms. There are two line-level inputs. Price: \$750. Wright Audio, Dept. SR, 3088 W. 15th Ave., Unit 17, Eugene, OR 97402. Phone, 541-343-1413.

Paradigm Monitor The Paradigm Monitor Model 70P (right) and Model 90P (left) are floor-standing speakers with the same 1-inch tweeter and 6 1/2-inch mid-range driver. The 39-inch-tall 70P has two 6 1/2-inch woofers and the 43 1/2-inch-tall 90P two 8-inch woofers, driven in each case by a built-in 140-watt amplifier with auto on/off operation, soft clipping, and thermal protection. Frequency response is given as 30 Hz to 20 kHz ± 2 dB for the 70P, 25 Hz to 20 kHz ± 2 dB for the 90P. Each speaker is available finished in light cherry, dark cherry, or black ash vinyl. Price: 70P, \$1,199 a pair; 90P, \$1,499 a pair. AudioStream, Dept. SR, M.P.O. Box 2410, Niagara Falls, NY 14302. Phone, 905-632-0180. Web, www.paradigm.ca.

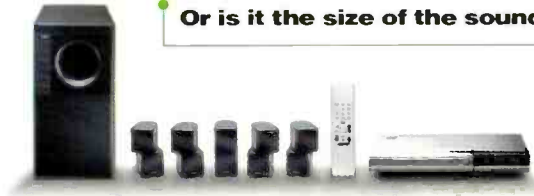


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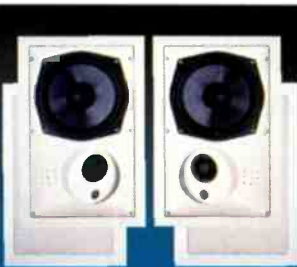
NEW PRODUCTS



ProScan The ProScan PSVR74 VHS Hi-Fi VCR features both commercial advance (which lets it skip over most commercials during playback of a recorded program) and movie advance (which lets it skip previews on prerecorded tapes). The PSVR74 also features VCR Plus Gold, which sets up the VCR Plus channel list automatically and also sets the VCR's own clock and calendar. The recorder automatically turns itself off after long periods of disuse to save energy and to insure proper timer operation. Price: \$379. ProScan, Thomson Consumer Electronics, Dept. SR, 10330 North Meridian St., Indianapolis, IN 46290. Phone, 800-776-7226.

SpeakerCraft

The Model 8.5MIT three-way in-wall speaker from SpeakerCraft features a Uni-Pivot tweeter/midrange combination and an 8-inch woofer. Its AcoustaCell enclosure is said to solve resonance and damping problems. The frequency response of the 8.5MIT is given as 30 Hz to 22 kHz \pm 2 dB and its sensitivity as 90 dB. Cutout size is 15 $\frac{1}{8}$ x 9 $\frac{1}{8}$ inches, and mounting depth is 3 $\frac{1}{8}$ inches. Price: \$1,225 a pair. SpeakerCraft, Dept. SR, 1650 Seventh St., Riverside, CA 92507. Phone, 800-448-0976.



Sennheiser

The Sennheiser RS4 wireless RF headphone system consists of the T4 transmitter and the HDR4 headphones. The system operates in the 900-MHz band, has three switchable frequencies, and is said to have an effective range of 250 feet. The supplied rechargeable nickel-metal-hydride battery is said to provide 3 hours of operation per charge. Features include automatic gain control and an automatic power-conservation mode. Price: \$160. Sennheiser, Dept. SR, 1 Enterprise Dr., Old Lyme, CT 06371. Phone, 860-434-9190. Web, www.sennheiser.com.



Acoustic Research The P315 HO, a 43 $\frac{3}{4}$ -inch-tall floor-standing acoustic-suspension speaker from Acoustic Research, has a 15-inch servo-controlled side-mounted woofer driven by a built-in 500-watt Sunfire amplifier, two midrange drivers, and a diamond-coated titanium-dome tweeter. Frequency response is given as 20 Hz to 20 kHz \pm 3 dB. The P315 HO is available finished in black ash or cherry wood veneer. Price: \$1,200. Acoustic Research, Dept. SR, 527 Stone Rd., Benicia, CA 94510. Phone, 707-748-5940. Web, www.acoustic-research.com.



Marantz The Marantz SR-580 Dolby Digital receiver delivers 60 watts to each of five channels into 8 ohms. It includes an optical, a coaxial, and an RF digital input and three analog audio-only inputs. Five A/V inputs are provided, including one on the front panel, all compatible with S-video signals. The receiver comes with a learning remote control. Price: \$700. Marantz, Dept. SR, 440 Medinah Rd., Roselle, IL 60172. Phone, 630-307-3100. Web, www.marantzamerica.com.

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Hot DVDs

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MY BEST FRIEND'S WEDDING

One of the surprise hits of 1997, this smart, funny movie about self-discovery stars Julia Roberts as a woman who falls in love with her best friend (Dermot Mulroney) on hearing he's going to marry someone else (Cameron Diaz); Roberts then sets out to destroy the wedding with the help of a gay friend (Rupert Everett). Director P.J. Hogan makes full use of the Panavision screen, many of the frames reminiscent of the spatial extremes in the early days of CinemaScope. It's good news, then, that the letterbox version on this DVD has splendid detail and focus. So does the pan-and-scan version on the flip side, but few will want to watch it since so many active characters are missing from the full-screen TV picture. The sound throughout is excellent, especially in the English Dolby Digital 5.1-channel mix. Music has good clarity and frequency response, dialogue is well defined, and the surround lends ambience and aural space recognition to shots made in many different locations. As usual, Columbia TriStar Home Video offers a choice of jewel-box or keep-case packaging, though I wish the company would begin

providing some other DVD extras as well, such as trailers and cast bios — features that have become more or less standard on titles from many other companies.

Two-sided; English, Dolby Digital 5.1; English, French, and Spanish, Dolby Digital 2-channel matrix surround; English and Spanish subtitles; letterbox (2.35:1 aspect ratio) and pan-and-scan. 105 min. Columbia TriStar Home Video (jewel box or keep case), \$29.95.



WHO'S AFRAID OF VIRGINIA WOOLF?

The 1966 movie version of Edward Albee's hit Broadway drama won five Academy Awards, including Best Actress for Elizabeth Taylor and Best Supporting Actress for Sandy Dennis. The movie was groundbreaking for pushing the censorship envelope of the day, which helped lead to the MPAA ratings we now enjoy. The spiffy DVD transfer allows viewers to revel in the dynamic performances in this story of a dysfunctional middle-age, college-faculty couple (played by Taylor and Richard Burton) who have resorted to cruel S&M games, refueled by alcohol, to hide real grief. The DVD format is capable of presenting a black-and-white picture that looks close to theatrical, and that's the case here. The image has plenty of contrast and, if you have your monitor's gray scale adjusted correctly, a rich palette of varying tones. Haskell Wexler, who won an Oscar for his cinematography, discusses his craft in a highly interesting and informative supplemental soundtrack. Warner Home Video also provides production notes and bios of the cast members, Albee, and director Mike Nichols. A nice touch is the inclusion of the complete exit music, so we can hear without dialogue the haunting main theme of Alex North's pungent chamber-ensemble score. But Warner gets a technical demerit for mastering the movie at a sound level many decibels below that of the inescapable opening DVD logo sequence. Once you crank it up, the sound is excellent cleaned-up mono, but you'd better lower the volume before putting in another disc!

Two-sided; Dolby Digital 1-channel mono and 1-channel mono commentary track; English,

French, and Spanish subtitles; letterbox (1.85:1 aspect ratio) and pan-and-scan. 131 min. Warner Home Video, \$24.95.



FLEETWOOD MAC: THE DANCE

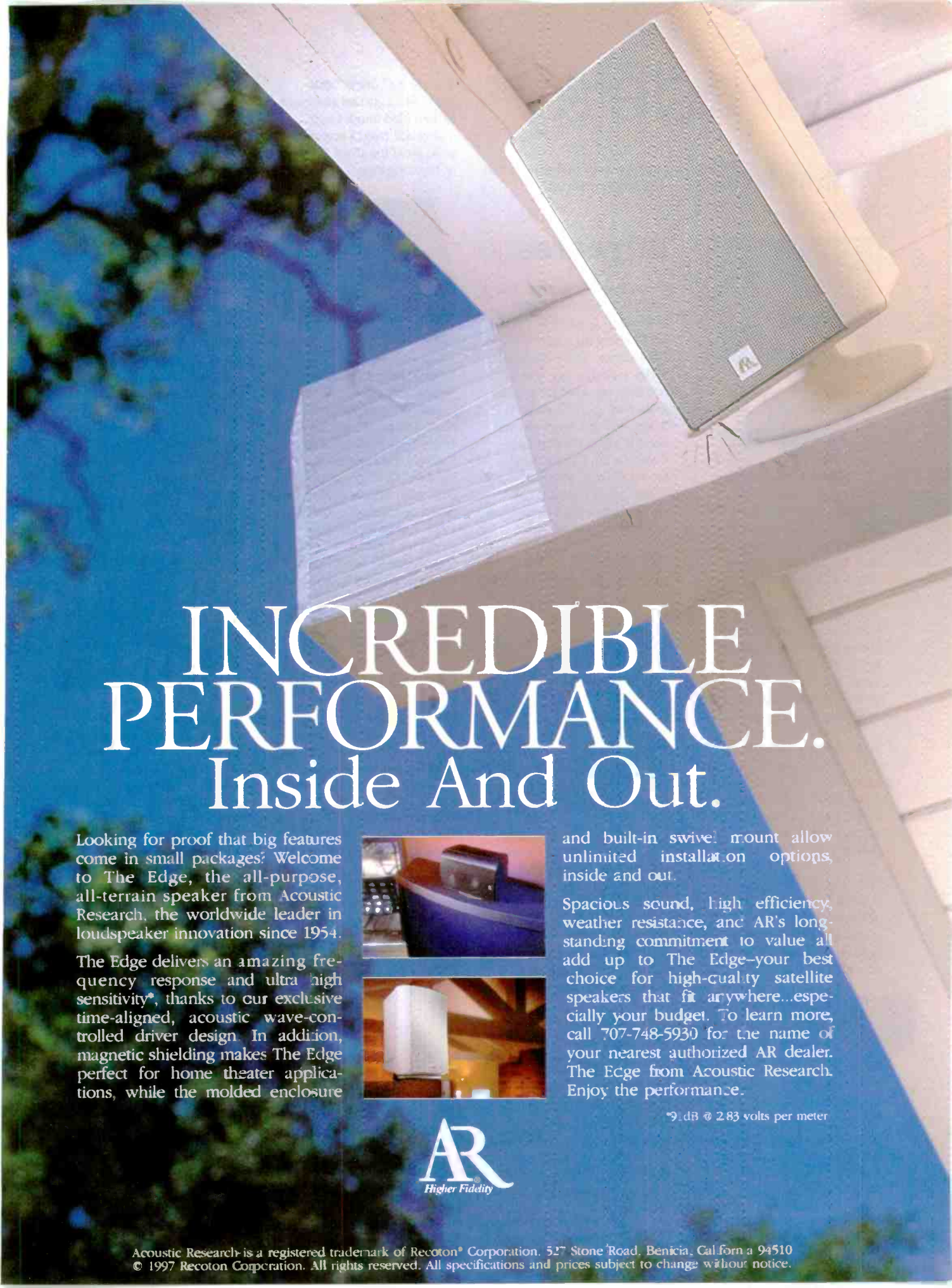
After a silence of ten years, the classic Fleetwood Mac lineup of Mick Fleetwood, Christine McVie, John McVie, Lindsey Buckingham, and Stevie Nicks commemorated the twentieth anniversary of their *Rumours* album by performing three concerts on a Warner Bros. soundstage. These were filmed and edited into the current program, and it's one of the best music titles to be released so far on DVD. Although the members of this landmark band are visually more subdued than in the past, effecting a near PBS concert appearance, the music is still in their collective bones. Driven by arguably one of the best-ever rhythm sections, they sound vital and alive, as if they had never taken a break. The many high points include Buckingham's fervent "Go Insane," Buckingham and Nicks's intimate, soulful "Landslide," and the jubilant "Don't Stop," in which the group is joined by the U.S.C. Trojan Marching Band. PCM tracks can take up so much space that putting them on the same side as the Dolby Digital tracks would probably have necessitated a break in the program. The solution here is a two-sided DVD with the program intact on each side, one with Dolby Digital 5.1-channel sound and the other with a straight PCM stereo track. Both mixes are good but decidedly different, the PCM warmer, the Dolby Digital more detailed with ambient crowd sounds and some music mixed to the back. The biggest difference is in "Don't Stop," where the Dolby 5.1 mix puts the brass in the back. Either soundtrack is good enough that it can be enjoyed without the video, purely as an audio recording. How thoughtful of Warner Reprise Video to provide all this for only \$5 more than the videocassette version and \$15 less than the laserdisc. DVD is surely the preferred medium for *The Dance*.

Two-sided; Dolby Digital 5.1 and PCM 48-kHz 16-bit stereo; English subtitles. 106 min. Warner Reprise Video, \$24.99.



Wedding's Julia Roberts

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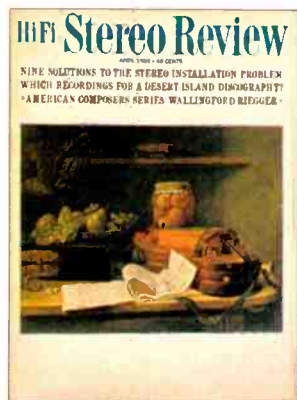
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*91 dB @ 2.83 volts per meter

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time delay



30 years ago

"I am compelled to disagree most emphatically with William Anderson's assertion in his January editorial that country-and-western music now qualifies as a phenomenon," charged Ronald A. Collins of Boston in an April 1968 letter. "Rather, it is a weird outpouring generally communicated to the public by people with chronic colds and sinus trouble, and probably therefore more properly thought of as a disease."

New products included Olson's AM-311 headphone amp (\$25), Lafayette's LR-1000T AM/ stereo-FM receiver (\$220), and Pioneer's top-of-the-line speaker, the four-way CS-63 (\$250) with a 15-inch woofer.

Does any of this sound familiar? "At the root of most of the problems of the classical record industry is simply the small size of today's potential



Lafayette receiver, 1968

buying audience," wrote music editor James Goodfriend. He argued that classical music should be made "an accepted part of the lives of young people, so that it will continue

to be a part of their lives when they have grown up."

20 years ago

"I don't want it to stop," Daryl Hall told interviewer Phyl Garland in April 1978 when asked about his career with John Oates. "If we can just stay at this level for, say, five years, and then taper off for another five years . . ." Elsewhere, editor William Anderson was ecstatic about the first *Live from Lincoln Center* vocal-recital telecast, starring "a man whose name is well on its way to becoming a household word": Luciano Pavarotti.



The "Beam Box," an indoor FM antenna shaped like an ordinary audio component, was a new product from BIC, priced at \$90. Infinity's top-of-the-line speaker, the Quantum Reference Standard (\$6,500 a pair), featured electromagnetic-induction midranges and tweeters and a 15-inch woofer.

The world's most powerful receiver at the time, the 270-watt-per-channel SX-1980 by Pioneer (\$1,250), was introduced at the Winter Consumer Electronics Show. The "most unusual" speaker on display, according to technical editor Ralph Hodges, was a system by Plasmatronics. Its sound came not just from a conventional woofer but

also from a "driver" that required a constant stream of helium bled into a small quartz cell from a pressurized tank, good for about 300 hours of listening time.



BIC FM antenna, 1978

Steve Simels urged readers to seek out six vintage records to seek out six vintage records he called "Rock Sleepers": *Moby Grape*, the MC5's *High Time*, Elvis Presley's *Elvis Country*, Paul Revere and the Raiders' *All-Time Greatest Hits*, Alan Price's *This Price Is Right*, and John Cale's *Paris 1919*. But he had no kind words for a current album, *Bat Out of Hell* by Meat Loaf, which he dubbed "pot roast."

10 years ago

In the April 1988 issue, Julian Hirsch tested emerging technologies in two speakers: the Magnasphere Nova (\$5,500), claimed by Magnat to be the first speaker to achieve true omnidirectional sound dispersion, and the Recoton W100 (\$270), a wireless system. Hirsch found "virtually no radiation to the sides" of the Magnat satellites but still praised the overall sound. The Recoton "worked exactly as claimed, and the

sound was remarkable for a pair of 4½-inch drivers in mini-cabinets."

"CES Showstoppers" included Casio's DA-1 portable DAT recorder (\$1,099), weighing 1.6 pounds, and Lexicon's CP-1 Digital Audio Environment Processor (\$1,200).

Sinéad O'Connor's debut album, *The Lion and the Cobra*, was cited in Best of the Month, as was Bernard Haitink's Angel recording of the Vaughan Williams *London* Symphony. Not so hot was *The Heat of Heat* by future *Tonight Show* bandleader



Kevin Eubanks, a case of "a fine jazz guitarist trapped in a bland, pop-oriented album," wrote Chris Albertson. And reviewer Alanna Nash, other than giving a "Performance" rating of "Overwrought," had just two sentences for Dolly Parton's *Rainbow*: "Have you seen Dolly's glitzy new TV show? Good, then you've heard this album."

—Ken Richardson

Dolly Parton, 1988



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Product Report, October 1997, TVRO Dealer Magazine

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AUDIO Q&A

IAN G. MASTERS

digital surrounds

Q. *I intend to upgrade my system to take advantage of digital media such as DVD. I know there are receivers that incorporate DTS decoding, and I thought maybe that would be the way to go because that's the digital surround system they use in movie theaters. What are the main differences between Dolby Pro Logic, Dolby Digital, and DTS? And what's in store for these formats?*

Pierre Martinez
Sugar Land, TX

A. Well, let's dust off the old crystal ball. Dolby Surround is a matrix system that uses two channels of information, which can be played back as simple stereo or fed to a Dolby Pro Logic decoder. The decoder extracts a center channel and a mono surround channel from the front left/right channels, and all four signals are fed to appropriate speakers. This is the most common kind of surround sound, and virtually every videocassette and laserdisc is encoded with Dolby Surround. For that reason, it's not going to disappear anytime soon.

Dolby Digital (DD) and DTS are both so-called discrete 5.1-channel systems in which there are five separate full-range audio channels — three front and two surround — as well as a dedicated limited-bandwidth low-frequency (subwoofer) channel. To fit all of these into a reasonable storage space on a digital disc or tape, data-reduction techniques are used to remove those parts of the signal that we can't hear. The DD and DTS systems accomplish that differently and, of course, incompatibly. Fans of each system claim superiority.

It is true that DTS has a slight lead in theaters, and it was chosen for such blockbusters as *Jurassic Park* and, more recently, *Titanic*, but that doesn't translate into dominance in the home-theater market. Most observers believe that Dolby Digital is so entrenched in the home market — it is the audio encoding scheme chosen for DVD and the upcoming digital TV — that nobody will be able to dislodge it. Consider that more than 500 DVD movies with DD soundtracks are currently available.

tone controls vs. equalizers

Q. *The majority of audio receivers have conventional tone controls centered at 100 Hz and 10 kHz. It seems to me that such broad-band controls are of little use for correcting speaker/room response. With various types of equalizers popping up*

everywhere in car audio, minisystems, and portables, shouldn't they be standard in home audio receivers too?

Chun Wang
New York, NY

A. I'm not so sure. Certainly, in the hands of someone who knows what he's doing, an equalizer allows much finer control over the spectrum and can be useful for taming acoustic anomalies. Trouble is, most people don't know how to use them properly but try to anyway, and they end up with worse sound than they started out with. Some of the worst-sounding audio systems I have encountered have been "improved" that way.

Purists would prefer no tone controls at all, but I think there's some virtue in being able to tame an overly bright recording or beef up a thin one. Conventional tone controls provide that facility without giving much scope for truly ruining the sound.

DVD across borders

Q. *If I purchase a DVD player outside the United States, but buy a disc in the U.S., will it play? If not, is there something I can adjust on the player to unlock it so that the disc will work?*

Ira Zarate
Houston, TX

A. No to both questions. The movie industry insisted on "regional coding" precisely in order to prevent discs intended for release in one part of the world from playing on machines in another part. For that reason, there's no little switch on the back that will let you play U.S. discs on a foreign machine or vice versa.

extra preamp

Q. *My integrated amplifier doesn't have enough inputs to handle all of my equipment. It does, however, have pre-out and main-in jacks. Could I connect a passive preamplifier with enough inputs to the main-in jacks and use that? If not, how else could I extend my input capabilities?*

James Mellon
Milan, OH

A. You could do that, and you would gain some flexibility. But since the output of a preamp is at line level, just like your source components, I'd plug it into one of the line-level inputs on the amp. That way you'd get the use of all of the amplifier's inputs (less the one that the preamp

is connected to), plus all of the preamp's inputs. Once you get that set up, you can use the external preamp's level control to get a good match between the signals fed to it and those fed directly to the amplifier.

recorder connections

Q. *My surround-sound receiver has a single-well cassette deck, which I use only for recording, connected to its one tape-monitor loop. I recently bought a dubbing deck to use in the same system. How should I connect it?*

Rony B. Montbrun
Clintonville, WI

A. There may be only one set of connections identified as an audio tape-monitor loop, but there's nothing to say you can't use unoccupied A/V inputs. The audio jacks in an A/V connection are exactly the same as their audio-only counterparts, and you can ignore the video jacks. There might, for instance, be a second VCR loop that you could use for your audio dubbing deck.

If not, you could probably just use any line-level input that's free. You already have recording capability with your existing recorder, and copying capability internally in the dubbing deck, so it could be assigned a playback-only role and connected to a regular input. If all the audio inputs are in use, there may be an unoccupied set of A/V jacks. Again, ignore the video connections.

If none of this works, external switching boxes are available that can extend a receiver's input possibilities considerably.

computer hi-fi

Q. *I have a spare power amplifier and speakers that I would like to hook up to my computer, but reviews of powered computer speakers never say what kind of input they require, so I can't tell whether my audio equipment will be compatible. Am I going to run into level or impedance problems?*

Bob Sogge
Tucson, AZ

A. Virtually all computer sound cards have line-level outputs, and multimedia amplified speakers have line-level inputs. Both, however, often use stereo mini-plugs and jacks instead of RCA-type connectors. The best thing is to hook it up and try it. Start with the volume on the amp at minimum and bring it up gradually until you reach a comfortable level. If there is

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audible distortion, the amp inputs may be overloading to some degree, but that can be remedied by turning down the output level of your computer, which is usually accomplished through a software setting.

self-processing speakers

Q. *My speakers incorporate built-in signal processing to widen the image they produce. If I upgrade from my two-channel setup to a 5.1-channel surround system, can I still use my existing speakers in the main channels?* **David C. Shaffer**
Sheboygan, WI

A. There's no reason you can't use your existing speakers as the main front pair in a surround system as long as you can find center and surround speakers that come reasonably close to a tonal match. The expanded sound field developed by the left/right front speakers might create some strange effects with an ordinary Dolby-encoded soundtrack, but it should work fine with a discrete digital surround signal.

humming CDs

Q. *I have a pair of amplified speakers to use with my portable CD player. If I connect them when the player is powered by its AC adapter, I hear a loud humming sound, but when I use batteries the hum is gone. Why?*

Brian Tusi
Camarillo, CA

A. It sounds like a ground-loop problem to me. When you connect the two components to the AC power system, their chassis are nominally at ground potential because the power lines are grounded. In reality, there can sometimes be slight differences in their respective "grounds," and if you connect the two chassis together by a second route — the shields in your audio cables — an electric current can flow and show up as 60-Hz hum. Break one of the ground connections, as by switching to batteries, and the loop disappears along with the hum.

Ground loops can be devilishly difficult to cure, but in your case I suspect it will be fairly simple: just make sure that both the speakers and the CD player are plugged into the same outlet or power strip.

Another possibility, however, is that the your CD player's AC adapter is faulty or has inadequate filtering and is generating the noise. A replacement adapter might quiet things.

If you have a question about audio, send it to Q&A, Stereo Review, 1633 Broadway, New York, NY 10019. Sorry, only questions chosen for publication can be answered.

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DVD-Audio Will Set You Free

I ALWAYS HAVE BEEN, and probably always will be, an apostle of technology, and, I guess, a bit of an evangelist as well. I have always optimistically believed that technology is overwhelmingly good. It can improve people's lives and make society a better place. Whatever ills technology creates, technology can remedy.

However, I must confess that my optimism wavered recently. Everywhere I looked, I could see disturbing signs of unnecessary complexity, such as owner's manuals for home-entertainment equipment with more than a hundred pages of instructions, and remote controls with forty or more buttons. My concern peaked as news of DVD-Audio trickled out of the working group charged with devising its specifications. The preliminary specs are far from simple.

Although the final DVD-Audio specifications will be more streamlined than the contentious early drafts suggest, it appears that instead of selecting from the many diverse ideas presented to it by competing companies, the working group will agree to disagree. The final DVD-Audio specification will not describe a single unified format but rather a basket of loosely compatible formats.

It was that diversity that troubled me. I worried that DVD-Audio was a sign that the system had broken down, that audio technology was crashing under its own weight, and that DVD-Audio would fail because it was just too complicated.

DVD-Audio is a very different story from previous, blessedly simple audio formats. The initial stage is simple enough: all DVD-Audio discs will carry two-channel music tracks that can be played on all DVD-Audio players. Beyond that, however, the permutations are staggering. Because the format is "scalable," manufacturers will have great liberty in deciding how to encode music data. For example, the "standard" sampling rate could be 44.1, 48, 88.2, or 96 kHz, and the digital word length could be 16, 20, or 24 bits. This "standard" format could support a maximum of six channels. A different, "super high quality" format could employ sampling rates of 176.4 or 192 kHz and

word lengths of 16, 20 or 24 bits; it would be limited to two channels. Main and surround channels could be encoded using different sampling rates and word lengths. A disc might store two-channel music separate from multichannel music, or it might contain instructions enabling the player to automatically mix the multichannel music down to two channels. A disc might contain an embedded data layer that is Red Book-compatible and playable on any CD player, or it might not. A disc might employ some kind of data compression, or it might not. DVD-Audio will also support video content encoded per a subset of the DVD-Video specification. It could include, for example, on-screen menus for player control.

We should not worry about the laundry list of DVD-Audio permutations but rather enjoy the possibilities.

Even the simplest aspects of a DVD-Audio disc will seem complicated. For example, depending on how the disc is encoded, a wide range of playing times is possible. A dual-layer disc carrying two-channel music encoded at 48 kHz and 24 bits would have a playing time of 469 minutes. If the sampling rate was bumped to 192 kHz, the disc's playing time would drop to 117 minutes. A single-layer hybrid multichannel disc could carry 43 minutes of 96-kHz/24-bit/two-channel music and 43 minutes of five-channel music with a 96-kHz/24-bit/three-channel format in the front and a 48-kHz/24-bit/two-channel format for the surround channels.

