

B&K
AV 505 Series 2
Audio/Video Receiver



JVC's D-ILA 52" High Definition RPTV



- **Best Of CEDIA Report**
- **T.H.E. Show Report**
- **Cyrus Integrated Amplifier, CD Player and Power Supply**



DYNAUDIO
FOCUS 220



TANNOY ARENA



ONKYO DV-SP502
Universal Player



PANASONIC 52"
LCD RPTV

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T.H.E. Show Report 2005

Jon Valin shares high-end discoveries from Indy's other A/V show.



On the Trade Show Circuit: Enjoying the A/V World's Richest Pageants

In the past few weeks the editorial staffs of *AVguide Monthly* and its sister magazine *The Perfect Vision* joined forces to cover not one but two A/V trade shows: the CEDIA Expo 2005 and the smaller "piggyback" T.H.E. Show 2005—both held concurrently in Indianapolis in early September. If you've ever attended shows of this magnitude, which for me bring to mind the Joni Mitchell album title *Miles of Aisles*, you will appreciate why many of our editors spend the latter half of September recovering from serious PTSFS (post trade-show fatigue syndrome)—a condition brought on by an experience we can only compare to that of jumping head first into a giant, A/V equipment-filled blender whose switch is set to PUREE.

But the great news is that we've survived and come back with stories involving the latest, greatest, and most enticing A/V products and technologies now appearing on the horizon. In fact, Absolute Multimedia plans *three* kinds of show coverage you'll want to know about:

- *AVguide Monthly*: In this issue, you'll find both a "Best of CEDIA 2005" article, where five of our editors pick the best new products or technologies seen at this year's show, and a "T.H.E. Show 2005" summary, where Jonathan Valin, Editor of *The Perfect Vision*, gives you a walking tour of the high-end components he sampled at T.H.E. Show 2005.
- www.avguide.com: About one week from the release date of this issue, our parent Web site will post a giant, pictorial CEDIA 2005 Show Report featuring nearly 200 hot new products seen at CEDIA. Helpful hint: The report comes just in time to help you figure out what A/V "toys" to put on your Christmas list.
- *The Perfect Vision*: TPV Issue 64 (the next issue) features an in-depth CEDIA 2005 report, where our editors identify and analyze emerging trends across each important A/V product category, then attempt to answer six challenging questions posed by Robert Harley, TPV's Editor-in-Chief.

Changes, Departures

Those of you who have followed *AVguide Monthly* from the beginning have seen the magazine's design evolve and, we like to think, blossom over time. Much of that development is attributable to our Web Producer, Jerry Sommers, whose equipment reviews have been a regular part of the magazine, and whose technical support skills have helped many people get maximum enjoyment from www.avguide.com. Sadly for us, but happily for him, Jerry Sommers will be leaving Austin, TX-based Absolute Multimedia to pursue new opportunities in San Francisco. Thanks, Jerry, for helping to build *AVguide Monthly*; we wish you the very best.

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Where Have All the Meadowlarks Gone?

Editor:

I heard a rumor that Meadowlark went out of business...is this true?

John M via the Internet

A message now posted on Meadowlark Audio's Web site, www.meadowlarkaudio.com, states, "After eleven years, production has ceased at Meadowlark Audio..." This is, of course, sad news for those of us who have heard and admired the time-aligned, transmission-line speakers developed by Meadowlark's chief designer, Pat McGinty.

But wait: There's good news, to follow. Just before the CEDIA 2005 show, AVguide Monthly learned that Pat McGinty had joined speaker and electronics manufacturer Innersound to create a new line of loudspeakers called the Windsongs. Meadowlark may be gone, but the fertile mind of McGinty is still hard at work, perfecting the art and science of speaker design.

Chris Martens

Media Servers at my Service?

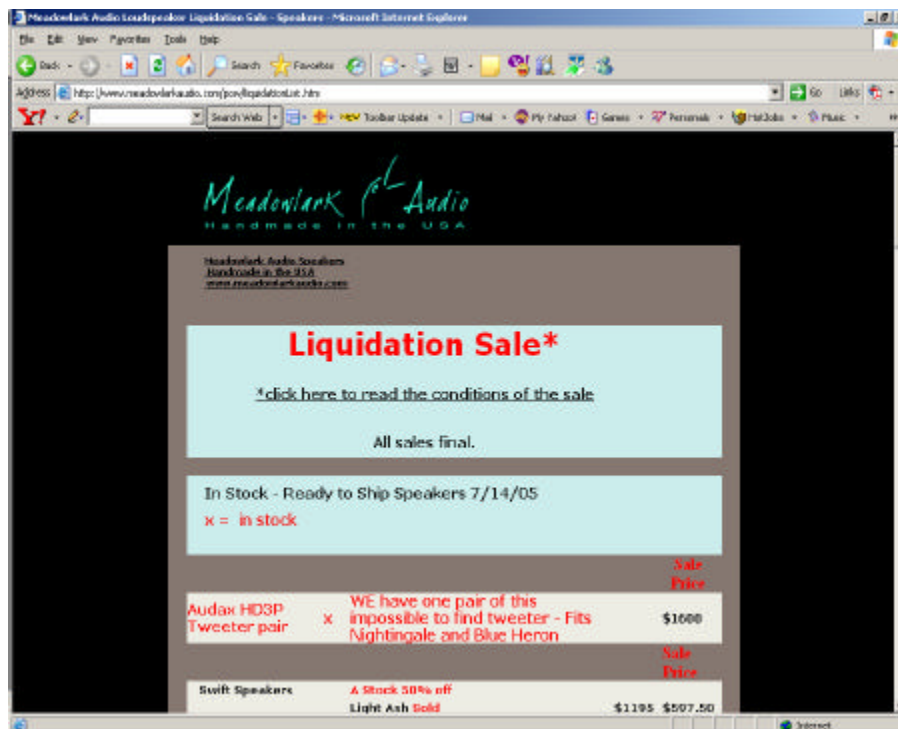
Editor:

I am "a computer guy" and I am very interested in creating a home video server where I can put all of my DVDs onto hard disk and then have my own "On Demand" server where I can select the movie and play it on my TV. I would also like to be able to record programs off digital cable and put them into the on-demand server.

Do you have any recommendations or a system that you recommend. My DVD collection is currently at about 400.

Matthew Hunter

You're in luck. We just returned from CEDIA Expo 2005 where media servers such as you're asking about were all the rage. Watch for an upcoming comprehensive report on new products seen at CEDIA, soon to be posted on



Visit www.meadowlarkaudio.com for up to 50% off Meadowlark Speakers

AVguide.com. Note especially the many media server companies listed under the Convergence category. There are many that fit your requirements—all good choices.

Arnie Williams, Managing Editor,
AVguide Monthly

Help me, please!

Editor:

I need advice. I have a desire to improve my present Audio/Video configuration. My budget is, let's say between \$5,000 and \$10,000 dollars U.S. (perhaps more). Here is my present configuration:

Line conditioning:

APC Line-R 600
running off a APC Back-UPS ES 500

Receiver:

Harman Kardon AVR 320

DVD:

Samsung DVD-HD941
CD Carousel: Sony Mega
Storage 400CD

TV:

Mitsubishi HD 1080 WS-48313

Main Speakers:

Klipsch RB35

Center Speaker:

Klipsch RC35

Surround Speakers:

Klipsch RS3 II

Subwoofer:

Definitive Pro Sub 100 TL
Good quality 10awg braided monster
type cable with gold plated banana
plugs

Some thoughts I have now is the man-

agement of my over 500 CDs is a pain with the Sony. Albums have to be entered manually and that is labor intensive, plus I've never been able to find any info on the quality of the player in the unit. Taking CDs out to play on another source and reinserting them is labor intensive also. Clearly if I stay with this kind of CD configuration, another unit will

MusicGiants service offers one of the most sophisticated and user friendly software interfaces we've ever seen. Finally, to address your hardware requirements, MusicGiants offers an optional, very high capacity media server called the SoundVault (priced at \$9500, including wireless keyboard and mouse). The SoundVault can store about 1000 CDs

No slight was intended, and we are definitely interested in Mr. Ulrick and the Spectron amplifiers. We may well request an interview with him in the future.

That said, however, we want you to be aware that Spectron's flagship amplifier, the Musician III, is priced at \$4995—a price point that falls well above AVguide's traditional \$4000/unit upper limit for what we regard as "affordable" components (and some would probably argue that even that price point is too high).

By comparison, NuForce's flagship Reference 9 monoblocks sell for \$2400/pair, which makes them a better fit for an audience interested in "affordable excellence." In short, we wanted the interview to focus on technologies (and, indirectly, products) our readers could more readily afford.

But note: Spectron has a new amp called the Troubadour that is scheduled to sell for between \$1995 (analog inputs) and \$2995 (analog and digital inputs), and is slated to become available in Q4, 2005. We think a Spectron Troubadour-NuForce Reference 9 comparison might prove very interesting.

CM



NuForce's Reference 9 Digital Amplifier

have to be bought. It would seem to me that some sort of CD music server that is connected to an Internet music library, like GraceNote would make this an obvious first choice for upgrade. However, I need something that can support at least 600 to 700 CDs worth of music. Does that mean a media center PC with huge storage, or is there another solution? My second concern is whether my line conditioning is deficient? I read a lot of reviews of line conditioning equipment, but question to what extent I would really hear a difference? There is no dealership within 100 miles of here who deals with anything advanced in that arena, and certainly nobody who is knowledgeable in that area. Could someone please help with advice on what my realistic options are? Am I basically in a low- to mid-level system, which will require scrapping everything in order to appreciate a real difference in sound and picture quality? Thank you for any help you can offer.

John Thompson via the Internet

Let's focus on your storage/music library requirements. One company you'll want to check out is MusicGiants (www.musicgiants.com), and here's why. MusicGiants is a music download service whose particular claim to fame is that all downloads feature content delivered at full CD-quality resolution—as WMA Lossless files. What is more, the

as WMA Lossless files, and it provides FireWire and USB connections to allow users to add terabytes of storage later on. The SoundVault, which is equipped with studio-grade, multichannel DACs, is one media server that takes sound quality very seriously.

CM

Grey Poupon and AVguide, s'il vous plaît

Editor:

Finally, there is an A/V Web site that has the pedigree equivalent to that of the outstanding Audio Web site Stereo Times. Congratulations!

Evans Harrigan

Thank you so much for noticing our efforts. As you can see, our reviewers really do "sweat the details."

CM

Yeah, Right. But What about John?

Editor:

Why would you not interview John Ulrich regarding his Spectron Class D amps for this article [See Class D Amplifiers: The Way of the Future? An Interview with NuForce's Casey Ng, AVguide Monthly, Issue 19]?

Donald M. Feferman

What's the Scoop on HD-DVD Blu-ray?

Editor:

I plan on buying an HD-DVD player or a Blu-ray player soon. Will they provide full bandwidth through component connections or only HDMI? Do you know if they will decode DVD Audio and SACD? My HD display is high quality but only accepts composite, S-video, d-sub 15, and component connections. Will I be left out in the cold?

Bill Stonehill

Watch the Winter 2005 issue of The Perfect Vision for more details.

Early HD-DVD pre-release product announcements suggested that players would provide full resolution 1080p signals only through HDMI connections, while providing down-rez signals via component connections. However, our understanding is that some manufacturers are actively re-thinking their strategies, recognizing that the majority of HD sets currently in the field do not have HDMI inputs.

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JVC HD-52G786 52" Rear-Projection Television

JVC's D-ILA RPTV is a champ at light output, but that's not all.

They call it D-ILA—"Direct Drive Image Light Amplifier." The technology involved is LCoS—"Liquid Crystal on Silicon"—and JVC has been hard at work on it for many years. Early LCoS efforts seen at trade shows were widely variable in picture quality and black level. It was said that manufacturing this technology was difficult, expensive, and inconsistent in results. JVC, however, had tremendous confidence in D-ILA and refused to let it go. Now, years later, digital projection at select movie theaters is done with JVC's professional LCoS projectors and manufacturing methods have improved to the point where a home version of D-ILA can be sold for a very competitive price—in the case of this 52" model, \$3799 retail.

LCoS is bulb-driven, meaning that a user-replaceable light bulb should be able to restore like-new performance and brightness. LCD and DLP sets also use light bulbs, but none of these competing technologies can compare to this set in light output. This is the all-time hands-down leader in that department. And even if you don't need all that brightness, it's nice to know there's so much reserve available when the bulb grows weak or when ambient light levels are extremely high.

Features

The 52G786 is a fully loaded HDTV. Included are both analog and digital (ATSC) tuners, CableCARD input, and an (HDCP-compliant) HDMI jack—features not often found in cheaper sets. With them, you can get HD right off the air (via an antenna), receive digital cable without an inconvenient cable box, and reproduce highest-quality digital video from your HDMI-equipped satellite box or DVD player.