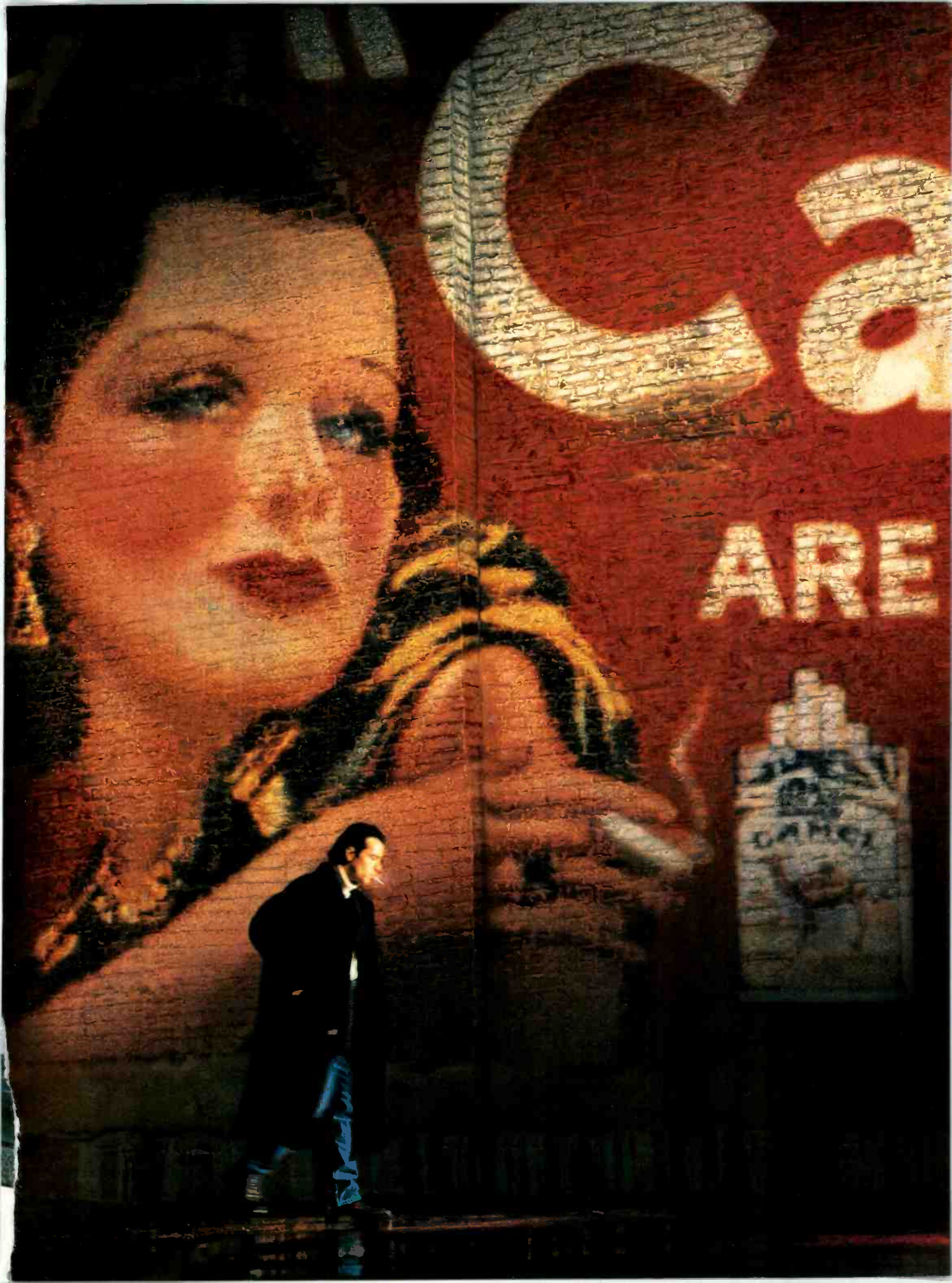
It was the vast technological range between the elegantly simple classical audio formats of the past and this new audio technology that gravely concerned me. I wondered whether we had gone too far, whether technologists had become so detached from their consumer markets that no one would buy DVD-Audio. I thought

about that long and hard, and I finally reached a resolute conclusion.

I've decided that the great complexity of DVD-Audio will be its greatest strength. We are long past the days of simple technologies such as the LP. We are living in a society in which complexity and diversity must be embraced. We should not worry about the laundry list of DVD-Audio permutations but rather enjoy the range of possibilities. With today's technology we can build low-cost players that can play any kind of DVD-Audio disc, oblivious to how its contents are encoded. DVD-Audio players will be true audio computers, able to process a wide variety of programs. It is no longer sensible or relevant to build digital devices that have only one function, like a CD player. Rather, the power of computers should be used to full advantage. Everything about DVD-Audio will be liberating. The playing times of the LP and the CD were chosen to accommodate the durations of the symphonies of long-dead European composers. With DVD-

Audio, the playing time, the fidelity, and everything else are variables, and the playback technology rightfully recedes as a limitation on the artistic content.

It is true that this liberation will come at a price. There will be resentment and confusion among some consumers. But the technology that creates confusion will give way to new technology that overcomes it. Surely the best DVD-Audio players will have clever operating systems and user-friendly interfaces that will make their use as intuitive as a CD player. Purchasers will be able to choose from a wide selection of programs appealing to traditional audio purists, to new home-theater enthusiasts, and to everyone in between. The CD was a transition technology between the old and new worlds of audio. The DVD-Audio umbrella — as the first consumer audio technology of the twenty-first century — shows us the true nature of the new world. It is a harbinger of the good things that will come from new technology in the new millennium. □



ARE





\$45 OR 250 C-NOTES

Lou Barnes spent most of his days on a beam, 70 stories above Manhattan. On frosty winter mornings he would check the thermometer at the corner news stand so he'd know what temperature to expect up there. We have a lot of respect for Lou. The towers he helped build will be around a long time. And we figured his thermometer should be too.



\$40 OR 200 C-NOTES

Betsy Hatherford was not exactly the quiet type. She told brilliant stories. She knew the words to every song on the radio. And she always kept a drink stashed in her garter to share with friends. Everywhere she went, men fell madly in love with her. Maybe it was her combustible charm, or her big dark eyes. Or maybe it was her flask.

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\$43 OR 225 C-NOTES

Down in Miami, there's a bartender named Dean Miles who's become something of an underground celebrity. Not because he makes movies or rock videos, but because he makes martinis and gimlets – some say the best on the planet. His loyal fans say his cocktail shaker is destined for the bartenders' hall of fame. And we couldn't agree more.

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JVC XV-D2000 DVD Player

KEN C. POHLMANN, HAMMER LABORATORIES

It's hard to believe it, given the still tender age of the DVD-Video format, but manufacturers are already bringing second-generation players to market. Granted, the early adopters who rushed out to buy first-generation hardware have had the privilege of enjoying DVD for many months, snapping up those sometimes hard-to-find titles. But if you were patient and waited for the market to settle somewhat, you'll be pleased to hear that, as expected, some second-generation DVD players do indeed deliver more bang for the buck. In other words, perhaps it was worth the wait.

Case in point: the JVC XV-D2000. This player offers a full complement of features, including built-in Dolby Digital (DD) decoding and audio playback at a 96-kHz sampling rate. (Only a handful of 96-kHz recordings are available.) The player's front panel follows the black-on-black vogue, but its silver disc drawer provides a touch of decoration. Six buttons handle power, transport, and drawer operation. Four cursor buttons can be used to navigate on-screen menus, and an Enter button executes the selected function. An On-Screen button displays an onboard set-up menu on a connected television.

Similarly, a DVD Menu button displays the menu encoded on a DVD disc.

Four small lights show when a resume-playback point has been saved and indicate the digital audio playback mode — Dolby Digital (AC-3), 48-kHz PCM, or 96-kHz PCM. A fluorescent display shows disc-status information such as track number and times. In addition, the display conveniently shows which audio outputs are activated. For example, when you're watching a Dolby Digital movie, icons for the six speaker channels are lighted. This lets you know exactly how the audio portion of a particular disc has been encoded. A bar just below the display lights up when a DVD is being played. A small Standby indicator lights when the player is turned off. Finally, the front

panel provides a stereo headphone jack with its own level control, a welcome feature for audiophiles.

The rear of the player contains a relative wealth of connectors. Two RCA jacks provide stereo analog audio output; a slide switch can be used to attenuate output level by 6 dB. Six more RCA jacks provide decoded Dolby Digital 5.1-channel analog outputs for front left and right, surround left and right, and center speakers as well as a subwoofer. A slide switch can be used to boost the subwoofer level by 6 dB. Coaxial and Toslink fiber-optic digital connectors are provided; both jacks can supply either PCM or undecoded Dolby Digital signals, selected via an on-screen menu. Analog video outputs use a coaxial RCA jack and an S-video jack. Finally, there are two JVC CompuLink pin jacks that can be used to share control information between the player and other JVC equipment.

The supplied remote control has a certain flair to its styling. If nothing else, I appreciated its unique contours because they helped me differentiate it from the eighty-three other remotes tucked into my futon's cushion. As with most contemporary A/V equipment, the XV-D2000's remote handles all sorts of control functions, ranging from the vital to the trivial. It duplicates all of the front-panel controls and adds features such as frame-by-frame and slow-motion playback, camera-angle selection, and a numerical keypad. The

FAST FACTS

DIMENSIONS 17¼ inches wide, 4½ inches high, 13 inches deep

PRICE \$1,000

WEIGHT 10½ pounds

MANUFACTURER JVC, Dept. SR, 41 Slater Dr., Elmwood Park, NJ 07407; telephone, 800-252-5722; Web, www.jvc-america.com

remote can also control some features (power, volume, channel selection, and so on) of other equipment such as cable-TV boxes and TV sets. The manufacturer's code for another component can be called up from an onboard memory. The remote's markings are large and clearly legible, but unfortunately there is no back-lighting.

As with other DVD players, on-screen menus let you configure the XV-D2000 for your specific system requirements as well as navigate through chapter titles on a DVD. In this case, an opening display appears when the player is powered up. When a disc isn't playing, the On Screen button calls up a Preferences menu; you can choose the language for the menus, subtitles, and audio tracks and select a 4:3 or 16:9 aspect ratio, PCM/AC-3 or PCM-only digital audio output, center speaker on/off, surround speakers on/off, subwoofer on/off, and other, similar functions. You can also access a special Parental Lock menu that lets you assign and store a parental rating for a movie.

When a DVD is playing, the On Screen button displays a setup menu; playback continues in a window. Using the menu, you can select chapters, repeat, A-B repeat, audio track, dynamic compression, down-mixing (in which a multichannel soundtrack is remixed for stereo playback over two speakers), camera angle, and picture sharpness. It's worth noting that the audio settings that are controlled within the DD decoder chip (like compression and down-mixing) have an effect only if you use the player's own DD decoder and hence its direct analog audio outputs. In addition, some of the functions (like camera angle) are available only if a particular DVD supports them. When you're playing back an audio CD, the On Screen menu lets you control the transport, select tracks, select random, repeat, or intro playback, and so on.



The DVD Menu button halts playback and calls up any menus that are contained on the loaded DVD. For example, most DVDs let you choose languages and chapters and have cast information. Finally, if the video output is static for more than 5 minutes, the player switches to a screen-saver output display. In general, these menus are quite intuitive. Best of all, after you set the preferences initially, you don't have to fool around moving cursors to enjoy a movie. This is a good graphical interface.

Clearly, the XV-D2000 offers a number of connection options. Primarily, you'll need to decide whether to use its Dolby Digital decoder or not, depending on whether your A/V receiver (or preamp) also has one. My Denon receiver does, but I tried it both ways, beginning with the receiver's decoder. Connection was simple, using an S-video cable for the video signal and a fiber-optic cable for the digital audio signal. My receiver had no problem decoding the Dolby Digital bitstream and delivering the excellent sound quality I have grown accustomed to.

I auditioned a number of DVDs, including *Eraser* — a great workout disc. Like other DVD players I've tried, the XV-D2000 impressed me with its picture quality. Also like other DVD players, there was a striking lack of video noise. I was also impressed by the detailed quality of shadows in darkly colored scenes. On the other hand, while the color rendition was quite accurate and picture resolution was very sharp, I judged these to be a tad less precise than I've seen from the best DVD players. But unless you've got an ultra-expensive TV set that's been professionally calibrated, I doubt that these subtle differences will be visible. Above all, although *Eraser* looked great, some other movies looked less than great, proving once again that quality of the A/V recording and encoding, not the player design, is the overriding factor in the final analysis.

It's important to note that the XV-D2000 lacks a component-video output. That feature could provide a higher-quality picture (as long as your monitor has a component-video input) and is therefore preferred by videophiles. I played with some of the player's video

MEASUREMENTS

DVD VIDEO PERFORMANCE

Test patterns from Sony test/demo DVD and Imaging Science Foundation's *Video Essentials* DVD. Composite-video output used throughout.

SETUP LEVEL	.....0 IRE*
100%-WHITE-LEVEL ERROR	.....0 IRE*
DIFFERENTIAL PHASE	.....<1°
DIFFERENTIAL GAIN	.....3%
CHROMINANCE NONLINEAR PHASE	.....<2°
CHROMINANCE NONLINEAR GAIN	.....<2%

HORIZONTAL LUMINANCE FREQUENCY RESPONSE

at 4 MHz	.....-0.45 dB
at 5 MHz	.....-1.5 dB
at 6 MHz	.....-3.2 dB

EQUIVALENT ON-SCREEN

RESOLUTION>480 lines
------------	-----------------

DOLBY DIGITAL (AC-3) PERFORMANCE

All data obtained with digital signals from Dolby Labs' test DVD; center and surround outputs on; subwoofer output on except where noted.

FREQUENCY RESPONSE (20 Hz to 20 kHz, subwoofer off)	.....+0.06, -0.02 dB
NOISE (A-wtd, re -20-dBFS** input)	.....-72.8 dB
EXCESS NOISE (without signal, worst case) 16-bit (EN16)	.....2 dB

* an IRE is a standardized unit of contrast
 ** decibels referred to digital full-scale

DISTORTION (worst case, 1 kHz)	
at 0 dBFS**	.....0.054%
at -20 dBFS**	.....0.11%

SUBWOOFER-OUTPUT FREQUENCY RESPONSE

12-dB-per-octave rolloff above -3-dB point at 90 Hz

MAXIMUM SUBWOOFER OUTPUT

0.63 volt

SUBWOOFER DISTORTION AT MAXIMUM OUTPUT

.....0.009%

CHANNEL IMBALANCE

.....0.89-dB spread

CD AUDIO PERFORMANCE

Except for distortion, all test signals were dithered, which limits measured performance for noise level and distortion, and all were two-channel stereo.

MAXIMUM OUTPUT

.....2.14 volts

FREQUENCY RESPONSE (20 Hz to 20 kHz) de-emphasis off	.....+0.09, -0.03 dB
de-emphasis on	.....+0.09, -0.01 dB

NOISE (A-wtd, re -20-dBFS** input) normal (de-emphasis off)

.....-76.4 dB

EXCESS NOISE (without signal)

16-bit (EN16).....0.12 dB

DISTORTION (THD+N, 1 kHz)

at 0 dBFS**	.....0.003%
at -20 dBFS**	.....0.013%

LINEARITY ERROR

at -90 dBFS**.....+0.1 dB

DEFECT TRACKING

(Pierre Verany test disc).....2,500 μm

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Shielded Main Speakers

Shielded Center & Surround Speakers

Sony Pro Logic Surround Receiver

10 Anniversary Celebration
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This remarkable system features our outstanding *New Ensemble II* sub/sat speakers. Stereo Review said *Ensemble II* "can only be compared with much more expensive speakers." *The Surround® II* 5.1 speakers switch from dipole to bipole operation, for great surround sound with any recording. Harman Kardon receiver was top-rated over models from Yamaha, Denon. Speakers backed by 10-Year Parts & Labor Warranty. Receiver backed by a 2-year warranty. Reg. \$1,289.96

Two-Way Main Speakers

Top-Rated Harman Kardon Surround Sound Receiver

Dual-Woofer Subwoofer

NEW! 10 Year WARRANTY

MultiPole Surround Speakers

10 Anniversary Celebration
\$999⁹⁶
 \$28 Month*

Wide-Dispersion Center Speaker

Save \$330 On New Ensemble Home Theater System – No Payments Till 1999!*

This incredible system features our dual-subwoofer/dual-satellite *New Ensemble* speakers. Critics compared *Ensemble* to speakers costing \$2,800. *The Surround* 5.1 surround speakers switch from dipole to bipole operation for optimum sound with any recording of movies or music. Harman Kardon receiver was top-rated over models from Yamaha and Denon. All speakers backed by our 10-Year Parts & Labor Warranty. Receiver backed by a 2-year warranty. Reg. \$1,629.96

NEW! 10 Year WARRANTY

Two-Way Main Speakers

Wide-Profile, Wide-Dispersion Center Speaker

Dual Subwoofers

10 Anniversary Celebration
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 \$37 Month*

MultiPole Surround Speakers

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Save \$400 On MovieWorks 5.1 Home Theater System – No Payments Till 1999!*

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Our Tower Home Theater system delivers rich, three-dimensional sound and thunderous bass. The Sony Dolby Digital AC-3 receiver is loaded with power. This package competes directly with systems selling for up to \$20,000. 10-Year Parts & Labor Warranty on non-amplified speakers.¹ 2-year warranty on receiver. Reg. \$3,649.95



Tower Three-Way Dual-Woofer Bipolar Speakers
"richly three-dimensional... an uncommon value." -Audio

NEW! 10 Year WARRANTY

Powerful Dolby Digital 5.1 Receiver By Sony

10 Anniversary Celebration
\$2,999⁹⁶
\$84 Month*

150 Watt, 12" Powered Subwoofer.
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The Surround 5.1 MultiPole Surround Speakers For Dipole Or Bipole Operation

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features, such as frame-by-frame and slow motion, and found them to work quite well. Frame-by-frame will interest cinema buffs who must see every nuance, but some will be disappointed that you can only move forward through the frames, not backward. Forward slow motion at one-half, one-third, one-fourth, one-eighth, one-sixteenth, and one-thirty-second normal speed is possible, but unfortunately there is no backward slow motion.

To test the XV-D2000's onboard Dolby Digital decoder, I had to connect its six analog output channels to my receiver's external input using six cords with RCA plugs. I used its on-screen menu to select/deselect dynamic-range compression and other DD options. The effect was about the same as when I tried them with my receiver's DD decoder. The player's 1-bit digital-to-analog (D/A) converters can work with 44.1-, 48-, and 96-kHz sampling rates, and they are said to provide 20-bit resolution. I was certainly quite happy with their sound quality. All Dolby Digital signals are coded at 48 kHz, and although the format uses fairly heavy data reduction, it's an excellent algorithm that is perfectly suited for movie playback.

I used a Dolby Labs test DVD to verify the functionality of the onboard decoder. For example, one set of tracks contains "difficult bitstreams" in which the audio signal is designed to max out the processing power of the decoder; the JVC player's decoder chip passed the test with no problems detected. I al-

so switched back and forth between the player's decoder and my receiver's decoder, and I could not detect any notable differences in sound quality, suggesting that the two DD chips and respective D/A converters were similar in performance and that the analog interconnection did not pose any significant problems. Of course, if you have a choice, you'll want to use your receiver's decoder to minimize wiring chores, but otherwise the XV-D2000's decoder will do a fine job.

It was with great anticipation that I loaded a Chesky Records promotional DVD whose audio signals were encoded with a 96-kHz sampling rate and 24 bits. Unfortunately, the JVC player would not play it. When the disc was loaded, the player identified it as a DVD, but then it persistently opened its drawer and disgorged the disc. It is hard to tell whether the fault lay in the player or the disc. JVC says it adhered to the proposed DVD-Audio standard for 96-kHz/24-bit discs, but incompatibilities like this are not unusual in the early days of new formats. It remains to be seen how many DVD-Video discs will use a 96-kHz audio sampling rate.

While it appears that the future DVD-Audio standard will include a 96-kHz sampling rate that may be compatible with this player, the standard is still the object of debate so it is impossible to say for sure. In any event, it looks like the DVD-Audio standard will also contain provisions for disc types that will not be playable in current-generation DVD-Video players without the



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need of additional outboard equipment.

Of course, like other DVD-Video players, the XV-D2000 can also play good, old-fashioned CDs. I listened carefully to a wide range of stereo discs, switching over to a high-powered stereo amplifier, and was very pleased with the results. The sound quality was comparable with that of a mid-line CD player, lacking only the extra clarity delivered by some high-end models. If you are wondering whether you will need to own both a CD player and a DVD player, the XV-D2000 makes a good case for the view that a good DVD player can handle both formats. On the other hand, I was disappointed to find that it could not play CD-R (recordable) discs. If you have a lot of CD-Rs (as I do), you'll need to hang onto a standard CD player.

After listening to the XV-D2000, I ran some audio tests to benchmark its performance. (It's important to listen first and measure later, or the numbers will inevitably bias your listening.) I was not surprised to find that the player provided good CD playback on the test bench, with very flat frequency response, high dynamic range, fairly low distortion, excellent low-level linearity, and good defect tracking. I also ran some numbers to benchmark the performance of the onboard Dolby Digital decoder. It is extremely important to remember that DD is a perceptual coding system that uses psychoacoustic principles to achieve a reduction in bit rate by omitting information that would normally be inaudible. Also remember that DD provides six channels with 384 kilobits per second vs. the CD with two channels at 1.4 megabits; the difference in fidelity is audible. Because Dolby Digital behavior varies according to the frequency content of the signals being encoded, standard test tones will tell you little, if anything, about a DD decoder's quality. That being said, the measured figures from the JVC player were entirely reasonable, but ultimately you'll have to use your own ear to judge its quality.

The JVC XV-D2000 is a splendid DVD player, offering excellent performance and features including onboard Dolby Digital decoding. Unless you need such special features as backward slow motion or a component-video output, or CD-R playback, it should fulfill your expectations of the DVD format. In any case, this is one second-generation DVD player that was certainly worth waiting for. □

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Klipsch KSB 3.1 Speaker

JULIAN HIRSCH, HIRSCH-HOUCK LABORATORIES

Klipsch is one of the oldest surviving names in the history of high-fidelity loud-speaker manufacture in the United States. When I first became infected with an incurable hi-fi virus, circa 1950, the Klipschorn was already widely acclaimed for its deep, effortless bass and incredibly high efficiency, and no one who heard and felt its awesome effects ever forgot the experience.

In those days, that caliber of performance came at a price — in dollars, cubic volume, and sheer weight — that was prohibitive for most hi-fi enthusiasts. But the world turns, as they say, and today it is possible for almost all of us to experience some of those sensations, at least to some degree, thanks to our current advanced and more affordable technology.

The Klipsch Synergy Monitors are a family of loudspeakers that can be used to create a variety of stereo and home-theater systems in several price, weight,

size, and performance categories. For this report, we tested the largest speaker of the group, the KSB 3.1, a stand-mounted two-way system whose magnetically shielded 8-inch woofer operates in a front-vented (bass-reflex) enclosure. Above the woofer is the tweeter, whose 1-inch neodymium-magnet compression driver is coupled to a 90 x 40-degree Tractrix horn. The crossover frequency is 2.8 kHz, and the speaker is

rated to handle 100 watts input (400 watts peak). Nominal system impedance is 8 ohms, and sensitivity is rated as 94 dB sound-pressure level (SPL) with a 1-watt (2.83-volt) input level.

The front of the KSB 3.1 speaker is covered by a removable curved black metal grille whose perforations provide a view of the drivers and the port. The cabinet is finished on all sides in a choice of black ash or rosewood vinyl veneer. The rear panel contains only the twin three-way binding-post connectors, which are compatible with wire ends, lugs, and single or dual banana plugs.

From the beginning, Klipsch speakers have been noted for their high efficiency, and the KSB 3.1 follows in that tradition. Its 94-dB sensitivity rating (we measured 95 dB) means that for a given sound level in the listening room, this speaker requires less than half as much amplifier power as most comparable systems, which are typically rated at about 89 or 90 dB.

For measurements and listening, we mounted the Klipsch KSB 3.1 speakers about 8 feet apart on stands 26 inches above the floor. The room response of the system was measured separately for the left and right channels, at 12 feet on the axis of the left speaker, and the two response curves were averaged.

Our resulting frequency-response curve generally resembled those of other speakers tested under the same conditions. However, it was noticeably more uniform than most over a wide range of frequencies, varying only ± 4 dB from 50 Hz to 12 kHz.

The quasi-anechoic MLS response, at distances of 1, 2, and 3 meters, exhibited the cyclic variations typical of that measurement but confirmed that the average high-frequency response was within the range of ± 4 dB over the full tweeter range, from 2.5 to 15 kHz.

We measured the woofer response simultaneously with two microphones, one placed close to the woofer cone and the other close to its port. The woofer and port responses were combined after compensating for the relative areas of their sources. The resulting bass curve rolled off smoothly below 100 Hz, to -3 dB at 60 Hz and -6 dB at 50 Hz.

Despite its 8-ohm rating, the electrical impedance curve of the KSB 3.1 reached a minimum of just under 4 ohms in the vicinity of 40 to 50 Hz and between 100 and 400 Hz. The maximum readings were 17.5 ohms at 20 Hz and 23 ohms at 5.5 kHz. Because of the

FAST FACTS

DIMENSIONS 17 inches high, 9 $\frac{1}{4}$ inches wide, 9 $\frac{1}{4}$ inches deep

WEIGHT 16 pounds

FINISH black ash or rosewood vinyl veneer

PRICE \$430 a pair

MANUFACTURER Klipsch, Dept. SR, 8900 Keystone Crossing, Suite 1220, Indianapolis, IN 46240; telephone, 800-554-7724; Web, www.klipsch.com

speaker's high sensitivity, the low readings are of no practical consequence because no correctly functioning amplifier should have any difficulty in driving these speakers.

As mentioned earlier, the KSB 3.1 is part of an extensive family of speakers, including compatible center-channel speakers, dedicated surround speakers, and powered subwoofers. Although we used and tested only the KSB 3.1, it acquitted itself admirably as part of a conventional stereo music system.

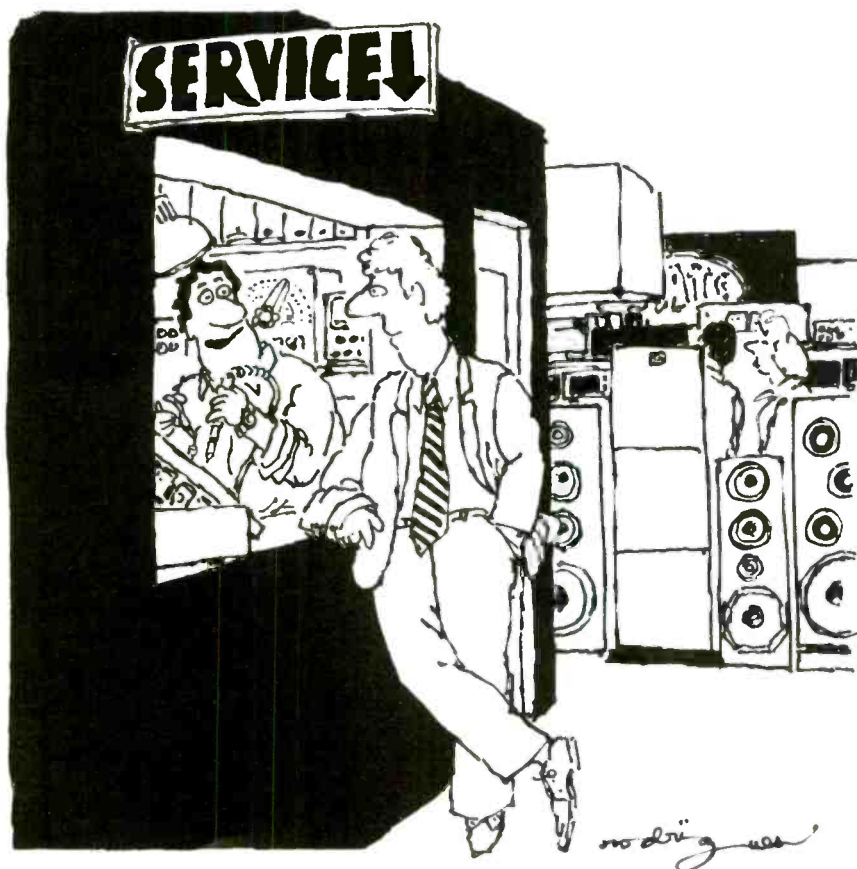
Its high sensitivity allowed the KSB 3.1 to generate very high sound levels (especially for a speaker of its size and cost), even driven by a low-power amplifier. However, this ability will rarely be called upon, since so much high-level recorded material is in the low-bass region, below this speaker's intended range. Our listening sessions suggest that its useful lower limit is close to its rating of 45 Hz or so. This is perfectly adequate for the vast majority of recorded music, and adding a modest subwoofer could extend the system's response by another octave.

Since the KSB 3.1 is part of a group

of home-theater speakers, it was designed to have a very low external magnetic field so as to minimize its effect on a video display. We routinely scan the external surfaces of speakers with a gaussmeter to insure that they will not degrade picture quality. Typical levels are under 1 gauss or so (it takes considerably more than that to visibly affect picture quality), and even that occurs only close to the magnet of a speaker driver.

Even with the gaussmeter probe touching the accessible portions of the KSB 3.1, the only place we got a measurable response was in direct contact with the side of the cabinet, next to the woofer. Unless the picture tube is sandwiched between the speakers (and probably not even then), the KSB 3.1 would seem to be an ideal choice for a compact home-theater installation.