The JVC offers several aspect ratios, including CINEMA ZOOM and HD



PANORAMA, both of which allow you to fill the screen even when a station is broadcasting at an HD scan rate but showing 4:3 programming. Many sets, including some expensive plasmas, don't have this feature, forcing you to

called up on the remote, but you might have a problem identifying which button to use. JVC calls it VIDEO STATUS. Video inputs can be labeled, but accessing them is inconvenient and requires scrolling through a list.

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live with those dreaded black or gray bars on the sides of the screen. (For some reason, though, actually watching this set in 4:3 puts those hated gray bars on the sides of the screen, even though a D-ILA set isn't subject to screen burn.)

Various video preset modes can be

The set's internal speakers can be driven as a center channel by your A/V receiver. There are also an on/off timer and a sleep timer (activated by a button on the remote) with another button on the remote (DISPLAY) that checks the status of the timers. Picture-in-picture is available (you can watch 12

channels at once if you like). Twenty-four channels can be saved as FAVORITE CHANNELS. Signal strength for digital off-the-air stations can be checked with the ANTENNA LEVEL feature (important!), though it's several levels down in the menu system rather than on a remote-control button. A neat D/A button allows you to tune just digital or just analog channels. (Remember this button if you do the initial scan for channels and get none. You might be in the wrong model!) When manually tuning digital channels, dashes are entered with the SUB button (17-2, 17-3, etc.) instead of via a conventionally placed dash button. Finally, a PC input allows direct connection to a computer (1024x768 maximum resolution). No warnings are given about screen burn.

I wasn't impressed with the owner's manual. While it initially looks simple and straightforward, it's often not, plus it contains several meaningless descriptions and translation irregularities. The remote, too, was confusing and definitely less intuitive than some others. Earlier JVC remotes were great. This one isn't, but you'll get used to it.

Operation

When you first turn the 52G786 on, you'll notice that it takes awhile to come up, and even after a picture is displayed the colors are all wrong until the set warms up completely (which takes as long as 10 minutes). When you do get a picture, it's gonna come up in DYNAMIC MODE and will be bright enough to sear your eyeballs if the room's dark. You're just not going to believe how bright this thing can get—and with no clipped whites or other overload distortions! To give you an idea of how bright, the 52G786 *could* measure eight times as bright as my reference Hitachi 55" plasma with small window patterns and 23 times as bright with full-screen white, though differences in light output will never *look* as large as the measurements indicate! Still, nothing I have tested approaches this sort of light-output capability.

While DYNAMIC will definitely impress you with sheer impact, I soon found the THEATERPRO button on the

remote, which calmed things down considerably (though the JVC was *still* a bit brighter than the Hitachi plasma running full-tilt next to it), while also removing a huge amount of edge enhancement and dropping color temperature down from "way too blue" to fairly close to the D6500 standard. THEATERPRO, which puts the set directly into THEATER MODE, gave a picture that seemed at least similar in color, contrast, and overall "look" to the fully calibrated reference plasma sitting beside it. I was impressed with the factory default "0" video settings, which, except for color being a bit high, were close to ideal. That's a good thing too, since color saturation doesn't increase at settings beyond 0 (even up to 30) if you're in THEATER MODE.

Another important item in the video menu is SMART PICTURE, which regulates contrast (overall light output) according to the average picture level.

DVD viewing was a mixed bag. While I was able to get a good overall picture, I couldn't help noticing some problems, especially if I watched up-close.

With this feature on (recommended), the JVC only looks "a little" brighter than everything else. Turn it off and Katie-bar-the-door. (DYNAMIC turns this off by default.)

JVC has not just provided separate memories for each input (video settings) but also separate memories for each scan rate. If you change the output of your set-top box from 1080i to 720p, a completely new set of video settings will be called up, so go back and recheck all of your preferred menu settings and adjustments.

Viewing

HD viewing in DYNAMIC MODE could make your jaw drop, so powerful was the impact, but it didn't take too much of that mode for me to tire of its excesses and inaccuracies. STANDARD MODE was somewhat less intense, though still plagued with noise and

artifacts, but I always liked pressing the THEATERPRO button on the remote, which made this set look much more like the best displays I've seen. If it's not bright enough for you, just raise CONTRAST. My main quibble about this set's HD was a subtle lack of resolution that kept reminding me that I was watching TV instead of the real thing.

DVD viewing was a mixed bag. While I was able to get a good overall picture, I couldn't help noticing some problems, especially if I watched up-close. DYNAMIC and STANDARD MODES were absolutely unacceptable. Both showed severe video noise, artifacts, and edge enhancement with DVDs. THEATER MODE (using the THEATER PRO button) was far freer from noise; still, getting a reasonably smooth, clean picture required dropping DETAIL to minimum. Even set this way (and with either a 480i or 480p source), there was subtle intermittent video noise as

objects started or stopped moving. From typical viewing distances, this was fairly difficult to see. Even though 3-2 pulldown (turned on via the NATURAL CINEMA button) worked effectively and the built-in scaler/deinterlacer tested O.K., I still preferred watching DVDs with a good progressive scan player, but avoided 480p when using the HDMI input due to restricted video bandwidth and resolution.

On the plus side, the set's relatively accurate grayscale calibration yielded dark scenes with very little unwanted color tint. On the minus side, however, the set's high black level significantly hurt detail in all dark scenes. Overall, while there are better sets for dedicated-dark-room home-theater applications, the JVC still had appealing smoothness, impressive brightness, and good color rendition.

Digital (ATSC) tuner reception

capability was just slightly below average for recent sets I've tested. Standard-definition picture quality was

JVC HD-52G786 52"
Rear-Projection Television

STRENGTHS

Incredible light output capability, good factory grayscale calibration in THEATERPRO MODE, computer input, immune to screen burn.

WEAKNESSES

High black levels hurt dark scenes, soft look to HD pictures, test sample slightly out of convergence, no direct-access input selection.

good, if just a bit on the soft side. Tuning was slow. Color rendition was quite good.

Conclusion

With so many various technologies available for big screen TV these days, the buyer needs to know the strengths and weaknesses of the ones he's considering. With the JVC HD-52G786, the obvious strength is light output. For viewing in a brightly lit room, this set has no equal. *Monday Night Football* in HD could knock your socks off. For watching movies in a dark room, there are better choices; the set's high black levels are painfully obvious with many

picture with good color, computer capability, and a full lineup of features—look no further.

Technical

Maximum undistorted light output on the HD-52G786 was 300fL on a 100 IRE window and 285fL on a full white screen. Black level was 0.18fL—one of the highest I've measured but subjectively about like the current Sony Grand Wega sets. Maximum full-on full-off contrast ratio was a fairly high 1666:1, but that counts only if you run the set as bright as it will go, which is too bright for most conditions. ANSI contrast was 140—low but not as bad as some other LCoS products I've tested, whose blacks suffered terribly when any bright object appeared on the screen. Contrast ratio in THEATER MODE with default settings (100fL) was 555:1.

Color temperature in THEATER MODE measured 6800K on bright patterns going slightly bluish (8000K) as dark gray was approached. Since blue will gradually weaken as the bulb breaks in, this set's grayscale calibration could come close to the 6500K ideal with a few hundred hours of use. This measured color temperature remained consistent with all inputs and scan rates—commendable. Directly

With so many various technologies available for big screen TV these days, the buyer needs to know the strengths and weaknesses of the ones he's considering. With the JVC HD-52G786, the obvious strength is light output.

movies in a dark theater environment. Other aspects of the JVC's performance were good (though not outstanding) and fairly competitive with DLP and LCD rear-projection models, though my review sample, which suffered from a bit of color fringing across the screen, was just a tad down on HD resolution compared to other sets. Nonetheless, if you want a *really bright*

compared to a fully ISF-calibrated display, the differences due to grayscale calibration errors were small. Other modes (DYNAMIC, STANDARD, GAME) measured much cooler (over 10,000K) even if LOW color temperature was selected—yet another reason to avoid these.

The focus test pattern from the Sencore generator didn't fare too well.

SPECIFICATIONS

JVC HD-52G786 52"

Rear-Projection Television

Price: \$3799

Technology: LCoS (rear projection)

Native Resolution: 1280x720p

Screen Size: 52"

Aspect Ratio: 16:9

Video Inputs: Two RF (UHF/VHF + ATSC/Digital Cable), four composite, three S-video, two component, one HDMI (HDCP), two i.LINK (IEEE1394), one VGA (D-sub)

Dimensions: 48 1/2" x 35 7/8" x 16 3/8"

Weight: 86 lbs.

Warranty: One year (parts and labor) in-home

Manufacturer Information

JVC COMPANY OF AMERICA

1700 Valley Road

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www.jvc.com

Associated Equipment

Pioneer DV47A and DV59AVi DVD players, V, Inc Bravo 1 and 2 DVD players, Zenith HD-SAT520 set-top box,

Test equipment by PhotoResearch, Gretag-MacBeth, Sencore, and Progressive Labs, Tara Labs Air-One video cables and interconnects, Eichmann eXpress Power AC cords

Part of this was due to a slight misconvergence of red, green, and blue which showed up as color fringing across most of the screen and part to lack of resolution. Multiburst patterns demonstrated this showing high frequency rolloff in video bandwidth—worse with HDMI than component. Darker test patterns showed a significant amount of video noise. If your set-top box allows it, set its output to 720p instead of 1080i.

Primary colors red and blue were reasonably close to HDTV standards but green, as with most microdisplays, was oversaturated and slightly yellowish (.287/.683).

The color decoder was fairly accurate with only 10-15% red push.

Randy Tomlinson is an independent ISF-certified calibrator in the Atlanta area and can be contacted via his Web site at: www.advancedtechservice.com.

Cyrus 8vs Integrated Amplifier, CD 8x Player, and PSX-R Power Supply

Half-width components that deliver full-size tube-&-analog-like sound.

In 1984, Mission introduced its Cyrus line of electronics. These components developed an enthusiastic following but were somewhat overshadowed by Mission's own loudspeakers, at least on these shores. Indeed, the last TAS review of any Cyrus product was in 1988, but the Cyrus team has been far from idle. Since that time, Cyrus has continued to evolve its line of high quality, affordable electronics and split from Mission last year to become a separate company. The new entity, Cyrus Advanced Audio and Video Systems, has created a broad, modular line of electronics. When I received the "half-width" Cyrus CD 8x player, 8vs integrated amplifier, and one PSX-R power supply, I wondered just how good these mighty-mites might be.

These new Cyrus 8-series components produced a surprisingly musical sound, making me think, at times, that I was listening to tubes and analog



Cyrus 8vs Integrated Amplifier

Cyrus power amplifiers via pre-amp outputs while simultaneously continuing to drive the 8vs' internal power amplifier (something few other integrated amplifiers can do) so it can also be used as part of a Cyrus bi/tri-ampli-

original Quads, I thought that the Cyrus was just another in a long line of solid-state components, some much more costly, that didn't mate well with these 'stats. Everything sounded closed down and too polite. I decided to let all the Cyrus components cook for over a week and played background music on them at low volume 24/7. You know what? These babies underwent a total transformation! Think Clark Kent into you know who. The midrange opened up dramatically, the bass was much more forceful, and the highs were more extended. I couldn't believe it was the same system. With the standby feature on the 8vs, you'd be well advised just to leave them on.

One of the Cyrus' greatest strengths is its ability to "get out of the way" and to let the strengths of various types of speakers shine through. For example, the Cyrus didn't impinge on the Quad's glorious midrange but got deeper and tighter bass out of them than my reference tube amplifiers do, so I found that I didn't need a sub-woofer as often. And where some digital/solid-state combos might make the

These new Cyrus 8-series components produced a surprisingly musical sound, making me think, at times, that I was listening to tubes and analog instead of solid state and digital.

instead of solid state and digital. The 8vs integrated amplifier, sporting an array of useful inputs and outputs, offers the greatest flexibility and expandability that I have found among integrated amplifiers, giving away little in this respect to separates. Besides its dual sets of speaker outputs, which allow easy bi-wiring, the 8vs pre-amp section can drive add-on outboard

fictionation solution. Better still, the CD 8x player rivals my reference DAC, particularly when mated with Cyrus' optional PSX-R external power supply. This system's strong musicality, convenience and small footprint, make it pretty compelling.

However, all was not well at first. When I initially hooked the Cyrus system up to my restored and modified

Canton Vento 807 DCs sound bright, the Cyrus components mated extremely well with them, preserving the Vento's signature resolution, transient speed, and top-end extension without skewing their neutral tonal balance. Finally, the Cyrus' performance with the Hyperion HPS-938s was the most "thrilling" of all, since the Cyrus didn't diminish that speaker's explosive and articulate mid-bass—its best attribute.