However, this speaker is equally suited to a role in a modest high-fidelity music system. Its imaging, response, and frequency balance are all excellent, and it will extract the maximum sonic performance from the most basic receiver or amplifier. □



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Stereo Review

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ACI Titan Powered Subwoofer Kit

TOM NOUSAINE, TN COMMUNICATIONS

Today's new audio enthusiasts approach the hobby from a perspective that's different from that of an earlier generation of audiophiles, those who may have begun, as I did, with a Heathkit catalog and a soldering pencil. Over the past twenty-five years or so, I have constructed dozens of kits bearing such brand names as Heathkit, Dynaco, and Hafler. Even some of my first speakers were Heathkits. I still own and use plenty of this audio and test gear.

The rationale for kits in the early days was simple economics. Any hobbyist who was willing to spend the time and effort stuffing circuit boards and wiring the chassis point-to-point could save hundreds of dollars. Boy, how

things have changed! Integrated circuits and advanced manufacturing techniques have taken so much hand labor out of the production of electronic equipment that an enthusiast today

can't build an amplifier, say, for less than it costs to buy a factory-assembled one. Those economics put Heathkit and other kit manufacturers out of business.

On the other hand, even with modern computer-controlled saws and advanced manufacturing, the irreducible cost of assembling, packaging, and shipping large, clumsy loudspeakers leaves a niche open for a company to make money selling speaker kits — a company like Audio Concepts, Inc. (ACI) of LaCrosse, Wisconsin.

ACI offers its Titan 12-inch powered subwoofer both assembled and as a kit that allows the enthusiast to supply his own labor and cabinetmaking skills — and his personal sense of style — and in the process save some dough compared with the price of an assembled speaker. The Titan sub sells for \$799 assembled but can be had for \$499 as a kit, a saving of over 35 percent.

For five bills you get a 12-inch woofer, an amplifier/crossover module, gaskets, wood screws, a set of speaker-level adapters, and box-stuffing material — you supply the cabinet. Building the kit requires no knowledge of loudspeakers, electronics, or soldering. The amplifier/crossover is fully assembled, including an attached power cord and speaker leads. It contains a variable low-pass filter, a volume control, a two-position phase switch, line-level RCA inputs, and adapters to allow speaker-level connections from your amplifier to the RCA inputs (which you might not need, depending on your system). Up to three inputs (left, right, and center) are supported.

The basic job in putting the Titan sub together is building your own 1.9-cubic-foot cabinet (an afternoon's work) and installing the power amplifier and driver in it (an hour's task). ACI supplies kit buyers with a detailed drawing of the cabinet used for the factory-built Titan, so you can simply copy it if desired.

However, this is *not* a Heathkit — there are no step-by-step instructions to lead the builder through every tiny excruciating detail. The Titan is not a difficult kit; it requires only the carpentry skills to build the cabinet and the ability to make two slide-on connections between the amplifier/crossover module and the driver. But the assembly instructions are terse — just one page that lists five steps, plus two pages of cabinet drawings.

The first step is, "Read the enclosed instructions and refer to the enclosed drawings to build cabinet." The sec-

FAST FACTS

DIMENSIONS 26 inches high, 13 inches wide, 15 inches deep (factory-built)

WEIGHT 26 pounds

FINISH clear or black lacquered oak or clear lacquered cherry (factory-built)

PRICES assembled, \$799; kit, \$499

MANUFACTURER Audio Concepts, Inc., Dept. SR, 901 S. 4th St., La Crosse, WI 54601; telephone, 608-784-4570; Web, www.audioc.com

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ond? "Assemble the cabinet and install the damping material." Building the Titan isn't rocket science, but a little hand-holding would probably benefit novice builders.

The Titan's amplifier is rated to deliver 250 watts. Frequency response is given as 20 Hz to 150 Hz ± 3 dB. The crossover frequency is adjustable between 50 and 150 Hz, and the crossover slope starts at 12 dB per octave, increasing to 24 dB per octave. The amp has built-in current- and heat-protection circuitry. The Titan carries a five-year limited warranty (for the kit version it covers only the amp module and the driver), and there is a fifteen-day return privilege (but the customer must pay for shipping).

Making a subwoofer enclosure is not difficult, but there are a few important details to consider. Following the ACI drawings will give you a great cabinet as long as you make sure it's tightly sealed and has no air leaks. Be sure to use medium-density fiberboard (MDF), particleboard, or high-grade plywood.

The basic job in building the subwoofer is making your own cabinet and installing the power amplifier and driver.

(Solid lumber is not acceptable because it shrinks and swells with changes in humidity.) The net interior volume of the cabinet needs to be 1.9 cubic feet. Allow about 0.35 cubic feet for the woofer superstructure and the power-amplifier assembly and enough to compensate for whatever internal bracing you put in.

Don't be afraid to use extra bracing, but don't get carried away, either. Some 1 x 2 lumber fastened lengthwise on each panel should be sufficient. The cabinet should be inert and free of resonance in the woofer's operating range, but it doesn't have to be super stiff. While it might be tempting to go overboard, it just wastes time and energy. Be absolutely certain to use the supplied gasket material when mounting the woofer and crossover network. If you damage it, stick-on, closed-cell foam weather stripping from the hardware store is a wonderful substitute.

In the factory version of the Titan, the woofer is mounted in the bottom panel of the enclosure, facing down-

ward. The bottom panel is suspended $1\frac{3}{8}$ inch above the baseplate. The driver's suspension is slightly offset to the rear, presumably to compensate for the pull of gravity on the cone. The spacing also affects the tuning of the system, because the mass of the air trapped between the cabinet's baseplate and the cone is added to the moving mass of the system. The factory cabinet is $13\frac{1}{2}$ inches wide, $14\frac{1}{2}$ inches deep, and 27 inches tall, which gives it a 1.36-square-foot footprint and a gross space requirement of 3.06 cubic feet.

Good carpentry and lots of wood glue to seal the joints will make for a solid, leak-free enclosure. A clever builder might be able to get a lumberyard to cut the main panels. Even if you do that, you'll still need a coping or saber saw to cut the holes for the amplifier and driver.

This project will take about 14 square feet of material, which is a little less than half of a 4 x 8-foot sheet of MDF or plywood. If you want to display your masterpiece, you can buy ma-

closure and with the amplifier installed but disconnected. All okay? Then it's show time!

The Titan subwoofer, whether factory-built or made from a kit, works like any other sub except that it does not have speaker-level inputs or a high-pass filter for your main speakers. (A filter can be purchased separately from Audio Concepts.) Speaker-level connections can be made by using the supplied speaker-level adapters, which are simply short sections of speaker wire terminated with male RCA plugs.

Connection to the speaker-level outputs of a system amplifier or receiver requires connecting the adapters to speaker wire with wire nuts or solder and plugging the connectors into the RCA jacks. Setup is identical for both factory-assembled and user-assembled speakers. I used the regular line-level connections and installed the Titan in my reference home-theater system in the right rear corner of my large listening room.

The owner's manual says that the Titan needs a minimum of 60 hours break-in before it will sound its best. Break-in time is a currently fashionable audio old wives' tale. I have conducted extensive controlled tests of woofer break-in. While speaker suspensions do loosen up with use, the changes make no difference in performance.

When a woofer's surround and spider are stretched, they become more compliant, which lowers the woofer's resonance, but that is offset by the change in compliance. The result is that the speaker works the same whether broken-in or brand-new. In any case, the speaker will naturally break itself in with use. I bring this up, however, because you must be careful using noise or sine waves as break-in signals. They can be dangerous to your woofer if played loudly over a long time. Be sure to use very low levels when playing a special "break-in" CD.

In my large (13 x 23 x 18-foot) room, the Titan had low-frequency extension to 29 Hz, with basically flat response (± 4 dB) from 29 to 100 Hz. You can expect extension to 25 Hz in a smaller room. The crossover slopes measured 18 dB per octave. The sub's actual crossover point was 100 Hz when the knob was set to full bandwidth, while at the 85-Hz setting, its actual turnover point was 81 Hz, and at the lowest marked setting of 50 Hz, its real crossover point was 71 Hz.

The Titan did not prove to be a big



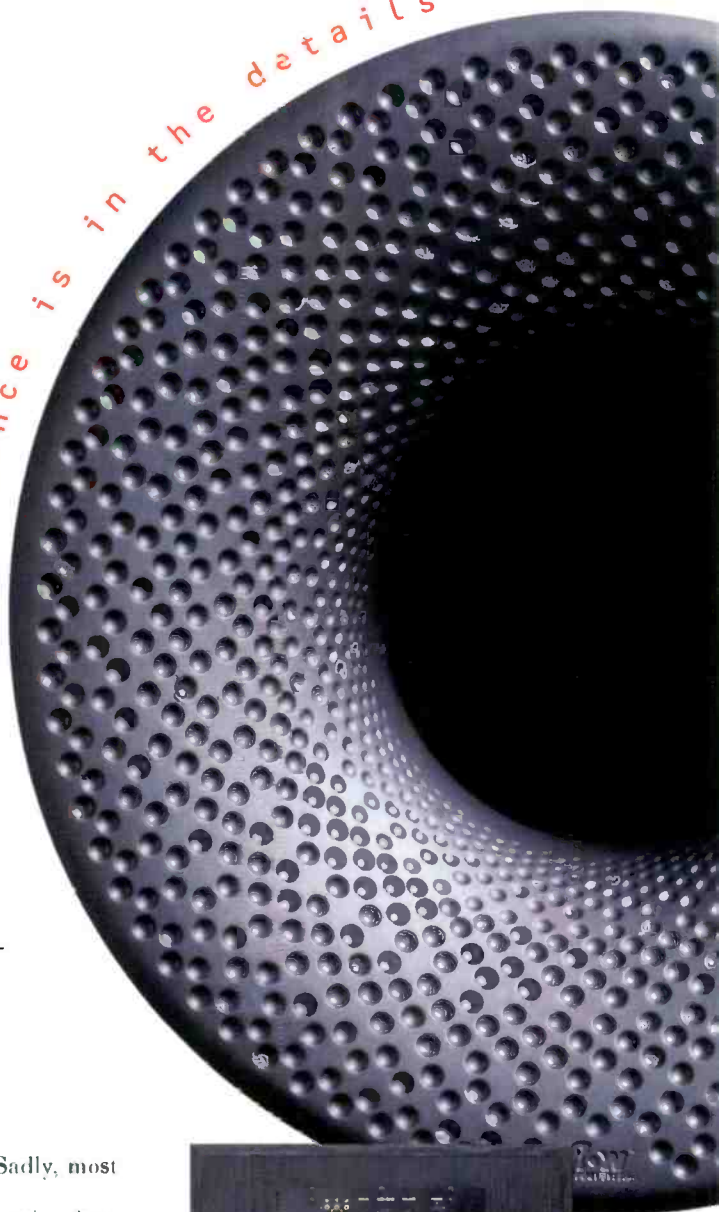
Performance is in the details

A Technical Knockout

Superior subwoofer performance requires superior amplification. Sadly, most active subwoofers typically feature "off-the-shelf" integrated electronics that degrade the entire system's performance as well as the bass. B&W has taken the high road in electronics by employing discrete power amplifier designs that have won dozens of international awards for audiophile grade components.

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The result of all this zealous attention to detail? Bass that's visceral, accurate, and above all, musical. Anything less wouldn't be B&W.



ASH2000 rear view featuring high current toroidal power supply and discrete 175 watt amplifier

hitter in the sound-pressure level (SPL) department. Maximum measured SPL (with a 10 percent limit on distortion) was a respectable 106 dB at 62 Hz, but output fell rapidly at lower frequencies to just under 80 dB at 25 Hz. The Titan averaged 96 dB SPL over the range from 25 to 62 Hz (again with a distortion limit of 10 percent). You can expect 3 to 4 dB more output if you have a smaller room.

On the other hand, the Titan sub whacked out an average 106 dB SPL (with no limits on distortion) on my three big-bass music tracks: "It's Live" from Bass Erotica's *Bass Ecstasy* (Neurodisc), the "Jurassic Lunch" lawyer-eating scene on *The Great Fantasy and Adventure Album* (Telarc), and the black-powder cannon blasts in Tchaikovsky's *1812 Overture* (Telarc).

Such maximum output numbers tend to overstate the real potential of most subwoofers because the program material contains a significant amount of information at higher frequencies where the subwoofer has more output than at its low end. For example, when I ran the Titan sub full bandwidth, the "boom" scene from Chapter 14 of the *Clear &*

Present Danger laserdisc rang up 111 dB on the sound-level meter. When I set the sub's crossover to 50 Hz (really about 71 Hz), the maximum output fell to 108 dB.

While 108 dB SPL sounds like a lot of bass, I take these measurements just before a subwoofer goes into audible distress or stops getting louder. The Titan maintained its composure, but the fundamentals were underrepresented at these high SPLs.

For example, a high-output subwoofer will deliver the first distant footstep of T-Rex in "Jurassic Lunch" as a very-low-frequency movement of the building or ground — as if someone had backed a dump truck into the far side of your house. With the Titan and other limited-extension subwoofers, that first step sounds more like a distant burp, with little tactile impact.

One limiting factor of the Titan is the excursion capability of its woofer. The driver has a low resonance (16 Hz), and the suspension has over 10 millimeters of clean travel, but the motor runs out of gas just shy of a 7-mm stroke. This means that the Titan's output will be restricted at very low frequencies com-

pared with the best woofers. The speaker's protection circuitry may limit SPL at very low frequencies as well.

Those limitations aside, the Titan can deliver all of the advantages of a subwoofer with rock-and-roll, jazz, show tunes, and most other popular music. The ability to place the bass speaker optimally in your room is an advantage over the use of full-range speakers, since the best location of speakers for stereo imaging will not be the same as for reproducing low frequencies (usually a corner).

The question is not whether you need a subwoofer, but which one to get. The Titan is an excellent project for any audio enthusiast with cabinet-building skills who wants to add a subwoofer but doesn't want an ordinary-looking box. The Titan has basically good performance, and the opportunity to add your own style and flair to the cabinet — and proudly tell your friends, "I made it myself" — is what sets it apart from the crowd. The price is also attractive, of course. You should be able to put together your finished sub for about \$550 total. And that's without ever needing to plug in a soldering pencil. □

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Mirage OM-12 Speaker

DAVID RANADA, TECHNICAL EDITOR

Mirage's OM-12 occupies the starting position in the company's new Omnipolar line of full-range speakers. "Omnipolar" refers to the speaker's radiation pattern, which is responsible for much of its distinctive sound quality.

The OM-12 radiates equally forward and backward. Unlike the more familiar dipolar radiation pattern of many surround-channel speakers, the sound coming from the back of the OM-12 is *in phase* with that coming from the front. That has two major consequences. First, there is no appreciable cancellation of the sound radiating 90 degrees off-axis (to the sides), as occurs in dipoles, giving the OM-12 more of an omnidirectional radiation pattern (hence the name of the speaker series), at least

in the horizontal plane. Second, the lack of front-to-back cancellation means that the speaker's bass output can be substantial, unlike a dipole.

To generate its omnipolar sound, the OM-12's front and back panels are

equipped with identical drivers. On each panel, near the top, is a 1-inch titanium-hybrid dome tweeter, which crosses over at 2 kHz to a 5½-inch polypropylene-cone woofer just beneath it. Near the floor on the rear panel is a 3-inch port, and beneath that are the speaker's input terminals. The terminals are gold-plated multiway binding posts with jumper straps to another set of terminals used for biwiring and biamplification, hookups that are illustrated but not labeled in the owner's manual. The manual specifically recommends placing the speakers a minimum of 15 inches from the rear wall, and an illustration shows a range of 0.4 to 1 meter (15 to 39½ inches). Recommended distance from the nearest side wall is shown as 0.5 to 1 meter (19¾ to 39½ inches).

The enclosure itself is unusual. It is relatively shallow at its top (5¾ inches) and thickens toward the bottom, where it is 11 inches deep. This tapered shape, along with the black stretch-cloth grille, makes the speaker resemble the John Hancock building in Chicago. Mirage's specifications for the OM-12 include a nominal impedance of 6 ohms and an in-room sensitivity of 90 dB sound-pressure level (SPL) at a distance of 1 meter with a 2.83-volt input.

Our lab tests confirmed both of those ratings. The speaker's minimum impedance was 4 ohms at 235 Hz, and its maximum impedance was 16.4 ohms at 2.2 kHz, which should not pose problems for most amplifiers. The 90-dB sensitivity is slightly higher than that of many other speakers in the OM-12's price range and comparable to it in sound quality, a benefit if your amplifier or receiver has a low power rating.

Driven to very loud peak levels, equivalent to 100 dB, by specially shaped low-frequency tone bursts (in other words, driven by voltages that would produce 100-dB SPL peaks given the speaker's sensitivity rating and assuming a perfectly flat frequency response), the OM-12 produced audibly clean output down to 63 Hz, below which noise from its port became audible. That is actually pretty good high-level performance for a speaker with woofers the size of the OM-12's. Warble tones (essentially sine waves with vibrato) at a 90-dB drive level revealed some mechanical resonances in the tweeter assembly at around 300 Hz. Neither the vent noise nor the resonances were audible as such during normal program material. The speaker also produced an

FAST FACTS

DIMENSIONS 39⅞ inches high, 9 inches wide 11 inches deep (at base)
WEIGHT 35½ pounds
FINISH high-gloss black top cap, black wraparound grille cloth
PRICE \$900 a pair
MANUFACTURER Mirage, Audio Products International, Dept. SR, 3641 McNicoll Ave., Scarborough, Ontario M1X 1G5; telephone, 416-321-1800; Web, miragespeakers.com

in-room usable output down to 35 Hz, below which its output fell off dramatically.

The OM-12's overall frequency response — which, together with its radiation pattern, determines virtually all of a speaker's sound quality — was relatively flat, but in two separate regions. Overall, it measured a very good ± 3 dB from 60 Hz to 20 kHz with our one-third-octave in-room measurement technique. But that flatness was distributed essentially at two extremes: the frequencies below about 1 kHz were around 6 dB higher than those above that point. This shelving behavior was evident both in a "listening window" measurement — which produces an average of nineteen separate quasi-anechoic frequency responses taken across a 30-degree arc in front of the speaker — and in the one-third-octave spectrum-analyzer measurements. Also vis-

The Mirage OM-12 speakers most often added a pleasant spaciousness and sonic-stage depth to acoustically recorded classical music and jazz.

ible with both tests was a rise in the tweeter output (back to the general level near 500 Hz) that started at about 10 kHz and continued up to 20 kHz. Overall, this is a classic "swayback" frequency response that is not uncommon among two-way speaker systems such as the OM-12.

I actually expected to see such results, given the frequency balance I heard during my listening tests. With much popular vocal music, the OM-12s sounded beneficially less "forward" than speakers with flatter frequency balances through the midrange, probably because the drop in the OM-12's output in this region compensates for the response rise typical of pop-music vocal microphones. There was still a slight touch of excess sibilance, however, which probably came from the rise above 10 kHz.

That sibilance translated to a slight high-note steeliness on massed orchestral strings that I heard on every good

orchestral recording I played over the OM-12s. The sound of the violins was at the same time somewhat recessed and less vibrant than it could be, probably because of the lowered level between 1 and 10 kHz. (The speakers had to bear comparison with the several live orchestral concerts I attended during the audition period.)

All of these frequency-response effects were apart from the distinctive imaging properties of the OM-12. Consisting most often of a pleasant sense of added spaciousness and sonic-stage depth, these properties benefited most acoustically recorded music, particularly classical and some jazz. Along with this spaciousness, however, came a loss of imaging specificity or "tightness" that was evident with very dry, reverb-free popular-music recordings. These imaging effects showed up even in a single-speaker listening comparison

with a directional (unipolar?) speaker equalized for a similar quasi-anechoic response. The single OM-12 was more difficult to localize, with the apparent sound source not at the plane of the front panel but somewhere behind the speaker.

As with all speakers that radiate in more than one direction, such imaging effects are sensitive both to the size of the listening room and to how far the

speakers are placed from the walls. That's because the sound from the back of the speaker that is bounced off the wall toward the listener is at a far higher level than it would be with the reflections from a typical forward-radiating speaker. In a very large room with the speakers placed many feet from all the walls (violating Mirage's placement recommendations), you'd obtain imaging properties from the OM-12s resembling that from a pair of conventional speakers similarly placed. Reduce the size of the room or place the speakers closer to a wall, and you'll get the spatial effects I've mentioned here. Hence Mirage's placement recommendations, which I followed for our listening tests.

If your listening room allows such placement, and if you are looking for a sound quality in which the speakers tend to disappear as the apparent sound sources, you should audition the OM-12. Depending on the music you listen to most, you may be very pleased. □

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Much of the time, we take electrical power entirely for granted. Entirely, that is, until an event such as the great ice storm of January 1998, which crumpled high-voltage power-line towers like toy erector sets, punching the lights out in the northeast corner of North America for days and even weeks. Short of firing up a costly, noisy, dirty generator (assuming one is on hand), there's not much the A/V buff can do in response to such cataclysms — other than to rediscover the joys of reading (gasp!), chess, or sex, to name just a few activities one can pursue perfectly well without electricity.

In truth, such long-term outages are rare today even in rural parts, and they're all but unknown to urban America. Far too common, however, are numerous less dramatic electrical events. Among them are brownouts, when the nominal 117 volts of alternating current delivered by your house wiring sags alarmingly (less than 100 volts is not unknown); surges, when line voltage increases substantially for a short period; high-voltage spikes, or instantane-

ous bursts of excess power (as much as a kilovolt or more); and interruptions that may last a fraction of a second.

Of these, the last two are probably the most common — and potentially the most damaging to the electronic gear in modern home-entertainment systems. Spikes, which can be caused by lightning strikes on the power "grid" many miles away or by high-voltage switching transients as the complex grid adjusts to changing power demands, are often to blame for mysterious failures of electronic components, particularly TV and radio receivers as well as computers and other digital gear. (Any competent surge suppresser

will do a Secret Service act when lightning strikes, taking the bullet itself so that your gear can live, but then requiring repair or replacement.) Current interruptions, frequently too brief even to be noticeable as a dip of the lights, can still generate reset responses from components. Who among us has not experienced a VCR clock that mysteriously reverted to a flashing 12:00, or an unattended off-the-air recording that inexplicably stopped "all by itself"?

XS Technologies offers solutions to all these problems in its Strata 800 and 1000 uninterruptible power supplies, which combine short-term backup AC power and brownout support with extensive line conditioning and surge protection. While the concept of an uninterruptible power supply (UPS) is old hat in computer circles, it may be new to many an audio/videophile.

Briefly, a UPS sandwiches two DC batteries at opposite polarities around a high-current MOSFET switching transistor driven by a 60-Hz sine-wave oscillator (50 Hz in Europe). This arrangement yields alternating current at the appropriate line frequency, which runs through a step-up transformer to reach the required voltage. When a UPS detects a loss of line current at its input, it immediately switches over to its internal batteries so that any computer or A/V components connected to it will not even detect the change.

The utility of such a thing for, say, the CIA's computer network is self-evident. But why would you want one for a lowly audio or home-theater system? XS Technologies argues, rather com-

FAST FACTS

DIMENSIONS 17 x 2¾ x 15½ inches

WEIGHT 36 pounds

FINISH matte black

PRICE \$650

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prisingly, that it's already difficult to distinguish between "computer" and "A/V" technologies, and with the convergence bandwagon barreling ever closer these will only merge further. Consequently, a device that protects electronic systems from the worst vagaries of intermittent or inconsistent power as well as spikes, surges, and AC-borne radio-frequency interference (RFI) makes a lot of sense.

We tested the XS Technologies Strata 800, a 36-pound UPS that's about the size of a slim-line preamp. The front

MEASUREMENTS

VOLTAGE

AC mode, input/output119/118 V
battery mode, output116.5 V

OUTPUT FREQUENCY

(battery mode)60.6 Hz

BATTERY RUN TIME

(approx 250-W load)>21 minutes



panel is occupied solely by a nifty removable fluorescent display/remote controller with seven pushbuttons. Around back, the Strata has a heavy, three-prong power cord and six grounded AC outlets for plugging in components. Four of these outlets have battery backup, surge/spike/RFI protection, and individual on/off switches on the front panel/remote. The remaining pair, intended for high-load components (a power amp, for example), are protected but not backed up by the batteries, and one is unswitched.

Elsewhere on the rear are two pairs of F-connector antenna jacks for spike protection of cable, satellite TV, or cable-modem lines, and a single pair of RJ-11 modular telephone jacks for guarding a phone line. A DB-9 serial port permits power control and monitoring via computer. This is common with computer UPSs but could also prove quite useful in a whole-house media system; the Strata UPS does not come with the appropriate computer software, however.

The Strata 800 can be placed horizontally like an A/V component (although our sample had no feet for horizontal placement) or rack-mounted using an optional kit. But if you want to keep it out of your component rack and away from sensitive A/V gear, there are nifty fold-out feet that let it stand upright on the floor — a flexible placement option. Keeping the Strata away from A/V gear might not be a bad idea, as I observed fairly substantial electromagnetic and electrostatic interference (hum) within about 3 feet of it (using the highly scientific Fender Stratocaster pickup test): in the battery mode, the hum became quite severe.

As mentioned, the central part of the Strata faceplate unclips so that it can be used as a wired remote-control/display handset. What's more, the display characters and icons automatically reorient themselves depending on whether the display is horizontal or vertical — too cool. The numeric display shows input voltage and frequency (typically 117 to 122 volts and 60 Hz), percentage of maximum load, percentage of battery charge, and remaining battery-mode running time. The pushbuttons individually control outlets Nos. 1 through 5; No. 6 is always on. There's also a master power key that can turn outlets 1-5 on/off together, except for those that were previously turned off individually.

Operation of the Strata 800 proved very transparent. Unfortunately, lighting failed to strike my home during the test period (just kidding, God . . .), so I was unable to evaluate its maximum surge/spike protection. Thanks to a snow/ice storm, however, I did experience a couple of line flickers. Only once while I was present did the Strata kick into battery mode on its own for a second, which it did smoothly and with no disruption to my system; the UPS emitted a beep to signal the changeover.

To test battery capacity in typical audio use, I powered a 100-watt-per-channel A/V receiver in Dolby Pro

Logic mode, playing surround audio from my Toshiba rear-projection set at a moderate, family-TV listening level. Together the TV and receiver are rated to draw a total of 575 watts, just about the Strata 800's full rated capacity, though of course these are maximum figures. Under the real-world conditions I employed the system was probably drawing around 250 watts. Then I pulled the plug. The Strata 800 kept the system playing normally for just over 20 minutes, rather longer than I'd have guessed. I powered up again when the battery reached its 5-percent-charge level, since lead-acid batteries like the Strata's (and your car's) don't take kindly to complete exhaustion (though I'm sure that its power-management system takes that into account, too, in determining when to shut down automatically in battery operation).

I could detect no difference in sound quality or noise, even in critical headphone listening, between the AC and battery modes. (I kept the UPS some 4 feet away from all audio gear and cables.) As to the Strata 800's line-conditioning performance, I also heard no difference in critical listening with and without it — but that is not to say its capabilities might not prove beneficial at other times or in other locations. What did impress me mightily was the results of an experiment I tried, after gingerly working up to it: Monitoring a shorted (empty) line input with good headphones, volume at maximum, I detected absolutely zero clicks, pops, hums, or buzz while repeatedly powering and unpowering the Strata 800, thus switching between its battery and AC-power modes. The UPS itself did emit a faint mechanical buzzing that was clearly audible from my listening position in a quiet room, but it was entirely obscured by most program material.

Obviously, the XS Technologies Strata 800 will not replace a generator during extended blackouts. However, for a system with a lot of digital components, particularly one where power problems have shown up in the past, a UPS/power conditioner like this one can prove excellent insurance. The Strata 800 is not the cheapest available (and the Strata 1000, rated for 1,000 volts and 670 watts, is even costlier at \$850). Similar protection and capacity are available in stripped-down form from other makers for a C-note or so less. But unlike most, the Strata UPS is highly elegant both visually and ergonomically, and that counts for a lot. □

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Atlantic Technology System 370 THX Speakers

DAVID RANADA, TECHNICAL EDITOR

The System 370 is Atlantic Technology's third suite of Home THX speakers. It retains many important characteristics of its two predecessors (now discontinued), not the least of which are a couple of the company's design innovations.

The System 370 (\$3,996) consists of four different speakers, each available separately: two Model 371 LR speakers for the front left and right channels (\$1,299 a pair), one Model 373 C center-channel speaker (\$749), two Model 374 SR surround speakers (\$699 a pair), and one Model 372 PBM powered subwoofer (\$1,249).