All-around musicality is my top criterion for judging audio gear, and it is one of the Cyrus 8-series system's greatest strengths. Mated with the Quads, Miles' trumpet on *Sketches of Spain* [Columbia], Coleman Hawkins' sax on *The Hawk Relaxes* [Presitge/Moodsville/OJC], and Sarah Vaughn's voice on *Ballads* [Blue Note] had great musical timbre, a sense of musical rightness and naturalness that

systems—I could listen all day without aural fatigue (and did). The music "breathed" and had a touch of sweetness and warmth.

Yet this musicality does not come at the expense of a loss of clarity or a

recordings through the Cyrus system, such as Ivo Janssen's excellent recording of the Bach *Toccatas* [Void], or Bill Evans's *finest hour* [Verve], because the leading edges of transients were so well maintained. Listen to the mallets striking the tympani on the Berlioz *Requiem* [Telarc] and you'll hear what I mean.

What is the secret to Cyrus' performance? Stuart McGregor, Director of R&D, says that Cyrus products must not only measure well on the test bench, but must pass extensive listening tests, too, and the extra months spent fine tuning these designs really shows. The build quality on these units is superior to that of many units costing far more and a lot of attention has been paid to keeping signal paths short and isolating critical circuits from interference. Each unit in the Cyrus line has the same half-width form factor, with a chassis that is die-cast as a single piece from non-magnetic alloy. Not only does the chassis look good, but it also reduces microphonic effects while shielding the audio circuitry. Another plus is that a Cyrus system, even with a bevy of separate components, takes up very little space.

The 8vs integrated amplifier exemplifies the Cyrus design philosophy. It has the new "vs" (virtual servo) technology from Cyrus' top-of-the-line separate preamplifier, the Pre Xvs. Its remote has many useful features like controls to adjust balance and phase, and the ability to match the sensitivity of all inputs with the CD input. Nice! The 8vs ran as cool as could be with no problems at all, even when one of



Cyrus PSX-R Power Supply

What is the secret to Cyrus' performance? Stuart McGregor, Director of R&D, says that Cyrus products must not only measure well on the test bench, but must pass extensive listening tests, too, and the extra months spent fine tuning these designs really shows.

one hears in a live performance at a jazz club. Because there wasn't a hint of coldness or upper midrange glare—common problems with many digital

blurring of transients, as can happen with some tube-based amplifiers in this price class. Indeed, I really enjoyed listening to solo jazz and classical piano



Cyrus CD 8x Player

Cyrus 8vs Integrated Amplifier, CD 8x Player, and PSX-R Power Supply

STRENGTHS
Musicality, natural timbre, and transient speed; ability to drive difficult loads; systems design approach provides great flexibility, expandability/upgradeability, and convenience; build quality and size

WEAKNESSES
Not a great match with power-hungry speakers; image depth somewhat foreshortened; advanced remote controller takes some getting used to but is worth it.

my spade-to-banana adaptors lost its grip on the speaker cable and caused a short. The 8vs also accepts an optional intelligent external power supply, the PSX-R, which drives the pre-amplifier section. When I added it, the soundstage became deeper and more three-dimensional and had better resolution. This is a worthwhile upgrade.

Surprisingly, the Cyrus CD 8x player rivaled the musicality of my reference Musical Fidelity Tri-Vista 21 DAC, though it fell a bit short of that standard in terms of resolution and

soundstage depth. However, with the addition of the PSX-R, that gap was almost closed in my reference system and vanished when using the Cyrus integrated. The PSX-R drives the CD 8x's most "noisy" components, like the motors. Again, it's a worthwhile upgrade.

So what's not to like about these small Cyrus components? Unfortunately, they're not the outright bargains they are in the U.K. because of the sagging U.S. dollar. Second, if you're an analog junkie like I am, you'll have to add a phono stage. The 8vs mated beautifully with the separate phono stage of my custom MFA pre-amplifier, but Cyrus also makes a companion phono stage, the Phono X, that looks quite tasty. I'd love to get my hands on one. Third, the keys on the advanced remote controller serve multiple functions, depending on the Cyrus device used, so you'll need to refer to the manual to take full advantage its capabilities. Lastly, the Cyrus system is not the last word in image depth, resolution, or dynamic range, although its performance in each of these areas is more than acceptable.

MANUFACTURER COMMENT

Many thanks for taking the time to look beyond the initial "out of the box" experience. Cyrus is a very unusual audio company for several reasons not least because it is owned by the enthusiasts who have run the business since 1998. Another unusual aspect is that, bucking the industry trend, our board is not pressurised by venture capital bankers demanding unfeasible growth to fund borrowings. Following our MBO in 2005 Cyrus is privately financed and it's this that allows us to specialise and take whatever time is necessary to bring properly finessed projects to market.

Our engineers cut their teeth on the first audiophile CD players in 1988 and more recently the revolutionary DML loudspeaker drive panel of the Cyrus Icon. While we may be the new kids on the North American block, we have in fact a long history of award winning models in Europe.

Our upgrade philosophy is embedded into the range and as you mention in your review, brings many acoustic and financial benefits to the consumer. The concept that one may enter the Cyrus family at an affordable price point and maintain the value of the initial investment through to some seriously capable audio system options is unique. The luxury of upgrading a CD 6s CD player to an 8x and then onto the (forthcoming) CD 8xt transport is unprecedented yet this explanation offers only a single example of the true value of our modular system engineering. Other system options include hard disc audio servers, wireless multiroom controllers, and A/V systems that while providing stunning sonics, can be operated from a single button, our proprietary MC BUS logic control eliminating all the wires, switching and fuss usually associated with the rather negative WAF factor.

We would humbly suggest that we aim to offer U.S. consumers something unique, compact, understated and fine sounding together with a valuable upgrade path. Thank you for opening the first window on Cyrus Audio in the USA.

Peter Bartlett
Cyrus Audio Limited

SPECIFICATIONS

Cyrus 8vs Integrated Amplifier
Price: \$1795
Power output: 70 watts per channel
Number and type of inputs/outputs: 7 line inputs; dual speaker, pre-amp, Mc-Bus, and headphone outputs
Dimensions: 8.5" x 3 x 14.4"
Weight: 12.34 lbs.

Cyrus CD 8x Player
Price: \$1995
Type of outputs: 2-RCA, 1-optical, 1-digital, Mc-Bus
Dimensions: 8.5" x 3 x 14.4"
Weight: 7.7 lbs.

Cyrus PSX-R Power Supply
Price: \$795
Dimensions: 8.5" x 3 x 14.4"
Weight: 10.1 lbs.

DISTRIBUTOR INFORMATION
THE SOUND ORGANIZATION
11140 Petal Street, Suite 350
Dallas, Texas 75238
(972) 234-0182
www.soundorg.com

ASSOCIATED EQUIPMENT
MFA Venusian preamp (Frankland modified); VPI Aries/Graham/Koetsu; Musical Fidelity Tri-Vista 21 DAC; Edge G-4 and Precision Fidelity M-7A (modified) power amplifiers; Hyperion HPS-938, Quad ESL-57s (PK modified), and Canton Vento 807 DC loudspeakers, etc.

Its 70 watts per channel sounds like a lot more but can poop out on some dynamic peaks. If you have power hungry speakers and like to listen at high volumes, you're going to have to bi-amplify the system for more power. This is easily done with the addition of any other Cyrus amplifier, like the Mono Xs, which provide 150 watts per channel.

The performance and price of this Cyrus combo make it hard to justify spending a lot more on a digital system. Not only does it almost disappear physically in your living or listening room, but the 8-series' engaging musicality, expandability, and convenience, as well as Cyrus' history of offering cost-effective upgrades, makes this combination hard to beat. Keep your eyes on these guys. They've been unleashed!

Tannoy Arena 5.1-Channel Speaker System

A British hi-fi veteran builds a stylish, new age surround rig.



For the longest time after the advent of the copy machine, Xerox Corp. found itself in the enviable position of having its name becoming a noun and a verb that almost everyone took to be synonymous with the word "copy" itself. You didn't photocopy something in those days, you "Xeroxed" it. An analogous phenomenon occurred in Great Britain with Tannoy. One of the first loudspeaker makers on the continent and a technology leader for more than 75 years, the Scottish firm's name has become a popular British synonym for two words; "loudspeakers" and "hi-fi"—as in, "Let's listen to the Tannoy to catch the BBC's Beatles retrospective."

Another rep Tannoy has incurred

by being a technology leader in a land that has long considered plaid the height of fashion, was one of no-frills functional enclosure design. "Just put the incredibly sophisticated works in a standard casing," the designers

permanently with the Tannoy Arena surround-sound system. Looking like svelte versions of passenger-ship deck-venting tubes (sci-fi cyclopean aliens also spring to mind), the cast-aluminum speakers, especially when

Looking like svelte versions of passenger-ship deck-venting tubes (sci-fi cyclopean aliens also spring to mind), the cast-aluminum speakers, especially when mounted on the Twiggy-thin Arena floor stands, would not be at all out of place as sculpture exhibits in any modern art museum.

seemed to say. "It's not a showpiece, love, it's a loudspeaker."

That tradition has been laid to rest

mounted on the Twiggy-thin Arena floor stands, would not be at all out of place as sculpture exhibits in any mod-

ern art museum. Available in silver, white, black, or bronze, they passed my wife's living-room aesthetics test as soon as I set them up—and that's no small accomplishment, considering that the mistress of the house is a professional, minimalist abstract artist.

Tannoy's Arenas come with ample rolls of zipcord-type speaker cable, but I wanted to use audiophile-grade cables for my listening tests, which proved difficult with the stand-mounted Arena L/R satellites. Why? Because the stands are designed for cables to be run up to the speakers from the inside, but the flared bottoms of the stands offer so little ground clearance that there's not enough room for thick cables to pass through. I jury-rigged a temporary solution for my tests, but I'd like to see Tannoy either equip these stands with taller feet or a relief channel to accommodate beefy speaker wires. Trust me, the Arenas sound good enough that you'll want to use good cables.

It's the Tannoy signature technolo-

gy behind the Arenas, however, that's being put to the test with the product's introduction. Developed in 1947, Tannoy dual-concentric drivers position a centrally mounted tweeter within the throat of a concentric, ring-shaped midrange or mid-bass driver. The advantages of this design have been proven for nigh on half a century in

plucking a koto, but most of all, the continuing fall of raindrops. The climactic moment when Hero drives forward for the kill is made intense to the point of painful beauty as his sword slices through rivulet after rivulet of falling rain water. The Arenas' soundstaging was deep and wide, and the speakers themselves transparent, dur-

Hats off to the center-channel speakers. The dialogue of Harry Potter and his friends in *The Prisoner of Azkaban* [Warner Home Video] achieved a level of voice clarity I hadn't heard since last viewing the film at our local theater.

Tannoy's larger speaker models—there are no "lobing" or time misalignment effects because the two drive units share the same centerlines and fore-and-aft acoustic centers. But Tannoy has never offered this technology in speakers this small—or this affordable—until now. The Arenas, then, are potentially forging a new path that is not without risk for the venerable speaker maker.

Home Theater Atmospherics

A good surround-sound system will provide many subtle sonic cues, especially with atmospheric background, as demanded in the famous scene from *Hero* [Buena Vista] where the assassin Sky is playing chess in a club courtyard open to the elements. All around the hall raindrops are falling to the stone floor and into small basins. The fight scene that ensues between Hero and Sky is enveloped in an aural tapestry made up of sword clashes, warrior grunts and lunges, the twang of a blind musician

ing the fight scene. The bass did seem a little under damped, so I moved the powered subwoofer further from my back wall, but that didn't alleviate the slight tendency toward excess mid-bass richness. On the other frequency extreme, some of the koto player's high notes and the yelps of the fighters as they prepared for their lunges exhibited a bit of edginess on sharp transient attacks—a minor problem I didn't hear when I tried an almost twice as expensive Von Schweikert surround system just prior to evaluating the Arenas.

Hats off to the center-channel speakers. The dialogue of Harry Potter and his friends in *The Prisoner of Azkaban* [Warner Home Video] achieved a level of voice clarity I hadn't heard since last viewing the film at our local theater. The center channel paired with the subwoofer also shined in the sinister surround-sound atmospherics of *Shaun of the Dead* [Universal Studios]. I took advantage of the powered subwoofer's "Cinema" setting, which opens up the bass for even more low-frequency effects. In the early scenes, while Shaun is still oblivious to the mounting danger of the walking dead, suspense is built up by the soundtrack's Jaws-like "duh dump" that seems to grow more ominous with each unexpected repetition. The subwoofer didn't achieve the kind of floor rattling effects that I've heard on



Tannoy Arena 5.1-Channel Speaker System

STRENGTHS

Transparency, excellent soundstaging and imaging, attractive design, compact but powerful, affordable.