The 371 LR front-channel speaker resembles other high-quality, front-channel home-theater speakers in using a D'Appolito array for its drivers, a vertically symmetrical arrangement that produces broad horizontal dispersion while limiting vertical dispersion in order to reduce reflections from the ceiling and floor. The central driver is a 3/4-inch, fluid-cooled, silk-dome tweeter, which is vertically flanked by two 3 1/2-inch midrange drivers. These in turn are

flanked by two 6 1/2-inch cone woofers. Crossover frequencies are 350 Hz and 4.5 kHz, respectively. The sealed-box (acoustic-suspension) speaker carries a nominal impedance of 8 ohms and a rated sensitivity of 91 dB sound-pressure level (SPL) with a 2.83-volt input. The enclosure measures 7 1/2 x 23 5/8 x 11 3/8 inches, and weight is 27 pounds including the removable grille (not shown). Connections for the Model 371 LR are gold-plated multiway binding posts, as they are also for the Models 373 C and 374 SR.

Unlike some other Home THX systems, the System 370 does not use three identical front speakers, nor is the 373 C center speaker simply a 371 LR turned on its side. While the 373 C's sealed-enclosure design, driver complement, crossover frequencies, impedance, and sensitivity are the same as the 371 LR's, its driver layout is different. In order for it to sound as much like a 371 LR as possible, and for similarly limited vertical dispersion, the 373 C also arrays its tweeter and midrange drivers vertically, but flanked left-right by the two 6 1/2-inch woofers. This cen-

ter-speaker driver layout was an Atlantic Technology innovation, introduced with its first THX system.

Another Atlantic Technology innovation was a separate wooden base for the center-channel speaker that allows it to be tilted up or down to direct its sound toward the listener. The system manual states that the center of the 373 C should ideally be placed within 2 feet (vertically) of the centers of the 371 LR speakers. But because of the tilting base, the center speaker's mounting height is less critical than it is in other systems. Counting the base, the 373 C measures 25 3/4 x 10 x 10 1/2 inches, and it weighs 28 pounds with grille.

Yet another center-speaker placement problem — the undesirable boosting of midrange response caused by reflections off a TV or cabinet door close by — is addressed by the 373 C's Boundary Compensation Control. This is a rear-panel switch with two positions: Boundary Compensation, which reduces the level of the midrange output in quasi-flush-mounting setups, and Free Air THX Reference. The Free Air setting should be used when the speaker is placed on a stand and away from the wall, which is how we positioned it.

The 374 SR surrounds are dipole radiators intended for mounting to the sides of the main listening position. The speaker has a triangular cross section, and each of the two outward-facing facets contains the same driver complement, a 5/4-inch woofer crossing over at 3.5 kHz to a fluid-cooled 3/4-inch silk-dome tweeter. Nominal impedance is 8 ohms, and sensitivity is given as 87 dB. The enclosure measures 7 7/8 x 18 3/4 x 7 1/4 inches, and weight is 12 pounds.

None of the main speakers in the System 370 is rated to deliver response below 80 Hz, though all of them will, the front trio especially. In this system the responsibility for the bass falls mainly on the Model 372 PBM subwoofer. Since it must generate the very high levels of low-frequency energy called for by action-movie soundtracks, the 372 PBM is necessarily large (16 3/4 x 22 5/8 x 19 5/8 inches) and heavy (86 pounds). The enclosure's four rubber feet make it impossible to slide it across a carpeted floor unless you unscrew the feet or tip the box on its side.

The massive, sealed enclosure contains an appropriately huge woofer, a 15-inch high-excursion cone, driven by an amplifier rated to deliver a substantial 275 watts. Peak output is given as 108

dB SPL, which is very loud but necessary if you want to reproduce soundtracks at movie-theater levels.

There are many ways of hooking up the Model 372 PBM; the thorough user's manual diagrams ten of them. The simplest involve line-level connections to a THX amplifier or receiver's subwoofer outputs, which is what we used for our listening tests. Other methods include using the sub's speaker-level inputs (multiway binding posts) and hookups intended for non-THX systems, which utilize the module's built-in, line-level, 80-Hz high-pass filtering.

Using the 372 PBM in an all-THX system simplifies subwoofer adjustment because the THX bass-management circuitry in the system amplifier or receiver will do most of the work for you. Otherwise, you'll want to take advantage of the module's switchable-frequency low-pass filter, which provides an 18-dB-per-octave rolloff above 55, 80, 100, or 140 Hz (along with a bypass position for operation with a THX receiver or preamp), as well as its front-panel volume control, which is normally covered by the removable grille. The module's rear panel, besides housing the input and output connections, power-cord connector, and power switch, has toggle switches for polarity (phase) inversion and for defeating the automatic-turn-off delay that normally shuts the unit off after 7 to 10 minutes of no signal. In all, the subwoofer's controls make it suitable for nearly all high-quality home-theater systems, not just System 370 or other all-THX setups.

On the rear panels of both the 371 LR front speakers and 374 SR surrounds are keyhole mounting brackets for wall-mounting on pan-head screws. Atlantic Technology also makes optional pedestal stands, shown in our photograph, for these two speaker models (priced around \$250 to \$300 a pair at dealer's option). The stands not only turn these speakers into the visual equivalent of tower speakers but also place them at ideal heights for proper imaging (your ears should be at the same height as the front-channel tweeters, especially at an in-store audition).

I used the pedestals for the front speakers, placing them in our standard away-from-the-walls locations, and I placed the surrounds on our normal sound-room shelving, which locates them about 2 feet above seated ear level to either side of the main listening position. The subwoofer was placed near the front left corner of the listening

room, in accordance with our normal practice and with the recommendations in the owner's manual.

With that placement, and after not very much fine tuning of levels and position, I was able to obtain an outstanding in-room frequency response from the front left speaker plus subwoofer of ± 2.5 dB from 40 Hz to 20 kHz, which is about as good as it gets in our sound room. Measured with quasi-anechoic MLS techniques, the on-axis response of the front satellites was within 2 dB of flat from 1 kHz clear to 20 kHz. And that, in turn, is pretty much as flat as a speaker's response can be measured with our present testing setup.

The center speaker measured practically identically to its front-channel brethren above 1 kHz, showing the value of the central vertical driver array. The subwoofer was capable of producing useful output down to a room-rattling 25 Hz. I found no mechanical resonances in any of the system's speakers with moderately loud warbled sine-wave test tones, which is unusual.

As with all top-echelon loudspeakers with claims to high sonic accuracy, the

omnidirectional speaker system, a THX speaker setup can sound a bit "dry." But when you're sitting down in front of the System 370, you'll find that it *is* capable of creating all the sense of space and depth that *the recording itself* has to offer, without imposing any additional spaciousness of its own. The effect is very "analytical" in the fashion of a professional monitoring system or a soundtrack mixdown studio. Besides, with the surround speakers connected you need only turn on your receiver's or processor's ambience-enhancement modes to get all the spaciousness you need. In our tests, the System 370's left-right imaging on music, soundtracks, and the ultra-critical imaging test tones of the Delos *Surround Spectacular* CDs was very tight and precise. All these imaging characteristics aided the dramatic presentation of high-production-value stereo music, such as opera (like Britten's *Peter Grimes* on EMI) and the sonic montages of Janet Jackson's *The Velvet Rope*, as much as it was valuable in soundtracks.

The subwoofer was capable of prodigious undistorted output, as hinted at

The clearly audible neutrality of the Atlantic Technology System 370 speakers can make good recordings of both music and soundtracks sound superb.

"sound" of the Atlantic Technology System 370 depends greatly on the program material. Its measured and clearly audible neutrality of frequency balance can make good recordings of both music and soundtracks sound absolutely superb. But such sonic evenhandedness will also ruthlessly expose the all-too-common deficiencies of everyday recordings and soundtracks, such as limited dynamic range, poor equalization, and voice processing designed to make a recording sound good over a radio, a boombox, or the "cheap" speakers in your neighborhood super-mega-omni-plex theater.

I've heard complaints that Home THX speaker systems aren't as good at reproducing the spaciousness of many music recordings, reservations probably stemming from the deliberately limited vertical dispersion of such systems. Indeed, in direct comparison with, say, an

by a number of action movies (including *Das Boot*) and conclusively demonstrated by my comparatively explosion-free collection of demo-disc pipe-organ music and orchestral bass-drum passages, including Christopher Rouse's very high-impact *Gorgon* on an RCA Victor CD of his music.

Driven by a sonic spectacular like the Rouse CD or, in surround mode, the Dolby Digital soundtrack of *Contact*, the System 370 left practically nothing to be desired in terms of dynamic range, frequency extension, frequency balance, imaging, or spaciousness. I hardly need add that the Atlantic Technology System 370 is one of the best home-theater speaker systems I have had the pleasure of reviewing.

Atlantic Technology, Dept. SR, 343 Vanderbilt Ave., Norwood, MA 02062; telephone, 781-762-6300



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Dealer's Choice

A/V EXPERTS SUGGEST WINNING HOME-THEATER STRATEGIES FOR THREE DIFFERENT BUDGETS

MANY PEOPLE, it seems, enter an audio/video specialty store with some trepidation. Perhaps it's because they have come to expect all retail stores to be bustling environments with rushed, un-knowledgeable sales help and public-address systems that bellow about the latest special in Aisle 4. It can come as a shock to find a relatively tasteful, serene setting with educated employees who are willing to chat with customers at length.

Even more surprising is the thought of a specialist carrying purchases to a customer's car, or delivering them to his home, rather than dropping them at his feet from a fork lift.

A good A/V specialty store will have showrooms exhibiting audio and video components with familiar brand names — and perhaps some that are unfamiliar. The specialist will take care to display and connect these components in a manner that offers some semblance of what they might sound and look like at home. And, amazing as it may seem, these specialists delight in installing the equipment they sell so that it

sounds and looks at least as good in their customers' homes as it did in the store. Yet some people maintain a lingering suspicion about the value, quality, and price of the kind of gear a specialist might recommend.

Specialists, however, have every reason to recommend the right stuff to their customers. Their business depends on word-of-mouth referrals, so it's in their interest to listen to their customers and

determine what will work for them.

We surveyed three specialists in three different parts of the country and asked each one to design a home-theater system at a different price level, all representing what real people might have budgeted for an audio or home-theater system. The prices given are manufacturer's suggested retail prices.

All three dealers recommended Dolby Digital-based systems with solid value and performance. They also concurred that DVD represents the future. The following pages tell how these A/V experts suggested we spend our money.

BY RICH WARREN

Dealer's Choice

a bachelor's a/v starter set

WE PRESENTED OUR FIRST scenario to Barry Levinson, the proprietor of Roberts Audio Video in New London, Connecticut. We described a young professional who was moving out of his parents' house to his own apartment — but taking their 27-inch TV with him. They celebrated his leaving with a new home-theater system. Their son, meanwhile, budgeted \$3,000 to build a home theater in his small apartment around the 27-inch TV.

Before Levinson would chat with us, he suggested that we take a look at his Web site, www.robertsav.com. In almost a score of pages, the site details the history and goals of the company, describes the benefits of custom installation and home theater, and lists the brands carried in the 3,000-square-foot store. A clue to the

\$3,000 HOME THEATER

ROBERTS AUDIO VIDEO New London, CT

Sony DVP-S3000 DVD player: \$699

Sony STR-DE915 Dolby Digital receiver: \$700

Phase Technology 7T speakers: \$550/pr

Phase Technology T center speaker: \$200

Phase Technology DS T surround speakers: \$250/pr

Phase Technology Power 12 powered subwoofer: \$400

Roberts style can be found right on the opening page, which notes that the store is happy to deliver and install new equipment. "The salesman will often do this himself, not just a guy with a strong back who can't answer your questions or show you how to use it." When we talked to Levinson, he stressed the importance of customer service, saying, "I've been here more than twenty years since taking over from my father." He credited customer service for his store's longevity.

Levinson initially had a little trouble staying within our budget. "We do address the entry-level market, but as a specialty store we focus on step-up product lines," he explained, noting that most of the home-theater systems he sells cost between \$4,000 and \$20,000. "But we certainly

provide service, support, and installation for competitively priced products as well."

So how and why did Levinson choose the components for our \$3,000 system? He started by explaining the importance of Dolby Digital in justifying the Sony gear he selected. "We sell a lot of Sony and Sony ES components," he said. "Sony happens to have prices that allow you to put together a home-theater package with Dolby Digital for \$3,000."

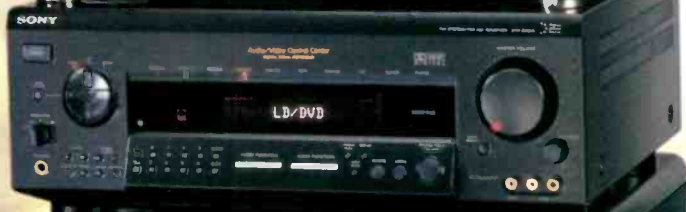
Describing how he selects components for his customers, Levinson said, "The upgrade path is important. I don't think you could rightly show somebody a Dolby Pro Logic system that isn't upgradable without making sure they understand that it's not compatible with Dolby Digital and can't be upgraded."

He applauded the DVD format, saying, "We're certainly convinced that DVD, like laser-disc, offers high performance. It's being bought by knowledgeable buyers — people who will always go out of their way for the best new technology." Levinson chose the Sony DVP-S3000 DVD player because it is a good match for the Sony STR-DE915 receiver and shares the same remote control.

Levinson called Phase Technology speakers a "value-driven line." The Phase Tech Model 7T in particular, he said, "has been a highly regarded two-way floor-standing speaker. The DS T surround speakers are small, nearly flat wall-mounted dipoles. The Power 12 is a good-sounding 12-inch subwoofer that can fill most people's rooms adequately, and the full-range Model T center speaker has good vocalization characteristics. The system doesn't have heavy-duty power requirements."

When Robert Levinson's Electric Shop — as his father's store was called — opened in 1934, it sold the latest in electrical products. Seeing how the business evolved, I asked Barry what he expected to be selling in the future. He predicted that within two years, 80 percent of his sales will be custom-installed systems. "The high end and custom installation are specialty markets in which people are more interested in enjoying the system than shopping for the best deal." Such customers, he said, have "outgrown the basics and budget shopping and are really interested in a system that works and is usable when they get it home." He added, "That's the customer that we must continue to address if we want to stay in business."





Dealer's Choice

taking the a/v plunge

OUR SECOND SCENARIO was presented to Ford Montgomery of Chelsea Audio Video in Portland and Beaverton, Oregon. We described a family that had been planning for years to turn the basement of their house into a home theater. They had saved enough to budget \$5,000 for components, including a big-screen TV.

Montgomery remembers being a hi-fi buff all the way from childhood through college. After waiting tables for a year, he changed his avocation into his vocation when he was offered a job selling stereo equipment by a store owner who understood his passion. Two years later, in 1974, he founded Chelsea Audio, which he has since

\$5,300 HOME THEATER

CHELSEA AUDIO VIDEO Portland/Beaverton, OR

Marantz DVD-810 DVD player: \$700

**Marantz AV-550 Dolby Digital preamplifier/
tuner:** \$1,000

Rotel RB-985 five-channel power amplifier:
\$1,000

B&W DM305 speakers: \$450/pr

B&W CC3 center speaker: \$180

B&W DM302 speakers (surround): \$250/pr

Velodyne VA-8100X powered subwoofer: \$599

Mitsubishi CD-32309 32-inch TV: \$1,099

expanded to include car stereo and video. His main store occupies 7,000 square feet and includes five sound/theater rooms.

Montgomery eagerly designed our system. "The Mitsubishi monitor was the biggest I could get into the system and still get close to the budget," he said. "It delivers a very nice picture because Mitsubishi pays attention to producing true whites at the proper reference color temperature." Yet he wasn't entirely happy about the screen size. "I would have liked to recommend a bigger picture," he said, "but anything 35 inches or larger would be a big price jump. As it is, I'm already \$300 over the original budget."

The system Montgomery designed is the only one of our three with a separate preamplifier and power amp. "I want the sound quality that you

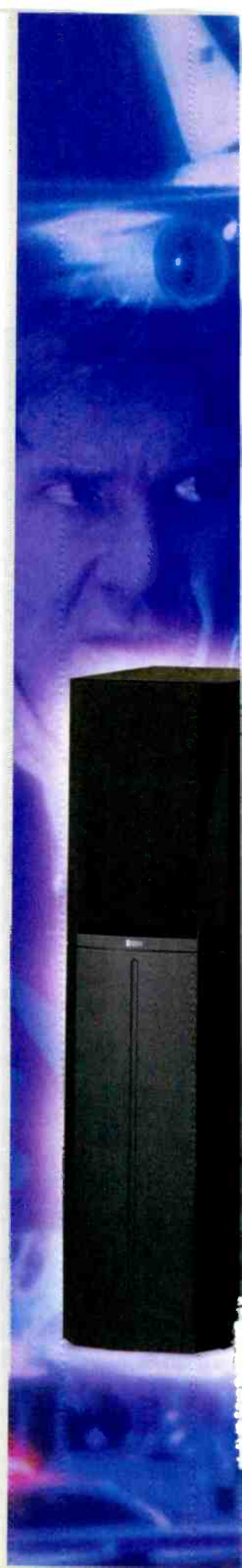
can get from separate components," he said. "They're better and more flexible. I know receivers are what sell best, but that's because people aren't told often enough that separates offer many advantages."

He rhapsodized about the equipment he chose, saying, "The AV-550 is Marantz's new Dolby Digital preamp/tuner. We sold hundreds of its predecessors. It's the most affordable Dolby Digital preamp separate that we know of, and it's excellent — it sounds great, and its chip set is good. The DVD-810 DVD player is also excellent and works with the same remote control." He called the Rotel RB-985 five-channel power amp "bulletproof," saying that "you can just about run it into a dead short as far as we can tell. Unlike some other components, the Rotel amp has a solid power supply that really delivers the power nice and clean."

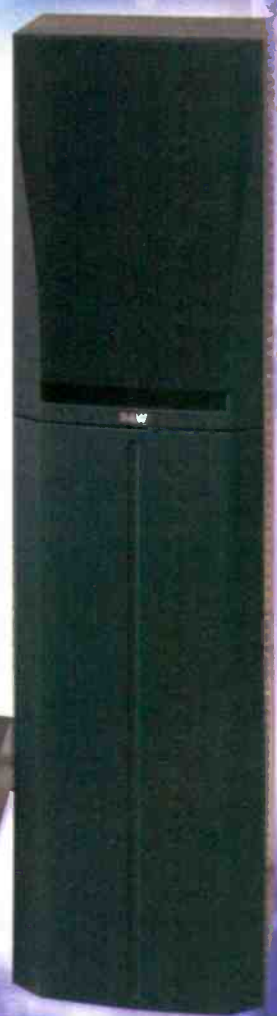
Montgomery sang the praises of B&W speakers and their music reproduction. He cited the imaging of the B&W DM305, which is the tower version of the B&W DM302. "The DM305 has a little deeper bass and is a little tighter than the DM302," Montgomery remarked, "and it makes a great music speaker. So this is home theater where you can sit down and listen to music in stereo with good imaging, good staging depth, and fine sound." He matched the DM305s with the shielded CC3 center speaker and B&W DM302 bookshelf speakers for the surround channels. They all possess nearly identical timbre, he said. "They're easily driven by the 100-watt-per-channel Rotel amp. They're nicely matched, decent looking, and just a good value." To explain his choice of the 100-watt Velodyne VA-8100X powered sub, with an 8-inch driver and a 10-inch passive radiator, he called Velodyne "the king of subwoofers."

Cables excite Montgomery, who insisted that if we were real customers, he wouldn't let us out of his store without interconnect and front-speaker cables from Transparent Audio and 12-gauge Monster Cable speaker wire for the surrounds. But, of course, that would put the system cost even further above budget.

Montgomery concluded, "I think if I took this system and set it up in your room — a service we include at no extra charge — and you gave me a little time to voice the room and set up the speakers and tweak it a bit, I could make it cry. It wouldn't be a cheap system, but it would sound great for both movies and music."



UNITED STATES OF AMERICA



Dealer's Choice

filling an empty nest

REMEMBER THE PARENTS of the kid who was leaving home? They're the subjects of our third scenario. To celebrate getting their son — and their old 27-inch TV — out of the house, they decided to install the best home theater they could buy for about \$7,500. If anyone could give them the right advice, it would be Columbia Audio/Video of Highland Park and Arlington Heights, Illinois, which celebrates its 50th anniversary this year.

When Norm and Irv Rozak founded the business in 1948, it sold records and appliances as well as the headphones that Irv manufactured. They jumped into hi-fi pretty quickly, staging the first

for a good part of Columbia's business. Its know-how filters down into the company's custom-installation division, which works hand-in-hand with its main 10,000-square-foot retail store in Highland Park.

Norm Rozak remains active in running his company but has given considerable responsibilities in its operation to his daughter Linda, who relishes the business. She started our conversation by saying, "Educating the consumer is our mission. We feel strongly about supporting consumers, going out into their homes, evaluating their living environment and assessing their living habits. It gives us a better idea of what we're working with." Without such interaction, she said, "you might put together a system that includes a projection TV and then discover that it has to be installed in a room with miles of windows."

Linda Rozak referred us to one of Columbia's system designers, Michael Bernhard, to assemble our \$7,500 system. He waxed enthusiastic about the Sony KV-35XBR monitor, saying, "TV is, of course, really important to the whole deal, and I think that the Sony 35-inch XBR is the best 35-inch TV made for consumers. It's a great TV — best picture, best sound out there." He continued, "It's always nice to match the TV and the VCR, so I chose a Sony hi-fi VCR. The remote matches, and it's easy to operate."

Bernhard also chose a Sony DVD player. "The Sony DVP-S3000 is a really great player for the money," he said, "and it's important to have a DVD player in this day and age if you're going to be starting off your home theater. There's no question that it's the direction to go."

When it came to audio electronics, Bernhard explained that Columbia carries many brands and that the best values change from season to season. For this system he chose the Denon AVR-3200 receiver. "It's a really good value, it sounds good, and it's pretty easy to work, too." He further explained, "Part

of my job is training customers to use equipment, and I've been successful with the Denon products. This is one of Denon's lowest-priced Dolby Digital receivers, but it's got a pretty good bang with five 100-watt channels." The receiver also has a five-channel ambience-synthesis music mode, he noted. "It's fairly amazing that you can get ambience synthesis that sounds this good for this kind of money."

\$7,800 HOME THEATER

COLUMBIA AUDIO/VIDEO

Highland Park/Arlington Heights, IL

Sony DVP-S3000 DVD player: \$699

Sony SL-V675HF hi-fi VCR: \$279

Denon AVR 3200 Dolby Digital receiver: \$999

Monitor Audio 700PMC speakers: \$1,000/pr

Monitor Audio CC300 center speaker: \$499

Monitor Audio MA FX 1 surround speakers: \$800/pr

Monitor Audio MAS 1 subwoofer: \$999

Sony KV-35XBR 35-inch TV: \$2,499

hi-fi show in the Chicago area. Since Norm Rozak was a technician, it's not surprising that the specialty of the fledgling company was its service department.

Just as Columbia was ahead of the curve in hi-fi, it preceded most audio stores into video, opening a professional video division in 1979. The professional division diversified into a variety of pro electronics, and it now accounts





As for the speakers, Bernhard was as passionate about his choices as his fellow dealers were about theirs. "I really love the Monitor Audio speakers," he exclaimed. "I do a lot of work with them. The Model 700PMC and CC300 speakers are bookshelf-sized, and the MA FX 1 surrounds are dipoles. You can really make them disappear, and they sound great." He went on to call the Monitor Audio MAS 1 passive sub-

woofer, with dual 10-inch drivers, "actually better with music than with home theater. It's really tight and fast."

"Budget permitting," Bernhard said, "I would recommend audiophile cables. Nearly every system I do uses Straight Wire cable. I didn't specify any for this system because the cabinet and room layout are unknowns and have to be considered before the right cables can be recommended. Straight Wire cable

was in my house before I was working in the audio industry, and it's going to stay there."

Bernhard takes pride in his ability not only to advise and install the equipment he sells, but also to work with subcontractors such as electricians, cabinetmakers, and architects to make sure that it all goes smoothly, usually at no additional charge. "I oversee every phase of installation," he explained. □

*A Look Under the Hoods of Three
Souped-Up Dolby Digital Receivers*

COMPARISON TEST BY DANIEL KUMIN

RECEIVER RALLY

THE POPULARITY of home-theater and digital surround-sound technologies is booming, which is encouraging manufacturers to release a veritable flood of 5.1-channel Dolby Digital A/V receivers. This means that you'll have more choices than ever if you go receiver shopping, but also more — and more difficult — decisions to make.

All three of the receivers we're looking at this time around — the Marantz SR-880, the Harman Kardon AVR 85, and the Sony STR-DA90ESG — were selected from the \$1,400 to \$1,600 price range that's one jump below the most costly, most heavily feature-laden A/V receivers available. All three feature roughly equivalent power. While they're not rated identically, in practical terms all fall close to 100 watts per channel in their surround modes.

I put all three receivers through their paces with the same loudspeaker suite: B&W Model 803/2 left/right speakers and HTM center speaker up front and Citation Model 7.3 switchable dipole/bipole surrounds. Sources included CDs, DVDs, laserdiscs, and digital satellite broadcasts, and I viewed the video programs and on-screen displays on a 40-inch Toshiba TW40F80 TV set. I did most of my listening with the

speakers running full-range, without a subwoofer, in order to place the maximum demand on all amplifier channels. However, I also tried each receiver with a powered subwoofer and the low-end crossovers engaged, the most popular home-theater setup.

While similarities abounded, there were some very real differences among these A/V receivers, both in how they operated and in how they performed.

Marantz SR-880 The Marantz SR-880 is tidily arranged and reasonably compact. As on most A/V receivers today, pushbuttons are used for all of its controls except volume, tone, and balance. The buttons are arranged more sensibly on the panel than on some other receivers, with larger keys offering input selections and smaller ones controlling secondary selections such as the active digital input. Pairs of up/

MARANTZ SR-880



RATED POWER PER CHANNEL: five channels driven, 110 watts into 8 ohms from 20 Hz to 20 kHz for three front channels, 60 watts into 8 ohms for two surround channels; two channels driven (stereo mode), 110 watts per channel, 20 Hz to 20 kHz into 8 ohms with 0.05% THD. **SPECIAL FEATURES:** Dual-source/independent-volume multiroom audio with IR-repeater connections; one optical, one coaxial, and one AC-3/RF digital input; two S-video inputs and outputs. **DIMENSIONS:** 17¼ x 6¼ x 18¼ inches. **WEIGHT:** 32 pounds. **PRICE:** \$1,500. **MANUFACTURER:** Marantz America, Inc., Dept. SR, 440 Medinah Rd., Roselle, IL 60172; telephone, 630-307-3100; Web, www.marantzamerica.com.

down pushbuttons are provided for radio tuning, tuner preset selection, and selecting from the six surround modes. The various control groups are well segregated, making front-panel operation easier. One negative, however, is the rather small, gold-on-black labeling, which is very hard to read, even close up, in anything but bright light.

A simple blue ten-character readout displays tuner and surround settings. The SR-880's on-screen display — more on this later — provides all needed data as well. Elsewhere on the receiver's face are a headphone jack and a convenience A/V input.

Around back, the Marantz SR-880 is fairly typical. There are inputs for four audio/video sources, including two full VCR loops. Audio-only ports include two more tape loops and a CD input. There's no phono input, however, so you'd need an external phono preamp to play vinyl. The presence of line outputs for all six channels, including subwoofer, augurs well for expandability, while a stereo line-level output marked Multiroom offers independent volume and source selection to a second zone. Connections for a remote infrared sensor (sold separately) and unified-remote components that adhere to the proprietary Marantz/Philips D-BUS protocols are also on tap.

Naturally, composite-video connectors are available for all A/V inputs and outputs, but S-video is offered only for the VCR-1 loop, the DVD/laserdisc inputs, and the monitor outputs. It would

be better if my DSS receiver could feed my system S-video signals and not just my DVD player and S-VHS deck.

There are three digital inputs: one coaxial and one optical for Dolby Digital (DD) or PCM sources, and one AC-3/RF for DD signals from laserdiscs. That's adequate for most systems today, but we're gonna need more digital ports down the road for DTV receivers, second-wave satellite tuners, and so on. Speaker connections for all channels are the wide-spaced banana terminals I'm seeing often these days — a good, solid choice, though U.S.-spec dual banana jacks don't fit.

Marantz packages the SR-880 with its imposing RC-2000 learning remote control, one of the more powerful and elaborate full-system remotes available (it's also sold separately for \$250). It's much too complex to discuss fully here (see comparison review, "In Control," last August). Briefly, in addition to managing the full set of receiver functions, the remote can control nine additional components, with several dozen commands available for each. All codes are learned rather than preprogrammed, which means that you'll have to set some time aside for remote-to-remote button-pushing sessions. Once programmed, however, the big, somewhat heavy, nicely back-lit remote is a singularly flexible full-system controller that you can customize in many, many ways.

Setup of the SR-880 was completely straightforward, and the receiver main-

tained channel balance very well over a broad master-volume range. Amplifier performance was impressive in stereo playback and no less so in full five-channel surround. Though its output without a subwoofer wasn't quite powerful enough to drive me from the room, it came close — and with the sub in the system, the sound was very loud yet clean indeed. Despite the SR-880's slightly more modest surround-channel ratings, it delivered ample thump there, too, never falling significantly short before the onset of full-system clipping.

With just one caveat, surround-sound qualities were beyond reproach. The Marantz SR-880 proved winningly quiet, keeping noise in any surround mode well below audibility at the listening position, even with a silent DVD track. Pro Logic performance was excellent as well, with virtually no discernible center-channel leakage to the other speakers. Steering accuracy and stability were equally excellent, and the receiver delivered smoothly listenable, yet open and detailed surround sound from every good Dolby Surround recording I played. Dolby Digital performance was of a similarly high grade, which is to say excellent. Background noise was just about nonexistent, and definition, detail, and ambience were absolutely first-rate.

The caveat I referred to concerns an odd sort of distortion/noise mechanism I encountered from the surround channels (though not in Dolby Digital mode) with certain kinds of programs: a sort of faint hash, or noise "hair," on some (but not all) sounds. I first detected this as an elusive rasp from the surrounds on the opening bars of Tracks 2 and 9 of the Delos *Surround Spectacular* CD (Delos DE3179), but once I learned to listen for it, I was able to hear it on a wide variety of recordings, including many solo-piano discs, whether surround-encoded or not. This error was undiminished by changes in input-signal level (including the insertion of a 20-dB pad) or by switching from an analog input to a PCM digital input and it was equally present with the receiver's Movie and Matrix modes.

At first, I suspected the noise was caused by some sort of amplifier defect, but I quickly discounted that theory in favor of some unusual digital processing or decoding error in the surround/Pro Logic software. A Yamaha digital signal processing (DSP) engine performs all of the SR-880's surround processing, and I heard the same arti-

fact from the Harman Kardon AVR 85, which has an identical, or at least very similar, surround/DSP circuit.

Both Marantz and Harman Kardon say that they are addressing this problem in future production units and will fix it in any receivers brought to their attention. Though the artifact is subtle enough that most users are unlikely to identify or perhaps even notice it, it is a flaw nonetheless. (To check if a receiver you're considering exhibits this flaw, disconnect all three front channels and listen intently to the surrounds alone. If you use Track 9 of the Delos disc, Copland's *Fanfare for the Common Man*, I guarantee you'll hear it within 30 seconds if it's there.)

In everyday use the SR-880 proved robust, reliable, and simple. Its plain, text-based on-screen displays give the information you need and then clear out of the way. And the big remote is largely self-prompting and easy to operate despite its tremendous flexibility. (You do have to grow accustomed to switching it from component to component, though, as almost all of its buttons are "soft" keys.)

One oddity is that the Marantz receiver does not "poll" its inputs to select an active digital bitstream. Unless you manually select one of the digital inputs it will continue to play any incoming analog audio source, and Dolby Digital does not appear in the rotation of surround modes. And if you switch from a DD input to an analog one, when you return to the DD-assigned position the receiver stays in analog mode. Equally odd, any digital source can be assigned to any input, including AM/FM, tape, and so on. (All the foregoing applies equally to the Harman Kardon receiver.) Another annoying trait I discovered is that if I held in the remote's volume-down key to make a large attenuation, the electronic volume control would pause for almost a full second at one or two random points on its way down the scale.

The SR-880's AM and FM reception quality were typical of today's receivers. On the FM side, I got fine sound from high-power and local broadcasts in my semi-rural area, but only limited reception of several weaker or more distant signals that good separate tuners can bring in with relative ease. The FM tuner was hampered mostly by a too-high stereo threshold, which caused its seek routine to skip many stations and made stereo reception of weaker signals impossible. On the AM side, the

SR-880 could manually tune in about a half-dozen intelligible broadcasts on most days, or about average.

On balance, Marantz's SR-880 Dolby Digital receiver delivers the real home-theater deal in the form of a powerful five-channel amplification system, eminently usable controls and features, and superb surround performance in both digital and analog domains, with that one caveat discussed above. Even without its powerful RC-2000 remote control it would represent good value, and getting that in the package is a very real bonus.

Harman Kardon AVR 85 Harman Kardon's latest Dolby Digital receiver, the AVR 85, follows the firm's long-standing tradition of visually striking design. A large glass window containing the display is above a single row of sculpted pushbuttons that operate most controls. A few additional buttons below them handle digital input selection and surround-mode cycling, while the usual four knobs control volume, bass, treble, and balance. Elsewhere on the front panel are a headphone jack, a power button, and a set of A/V convenience jacks.


From the rear the AVR 85 looks nearly identical to the Marantz SR-880. In fact, both receivers are constructed on the same chassis. But while there is a good deal of similarity and lots of identical parts under the hoods, there are a number of differences, too. Para-

mount among these is the AVR 85's amplifier section, which appears to be entirely distinct, including its driver stages.

The video board of the AVR 85 is also different, supplying S-video connections for three A/V signal paths instead of two as on the Marantz, including DVD and both Video-1 and Video-2. Counting the composite-only TV input and the front-panel set, that makes five A/V slots in all, which are complemented by a CD input and two complete tape loops on the audio side. There are pre-out jacks for all six channels as well as a stereo pair for multi-room applications and the requisite connections for an optional infrared (IR) receiver from the remote zone.

Digital inputs comprise one coaxial, one optical, and one AC-3/RF for an appropriately equipped laserdisc deck. Any of these can be assigned to any source — even such nonsensical assignments as optical to AM/FM or AC-3/RF to CD — and the active digital input automatically overrides any incoming analog signals. Equally puzzling, assignments are not remembered by input. Consequently, if you choose, say, the optical input for a DVD player and watch a disc, then listen to FM for a while, when you return to the DVD you will hear Dolby Pro Logic surround sound from the DVD player's down-mixed analog audio output unless you remember to hit the optical button again. To its credit, the AVR 85 does

HARMAN KARDON AVR 85



RATED POWER PER CHANNEL: five-channel surround modes, three front channels 85 watts into 8 ohms from 20 Hz to 20 kHz with 0.07% THD, two surround channels 85 watts into 8 ohms from 40 Hz to 20 kHz; two channels driven (stereo mode), 90 watts per channel from 20 Hz to 20 kHz into 8 ohms with 0.07% THD. **SPECIAL FEATURES:** Dual-source/independent-volume multiroom audio with IR-repeater connections; one optical, one coaxial, and one AC-3/RF digital input; three S-video inputs and outputs; auto turn-off by TV audio. **DIMENSIONS:** 17 $\frac{3}{8}$ x 6 $\frac{3}{8}$ x 18 inches. **WEIGHT:** 32 $\frac{5}{8}$ pounds. **PRICE:** \$1,695. **MANUFACTURER:** Harman Kardon, Dept. SR, 253 Crossways Park Dr., Woodbury, NY 11797; telephone, 800-422-8027.

MEASUREMENTS

	MARANTZ SR-880	HARMAN KARDON AVR 85	SONY STR-DA90ESG
DOLBY DIGITAL PERFORMANCE			
OUTPUT AT CLIPPING (per channel, one channel at a time driven)			
8 ohms	126/83 watts (front/surround)	97 watts	181 watts
4 ohms	181/108 watts (front/surround)	165 watts	238 watts
SHORT-TERM OUTPUT POWER (per channel, all five channels driven)			
8 ohms	89/51 watts (front/surround)	74 watts	102 watts
FREQUENCY RESPONSE (worst case, 22 Hz to 20 kHz)	front channels +0.1, -0.4 dB	front channels +0, -2.1 dB	front channels +0, -1.8 dB
NOISE (A-wtd, typical, re 1 watt from -20-dBFS* signal)	-72 dB	-73 dB	-76 dB
EXCESS NOISE 16-bit (EN16)	1.25 dB	2.5 dB	2.8 dB
SUBWOOFER CROSSOVER			
frequency	103 Hz	103 Hz	120 Hz
slope	24 dB per octave	24 dB per octave	12 dB per octave
STEREO PERFORMANCE/ANALOG INPUTS			
OUTPUT AT CLIPPING (per channel, both channels driven)			
8 ohms	111 watts	89 watts	128 watts
4 ohms	150 watts	141 watts	201 watts
DISTORTION			
at 1 watt (8 ohms)	0.03%	0.05%	0.03%
at rated power	0.02% ¹	0.09% ²	0.007%
NOISE (A-wtd)	-82 dB	-80 dB	-83.3 dB
LINEARITY ERROR (at -90 dBFS*)	+0.8 dB	-0.4 dB	+0.23 dB
EXCESS NOISE (with signal) 16-bit (EN16)	1.25 dB	2.75 dB	1.8 dB
FREQUENCY RESPONSE 20 Hz to 20 kHz	+0.1, -0.4 dB	+0.2, -0.3 dB	±0.1 dB

* decibels referred to digital full-scale

¹ In Dolby Pro Logic mode surround-channel distortion was about 0.7 percent at all levels below clipping.

² In Dolby Pro Logic mode surround-channel distortion was about 0.6 percent at all levels below clipping.

function. One of the more annoying examples is that there is no manual tuning control except on the tuner "page." Worse, modifying the EQ (equalizer) settings, the only tone controls, requires a trip through three menu levels and a minimum of five key presses before you actually get to change a setting up or down — twisting a knob is a *lot* easier. Another irritant: Inputs do not remember the last-used surround setting, and to recover it, you must navigate goodly distances through two menus.

Of course, you can't have it all ways. In return, the Sony design delivers control and flexibility well above those of most A/V receivers. Perhaps more important, despite the layered nature of its user interface the system's full potential is a good deal easier to tap than that of many complex A/V receivers. But the VisionTouch approach is different. For

one thing, it immediately excludes those reluctant to make the video screen active for music listening as well as A/V programs. (While it is *possible* to use the front-panel display instead of the on-screen GUI, it's not easy or convenient.) I suspect, however, that it will appeal strongly to a good segment of potential owners. Combined with the STR-DA90ESG's very solid inherent performance and rather stunning design, it makes for a unique package.

The Finish Line These receivers share many characteristics, but there are plenty of differences to set them apart. Obviously, all three are big-ticket items, and that raises the question of value.

Yes, you can buy similar features (including Dolby Digital) and similar or even identical power for several hundred dollars less, even from the same

manufacturers. Yet each of these receivers enjoys its maker's "high-end" treatment in the quality of its internal components, construction, and fit-and-finish and in its surround modes, features, and functions.

As to the differences, the most prominent are self-evident. Sony's Vision-Touch control interface makes the STR-DA90ESG as radical an A/V receiver as you'll find out there, yet its performance is competitive in every important way. Harman Kardon's AVR 85 features refined amplifier circuits while retaining ample A/V flexibility. Operating simplicity and sound quality are the keys to the Marantz SR-880, yet it still includes the company's most powerful system remote control. But at the end of the day, any one of these three receivers should bring a smile to the ears of just about any audio/videophile. □

Show Stoppers

1998

INTERNATIONAL CONSUMER ELECTRONICS SHOW



by Bob Ankosko

All eyes were fixed on the big, bright TV screen. The guy next to me flinched as the figure skater skidded to a halt, sending shards of ice flying, and there was a murmur in the crowd as people reacted to the intense clarity of the picture and sound. For a moment we were ringside in Nagano as the Japanese team prepared for the 1998 Winter Olympics. Of course, we were really in Las Vegas, watching a spectacular high-definition broadcast on one of the three HDTV channels that aired nonstop during the 1998 International Consumer Electronics Show.

Digital TV was *the* big news of the show, where every major TV company showcased next-generation widescreen sets in a variety of types and sizes, all vowing to offer DTVs for sale this fall when the first digital broadcasts hit the airwaves in New York, Los Angeles, and eight other top markets. Most of the sets were prototypes, ranging from direct-view models to Jetsonesque wall-hanging plasma displays to big-screen projection models with target prices starting at \$7,000.

In a move that took the industry by surprise, DirecTV announced that it will deliver high-definition programming on two satellite TV channels this fall, which would give DTV an immediate (though limited) national presence. RCA says that it will build the HD-capable satellite receiver required to receive the signals into the ProScan DTV set it plans to introduce this fall.

To set the record straight on precisely what DTV means, the Consumer Electronics Manufacturers Association,

sponsor of CES, issued a list of industry-standard definitions: Digital TV (DTV) is the umbrella term for the system adopted by the FCC in 1996. High-definition TV (HDTV) refers to wide-screen sets (16:9 aspect ratio) that can display the format's maximum video resolution with Dolby Digital audio. Standard-definition TV (SDTV) refers to sets with lower resolution than HDTV that may or may not have a widescreen display and Dolby Digital audio.

Despite the preoccupation with digital TV, DVD stole a corner of the spotlight as more than a dozen major-brand second-generation players were announced, including the first handheld DVD playback system from Panasonic. Most of the new players are slated to reach stores this spring at prices ranging from \$500 to \$900. Sharp rolled out its first player, the DV-550U (\$750), a mini deck with a Dolby Digital decoder.

Meanwhile, in a hotel far away from

DTV Spotlight Crowds gathering around \$10,000 wall-hanging plasma TVs, prototype digital TVs, and other advanced video monitors was a common sight at CES. Above, showgoers marvel at the brilliance of the picture displayed by Pioneer's 50-inch flat-panel plasma TV. The high-definition-capable set is due to hit stores this summer with a hefty price tag.

the main convention center, Digital Video Express (Divx) was hosting private demos of its controversial system that plays regular DVDs as well as \$5 limited-play Divx discs (see "Pay-Per-View DVD," December 1997). In our meeting, CEO Richard Sharp put a Zenith Divx player through its paces, walking through the registration process and using the player's remote to navigate a series of user-friendly on-screen menus with such options as "Play Movie" and "View Movie Status," which tells you how much time remains in the 48-hour viewing period. If you try to play a disc after its viewing period has expired, a message that your credit account will be charged \$3.25 appears on screen.

Much to the dismay of detractors who hoped the system would go away, Divx's Sharp said that the launch is moving ahead as originally planned, with a two-market test using Zenith players scheduled for April and a national rollout this summer when RCA and Panasonic decks will be available.

To keep the home-theater fire burning brightly, manufacturers introduced a new round of "budget" Dolby Digital receivers, including Denon's AVR-2700 (\$799), the Marantz SR-580 (\$700), and Pioneer's VSX-D557 (\$625), all expected to hit stores by April, and JVC's RX-1024VBK (\$860), which is slated for release in June.

Word that Technics, Yamaha, and Sherwood will introduce components that decode both the Dolby Digital and DTS surround formats gave DTS a buzz on the show floor. Sherwood announced its \$800 RVD-6090 receiver and Technics its \$400 SH-AC500D outboard decoder; Yamaha's DD/DTS entry is the \$2,800 DSP-A1 amp/processor. Several companies, including Panasonic, Pioneer, and Denon, also labeled their second-generation DVD players "DTS compatible," though the first of "several" unnamed DVDs with DTS soundtracks have yet to reach stores.

In a departure from its usual component focus, Nakamichi previewed a mini home-theater system it plans to deliver later this year. Expected to sell in the \$2,000 to \$2,500 range, the elegantly styled system includes five tiny satellite speakers, a subwoofer with a built-in system amp, and a control center housing a five-disc CD changer, a tuner, and a Dolby Digital preamp.

In what could be the beginning of an-



Smart Car

The age of autodriven vehicles will arrive in due time, but for now you'll have to settle for an in-dash entertainment/information system that listens to spoken requests — and responds aurally — so that you can keep your eyes on the road and your hands on the wheel. The heart of Clarion's AutoPC, which resembles an ordinary CD receiver, is an expandable Windows CE-based computer with a speech interface that recognizes some 200 voice commands. Beyond its everyday features — a CD player (which

also reads CD-ROMs), an AM/FM tuner, a digital equalizer, and a 35-watt x 4 power amp — AutoPC provides a basic navigation system that gives you directions out loud, an address book, and a voice-memo feature. Options include a GPS (global positioning system) satellite receiver for advanced navigation, a cellular-phone interface, and a six-disc CD/CD-ROM changer that ties into AutoPC via a Universal Serial Bus (USB) interface. Due out this summer, the basic package costs \$1,299.



Armchair Bass

Tired of having to kneel before the subwoofer god every time you want to tweak your system's bass output? PSB's Stratus SubSonic 4 subwoofer, due out later this year at a price of about \$1,500, includes an infrared (IR) remote control and a standalone IR receiver so that you can adjust its output level and low-pass crossover, among other parameters, from the comfort of your easy chair. PSB even provides several adjustable presets so that you can toggle between different settings. Rated down to 20 Hz, the mammoth 19 x 19 x 22-inch subwoofer packs a 15-inch driver in a sealed enclosure, an adjustable 24-dB-per-octave low-pass crossover, a fixed 80-Hz high-pass crossover, and a high-efficiency 300-watt amplifier.

DVD to Go

You can set up a private movie theater just about anywhere with Panasonic's DVD-L10 portable DVD system (\$1,300), which weighs less than 2 pounds and measures only 6¼ x 1¾ x 6¼ inches. Highlights include a 5¾-inch widescreen liquid-crystal display, built-in speakers, a headphone jack, a Virtual Surround Sound mode, and a wireless remote. The system also has a 10-bit video digital-to-analog (D/A) converter and a 24-bit/96-kHz audio D/A converter, both S-video and composite-video outputs, and an optical digital audio output. The supplied rechargeable battery is said to keep the movies rolling for up to 2 hours.



MiniDisc Mania

In the wake of Sony's CES pledge to spend millions of dollars to relaunch the MiniDisc (MD) digital recording format here in the U.S., a number of other companies unveiled more than two dozen new MD components. Sony itself led the way with ten models, including the MDS-JE520 home recorder (\$360), the MZ-E35 MD Walkman (\$450), and the MDX-C7900 car receiver (\$450) grouped in the middle of this page. The portable and home units are slated to hit store shelves in May and August, respectively. In home decks, Kenwood introduced the Model 1050MD (\$400, top right) and Yamaha showed the MDX-793 (\$699, right), the company's first MD component. Among those not pictured here are Denon's DMD-1000 deck (\$599) and Pioneer's MJ-D707 deck (\$400), which is expected to reach stores in June and features the company's patented digital noise reduction (DNR) system for recording from analog sources. Kenwood also introduced the DMC-G7R portable



MD recorder (\$400), the DMC-G3 portable player (\$250), and the KMB-C80 six-disc car changer (\$600). Sharp announced the MD-R2 (\$400) and MD-R3 (\$549) CD-to-MD home recorders, the latter including a three-disc CD changer, and two ultra-compact portables, the MD-MS702 recorder (\$500) and the MD-S301 player (\$350, right). JVC re-entered the MD market with the XU-301BK CD-to-MD deck featuring a three-disc CD changer (\$660, below). Aiwa expanded its MD lineup with three new minisystems, ranging in price from \$600 to \$850, each of which includes an MD recorder. Sanyo also augmented its car MD lineup with the MDR-500 in-dash receiver and the MD-P3 three-disc changer, which is small enough to fit into a standard DIN-size dash opening.



other trend in speaker design, Definitive Technology and Polk Audio each demonstrated center-channel speakers with built-in powered woofers. Polk's CS1000p (\$1,200) contains a 100-watt amp to power a pair of 6½-inch woofers, while the 10-inch woofer in Def Tech's C/L/R/3000 (\$999) is driven by a 125-watt amp. In a similar vein, Carver's new \$3,395 Cinema 5.4x home-theater speaker system features a center speaker with a resident 500-watt power amp for the system's subwoofer.

With eyes focused on home theater, it was easy to lose sight of pure audio. But on the eve of the show, the DVD Consortium working group responsible for developing the specifications for a new DVD-Audio format released its draft proposal, which calls for a flexible standard requiring at least two and up to six uncompressed channels of PCM audio (see "Signals" on page 32 for details).

Elsewhere on the audio front, if you thought MiniDisc was dead, think again. Sony kicked off a multimillion-dollar advertising/promotional campaign to re-launch the digital recording format, which despite 1997 worldwide sales of more than 6 million units has not sold well in this country. As you can see on page 77, a number of companies are joining Sony in giving MD a big push in 1998.

Following on the heels of the Philips CDR870 CD-RW (rewritable) recorder introduced late last year, Marantz and Pioneer announced their own CD-RW recorders, respectively the DR-700 and PD-R555W, both due later this year.

In the killer-demo department, Paradigm's dual-subwoofer Active Reference System (\$7,500) gets top billing for its superb delivery of the diva concert from the DVD of *The Fifth Element*, a popular CES demo clip. Lexicon also staged a must-hear-to-believe demo of the Logic-7 surround mode in its flagship DC-1 surround processor/preamp, which allows stereo recordings to be played back with five or seven stunningly realistic-sounding channels.

Aside from Clarion's AutoPC (page 76) and Alpine's curious car DVD (!) demo, another car product that caught our ears was NuReality's VFX-4200 processor (\$300), the first component to use SRS Labs' Focus technology, which elevates the stereo image to dashboard level in cars that have low door-mounted speakers. It works!

Pick Your Format

Mondial Designs aims to calm worries of format obsolescence with the fully upgradeable Acurus Act3 digital surround processor/preamp (\$1,499), which decodes these formats: Dolby Digital, DTS (44.1- and 48-kHz versions), MPEG-2 (potentially useful for future satellite broadcasts), and Dolby Surround (Pro Logic). Ambience-enhancement modes for stereo programs are also provided. To simplify operation, channel-level settings for each surround mode can be stored in memory for automatic recall whenever a particular mode is selected. The Act3 offers an impressive array of A/V connectors, including eight analog and eleven digital audio inputs (three Toslink optical connectors), two record outputs, composite-video and S-video jacks, and an RS-232 serial data port.



Thunder Towers

You haven't experienced bass until you've been massaged by a couple of 18-inch subwoofers, each driven by its own 1,000-watt amplifier. We're not talking about a stand-alone subwoofer here, but rather the 13-Hz-rated bass section of Definitive Technology's new flagship BP3000 bipolar speaker (\$4,500 a pair), the followup to the trend-setting BP2000. Housed in a sleek, 52-inch-tall tower, each speaker has four 6½-inch woofers and two 1-inch aluminum-dome tweeters in the front and another array of the same drivers in the rear.



Web-Ready Minisystem

With Sharp's forward-looking MD-X8 minisystem (\$900), you can download music from the Web, record it directly onto MiniDisc using the built-in MD deck, and immediately play it back. There's a catch, however: to do all that, you'll need a computer and a special \$300 PC sound-card/software package that lets you link the MD-X8 to it. Aside from the MD deck, which sports both optical and

coaxial digital inputs, the MD-X8 minisystem can deliver 80 watts of total power and includes a pair of two-way bookshelf speakers, a three-disc CD changer, an AM/FM tuner with forty station presets, and a remote control. The system also features an SRS (Sound Retrieval System) mode, which simulates surround sound using only two speakers, and an X-Bass bass-extension control.

Super Surround

The latest high-tech sensation from England's Meridian is the Reference Surround Processor 861, an open-architecture, software-upgradeable surround processor/preamplifier that decodes the Dolby Digital, MPEG, and DTS (44.1- and 48-kHz) digital surround formats and is also capable of processing 24-bit PCM digital audio signals. For surround-sound fanatics who want to go beyond 5.1 channels, the RSP 861 can handle eight (or 7.1) channels and provide several additional surround modes, including THX Cinema and SuperStereo. Among its most intriguing features is a processing function that monitors how hard each speaker is working and, when necessary, momentarily engages a psychoacoustically optimized limiting filter to prevent a speaker from being overdriven. How much the RSP 861 will cost and when it will be available were not determined at press time.



Automatic Home Cinema

Designed to be a high-performance home-theater system that even your mother could configure, the \$30,000 CineMaster from Jamo will roll out this summer. To demystify system setup, Jamo devised an auto-calibration feature: you place the supplied microphone in the main listening position, select "Automatic Calibration" from the on-screen menu using the supplied remote, and sit back while the system cycles pink noise through each of its seven powered speakers (including subwoofer), setting level and delay time according to THX specs. The on-screen display even shows which speaker is being adjusted and how much its level (in decibels) and delay time (in milliseconds) were modified. Operation is further simplified by a one-button turn-on feature and automatic input selection. The system's brains are housed in a controller box, which also provides Dolby Digital decoding. Each speaker has its own digital crossover/amplifier, adding up to a total system power rating of about 2,000 watts.

High-Performance Mini

Harman Kardon engineers in New York, California, and Japan joined forces to develop a compact audio system that emulates the design principles behind the company's separate components and is built around an intelligent unified control interface. The outcome is Festival 60 (\$1,399), an elegant five-piece shelf system featuring a wedge-shaped control module/tuner with a large display window and a row of "smart keys" whose functions change according to the selected source. The system includes a seven-disc CD changer, a stereo power amplifier rated to deliver 55 watts per channel, and a pair of bookshelf-size speakers. Rated down to 50 Hz, each speaker has a 6-inch woofer and a 1-inch dome tweeter. Rounding out the package is an ergonomically styled remote control with a unique volume toggle that you operate with your thumb. A home-theater version of the system, dubbed the Festival 80 (not shown), is available for \$2,199. It features six speakers, including a subwoofer that houses all system amplification, and Dolby Pro Logic surround decoding.



Multimedia Changers

Reacting to the increasing popularity of CD megachangers, a handful of companies are testing the waters with changers that play multiple CDs and DVDs. Sony's DVP-C6000 (above), slated to be available this summer at a yet-to-be-determined price, features a five-disc carousel and a built-in Dolby Digital decoder. Fisher's DVD-60 multiformat 60-disc changer (right) is expected to reach store shelves late this year with a \$2,400 price tag. Designed to be computer controlled via a FireWire interface, the changer has a vertical jukebox-like storage carousel and two disc transports that can play CDs, CD-ROMs, DVDs, and DVD-ROMs. The idea is that you could access a CD-ROM on a computer, say, viewing it on the PC monitor, while a DVD movie is playing on the main TV. Not to be outdone, Runco, maker of high-end video projectors, unveiled the SAR-200/Theater Manager 200-disc DVD changer (not shown), which includes a software control system with a wireless keyboard for the asking price of \$15,000.



my first stereo



40th
1958 ANNIVERSARY 1998

CAN YOU REMEMBER your first stereo components? For our 40th-anniversary celebration, we asked past and present editors and contributors to reminisce about their beginnings in stereo.

From William Livingstone's operatic obsessions to Ken Pohlmann's and David Ranada's early adventures building components from kits, here's a second installment of our audio memoirs. More to come!

WILLIAM LIVINGSTONE

Editor at Large, formerly Editor in Chief

The first of my friends to acquire stereo equipment showed it off with demo records of railroad trains and ping-pong games, which led me to believe that stereo was just a cute trick. But he also had an opera recording that made the soprano Leontyne Price seem to pro-

ceed majestically from the plant stand by the right speaker, across the fireplace, to the floor lamp by the left speaker. Really neat!

The time was about 1959, and I couldn't afford stereo equipment. They weren't giving it away for green stamps,

and I was an underpaid encyclopedia editor. I didn't buy my own stereo equipment until 1965 when I came to work as managing editor of this magazine, then called *HiFi/Stereo Review*. They wouldn't let you work for the magazine if you had only mono equipment at home.

One of the editors sold me a used Heathkit receiver, and on the advice of the Technical Department I bought a pair of Acoustic Research speakers that warmed my heart. Record changers were scorned by audiophiles back then, so I also bought a purist single-play AR turntable. I topped it off with an Ampex reel-to-reel tape recorder, and I thought I was the hottest thing in Greenwich Village, even though this wasn't a state-of-the-art installation.