WEAKNESSES

Satellite speaker stands should accommodate large-diameter speaker cables, slightly underdamped bass with limited low frequency extension; slight upper-midrange edginess.

more expensive systems, which could be because of limited ultra-low bass extension.

The Sound of Music

To partake of the cornucopia of timbres it offers, I put on an SACD of Babatunde Olatunje's *Circle of Drums* [Chesky]. One of the odd things about Chesky-produced multichannel SACDs, however, is that they don't utilize the center channel—and this can present imaging challenges even to the best surround systems. In the 21-minute "Cosmic Rhythm Vibrations," the Arenas were given the daunting task of rendering every timbre of drum sound, from large-head low-frequency floor toms, to higher pitched djembes, ngomas, and ashikos, to subtler shek-

eres and talking drums in 4.1 rather than 5.1 channels. The Arenas reproduced every attack, from a high-pitched slap, to a low-frequency palm thud, to the musical-saw-like wavering sounds of the talking drum, so faithfully I felt I was part of the drum circle myself. That edginess on the attack at the highest timbres, however, was still noticeable.

To test the Arenas with a 5.1-channel recording to see how the center speaker integrated with the rest of the system, I chose the SACD version of James Taylor's *Hourglass* [Columbia]. I especially like track four, "Gaia," which showcases Taylor's distinctive voice counterpoised against some fine bass playing by Jimmy Johnson and percussion by Carlos Vega. The Arenas faithfully reproduced Taylor's characteristic smooth voice, in 3D, with Johnson's bass placed forward, but not too much so. His low bass runs did not have the energetic force I've heard on more expensive systems, however. Vega's percussion break about three-fourths of the way through came off with distinctive attack and bone-rattling detail. The middle frequency range seems to be the Arenas' area of greatest strength.

Summary

You don't spend 75 years as an industry leader or have your company name become a household word without being sensitive to changing trends. Tannoy's Arenas address a current lifestyle preference for surround-sound speaker systems that are small, elegant, powerful, and affordable. If you have a small apartment or flat, or a living room that while spacious still calls out for minimalism, the Arenas deserve your attention.

If you're into the floor-rattling special effects in action-packed car-crashing thrillers or subterranean rock concert monitor-blasters, these may not be the speakers for you—but they certainly

deserve an audition before you make that decision.

To many folks, the Arenas will represent beauty, proven technology, and superb surround sound, at an easy-to-handle price.

SPECIFICATIONS

Tannoy Arena 5.1-channel speaker system

Package Price: \$2199 (not including stands)
Colors: Bronze, silver, white, or black
Warranty (all system components): Five years, parts and labor

Tannoy Area Satellite L/R

Price: \$419/ea.
Frequency response: (-6dB) 80Hz-54kHz
Power handling: 15-100 watts
Nominal impedance: 8 ohms
Sensitivity: (2.83V @1m) 88dB
Driver Complement: one 3.9" dual concentric driver with .7" titanium dome tweeter
Dimensions: 7.36" x 5.25" x 6.98"
Weight: 5.5 lbs.

Tannoy Arena Center

Price: \$499
Frequency response: (-6dB) 80Hz-54kHz
Power handling: 15-100 watts
Nominal impedance: 8 ohms
Sensitivity: (2.83V @1m) 88dB
Driver Complement: one 3.9" dual concentric driver with .7" titanium dome tweeter, one 3.9" bass driver
Dimensions: 5.23" x 9.64" x 5.87"
Weight: 8.8 lbs.

Tannoy Arena Subwoofer

Price: \$649
Low Frequency response: (-6dB) 29Hz
Limit for usable output: 16Hz
Integral amplifier power: 300 watts RMS
Driver complement: 10" woofer
Dimensions: 17.5" x 13.75" x 8.25"
Weight: 32 lbs.)

Floor stands: \$250 each.
Satellite Table/Wall Mount: \$149/pair
Center Table/Wall Mount: \$159

MANUFACTURER INFORMATION

TANNOY NORTH AMERICA, INC.
335 Gage Avenue, Suite 1
N2M 5E1
Kitchener, Ontario, Canada
www.tannoy.com

ASSOCIATED EQUIPMENT: Yamaha RX-V657 AVR; Sony DVP-S9000ES DVD/SACD player and DVP-NS500V DVD/SACD multichannel player; AudioQuest Jaguar and Kimber Tonik interconnects; Monster video cables; AudioQuest CV-6 speaker cables.



Tannoy Arena Subwoofer

Panasonic PT-52LCX65 LCD RP-HDTV

High resolution at a pleasingly low price.

I've seen Panasonic's rear-projection LCD sets in stores for a couple of years now and have always been impressed with their picture in store demos. (I've also been impressed with Panasonic's smaller flat-panel direct-view LCD sets in store demos.) This review was my first opportunity, however, to evaluate either with critical eye and test equipment.

The specs look great on this current model. Here's a 52" 16:9 HD set (1280x720 resolution) with digital tuner and CableCARD at only \$2499 retail. Though it's not a plasma TV you can hang on the wall, the Panasonic PT-52LCX65 RPTV is considerably thinner (17") and lighter (83 lbs.) than older CRT-based rear projectors. Since I'd already tested more expensive versions of this technology from Sony and Hitachi, I was looking forward to seeing how the Panasonic measured up. For direct comparison, JVC's \$3800, 52" D-ILA set was available, as was my reference 55" Hitachi plasma. If the set compared well, it could be a real value in the 52" RPTV size.

Features

The PT-52LCX65 is missing a few exotic features, but it does have most of the important ones. For starters, there are *three* (not two) component inputs, though only one HDMI input. Computer use is encouraged, and the

for receiving digital cable without an annoying set-top box. Dolby 5.1 audio is available from these sources (for driving your surround receiver) via a digital-audio-out jack. There's even a memory slot for viewing pictures taken with your digital camera, provided it uses an SD memory card.

Though this set receives both cable and off-the-air TV (via antenna), only one RF input is provided. No guidance is given as to how to connect both simultaneously, but a customer service rep suggested I use an A/B switch available from Radio Shack—not very convenient if you have both sources.

Selecting your desired video source requires two button-pushes but thankfully no scrolling. Inputs can be named and unneeded inputs can be removed from the list.