It's hard to describe the great pleasure I derived from the classical LP records I played on that stereo setup. Three decades later, I still have not been able to discard, sell, or give away some of them. Fortunately, my roommate at the time shared my tastes and my obsession with opera, and both of us played records whenever we were at home. According to our neighbors we played them too often, too late, and too loud. One of them complained to the owner of our building that we never took an intermission. Listener fatigue? What's that?

Somebody convinced me that better equipment gave higher fidelity at low volume settings, so I upgraded the electronics in that first system. And to silence the most vociferous of the neighbors, I moved the setup to another room in the apartment. There my roommate and I began to test the high fidelity/low volume theory by replaying our extensive collection of Maria Callas records at different volumes.

I took it quite personally when a letter came from some pretentious neurotic who lived a block away. He not only complained that we played the music too often, too late, and too loud, he also said that our sound was shrill, and he couldn't stand that screechy soprano we played all the time.

Well! Maria Callas needs no defense from me. I mean, they didn't call her *La Divina* for nothing. But where did that creep get off saying our sound was shrill? Those were *great* speakers. I've upgraded many times since then, but I remember those first speakers with respect and affection. They were Acoustic Research AR-2ax's, and I still miss them.

CRAIG STARK

Contributor, equipment reviewer, and longtime "Tape Talk" columnist

My earliest system antedated stereo but reflected a continuing passion for building and modifying my own equipment. It consisted of an 8-watt Heathkit monaural amplifier and an 8-inch Philips coaxial speaker, which I housed in a home-built folded-horn enclosure. By college days I had built a 25-watt Eico amplifier and later acquired a wonderful KLH-6 speaker. Early in graduate school — when *Stereo Review* was still called *HiFi/Stereo Review* — I worked through a Christmas vacation to earn enough to get a second KLH speaker and move up to "two-speaker mono." I assembled my first real stereo system, comprising AR-3 speakers driven by two 40-watt Dynakit amplifiers, a Dynaco PAT-1 preamp, and, for my growing collection of LPs, a Garrard record changer and an Empire cartridge.

Tape soon became my passion, however, and I acquired, first, a Viking A-77 tape deck and then a Magnecord 1024 deck, which I modified to incor-

porate switchable record equalization and bias. The big move up was to a half-track, three-speed Crown 800 recorder, in which I also installed a quarter-track stereo playback head for compatibility with the dominant home format. Though unused for several years, it still adorns my equipment rack along with a Teac A-7030 deck, now supplemented by a Sony 60-ES DAT recorder.

I served as recording engineer for live concerts at Lake Erie College, Haverford, and Sarah Lawrence, where I taught philosophy. Several of my "master tapes" were played on WCLV-FM, Cleveland, and one was actually made into a Musical Heritage Society LP.

The need to review equipment for Hirsch-Houck Labs led to the acquisition of a swept-frequency chart recorder, an oscilloscope, precision 8-ohm dummy loads, calibrated microphones, an ABX switchbox comparator, and — the jewel of my test bench — an Audio Precision System One analyzer.

KEN C. POHLMANN

Contributor, equipment reviewer, and "Signals" columnist

When I finally decided to invest in my first stereo system, I also resolved that I would support the venture with the full force of my thick financial portfolio. Unfortunately, at that time my financial empire was not particularly well diversified. In fact, my wealth was derived entirely from my neighbor's lawns and their propensity to grow during the summer months. Still, at the end of the summer, I was fiscally prepared to take the plunge into the brave new world of stereo. I fortuitously obtained, at no cost, two loudspeakers that had apparently been part of a building's public-address system. I rounded up sufficient lumber so that within a week I had constructed two ported enclosures, the rustic plywood cabinets elegantly stained in dark walnut.

Next there was the problem of a stereo receiver. Factory-built units were too expensive for me, and so were Heathkits. Then I stumbled on a magazine advertisement (was it in *Stereo Review*?) for a no-name receiver kit that

earnestly promised "high fidelity." I mailed in my check. A few weeks later I was confronted with an empty metal chassis, an empty circuit board, a plastic bag of parts, and a mimeographed page of extremely indifferent instructions. I feverishly applied myself to the task, working nonstop for several days, until at last the receiver was finished — that is, the great majority of the parts had been soldered into place. I connected my custom-built loudspeakers and, with anticipation, applied the power.

With a distinctly audible hum from the power transformer, the receiver came alive, its lighted tuning dial glowing fiercely. I tuned across the FM band until the signal-strength meter kicked over and the stereo light kicked on. But there was no sound. What followed was my first course in circuit troubleshooting. The problem was what the instructions had alluded to as a cold solder joint. With a reapplication of heat, electrical conduction was established, and the miracle of stereo FM was complete.

I spent the entire night listening to stereo broadcasts, the 19-kHz pilot tone ringing in my ears. Although the original speakers were quickly replaced by somewhat better ones, no sound, at any price, has ever surpassed the fidelity I heard that night.

DAVID RANADA

Technical Editor

Like many other important things in our lives, most of us have fond memories of our first stereo systems. Mine was literally put together while I was in high school in Hawaii. I remember as a child watching my father, enveloped in puffs of incense-like solder rosin, assembling parts of the family stereo system from kits. Going the kit route was a good way to save money — which I earned by working in the A/V production facilities that made tapes for my school — and to learn about the innards of audio components. There were several companies producing high-quality audio kits in the early 1970s, among them Harman Kardon and Heathkit. But I chose Dynaco kits for my electronics: a PAT-4 preamp, a Stereo 80 power amplifier, and an FM-3 tube FM-only tuner. My AR turntable was fitted with the top Shure cartridge at that time, the V15 Type II. For speakers I chose the Acoustic Research AR-6's.

My old Revox open-reel deck still operates, though it has had a couple of overhauls though the years. I attribute the fact that all of the Dynaco equipment still works not to my clearly inherited abilities with a soldering iron, but to inherently good kit design. It's an unfortunate side effect of the progress that electronics has made that kids in high school now don't have the opportunity to assemble state-of-the-art audio equipment from kits. Modern circuit designs and production techniques virtually dictate mass production. In fact, if you read the electronics hobbyist magazines, you'll usually find them rehashing circuit designs and assembly methods that date back to my college days twenty years ago. Electronics do-it-yourselfers are locked out of leading-edge experimentation by the advanced assembly techniques and the complexity of modern electronics. I now use my soldering iron only to assemble the occasional special cable for *Stereo Review*'s test equipment.

Tell us briefly about *your* first stereo. We may publish it along with other reader memories in a future issue. Write to My First Stereo, *Stereo Review*, 1633 Broadway, New York, NY 10019. Sorry, but submissions for this feature cannot be acknowledged or returned.



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BEST OF THE MONTH

REVIEWS

OUR CRITICS CHOOSE THE OUTSTANDING CURRENT RELEASES



KEVIN ELLSWORTH/NONESUCH

Bill Frisell: Bend That Genre!

Ever wonder what Johnny Cash's backup group the Tennessee Two might have sounded like jamming on a tango? You might get an idea from the title track of guitarist Bill Frisell's *Gone, Just Like a Train*, an album that features the jazz deconstructionist in a bare-bones trio setting with Nashville session man Viktor Krauss on bass and studio rocker Jim Keltner on drums. A country lament that ends up as a tango is just one of the record's surprises,

though maybe it's not so surprising from Frisell, a forthright eclectic whose ventures into music other than jazz never smack of pretension or compromise.

In one sense, *Gone, Just Like a Train* picks up where last year's *Nashville* left off. Absent this time, however, are the dobros and mandolins that seemed a little superfluous anyway, given the healthy twang of Frisell's guitar. Unlike its predecessor, the new record isn't a genre album so much as a genre-bender. Part of what

makes Frisell perhaps the most innovative figure in jazz right now, as well as one of the most readily identifiable, is his ability to mix and match without being a chameleon. One of the tunes here, "Egg Radio," is a semi-reggae; the one right before it, "Nature's Symphony," begins with dollops of Hawaiian vibrato. Yet even a listener unfamiliar with Frisell would have no trouble identifying these tracks as the work of the same guitarist, one who claims your attention immediately with his combination of lyricism and power.

Frisell's trademark as a soloist has always been using feedback and distortion to introspective ends. Without sacrificing his musical identity, he plays a little more forcefully here, thanks in part to the goading of his sidemen. A key to the album's success is the quickness of Keltner's responses to Frisell; the drummer's spry, broken time-keeping in "Lookout for Hope" offers ample testimony to his jazz chops. And in the opening "Blues for Los Angeles" and elsewhere, the rumble of Krauss's bass puts Frisell in touch with his inner Link Wray.

Gone, Just Like a Train is going to be filed under jazz, and it belongs there despite its mixed pedigree. But its appeal is wider than that of most jazz records. Like all of Bill Frisell's work, it belongs in your collection whether your idea of a great guitarist is George Van Eps or Jimi Hendrix, Alfred Apaka or John Fahey.

Francis Davis

BILL FRISELL *Gone, Just Like a Train*
Blues for Los Angeles; Verona; Godson Song; Girl Asks Boy (Part 1); Pleased to Meet You; Lookout for Hope; Nature's Symphony; Egg Radio; Ballroom; Girl Asks Boy (Part 2); Sherlock Jr.; Gone, Just Like a Train; The Wife and Kid; Raccoon Cat; Lonesome
(Nonesuch, 70 min)

Bryn Terfel Sings Heroic Handel Arias

In Handel's immense output of operas and oratorios we find relatively few arias for the low male voice. When the bass-baritone Bryn Terfel undertook to record a new Deutsche Grammophon CD of Handel arias — a repertoire eminently suited to his gifts — he and his conductor, Charles Mackerras, readily appropriated certain arias originally intended for tenors or male altos. In this they broke no new ground. Some of these arias have been transposed before, and besides, as they are associated with the characters

of heroes and warriors, the more virile sound of a bass-baritone makes the combination of words and music dramatically viable for today's listeners.

We get vividly theatrical portraits here of the boastful Harapha from *Samson* and the clumsily amorous Polyphemus from *Acis and Galatea*, and Terfel's reading of the bass aria from *Alexander's Feast* is especially graphic at the line, "See the snakes that they rear, how they hiss in their hair." The familiar "Where'er you walk" (*Semele*), written for a tenor, requires only a slight downward transposition, and Terfel's tender *mezza voce* provides the perfect solution. He brings martial fire to "Arm, arm ye brave" from *Judas Maccabaeus* and thunderous resonance to three solos from *Messiah*. The long legato line in the variations of "The Trumpet



DEUTSCHE GRAMMOPHON

Bass-baritone Bryn Terfel

Shall Sound" deserves special mention.

Great coloristic variety, a truly dramatic involvement in recitatives, and exemplary enunciation are characteristic of this exceptional interpreter. My only reservation here concerns the aria "Va tacito e nascosto" from *Giulio Cesare*, which in my judgment is somewhat *overdramatized*. Mackerras and the Scottish Chamber Orchestra give admirable support throughout the CD. The crisp sound and ideal tempo choices result in a perfect amalgam of period awareness and orchestral richness.

George Jellinek

BRYN TERFEL

Handel Arias

Bryn Terfel, bass-baritone; Scottish Chamber Orchestra, Charles Mackerras cond. (Deutsche Grammophon 453 480, 73 min)

Victoria Williams's Antic Muse

Victoria Williams crafts extraordinary songs out of everyday materials: the color of the sky, the shapes of clouds, a warm cabin, a cup of tea. *Musings of a Creekdipper* is a gallery of simple pleasures, elevated to their proper place in the cosmos through the humanizing warmth of her antic muse.

Williams is a hippie in the best sense of the word, a nature girl possessed of un-

abashed generosity and loving kindness. Her music is as free-flowing and full of meanders as the creeks into which she dips fingers and toes, a real-life pastime saluted in the new record's title and photos. It is, shall we say, a less intrusive and more respectful way to treat the earth than plowing a sport/utility vehicle through the wilderness. Likewise, her music tends toward subtlety and nuance rather than the mechanistic bashing and crashing that is the *lingua franca* of popular music in the age of electronica and Marilyn Manson. Her philosophy is one of peaceful coexistence and not conquest, rusticity and not urbanity, peace and love and not *Sturm und Drang*. *Musings of a Creekdipper* is therefore, improbably, radical.

While her songs bear a genially eccentric signature, they also are refreshingly accessible, quickly acquiring a tuneful familiarity to the willing ear. The album opens with the impressionistic "Periwinkle Sky," a gorgeous musical canvas painted with pianistic shimmers, light percussive thunder, and evocative wordplay. Here she poses a question that has no doubt crossed the minds of millions who ponder the rural/urban schism and the breach that the world of commerce necessarily makes with that of nature: "I wonder if I'll stay or if I'll go away to the busy-ness of town." The cycle of life and death is another recurrent theme. In the enchanting "Grandpa in the Compach," Williams imagines life-after-death as a kind of angelic omnipotence ("I wish I could fly and see everyone I loved in the blink of an eye") while saluting the hale-and-hearty life of her grandfather, a retired farmer who's "hanging in the shade, enjoying this last leg of his earthly life /

Learning to rest / Soon he'll fly." The fact that Williams herself suffers from multiple sclerosis explains some of the lovely autumnal light that's cast by *Musings of a Creekdipper*.

The arrangements hover somewhere between folkish, back-porch strumming and orchestrated art songs. Williams's merging of rustic simplicity with grander designs recalls the late-Sixties collaborations of Beach Boy Brian Wilson and lyricist Van Dyke Parks in slices of artful Americana like "Heroes and Villains" and "Cabinessence." Her songs, in their own way, rise to similarly lofty heights, especially such memorable compositions as "Kashmir's Corn," a kind of Brer Rabbit comic set to music, and "Train Song (Demise of the Caboose)." In the latter, Williams speaks her mind about the dehumanizing modernization of train travel over a choogling musical base played by Wendy Melvoin and Lisa Coleman (former members of Prince and the Revolution) that conjures the rhythm of the rails. Throughout the album, Williams's girlish voice projects a sparkling sense of innocence and delight — a welcome change from the glib ironies that are a frequent byproduct of our age. If you're beginning to lose faith, come to *Musings of a Creekdipper*, whose restorative flights of fancy will put you right again.

If you want more, there's also a companion disc of sorts. *The Original Harmony Ridge Creek Dippers*, available by mail-order only (send \$12 payable to Creek Dipper, P.O. Box 342, Joshua Tree, CA 92252). The trio here includes Williams and fiddler Mike "Razz" Russell but mainly features the songs, singing, and playing of Williams's husband, Mark Olson, formerly of the Jayhawks. This record isn't as dauntingly visionary as Williams's solo disc, but it has its own



ANDREW SOUTHAW/ATLANTIC

Victoria Williams

set of virtues and verities to share at a somewhat creakier, more relaxed gait. Among other things, it boasts "Humming Bird," a charming, unplugged sing-along that appears in a different version on *Musings*. That, however, is the only overlap between the two albums.

Parke Puterbaugh

VICTORIA WILLIAMS

Musings of a Creekdipper

Periwinkle Sky; Rainmaker; Kashmir's Corn; Train Song (Denise of the Caboose); Last Word; Nature Boy; Tree Song (Eucalyptus Lullabye); Let It Be So; Allergic Boy; Humming Bird; Grandpa in the Cornpatch; Blackbirds Rise (Atlantic, 44 min)

Richard Goode's Chopin

We don't often encounter Richard Goode outside the Viennese repertory with which he has so strongly identified himself. But his absolutely magical new Chopin recital on Nonesuch illustrates how foolish it would have been to assume that his previous recordings defined some sort of limitations on his interests or capabilities. Within the striking frame provided by two of Chopin's most remarkable larger pieces, the Polonaise-Fantaisie in A-flat Major of 1845 and the contemporaneous Barcarolle in F-sharp Major, Goode plays a single nocturne (Op. 55, No. 2, in E-flat Major), the last of the four scherzos (in E Major, Op. 54), and a well-chosen handful of mazurkas (Op. 7, No. 3, in F Minor; Op. 41, No. 3, in A-flat Major; Op. 17, No. 1, in B-flat Major; No. 2, in E Minor; and No. 4, in A

Minor). All are delivered with the combination of fastidiousness, expressiveness, and faithfulness to the idiom of the composer that have characterized this pianist's Mozart, Beethoven, and Schubert.

These Chopin realizations, in fact, strike me as even more urgently involved, more personally communicative, and certainly more vividly colored than anything I've heard from Goode before — and that's saying quite a bit. While many collectors may prefer to have "integral" packages of the mazurkas, the nocturnes, the scherzos, and so on, no one who hears this disc, or any part of it, is likely to object to duplications of items in an existing collection. The recorded sound does full justice to the glorious playing, and Harris Goldsmith's superb annotation is a further ornament to an outstanding release.

Richard Freed



Pianist Richard Goode

CHOPIN

Polonaise-Fantaisie in A-flat Major; Nocturne in E-Flat Major; Mazurka in F Minor, Op. 7, No. 3; Mazurka in A-flat Major, Op. 41, No. 3; Mazurkas in B-flat Major, E Minor, and A Minor, Op. 17, Nos. 1, 2, and 4; Scherzo in E Major, Op. 54; Barcarolle in F-sharp Major, Op. 60 Richard Goode, piano (Nonesuch 79452, 49 min)



CARIBBEAN ISLAND MUSIC

(Nonesuch Explorer)

BROWN GIRL IN THE RING

(Rounder)

The first CD has songs and dances recorded in 1971 by anthropologist John Storm Roberts. The second, launching the Caribbean Voyage series in Rounder's Alan Lomax Collection, offers children's game and pass-play songs recorded in 1962; a companion hardcover book is available (Pantheon, \$30).

JEFFERSON AIRPLANE

Crown of Creation (RCA)

Volunteers (RCA)

Digital remasters of the 1968 and 1969 albums, each with new liner notes by Jeff Tamarkin.

RAHSAAN ROLAND KIRK

Dog Years in the Fourth Ring

(32 Jazz, three CDs)

The Inflated Tear (Rhino)

32 Jazz couples the multi-instrumentalist's rare 1971 *Natural Black Inventions: Root Strata* with two discs of unreleased live recordings. Rhino offers his 1968 album (adding the track "I'm Glad There Is You") as part of a series of five deluxe reissues, which also include Ornette Coleman's *Free Jazz*, Charles Mingus's *Blues and Roots*, and John Coltrane's *Giant Steps* and *My Favorite Things*.

JOHN MAYALL AND THE

BLUESBREAKERS

The Best: As It All Began,

1964-1969 (Deram)

THEM FEATURING VAN MORRISON

The Story, 1964-1966

(Deram, two CDs)

The first anthology was compiled

by Mayall himself and features his track-by-track liner notes. The second serves up fifty songs, some mono, some stereo.

SATURDAY NIGHT FEVER

(Mobile Fidelity Sound Lab)

The famous 1977 soundtrack, with the two LPs now on one gold disc.

THUNDERCLAP NEWMAN

Hollywood Dream

(Touchwood/Track)

Pete Townshend brought together Andy Newman, John "Speedy" Keen, and Jimmy McCulloch in 1970 and produced their only album, featuring "Something in the Air" and now including six bonus tracks.

ALBÉNIZ Iberia

Minneapolis Symphony, Antal Dorati cond. (Mercury 434 388) A compilation of late-1950s recordings that also includes short works by Falla, Mussorgsky, and Smetana.

SERGIO FRANCHI

Romantic Italian Songs

Sergio Franchi, tenor; orchestra and

chorus, Wally Scott cond. (RCA Victor 68902) A Living Stereo reissue of Neapolitan songs, such as "O sole mio" and "Torna 'a Surriento," recorded in 1962 when Franchi was a crossover star.

GROFÉ Grand Canyon Suite;

Piano Concerto

GERSHWIN

Rhapsody in Blue

Jesús María Sanromá, piano; Rochester Philharmonic, Ferde Grofé cond.; Pittsburgh Symphony, William Steinberg cond. (Everest EVC 9038) Grofé conducts his *Grand Canyon Suite* and the première recording of his piano concerto with the soloist he wrote it for, who is also featured in *Rhapsody in Blue*, all from 1960.

SIBELIUS Orchestral Works

Bournemouth Symphony, Paavo Berglund cond. (EMI 69773) Eleven "beautifully played" overtures, tone poems, and other "charming chips from the Sibelian work bench" such as theater-music excerpts (December 1971).

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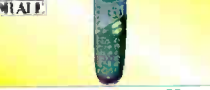
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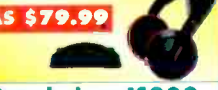
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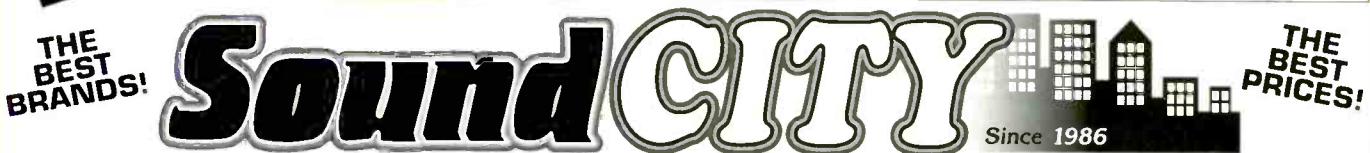
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Barry Willis Stereophile Nov. 1997

"Chase Technologies, Inc. of St. Petersburg, Florida, is now in receivership. The company manufactured an inexpensive line-level pre-amp, the RLC-1, which last year was heavily advertised in Stereophile and other publications. Designed and marketed as a sonically transparent remote-controlled add-on for older systems, the RLC-1 enables users to control volume, balance, bass and treble, to select between four line-level inputs, and to fade between two amplifiers if desired - all via the remote. The unassuming little box, with a monolithic IC (the Philips TEA6320) at the heart of its circuitry, won a sort of underground following among budget-conscious audiophiles. Its sonic transparency also lent it a degree of reverse-snobbery appeal. My own extended use of the RLC-1 convinced me of its value, but Chase Technologies' unfortunate circumstances precluded it from a formal review. Initially priced at \$149, the RLC-1 widely sold for \$120 before Chase Technologies abruptly disappeared from the market several months ago. Sound City, a mail order operation based in Towaco, New Jersey, has purchased all remaining Chase Technologies inventory and is selling the RLC-1 at \$59 each, less than half the original retail price. Kamel Yassin, Sound City's president, said in a telephone interview that his company offers a 90 day warranty on the device. Defective units will be exchanged for new ones until stock is depleted, after which the purchase price will be refunded. As of early September Sound City had more than 2,000 RLC-1s in its warehouse."

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NEW RECORDINGS REVIEWED BY CHRIS ALBERTSON, FRANCIS DAVIS, WILL FRIEDWALD, PHYL GARLAND, RON GIVENS, BRETT MILANO, ALANNA NASH, PARKE PUTERBAUGH, KEN RICHARDSON, AND STEVE SIMELS



BAHA MEN *I Like What I Like*

(Mercury, 46 min)

★

THE REAL BAHAMAS, VOLS. I & II

(Nonesuch Explorer, 74 min)

★★★★★

THE BAHAMAS: ISLANDS OF SONG

(Smithsonian Folkways, 60 min)

★★★★★

Having lived in the Bahamas for three years, I can safely say that the tourist-brochure music played by the seven Baha Men is about as close to genuine Junkanoo — the islands' mix of dance music and West African rhythms — as a cruise ship is to a conch boat. *I Like What I Like* is full of shams: grade-school songwriting, slick Americanized production, an unbelievably sappy ballad ("Heart"), and a hoot of an homage to K.C. and the Sunshine Band ("That's the Way I Get Down"). Phooey.

For the real Bahamas — that is, its traditional folk music — turn instead to, well, *The Real Bahamas*. Nonesuch has remastered onto one CD the tracks it recorded in Nassau in 1965 for release on two LPs in 1966 and 1978. Most of the songs are spirituals; all of them will rattle your soul. Performers include the legendary guitarist Joseph Spence and singer Raymond Pinder (shown on the cover) as well as their wives, Louise and Edith. Voluminous liner notes are provided.

There's excellent documentation, too, for *The Bahamas: Islands of Song*, which has

both a more secular and a more contemporary slant. Smithsonian Folkways made the recordings just three years ago, and besides spirituals by Cat Island Mites you get four-part harmony from the Dicey Doh Singers and the Sons of Andros, accordion by Thomas Cartwright of Long Island (not *that* Long Island), and banjo by Nat Saunders of Bimini. Whether the subject is a "Christian Automobile" or "The Times Table" (yes, the *math* times table), it's all infinitely more rousing than the drivel of the Baha Men. Interestingly, these sessions were done in a makeshift studio set up in a Nassau club formerly operated by those guys. If only they had been around to soak up some of this magic.

K.R.

PETER CASE *Full Service No Waiting*

(Vanguard, 50 min)

★★★★★

PLIMSOUHS *Kool Trash*

(Musidisc, 39 min)

★★★★★

The tasteful acoustic arrangements on the country/folk-based *Full Service No Waiting*. Peter Case's sixth solo album, may sound a million miles away from the hedonism of his original band, the Plimsouls, who for a time in the early 1980s were the best power-pop group in Los Angeles. But the pop nuances are still there between the lines: "Honey Child" could be a killer swamp-rock song given a different setting, and "See Through Eyes" sports a stirring hook. And Case is still a terrific singer, whether he's playing the country balladeer, doing a convincing Dylan, or returning to his old gutsy voice. Lyrics are clearly a priority nowadays, though he occasionally overreaches: "Green Blanket (Part I)," about homeless life, offers more sympathy than insight. But he remains convincing when he stays closer to home: "See Through Eyes" and "Still Playin'" both address his history as a working songwriter, mixing grown-up disillusionment with grizzled optimism.

Purer optimism comes through on the Plimsouls' reunion album, *Kool Trash*, quietly released on a French import label and worth whatever trouble it takes to find. Without exaggeration, they sound like it's only been six months since their last record. The rock-and-soul approach holds up fine,

and the band's youthful swagger is surprisingly undimmed — in fact, it's even stronger, what with the addition of ex-Blondie member Clem Burke, one of the great sloppy drummers. Case sneaks in some depth in "Playing with Jack," a double-edged anti-drug song. But mostly *Kool Trash* is cheap thrills, including beat-group workouts, Kinks riffs, and giddy New Wave. Combining the knack of a seasoned band with the no-frills drive of a garage demo, this is a solid comeback — and the news that Case plans to keep making both solo and Plimsouls albums is welcome indeed.

B.M.

ANI DIFRANCO *Little Plastic Castle*

(Righteous Babe, 61 min)

★★★★★

Ani DiFranco is not so much your ordinary average singer/songwriter as she is a force of nature. Words, songs, and indeed entire albums tumble out of her in torrents, and what is surprising is not only the quantity but the quality of her work. Now comes *Little Plastic Castle*, the twelfth album she's put out this decade on her own Righteous Babe label, itself a success story of beating the system.

DiFranco's explicitness about sex and relationships makes Melissa Etheridge seem

ALBERT SANCHEZ



Ani DiFranco

STAR SYSTEM

Excellent ★★★★★

Very good ★★★★

Good ★★★

Fair ★★

Poor ★

like Helen Reddy by comparison. She breathlessly lets it all fly out of her in uncensored accounts, such as the hell-on-wheels tale of "Gravel" or the Mexican adventure of the mariachi-spiced title track. No less engaging are the musical settings, which usually find her working in a trio format that features her syncopated strumming and fingerpicking — she's as high-energy as an acoustic guitarist as you'll ever hear — intertwined with an adroit, empathetic rhythm section. DiFranco's approach of investing her folk-singing with punk attitude, rap cadence, and jazz improv reaches a new pla-

teau on *Little Plastic Castle*. And, ever the fearless experimentalist, she closes with "Pulse," a 14-minute moodscape featuring Jon Hassell's ghostly trumpet. *P.P.*

DONNIE FRITTS *Everybody's Got a Song* (Oh Boy, 43 min)

★★★★

Donnie Fritts was an architect of the Muscle Shoals sound, and over the past thirty years his songs have been sung by the likes of Ray Charles, Willie Nelson, the Rolling Stones, Kris Kristofferson, Bobby "Blue" Bland, Dusty Springfield, and Jerry

Lee Lewis. Fritts has preferred to stay in the background: *Everybody's Got a Song* is only his second solo outing since 1974's *Prono to Lean*. The new album works both as rootsy music and as plain ol' roarin' good fun, with Fritts and pals — including Nelson, Kristofferson, John Prine, Waylon Jennings, Lucinda Williams, Delbert McClinton, Lee Roy Parnell, and Tony Joe White — running through some of his best-known songs ("We Had It All") and newer tracks ("If You Say So"). Fritts is that admirable kind of man who isn't afraid to show his poignant side, most obvious in "Star of the Show." He also isn't shy about trying his hand at sly humor, particularly in "Ten Foot Pole," about an untouchable woman. All in all, there's not an inferior cut on *Everybody's Got a Song*, and by the end you'll feel like a fly on the wall of a mighty fine time. *A.N.*

KING CRIMSON

CATALOG UPDATE

EVERYTHING'S coming up Crimson these days. Just out is *The Nightwatch* (shown), a two-CD document of the band's legendary show at the Amsterdam Concertgebouw in November 1973. The second disc is an enhanced CD providing bios and a catalog of Discipline Global Mobile (DGM), the custom Crimson label. Today, the four dynamic *Nightwatch* players — Robert Fripp, John Wetton, David Cross, and Bill Bruford — are keeping busy individually. Fripp will issue *Gates of Paradise* (DGM), another of his solo "Soundscapes," in April. Wetton's acoustic *Ark Angel* should be available in the U.S. by the time you read this. Cross already has a record out, *Eviles* (Purple Pyramid), with appearances by both Fripp and Wetton. And Bruford, whose most recent project is *If Summer Had Its Ghosts* (DGM) with Ralph Towner and Eddie Gomez, expects to have a new album out this summer involving fellow Crimsoid Tony Levin as well as Chris Botti and David Torn. Levin, it should be noted, has been a member of no fewer than three trio projects of late: *Black Light Syndrome* (Magna Carta) with Terry Bozzio and

Steve Stevens, Andy Summers's *The Last Dance of Mr. X* (RCA Victor) with Gregg Bissonette, and *From the Caves of the Iron Mountain* (Papa Bear, 800-688-2227) with Steve Gorn and Jerry Marotta.

Coming in April on DGM is *Space Groove* by the King Crimson offshoot Projekt Two, whose members are Fripp, Trey Gunn, and Adrian Belew. Projekt One was Fripp, Gunn, Levin, and Bruford, who played four nights of improvised music in London back in December; a live album is expected soon. The next big archival release is due in May, when the 1980s lineup of Fripp, Belew, Levin, and Bruford get their due in a live set. And expect something special around January 1999, the thirtieth anniversary of all things Crimson.

Meanwhile, you can enter the *Schizoid Dimension: A Tribute to King Crimson* (Purple Pyramid), with thirteen covers ranging from "Neal and Jack and Me" all the way back to, of course, "21st Century Schizoid Man." And you can marvel at the fact that in just a few years, some lineup of this schizoid band will likely be playing that song in the 21st century itself. —Ken Richardson



King Crimson, circa 1973: John Wetton, David Cross, Robert Fripp, Bill Bruford



STEVE HACKETT

Watcher of the Skies: Genesis Revisited (Guardian, 77 min)

★★★

KASHMIR: SYMPHONIC LED ZEPPELIN (Point Music, 72 min)

★

ROYAL PHILHARMONIC ORCHESTRA PLAYS THE MUSIC OF OASIS (Music Club, 60 min)

★

During the Sixties a number of kitschy orchestral albums were devoted to the Beatles, so it's only fitting that Oasis should now get the same treatment. And it's good to know that some things never change, because the "tribute" by the Royal Philharmonic sounds just as clumsy as any rock/classical crossover that Arthur Fiedler or the Hollyridge Strings ever attempted. The arrangers cheat by bringing in a rock band to copy Oasis's parts, using the orchestra primarily for the vocal lines. Like those Sixties projects, however, the album is cheesy enough to be perversely entertaining, especially when the heavenly harps are hauled out for, of all songs, "Cigarettes & Alcohol."

It's still sheer poetry compared with the massacre of Led Zeppelin on *Kashmir*. The disc was perpetrated by Killing Joke avant-gardists Jaz Coleman and Youth (as performed by the London Philharmonic), and it could be read as their revenge on mainstream rock, except it's *not* a parody. But you wouldn't guess that from the title track, which substitutes a misused Arabic violin for Robert Plant's voice, nor from the glop-py tone-poem they make of "Stairway to Heaven," nor from the secret-agent overkill of "When the Levee Breaks." Worse, they bracket the CD with two ponderous sound collages that have no Zep connection.

Guitarist Steve Hackett's *Watcher of the Skies* is more credible. Here he rearranges some of the loftiest epics of his old band,

Genesis, abetted by various art-rock mainstays (including John Wetton, Bill Bruford, and Chester Thompson). But he keeps the spirit and the power of the original material, using the Royal Philharmonic mainly to enhance the old keyboard parts; more space is given to his dazzling but lyrical guitar work. The aptly titled "Deja Vu" is a bonus for fans, fleshing out a song that Peter Gabriel began writing 25 years ago. The only problem with *Watcher*, as with many Hackett solo albums, is that he takes a few of the vocals himself. He absolutely can't sing, and anyone who plays guitar this well shouldn't have to. *B.M.*

JAMIE HARTFORD *What About Yes*

(Paladin, 49 min)

★★★★

Jamie Hartford may be banjo-player John Hartford's chip off the old block, but that doesn't mean the same music flows through their veins. The younger Hartford is a roots-rock and blues devotee who weighs in on *What About Yes* with a stunning set of originals and well-chosen covers. Backed by guitarist Ray Flacke, harmonica man Paco Ship, bassist Charlie Chadwick, and drummer Rick Lonow — the same crack band that has shared the stage with him impressively at live gigs in recent years — Hartford comes at the genres with such a fresh approach that you'd swear he and his astonishingly well-oiled group of pickers were present on the nights that blues and rock were born. From his unforgettable rendition of Steve Goodman's "Lookin' for Trouble" (a song to slit your wrists by if ever there was one) to his own "Who Cut Your Heart Out" (a bitter retort to a damaged lover) and the title song, where harmonica and lead guitar dance a slithery coitus, Hartford grabs your attention and runs away with it. This guy may be working with a limited, just-woke-up baritone, but chances are he'll keep you up nights thinking about it. *A.N.*

THE MAVERICKS *Trampoline*

(MCA, 53 min)

★★

Raul Malo, the Mavericks' lead singer, has long been shaped by two particular musical influences: the Latin rhythms and structures of his Cuban heritage and the great vocal and melodic gifts of Roy Orbison, whom he often emulates either directly or by writing in the style of the early 1960s, when Orbison enjoyed his greatest success. All this is well and good except when Malo and crew wrap an entire album around those two conceits. Latin pop punctuated with blaring horns wears out its welcome early when it comes from mainstream hitmakers, as does mediocre, over-orchestrated 1960s-style radio material.

The overall effect of *Trampoline* is fur-

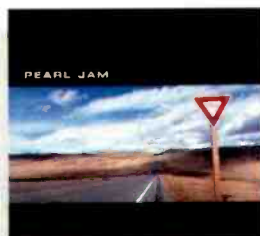
ther diminished by the fact that only two songs stick in the memory: "Dream River," a pretty ballad that resonates with the Elvis Presley classic "I Want You, I Need You, I Love You," and "Fool #1," a sleepy, slinky piece of lounge jazz-pop that conjures up memories of George Maharis crisscrossing the country in a Corvette. In the second song, as often on past records, Malo creates a character who lives in romantic dreams and self-deception. The Mavericks themselves may be engaging in such behavior if they think they can sustain their career by offering so little for the ages. *A.N.*

PEARL JAM *Yield*

(Epic, 49 min)

★★★★

After the downbeat reflections of *No Code*, it's great to hear Pearl Jam back at full throttle. The best Pearl Jam is a raging Pearl Jam, and the band is unrelenting on *Yield*. It is an angry and somewhat more politicized record than its predecessors, challenging liberal-baiting rhetoricians with its opening line from "Brain of J.": "Who's got the brain of J.F.K. / What's it mean to us now?" Except for a few art-noise experiments, *Yield* has a raw, live-in-the-studio feel that serves this band's edgy instincts well. The postmodern new math of guitarists Stone Gossard and Mike McCready is in full effect, goosed along by the cryptometal might of bassist Jeff Ament and drummer Jack Irons. Eddie Vedder's lyrics, delivered in his moody baritone, are terse and oblique but powerful in a way that values symbolism over literal meaning.



Those songs that don't start out at warp speed or with grinding intensity eventually arrive there. "Faithfull" and "No Way" build deliberately to fevered pitches, with the latter song, written by Gossard, propounding a weary disillusionment: "I'm not trying to make a difference / I've stopped trying to make a difference." By contrast, Vedder's "Wishlist" offers a catalog of desires — "I wish I was a messenger and all the news was good" — set against a backdrop of Byrds-like guitars. Then there's "Do the Evolution," a rabid, full-bore rocker that throws up its hands in disgust at what seems like the human animal's manifest destiny to destroy the planet. The track is vintage Pearl Jam, of which there is plenty on *Yield*. *P.P.*



PAUL COX/GUARDIAN

Steve Hackett

THE REPLACEMENTS

All for Nothing/Nothing for All

(Reprise, two CDs, 111 min; enhanced CD)

★★★

THE PIXIES

Death to the Pixies 1987-1991

(Elektra, two CDs, 104 min)

★★★★

Imagine that you had made it through the 1980s without hearing a note of either the Replacements or the Pixies. Would you know from one listen to their posthumous compilations that they weren't just good bands but important, influential ones, too?

In the Replacements' case, maybe not. You'd still hear a tight little rock band with a gifted songwriter, but *All for Nothing/Nothing for All* picks up halfway through their career, after four gloriously ragged albums for Twin/Tone, including their best, *Let It Be*. By 1985 they were fully disciplined in the studio, and there was more sensitivity than brattiness in Paul Westerberg's writing. He still turned out classics in this phase, including the fannish "Alex Chilton" and the eloquent "Achin' to Be," but toward the end he got dispirited and relentlessly midtempo. Also, this compilation couples a disc of outtakes — mostly loose, likeable throwaways — with the set of "favorites"; it would have been fairer to sell the CDs separately. And since the Replacements once recorded "Seen Your Video" ("... we don't wanna know!"), it's ironic that their four halfhearted MTV clips are the multimedia bonuses.

Death to the Pixies also pulls a fast one, combining an essential concert disc — their first official one, from their early-1990s live peak — with their own "hits" set. But this compilation does the rest of the job right, tapping the best songs from all five albums. And the music comes across just as pro-



The Pixies, circa 1988: Black Francis, Kim Deal, David Lovering, Joey Santiago

foundly weird as it did ten years ago. The Pixies apparently tried to sound like a normal rock band, but something went spectacularly wrong between the psychosexual and outer-space obsessions in the songs of Black Francis (now Frank Black), Kim Deal's come-hither backup vocals, and that spine-chilling guitar sound. "Debaser" remains three of 1980s rock's most manic minutes, pidgin-French chorus and all. Lots of important bands tried to copy this sound — the liner notes point out that "Smells Like Teen Spirit" was one of the more successful attempts — but nobody's gotten it exactly right. Reunion, anyone? *B.M.*

RICKY SKAGGS *Life Is a Journey*

(Atlantic, 33 min)

★★

RICKY SKAGGS AND

KENTUCKY THUNDER *Bluegrass Rules!*

(Skaggs Family/Rounder, 35 min)

★★★★

RICKY SKAGGS *Country Gentleman:*

The Best of Ricky Skaggs

(Epic/Legacy, two CDs, 106 min)

★★★★★

Ricky Skaggs is back with two new albums, the first aimed at the commercial country market and the second at his hard-core bluegrass fans. Also in the racks is a wonderful two-CD retrospective of his greatest hits from 1981 to 1991.

On *Life Is a Journey*, Skaggs begins with a spirited version of Steve Earle's "Hillbilly Highway," but from there he free-floats into filler and outdated material. Although Lee Ann Womack rescues him in "Lonesome Dove" and her own "I Don't Remember Forgetting," he is only too happy to wallow in Leon Payne's preachy, 1960s-era "The Selfishness in Man" and in "Ain't Love a Good Thing," which was never that great when it first appeared in the early 1970s.

Things pick up on *Bluegrass Rules!*, where Skaggs and the fine band Kentucky Thunder gather in the same room for a live

recording. The playing here is first-rate, and Skaggs adds a Gothic flavor to the traditional program with "Drunken Driver." But as a producer, he should have paid more attention to varying the material, which relies heavily on instrumentals. Stanley Brothers songs, and stories in which his woman has run off. After so much one-note carping, you begin to understand why she left.

All this takes on a particularly lamentable sheen when compared with the *Country Gentleman* collection, where the music sounds as fresh as the day it was recorded. Songs like Bill Monroe's "Uncle Pen," the ballad "I've Got a New Heartache," and the ensemble classic "Restless" with Steve Wariner, Vince Gill, and Mark O'Connor positively throb with energy. The power picking, too, defines a certain era in revitalized Nashville, and it helped usher in a new standard for country musicians. *A.N.*

SONIA *Almost Chocolate*

(Philo, 39 min)

★★★★★

Afier making a career record with her band Disappear Fear on *Seed in the Sahara*, Sonia Rustein could be forgiven if she were to fall back into an unassuming solo project. But *Almost Chocolate* is no retreat, and it certainly isn't as singer/songwriter sweet as the title implies. Rather, Sonia has come up with nothing less than a song cycle about her own life, told in language that hasn't lost a bit of its honesty. Starting out "hungry for oatmeal," she takes us from New York to L.A. to Baltimore, from bat mitzvah to high school to college, and ultimately to the moment she forms her band with sister Cindy Frank (who adds harmonies to three tracks here). There are tales of Sonia's sexual awakening(s), not to mention her difficulties with simple love: "I could be fallin'," she sings, but she could also be "flyin', cryin', crawlin'." The album loses some of its personal immediacy by taking a political turn in a few tracks at the

end, but "On Your Side" is a beautiful, nearly wordless hymn to peace between Israelis and Palestinians. Except for the electric shuffle that opens the record, Sonia carries the program with just her voice and her acoustic guitar, and it's a fine reaffirmation of her sing-it-like-it-is talent. *K.R.*

BARBRA STREISAND *Higher Ground*

(Columbia, 57 min)

★★★

CELINE DION *Let's Talk About Love*

(550 Music/Epic, 71 min)

★★

JULIE BUDD *Pure Imagination*

(After 9/Touchwood, 55 min)

★★★★★

Barbra Streisand rules over such a vast dominion of singers that she has inspired two disciples in entirely opposite fields. Julie Budd and Celine Dion come out of, respectively, the early and late eras of Streisand, which is to say before and after the time when she began wasting her Broadway-based voice on pseudo-soul.

Both Streisand's *Heavenly Ground* and Dion's *Let's Talk About Love* are compromised by electronic accoutrements and forgettable songs. More's the pity for Streisand, because this time she has found a subject matter that matches her own pretensions: big, profound songs pondering the nature of God and the universe. Only when she sticks to straightforward treatments of comparatively traditional items like "I Believe," "Deep River," and the Hebrew prayer "Avinu Malkeinu" does the majesty of her celebrated instrument peek through. The Streisand-Dion duet "Tell Him," which is on both discs, is unmemorable, while Dion's duet with Luciano Pavarotti, "I Hate You Then I Love You," succeeds in transforming the tenor into an ersatz Julio Iglesias.

One wonders what it can be that prevents Streisand from making a simple, straightforward disc like Budd's *Pure Imagination*. Not surprisingly, Budd keeps things pure by sticking mainly to top-drawer show tunes, including not only off-performed standards like "My Shining Hour" but such less-recorded and more whimsical items as "Never Never Land" and the Newley-Bricusse title track. These fanciful lyrics commingle well with the singer's sensual alto and Don Sebesky's lush orchestrations, proving that Julie Budd is making better Barbra Streisand records than Streisand herself. *W.F.*

X *Beyond and Back: The Anthology*

(Elektra, two CDs, 139 min)

★★★★★

The band X was among the greatest American acts of the late 1970s and early 1980s. As a career overview of these black-clad, existential savants from L.A., *Beyond and Back* is long overdue. It's almost better than any of their individual al-

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bums because it's as fragmented, untidy, and inside-out as punk itself. Sound quality varies wildly from big-studio pristine to sub-bootleg muffled, and the feeling of careening somewhat out of control is exactly the point. Listening to this compendium of album tracks intermingled with unreleased demos, live recordings, remixes, and rarities feels like a night spent in some gloriously smoke-filled, beer-slicked dive. There's even an audio-verité excerpt from just such a show stuck on a hidden track.

X's oddly potent formula combined the punkabilly guitarist Billy Zoom with the furious drummer D.J. Bonebrake and the taut bassist John Doe, who sang vocals in jagged (dis)harmony with his then-wife, Exene Cervenka. Disc 1 documents their early years as punk literati, with jagged stop/start rhythms and the sound of voices meeting, entwining, and flaring off. Disc 2 is largely culled from the later output at Elektra, when the band moved into less frantic but no less impassioned modes. Overall, X was an intense band from a more exciting time, and *Beyond and Back* does a fine job of capturing its edgy magic by subverting conventional formats. much like X itself. *P.P.*

FRED HERSCH

Thelonious: Fred Hersch Plays Monk
(Nonesuch, 53 min)

★★★★★

FRED HERSCH & FRIENDS

The Duo Album

(Classical Action, 69 min; 165 W. 46th St., Suite 130, New York, NY 10036; e-mail, classactn@aol.com)

★★★★★

Not just the best of Fred Hersch's three Nonesuch solo-piano albums (the first two were devoted to Billy Strayhorn and Rodgers & Hammerstein), *Thelonious* is also perhaps the most satisfying of the recent tributes to Monk. Although Hersch's rounded tone and gentlemanly approach to improvisation make him an unlikely pianist to do justice to the angular, poking Monk, he craftily reshapes him to his own contours. The result is a thinking-man's tour de force, with Hersch bringing a musing quality to Monk's ballads and uptempo tunes alike.

Hersch's other new release is *The Duo Album*, a sequel to 1994's *Last Night When We Were Young: The Ballad Album*, with all proceeds again going to the battle against AIDS. The new CD features Hersch in a series of duets on standards with musicians who share his lyrical sensibility, including guitarist Jim Hall, vibraphonist Gary Burton, trumpeter Tom Harrell, saxophonists Lee Konitz (on alto) and Joe Lovano (on tenor), and fellow pianists Tommy Flanagan and Kenny Barron. Full of lovely moments — perhaps none so lovely as Hersch and singer Andy Bey's haunting rendition of "Alone Together" — *The Duo Album* is good music for a good cause. *F.D.*

JAZZ

MARILYN CRISPELL/GARY PEACOCK/

PAUL MOTIAN *Nothing Ever Was,*

Anyway: Music of Annette Peacock

(ECM, two CDs, 88 min)

★★★★★

On this absorbing set, Annette Peacock adds a trance-like vocal to "Dreams (If Time Weren't)," but otherwise she's represented only by her compositions. She dominates the performances in absentia, and they are also haunted by Paul Bley, the pianist who introduced many of these pieces in the late 1960s and early 1970s, when he was Peacock's husband. To pianist Marilyn Crispell's credit, her interpretations seem like variations on Bley's — especially in the tossing ballads, where she achieves a Bley-like mix of lyricism and intellectual rigor, despite a more aggressive attack.

The beginning-to-end rubato of the compositions and their elliptical character make great demands on a rhythm section, and I doubt this program would have been as successful with another bassist and drummer. Both Gary Peacock (another of Annette's ex-husbands) and Paul Motian have played this material with Bley, and they know its every nook and cranny.

Despite her obscurity, Peacock is an utterly distinctive composer. *Nothing Ever Was, Anyway*, as beautifully recorded an album as we have come to expect from ECM, should revive interest in her work. It might also prove to be a turning point for the dazzling Crispell. *F.D.*

VIRGINIA MAYHEW

Nini Green

(Chiaroscuro, 78 min)

★★★

Soprano, alto, and tenor saxophonist Virginia Mayhew arrived in New York from her native California in 1987, having been awarded the New School's Zoot Sims Memorial Scholarship. Now, at age 30, she makes her recording debut as a leader, and *Nini Green* (her grandmother's nickname) is a fine start. We hear a lot of Dexter Gordon but also a strong trace of John Coltrane. Mayhew's style is robust, with both a rich tone and a no-nonsense approach — straight-ahead and boppish. I have qualms about trumpeter Ingrid Jensen, who is less spontaneous and less skilled. The rhythm section, however, is headed with characteristic invention by pianist Kenny Barron, who gets good support from bassist Harvie Swartz, drummer Adam Cruz, and percussionist Leon Parker. The program of nine tunes includes five Mayhew originals, showing favorably that side of her talent. *Nini Green* is a pleasant excursion that should bring Virginia Mayhew to a greater audience, which she deserves. *C.A.*

QUICK FIXES

JANN ARDEN *Happy?*

(A&M, 46 min) ★★ ★

Arden's 1995 album, *Living Under June*, sold six million copies in her native Canada, largely on the strength of its memorable Adult Contemporary hit "Insensitive." She returns with *Happy?*, a melancholy set that makes her sound as if success is anathema to contentment. Arden has a soulful delivery, and her songs of woe are tastefully wrapped in spare pop arrangements that don't intrude on her emotions. *A.N.*

CHICK COREA + GARY BURTON

Native Sense

(Stretch/Concord, 65 min) ★★ ★ ★

Subtitled "The New Duets," *Native Sense* inevitably recalls *Crystal Silence*, pianist Corea and vibist Burton's 1972 chamber-jazz classic. Given the winning streak that Corea has been on lately, this new disc measures up to its predecessor in



both lyricism and intimacy. The only throwaways are two brief Bartok bagatelles, to which these duet partners are too even-tempered to do justice. The performances that click best tend to be Spanish in flavor, including a Corea tango and two of his rhumbas. *F.D.*

RAMBLIN' JACK ELLIOTT

Friends of Mine

(HighTone, 49 min) ★★ ★

Arlo Guthrie, Rosalie Sorrels, Emmylou Harris, Nanci Griffith, Jerry Jeff Walker, and Guy Clark are among the many Elliott acolytes turning out for this delightful album of duets. The pairings are, for the most part, hand-in-glove, the performances easy and affecting. *A.N.*

GENE HARRIS/JACK McDUFF

Down Home Blues

(Concord, 60 min) ★★ ★

The variety of blues played here by pianist Harris and organist McDuff is rather commercial, but it does get a good way down home. Bassist Luther Hughes and drummer Paul Humphrey provide solid support, and guitarist Ron Escheté is ap-

propriately funky. The two keyboard players hit a happy groove and go to town with it. *Down Home Blues* is more fun than substance, but who promised substance? *C.A.*

THE HIGH LLAMAS *Cold and Bouncy*

(V2, 62 min) ★★

Santa Barbara

(V2, 40 min) ★★

Gideon Gaye

(V2, 55 min) ★★ ★

The High Llamas' *Hawaii* was one of 1996's left-field delights, two CDs of new adventures in hi-fi. Their latest, *Cold and Bouncy*, is being co-released with reissues of the two pre-*Hawaii* albums, and all three raise suspicions that leader Sean O'Hagan may be a one-trick pony. *Cold and Bouncy* is basically an inferior re-read of its predecessor: this time, the Brian Wilson influence is augmented by space-age bachelor-pad music — a wildly original idea, right? The early albums sound like rough drafts. *Santa Barbara* is maddeningly lightweight, but *Gideon Gaye* does introduce the giddy orchestral pop that would blossom on *Hawaii*. *B.M.*

MIKE IRELAND AND HOLLER

Learning How to Live

(Sub Pop, 44 min) ★★ ★

Kansas City has never been what you'd call a hotbed of country music, which is why it's a perfect locale for Mike Ireland and his alternative country band. But Ireland, it seems, isn't even your basic alt.country rocker, as he takes his nods from the string-soaked country-politan era, the honky-tonk masters, and perhaps even *Almost Blue* Elvis Costello. *Learning How to Live* is a treatise on every possible response to failed love. This guy Ireland, with his rawer-than-an-open-wound vocals, may be hard to take, but he's on to something. Just exactly what is up to you. *A.N.*

LOVEMONGERS *Whirlygig*

(Will, 47 min) ★★ ★ ★

The Lovemongers are Ann and Nancy Wilson, long-time collaborator Sue Ennis on keyboards, and multi-instrumentalist Frank Cox, assisted by drummer Ben Smith, and *Whirlygig* is the closest the Heart sisters have come to the sound of *Little Queen* and *Dog and Butterfly* in a long, long time. Gone are the big synths. Back home are the artful acoustic/electric guitars and, most important, the songwriting chops. Great job. *K.R.*

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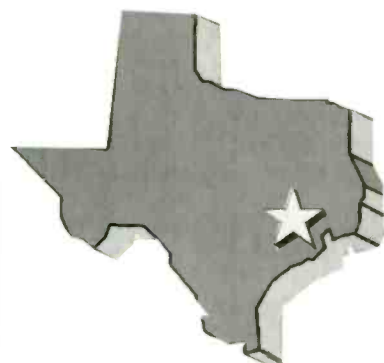
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NEW RECORDINGS REVIEWED BY RICHARD FREED, DAVID HALL, JAMIE JAMES, GEORGE JELLINEK, AND ERIC SALZMAN

ADAMS *Shaker Loops; Phrygian Gates; Chamber Symphony*

Ensemble Modern, Sian Edwards cond.
(RCA Victor 68674, 73 min)

★★★★

The three John Adams pieces on this CD are among the most important by the most mainstream of the composers to come out of American minimalism. Two of them are seminal tonal pieces written in 1978, *Shaker Loops* for strings (solo or ensemble) and *Phrygian Gates* for solo piano. Together they established Adams as the leading minimalist composer in the classic/romantic tradition of virtuoso string and keyboard music. Ironically, the witty and complex Chamber Symphony of 1992, modeled on Schoenberg's Chamber Symphony of 1906, marks a return to atonality of a sort. At the same time, it incorporates elements from American popular music, including serious influences from cartoon scores (the movements are marked "Mongrel Airs," "Aria with Walking Bass," and "Roadrunner").

The international significance of this music is underlined by the excellent performances here by German artists, the pianist Hermann Kretzschmar and the Ensemble Modern, under the direction of the British conductor Sian Edwards. The first two pieces are examples of serious, spacious minimalism, the third of clever postmodernism, and all three are brilliantly played and recorded. *E.S.*

BEETHOVEN *Bagatelles; Rondo No. 1; Für Elise; other works*

Alfred Brendel, piano (Philips 456 031, 77 min)

★★★★★

Alfred Brendel has appended to his latest Beethoven piano-sonata cycle the choicest miniatures from the master's workbench — the three sets of bagatelles, precursors of the wonderful small-scale piano pieces of Schubert, Schumann, and Brahms.

The seven bagatelles of Op. 33 find the

composer at his most ingratiating. They are predominantly lyrical in mode, but virtuosic spice is added in No. 5 and No. 7, which looks forward to the opening of the "Waldstein" Sonata. The second half of Op. 119 and all of Op. 126 put us in the whimsical and unpredictable world of late Beethoven. Two of the Op. 119 bagatelles, Nos. 5 and 6, are spinoffs from the great Diabelli Variations, and none of the eleven runs more than 2½ minutes — indeed, No. 10 flashes by in a mere 13 seconds. The six in the Op. 126 set are more substantial, and for me the high points are No. 4, with its delightful

drone-bass trio, and No. 6, with its sharp contrasts.

The four other pieces interspersed among the sets of bagatelles are highlighted by the deliciously wayward *Klavierstück* in B-flat Major and the wistfully touching performance of *Für Elise*, that touchstone of every student pianist's repertoire. Brendel is in his best form all the way, and the sonics are just fine. A delightful disc. *D.H.*

BRAHMS *Violin Concerto; Double Concerto*

Gidon Kremer, violin; Clemens Hagen, cello;

INSPIRED BY BACH

No one can accuse the cellist Yo-Yo Ma of lacking imagination. Having performed and recorded the major works for his instrument, he has turned his prodigious talent to expanding the solo-cello repertory with newly commissioned concertos, Appalachian folk music, and, most recently, the Argentinian tango. Now, in what he calls "one of the most exhilarating experiences of my life," he has rerecorded Bach's Cello Suites not only for release on CD but as the soundtracks of six short films collectively titled *Inspired by Bach*. Each film was done in collaboration with major artists from other disciplines, including the choreographer Mark Morris, the ice dancers Torvill and Dean, the filmmakers Atom Egoyan (*The Sweet Hereafter*) and François Girard (*Thirty-Two Short Films About Glenn Gould*),

the garden designer Julie Moir Messervy, and the Kabuki actor Tamasaburo Bando. The two-CD set and the six VHS videocassettes, available either individually or in a boxed set, were released by Sony Classical in February. PBS will telecast the suite of films, under the title *Yo-Yo Ma Inspired by Bach*, in April (check local listings).

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Royal Concertgebouw Orchestra, Nikolaus Harnoncourt cond. (Teldec 13137, 69 min)

★★★

BRAHMS Violin Concerto

MOZART Violin Concerto No. 3

Frank Peter Zimmermann, violin; Berlin Philharmonic, Wolfgang Sawallisch cond. (EMI 55426, 60 min)

★★★★★

BRAHMS Double Concerto; Horn Trio

Frank Peter Zimmermann, violin; Marie Luise Neunecker, horn; Wolfgang Sawallisch, piano; London Philharmonic, Wolfgang Sawallisch cond. (EMI 56385, 60 min)

★★★★★

I had been looking forward to the Teldec release for some time, not only for the violinist Gidon Kremer's participation in works in which he has demonstrated his mastery, but also for one of Nikolaus Harnoncourt's first excursions into the Brahms repertory and for what is apparently the first recording as a concerto soloist by the Hagen Quartet's cellist Clemens Hagen. Their performances are provocative in the most positive sense, and they differ from those of the same works on the two EMI discs in several ways.

First of all, there are some textual differences. Kremer likes to try out unusual or unknown cadenzas, and for the Violin Concerto he chose a little-known cadenza written for the first movement by Georges Enescu. Harnoncourt, for his part, went back to the manuscript scores and found sections of both concertos that differ in some respects from the published versions, though the differences are not substantial.

What is more noticeable, and more welcome, is that Kremer's playing in the Violin Concerto has become increasingly appealing since his first recording of it, with Herbert von Karajan on Angel, more than twenty years ago. His rhythm is firmer now, his phrasing altogether more natural, and the final movement has real charm instead of being rushed off its feet. His partnership with



Harnoncourt is exceptional, and Hagen's contribution in the Double Concerto brings a clarifying lightness and vitality to a part that is too often weighed down in lumbering portentousness.

The Teldec recording, however, does not give us much of the richness or warmth we associate with the great Amsterdam orchestra in its famous hall. The sound is curious-

The Eroica Trio

Conditioned as we have become to packages of related works by a single composer, the Eroica Trio's CD of music by Ravel, Gershwin, Godard, and Schoenfeld may seem a little odd, but it makes perfect sense as recital programming. It's also an effective recorded showcase for the trio — Erika Nickrenz (piano), Adela Peña (violin), and Sara Sant'Ambrogio (cello) — and contains an intriguing surprise or two.

Gershwin, of course, never composed a piano trio, but Raimundo Penaforte, a young Brazilian who, like the members of the Eroica Trio, trained at Juilliard, has turned the three preludes for piano solo into an effective ensemble work, not only rescoring them but also adding introductions and transitions of his own. Although the arranger of the *Berceuse* from Benjamin Godard's opera *Jocelyn* is not identified, this once ubiquitous piece can seldom have been projected with such striking tastefulness as it is here, offsetting its essential sentimentality. Sant'Ambrogio's creamy cello sound stands out here and in the expansive and touching slow movement of Paul Schoenfeld's *Café Music*, whose two outer sections provide a striking frame with allusions to conspicuously more animated popular-music genres.

The one familiar item, the Ravel Piano Trio, is the one that tells us the most about the performers — that they are serious and accomplished musicians who have a thorough understanding of



Adela Peña (left), Erika Nickrenz, and Sara Sant'Ambrogio

the specific character of each of the individual works and also a well-honed rapport that has not taken the edge off anyone's individuality. The warm sonics suit the music and these performances just fine. —Richard Freed

GERSHWIN Three Preludes (arr. Penaforte)

RAVEL Piano Trio

GODARD Berceuse

SCHOENFELD Café Music
Eroica Trio (EMI 56482, 66 min)

★★★

ly constricted, leaving the orchestral strings uncharacteristically dry and harsh, and the brass anything but golden.

The richness and mellowness we associate with Brahms, in any setting, are more in evidence on the two EMI discs, and indeed the performances themselves are more "Brahmsian" in the familiar sense of the term: more comfortable than adventurous, perhaps, but wanting in neither vigor nor freshness. Frank Peter Zimmermann's phrasing is even more natural and flowing than Kremer's, and Heinrich Schiff's robust yet caressing playing in the Double Concerto suits the approach of his two associates as fully as it does that of the music itself.

Zimmermann and the conductor Wolfgang Sawallisch are angelically playful in the outer movements of the Mozart Violin Concerto No. 3 and allow the middle one to give the impression of floating on air. The Brahms Horn Trio is even more of a winner. Sawallisch has shown himself to be a

splendid chamber-music player in several recordings, and this one is exceptional in every respect. All three performers seem utterly involved, and their parts are beautifully balanced (Marie Louise Neunecker's eloquent horn playing is the more effective for *not* being given unnatural solo prominence), responding to one another and to the music with a spontaneity and intensity that give it unflagging momentum and stunning dramatic impact. R.F.

DONIZETTI L'Elisir d'Amore

Roberto Alagna (Nemorino), Angela Gheorghiu (Adina), others: Lyons Opera Chorus and Orchestra, Evelino Pidò cond. (London 455 691, two CDs, 123 min)

★★★★★

Offering a lively, brightly recorded performance, this new version of Donizetti's little masterpiece, *The Elixir of Love*, is for the most part welcome. The generally graceful reading, ably led by Evelino Pidò.

is sometimes driven, but there is no doubt of the careful preparation and enthusiasm on the part of the conductor and singers.

As Nemorino, the stylish tenor Roberto Alagna sings very well indeed. While his characterization is not particularly nuanced, his musicality is always apparent. Angela Gheorghiu's Adina is played with high spirits and sung with assurance. She occasionally pounces on high notes, but she provides some lovely moments, "Prendi; prendi..." in Act II conspicuous among them.

Robert Scaltriti is the genial swashbuck-

ler Belcore; his clumsy courting of Adina in Act I is amusingly and nicely sung. As Dr. Dulcamara, one of opera's most ingratiating charlatans, Simone Alaimo sings with a rich, warm tone — and in the patter sections with astonishing speed and crisp diction. Elena Dan is a graceful Gianetta. Zestful choral singing and brisk orchestral playing add to the enjoyment.

Robert Ackart

KORNGOLD Die Tote Stadt

Thomas Sunnegardh (Paul), Katerina Dalayman (Marietta, Marie), Anders Bergström (Frank),

others: children's choir: Royal Swedish Opera Chorus and Orchestra, Leif Segerstam cond.

(Naxos 8.660060, two CDs, 125 min)

★★★

In 1920, Erich Wolfgang Korngold, a Mozart-like prodigy, had a huge operatic hit at age 20 with *Die Tote Stadt*. A throwback to the turn of the century, it was virtually a tract against modernism. The book is silly even by opera-libretto standards and has a *fin de siècle* quality that was already embarrassingly dated in 1920. The score is an amazing compound of post-Wagnerism and operetta, of *Kunst* (art) and kitsch. The brilliance of the writing and, especially, the orchestration is undeniable; the piece is a huge wallow in late-Romantic sex-and-death, with good tunes, superb vocal writing, great arrangements, and generous slathers of goo. But compared with Berg's almost contemporary *Wozzeck*, the Korngold opera is a lightweight.

The performance may be the most remarkable thing about this live recording from a 1996 production at the Royal Swedish Opera House in Stockholm (complete with intrusive applause in a couple of places). A superb cast of little-known Swedish singers prove to be ideal interpreters of this music, and the Finnish conductor, Leif Segerstam, directs a vivid, even extravagant performance that leaves nothing to the imagination.

E.S.

PROKOFIEV Symphony No. 5; Romeo and Juliet (excerpts)

New York Philharmonic, Kurt Masur cond.

(Teldec 96301, 75 min)

★★★★

Kurt Masur definitely knows his way around Prokofiev's Fifth Symphony, written during World War II and described by the composer as about "the grandeur of the human spirit," and this is a solidly molded and powerfully propelled reading, with the New York Philharmonic in splendid form.

The pacing of the monumental first movement is rock steady, the inner developmental detail masterfully set forth. The wonderful scherzo whizzes by with lots of vim and vigor, and the slow movement is relentless, climaxing in an overwhelming "primal scream." The propulsive finale carries all before it straight to a ferociously explosive end.

Countless different selections from the *Romeo and Juliet* ballet have been recorded over the years. Masur opts for a sequence comprising "Montagues and Capulets," "Juliet the Young Girl," "Masks," "Romeo and Juliet," "Tybalt's Death," and "Romeo at Juliet's Grave." For me "Tybalt's Death" is the most powerful episode, and it comes off to mesmerizing effect in this performance. The sonics have ample presence and power throughout.

D.H.

Whitman Sampler

The centennial of Walt Whitman's death in 1892 was presumably the stimulus for the baritone Thomas Hampson to undertake *To the Soul*, a remarkable labor of love in which he sings settings of works by our quintessential poet of the democratic spirit. The notes with the EMI disc tell us that Hampson combed through some 400

Bernstein ("To what you said") as well as some real discoveries, beginning with the eloquent and moving setting by Philip Dalmas (English? dates unknown) of "As I watched the ploughman ploughing." Henry Thacker Burleigh, a pupil of Dvorak, is represented by his deeply stirring and picturesque treatment of "Ethiopia saluting the colors." From the gifted and short-lived Charles Naginski we have the tenderly bleak "Look down fair moon." The autobiographical element in "Prayer of Columbus" is poignantly brought out by Robert Strassburg. Michael Tilson Thomas's "We two boys together clinging" and Craig Urquhart's "Among the multitude" are notable for their sensitive and knowing settings of Whitman's texts, as is Gerald Busby's "Behold this swarthy face."

Whitman could be overblown and bombastic, but Hampson's choices by and large steer clear of that, and even the more conventional songs have a minimum of kitsch — putting it another way, there's hardly a dud in the lot. A particularly imaginative touch is several interspersed recitations by Hampson, who is a bit too polite at the start with "One's self I sing" but later gains in warmth and eloquence.

The songs are delivered straight from the heart, and Craig Rutenberg is a dedicated keyboard partner. The annotation includes a comprehensive Whitman chronology, a well-chosen bibliography, and the complete texts. *To the Soul* is a splendidly realized contribution to the recorded art song.

— David Hall

THOMAS HAMPSON

To the Soul — The Poetry of Walt Whitman

Thomas Hampson, baritone; Craig Rutenberg, piano (EMI 55028, 75 min)

★★★★



SIMON FOULE/EMI

Baritone Thomas Hampson

settings for voice and piano before winding up with twenty-two songs by eighteen different composers, chiefly American or British.

The result is an absorbing mix of old and new, with acknowledged treasures by Frank Bridge ("The last invocation"), Ralph Vaughan Williams ("A clear midnight" and "Joy, shipmate, joy!"), Paul Hindemith ("Sing on there in the swamp"), Ned Rorem ("As Adam early in the morning," "Look down fair moon," and two others), Ernst Bacon ("One thought ever at the fore"), Charles Ives ("Walt Whitman"), and Leonard

REBEL Trio Sonatas (complete)

Ensemble Rebel (*Deutsche Harmonia Mundi*
BMG 77382, 62 min)

★★★

The place in music history of Jean-Féry Rebel (1666-1747) is based on his programmatic composition *Les Éléments*, in which chaos is represented by an astonishing use of dissonance far exceeding anything else known before the twentieth century. But his real accomplishment was the introduction of Italian chamber music into France, combining the influence of Corelli with French Baroque style in a very felicitous manner.

All seven of his surviving trio sonatas, recorded here by an excellent early-music ensemble named for the composer, carry the kind of mysterious titles so beloved in the French Baroque. The least mysterious, *Le Tombeau de Monsieur de Lully*, a memorial tribute to Lully, gives the album its title. *Tombeau*, and it is the longest work on the CD and has the most affecting and most immediately satisfying music. The other pieces carry the names of gods and goddesses (Venus, Juno, Apollo, and so forth), but the significance of these titles is less clear. All seven sonatas alternate fast and slow movements in relatively free forms and with expressive content. The quality of both the music itself and the performances is invariably high. *E.S.*

SHOSTAKOVICH Symphony No. 5

Moscow Radio Symphony, Vladimir Fedoseev
cond. (JVC/WEA 6502, 47 min)

★★★★★

No run-of-the-mill reading of the oft-recorded Shostakovich Fifth Symphony, this CD was mastered from analog recording sessions during the fateful days of August 18-19, 1991, which saw the failed coup against Mikhail Gorbachev and the beginning of the end of the Soviet Union. As news of the happenings outside the studio spread among the musicians, they and conductor Vladimir Fedoseev were hard put to whip the symphony's final movement into shape.

The opening bars are rock solid in their sense of resolution and purpose, and the music progresses through the development to the fierce march transformation of the lyrical motif and the shattering climax leading to the first movement's coda with its famous solo for principal flute. Instead of the usual sensuous tonal aura we hear a bleak and quietly devastating close, almost without vibrato, as if all passion were spent. The scherzo comes across as brutal and sarcastic, no holds barred. The great slow movement builds in an unbroken line to its first climax, sustained by timpani only, then on to its culmination and the time-out-of-mind coda with its inversion of motifs from the first movement.

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Two areas of the ostensibly triumphant finale present interpretive problems — the central lyrical section and the final pages, over which conductors have disagreed for nearly fifty years. Fedoseev opts for a fast tempo for the ending — indeed, considering the conditions of the recording session, he seems downright impatient at the very last bars. Sound quality is a bit strident at times, but there's plenty of "you are there" presence. *D.H.*

COLLECTIONS

OLGA BORODINA Arias

Olga Borodina, mezzo-soprano; Orchestra of the Welsh National Opera, Carlo Rizzi cond. (Philips 446 663, 70 min)

★★★

Olga Borodina's first CD of opera arias displays the range of her repertoire and gives evidence of her firm and lustrous tone, her dependable intonation, and the

kind of dramatic gifts that would make an even greater impact in a theatrical setting.

Of the twelve arias on display here, I found the most enjoyment in the two by Tchaikovsky — Lisa's Act III aria from *Pique Dame*, thrillingly sung in the original soprano key, and Joan of Arc's aria from *The Maid of Orleans*. Borodina manages the low notes in "Voce di donna" (*La Gioconda*) and "Amour! viens aider" (*Samson et Dalila*) quite skillfully, but her tone shines more firmly and confidently in the upper range. And, while she demonstrates proficiency in several languages (Italian, French, English), clear enunciation and textual illumination are not her strengths. *G.J.*

JOURNEY TO THE AMAZON

Sharon Isbin, guitar; Paul Winter, saxophone; Gaudencio Thiago de Mello, percussion (Teldec 19899, 55 min)

★★★★

Sharon Isbin's Amazonian collaboration with Paul Winter and the Brazilian percussionist/composer Gaudencio Thiago de Mello is delicately balanced between traditional and contemporary, classical and popular music. Several Latin American countries are represented, but the greater part of the music is Brazilian, most of it by the late, great *bossa nova* guitarist Laurindo Almeida or by Thiago de Mello himself.

My favorite selection is the second of Thiago de Mello's *Chants for the Chief*, based on a recording of the song of the legendary *uirapurú*, possibly the most extraordinary songster of all the birds. The extraordinary bird song recurs throughout the piece, and the harmony between these two very different musical worlds, human and avian, is remarkable and very moving. Thiago de Mello's Chant No. 1, based on the sound of the wind, is almost equally evocative. There are also a couple of Brazilian *chôros*, only slightly further removed from the natural world.

Much of the rest is based on dance rhythms: the Brazilian *baião*, the Venezuelan *joropo*, the Colombian *porro*, and the waltz. In spite of the variety (or perhaps because of it), the disparate elements of the music and the instrumentation somehow combine to create a unity of colorful and contrasting textures and rhythms, all of it imaginatively conceived and performed with spirit and love. *E.S.*

ANGELIKA KIRCHSCHLAGER

Songs by Korngold, Mahler, and Alma Schindler-Mahler

Angelika Kirchschrager, mezzo-soprano; Helmut Deutsch, piano (Sony 68344, 65 min)

★★★★

Angelika Kirchschrager, a native of Salzburg, the city of Mozart's birth, established herself on the lyric stage singing the mezzo roles of many of his operas, but for



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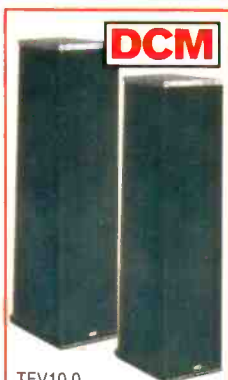
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BACH The Well-Tempered Clavier, Book I

Jeno Jando, piano (*Naxos 8.553796-7, two CDs, 111 min*) ★★★★★

Jeno Jando's CD of solo Bach is a lovely surprise. There's not the slightest hint here of the philosophizing, spiritualizing, or general monumentalizing into which so many musicians fall with this work. Instead, the playing shines with a straightforwardness, simplicity, and irresistible vitality that go to the true heart of this music, and the crystalline sound suits it all splendidly. *R.F.*



GERSHWIN Concerto in F **RAVEL** Piano Concerto in G Major

Hélène Grimaud, piano; Baltimore Symphony, David Zinman cond. (*Erato 19571, 55 min*) ★★★★★

Vigor, wit, poetry, and brilliance to burn inform both of these handsomely recorded performances by Hélène Grimaud, which benefit from the exceptional rapport between soloist and conductor we have come to expect when David Zinman is involved. The results are easily competitive with the best alternative versions. The sound is rich and vivid. *R.F.*

GLAZUNOV Carnival Overture; Spring; Concert Waltzes Nos. 1 and 2; Salomé, Introduction and Dance

Moscow Symphony Orchestra, Igor Golovschin cond. (*Naxos 8.553838, 60 min*) ★★★★★

The Naxos survey of Glazunov's orchestral music continues with this odd mix. The concert waltzes are graceful affairs in the best nineteenth-century Russian ballet tradition, and the idyllic *Spring* is ingratiating and lyrical, but the *Carnival Overture* is a not very convincing blend of jubilation and solemnity, and the *Introduction and Dance from Salomé* are pretty tame. The performances are decent, the recording clean but studio-bound. *D.H.*

RACHMANINOFF Piano Concertos Nos. 2 and 3

Noriko Ogawa, piano; Malmo Symphony,

Owain Arwel Hughes cond. (*Bis 900, 80 min*) ★★

Noriko Ogawa is a very fluent pianist, with a good sense of momentum and, on the evidence here, a special regard for tone production. What is missing in her expansive approach to these concertos is a corresponding regard for animation; there is little to suggest the *dramatic* nature of either work. The orchestral contribution, too, tends to be more of a complacent "accompaniment" than fully engaged symphonic dialogue. *R.F.*

SCHUBERT Complete Songs, Vol. 28 ("An 1822 Schubertiade")

Maarten Koningsberger, baritone, John Mark Ainsley, tenor, others; London Schubert Chorale; Graham Johnson, piano (*Hyperion 33028, 74 min*) ★★★★★

Among the twenty-two solo and part songs on this CD, all of which Schubert wrote in 1821 or 1822, a few are familiar but others have seldom been recorded. Some of the voices here are less attractive than others, but the disc amounts to a persuasive recreation of the kind of private recital of Schubert's music that his friends put on in their homes.

William Livingstone

UNCOMMON RITUAL

Edgar Meyer, double-bass, piano; Bela Fleck, banjos, guitars, mandolin; Mike Marshall, mandolins, guitar (*Sony 62891, 78 min*) ★★★★★

Talk about crossover! This CD presents a string trio comprising a classical double-bass player and composer, Edgar Meyer; a Hungarian banjoist and composer, Bela Fleck; and an American mandolin and guitar player, Mike Marshall. The selections include gypsy music, Elizabethan music, Bach, bluegrass,



jazz, blues, and world music, some of it arranged from well-known works but most of it original compositions by Meyer and his colleagues. The musical variety and technical achievement are dazzling, and it all blends into a gentle unity of wit and charm. *E.S.*

her debut recital disc she has chosen a sophisticated collection of Viennese art songs.

Much of the disc's interest lies in the première recording of Korngold's *Songs of the Clown*, a suite of songs on texts from Shakespeare's *Twelfth Night* that he wrote in 1939. Even as the old European civilization was being swept away by a tide of barbarism, these sunny, richly melodious ditties projected a defiant mood of lighthearted jollity. Kirchschrager sings the English words with a plausibly idiomatic touch. The disc opens with Korngold's *Five Songs*, a strange mélange of three bittersweet love songs, in German, and two rollicking songs on Elizabethan texts, one of them a setting of Shakespeare's Sonnet 130.

The rest is devoted to the Mahlers. Gustav and his wife, Alma. Kirchschrager's interpretation of the former's youthful collection *Lieder und Gesänge* is exquisitely colored and subtly nuanced, finding the sense of magical adventure in some of these folk tales about knights and the poignant longing of the maidens they left behind. You can definitely eliminate Alma Mahler from the latter category. She was one of the most fascinating women of the twentieth century. The five songs by her on this CD are accomplished imitations of her first husband's work — and that's saying a lot. *J.J.*

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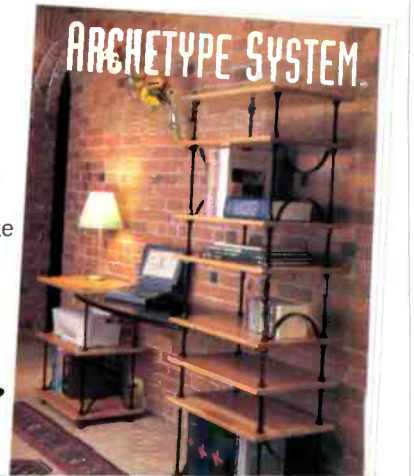


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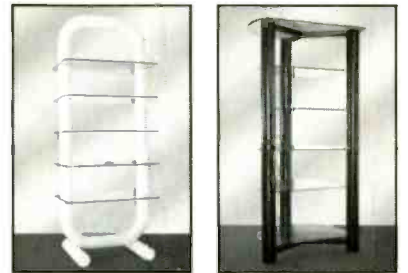
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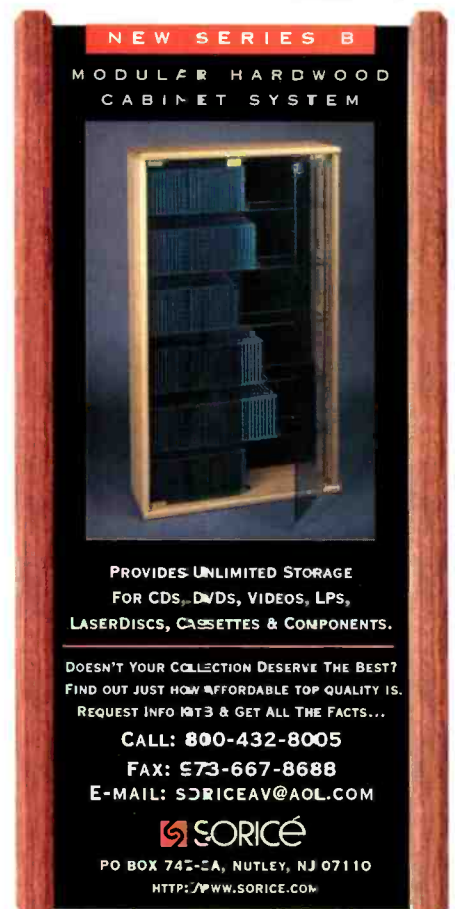
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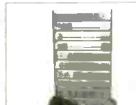
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A Standing Ovation

WHEN STEREO REVIEW announced that Julian Hirsch was retiring from active duty in the field of audio journalism at January's Consumer Electronics Show (CES), I witnessed something I never thought I'd see: a great gathering of audio's most prestigious manufacturers, designers, and editors, all rising to give a standing ovation to a guy who wrote about stereo equipment. We came to honor Julian for the decades of service he gave to this industry, but we stood and applauded because the very reason most of us were standing there in the first place was because we'd read his writing at some point in our lives and caught the fever.

I know I did. I first read Julian Hirsch in this magazine when I was 10 years old, and the fact that you're reading this column is proof that the experience changed my life. As a lapsed Webelo, my magazine reading at the time was pretty much limited to *Boy's Life*. But one day there was a copy of *Stereo Review* lying around at a friend's house, and I can still remember poring over the photos of JBL speakers and Pioneer turntables and thinking, "Whoa! There's a whole other world here — where do I start?"

Reading Julian's reviews and finding them both highly informative and easy to understand was what sealed the deal for me, and I knew that my kiddie all-in-one record player's days were numbered. When it came time to pick out my first store-bought rig, Julian's recommendations helped guide me through showroom after showroom, leading to a system that gave me many, many hours of musical discovery and just plain hi-fi geek fun.

As the undisputed dean of audio reviewing for the past four decades, Julian leaves behind a legacy unmatched by any other writer in the history of the genre. From the early days of monaural hi-fi, through the transition to stereo, through the tangled web of quadraphonics in the 1970s, to today's multichannel surround sound, Julian was there to carefully and patiently explain the latest products and technology in a way that made sense to the average person and avid hobbyist alike. His unwavering professionalism and genuine, down-to-earth enthusiasm for high-quality music reproduction served as a far greater force for promoting the hob-

by of hi-fi to the world at large than the elitist tone taken by his detractors.

And, like any great and influential figure, Julian did have his share of detractors. As high-end audio came into fashion in the 1970s, he became, through no intent of his own, its all-purpose bogeyman. Specifications and test equipment were anathema to the new breed of high-end magazine, which favored wholly subjective, opinionated, and often controversial reviewing over the kind of rigorous objective measurement style Julian helped pioneer with his legendary Hirsch-Houck Lab reports. Julian's firm reliance on objective measurements and his conservative views on the subject of audible differences between cables and amplifiers earned him first-name-only infamy in the subjective press — to the point where a

I first read Julian Hirsch in this magazine when I was 10 years old, and the experience changed my life.

high-end review wasn't worth its salt unless it wound up at least one florid comment on a component's sound with, "Take that, Julian!"

Ever the gentleman, Julian never responded to such unwarranted silliness. I remember meeting him in the halls of the Sahara Hotel at my first Las Vegas CES and being struck by his warmth and encouragement toward a rookie writer for a high-end magazine, which, incidentally, had taken its share of potshots at him over the years. "I've read your stuff; it's very good," he told me in the way a favorite uncle tells a small child what a pretty picture he's drawn. It made my week.

I've always felt that one of the great ironies is that if his critics in the high end had ever taken the opportunity to get to know Julian, they would've found much more common ground than they probably would've guessed. Home theater, for one. Like many die-hard traditionalists in the high end, Julian has little interest in surround sound or in playing movies on his system. "I don't go in for all that home

theater," he told me a few years ago. "What does it have to do with music?" I particularly enjoyed the looks on the faces of a couple of high-end writers who happened to be standing nearby as they discovered, to their dismay, that their purist stance on home theater was shared by none other than Julian Hirsch! Take that, boys.

When I decided on a career in audio journalism, I felt — and still feel — that a hi-fi magazine's job, beyond the basic function of product evaluation, is to convey the pleasure of owning a really good audio system to as many people as possible. Not just to the hobbyist choir, but to regular people who don't yet own a component system, or even just those curious enough to flip through the pages and gawk at the pictures. As a 10-year-old with a portable record player, I had no idea there was a better and more satisfying way to listen to music until I picked up my first issue of *Stereo Review*. And since becoming an audio writer myself, my main goal

has been to give to people who'd like better sound in their lives the same sense of joyous discovery and fun that Julian's writing gave me twenty years ago.

When I asked Julian what he planned to do with himself now that his life was no longer ruled by deadlines, he told me that he and his wife were planning a cruise. "We went on one a while back, and one night they had a Chocolate Night," he recalled, smiling widely at the memory. "One whole dining room on the ship, full of every kind of chocolate you could imagine — and all you could eat!"

Julian, that's the way your writing made me feel about the hobby of audio. Picking up my first copy of this magazine and reading your reviews was like opening a door to a world I never knew existed, and finding every kind of audio component I could possibly imagine. Thank you for all the years of entertainment and education you have given me. I know I join millions of readers the world over in wishing you health, happiness, and many Chocolate Nights to come. □

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