While various aspect-ratio choices are given, only FULL is available when receiving 720p or 1080i signals. This is unfortunate and will force you to look at those dreaded black bars when watching many commercial broadcasts. The ZOOM MODE allows use of the vertical size adjustment, so text at the bottom of the screen can be completely displayed.

The specs look great on this current model. Here's a 52" 16:9 HD set (1280x720 resolution) with digital tuner and cableCARD at only \$2499 retail.

computer input is located right on the front panel. There are built-in analog and digital tuners (with picture-in-picture capability) plus a CableCARD slot

A signal strength meter is provided for tuning digital off-the-air broadcasts, but it's several layers down in the menu system rather than on a



dedicated remote control button. There is a dedicated "Sleep" timer button, however.

I liked the simple, intuitive, backlit remote more than most. The owner's manual, too, was better than most with reasonably good explanations. Included in it are full instructions for replacing the 100-watt lamp, should that be necessary. While no guidelines are given as to lamp life, Panasonic does recommend that owners keep a spare.

Operation

When you first turn the PT-52LCX65 on, it will come up in VIVID MODE—too enhanced and too bluish. But the various video modes are simply factory presets of all of the regular user picture settings, so if, for instance, you compared VIVID and CINEMA and then adjusted all the picture controls alike, the two modes would look identical. Some sets have hidden tweaks (often undesirable ones) for each mode that can't be adjusted. This is not the case with the Panasonic. If you select a par-

ticular mode while watching a particular input, your choice of mode as well as your custom settings for that mode will be remembered for that input.

In my initial picture setup, I found that CONTRAST could be run as high as 25 with no white crush. SHARPNESS needed settings of 15 or less for minimal enhancement artifacts. COLOR TEMPERATURE was only acceptable in NORMAL MODE. Several additional video adjustments were unusual: according to the manual, BLACK LEVEL ("Light" or "Dark") needs to be set according to the input (only 480i uses the "Light" setting). It's actually a two-position gamma control for the darker part of the picture. I found that "Dark" excessively obscured detail in darker scenes and opted for "Light" all the time, with BRIGHTNESS adjusted accordingly. GAMMA ADJ did not affect the maximum white level of the picture (that's the CONTRAST control), but something more like overall brightness. I found that "Full" was always needed for best picture. BLK EXTENSION is a variable "black-enhancer" that may seem to give more contrast by inaccurately crushing the darkest regions of the picture. Normally I'd say keep it off, but set between 5 and 7, dark scenes did look a bit less washed

out. 3D I/P is just a strange name for 3-2 pulldown, which is required for the fewest artifacts from film-based sources with 480i (non-progressive-scan) DVD players.

Viewing

I had a strong competitor on hand for side-by-side viewing comparisons—the similar-in-size but much-more-expensive (\$1300 more) JVC HD-52G786. Still, the Panasonic held its own in some areas and actually bested the JVC in resolution (especially

The Panasonic held its own in some areas and actually bested the JVC in resolution (especially with HDMI sources), though it took me a while fiddling with the controls to get an optimum picture.

with HDMI sources), though it took me a while fiddling with the controls to get an optimum picture. Bright scenes looked surprisingly natural, with reds and minimal screaming lime greens. However, video motion artifacts, always a problem with the 1080i VOOM Original HD channels I like so much (now found on DISH Network), were more prevalent than on the JVC. While both sets had similar *measured* black levels and contrast ratios, the Panasonic's "blacks" and dark grays were tinted blue instead of gray, which contributed to dark scenes looking significantly more washed out and unnatural.

A friend brought over the Tom Cruise DVD *Vanilla Sky* to use as a test. It looked really bad—poor contrast, poor color, terrible flesh tones, ugly overall

colorcast. It didn't look great with the JVC, either. With confidence, I turned to my reference, the 55" Hitachi plasma, for a comparison, and while it did have slightly better contrast and color than either LCD set, *Vanilla Sky* still brought on the worst false contouring I've seen from the Hitachi. Nevertheless, my friend insisted that this DVD looked good on his Sharp 9000 DLP projector. Disbelievably, I drove over to his house to see for myself. He was right. The deeper blacks and superior dark scene per-

formance helped transform this demanding DVD, which will be a torture disk for all my future reviews. Yet, even the less demanding DVDs I tried constantly reminded me of this set's lack of contrast, dark scene detail, and overall "punch." Artifacts weren't a problem with the DVD player set to 480p, but 480i signals, via the set's own 3-2 pulldown, were riddled with them.

Viewing with the built-in digital tuner showed the Panasonic at its best. Reception capability was a tad better than the other sets here, and the picture, with either standard-definition signals or HD, was sharp, clean, free of artifacts, and (on very bright material) almost a match for the Hitachi plasma. But it was during direct comparisons with the plasma and the JVC via tuner that I put my finger on what really holds the Panasonic back *regardless of source*. While I could make the sets look nearly identical on bright scenes, the Panasonic would quickly lose much of its color saturation as scenes got darker, giving it an increasingly drab look. The other sets didn't have this problem. Keeping things as bright as possible by running CONTRAST at maximum and GAMMA ADJ at "Full" helped, but only as a cover-up of the real problem.



Panasonic PT-52LCX65 LCD RP-HDTV

STRENGTHS

- Excellent resolution of detail
- Accurate color decoder
- Simple and user friendly

WEAKNESSES

- Color disappears as scenes get darker
- High black level gives poor contrast in dark scenes
- "Color" of "black" distinctly bluish
- Motion artifacts with interlaced sources

Conclusion

While Panasonic's entry into the big screen LCD market is a good buy in many respects, it suffers even more from the same Achilles Heel the other ones have—poor black level—which is ironic since Panasonic plasmas have the best blacks in the industry. This always means that bright broadcasts (sports, news, etc.) look great, while darker ones look drab, washed out,

Comparing overall picture quality among LCD-based RPTVs, this one generally impressed me a little more than the low-end Hitachi products I've field-calibrated.

and unimpressive. If you can overlook this (which I definitely couldn't), there's not much else to seriously complain about, especially in a set so fully featured at such a low price. As with the similar Hitachi and Sony sets I previously reviewed, this TV won't always knock your socks off with everything you watch. Certain things just won't look very good on any of them, but *especially not on this one*. When you shop for a TV, bring some darker program material along to help you make up your mind.

Comparing overall picture quality among LCD-based RPTVs, this one generally impressed me a little more than the low-end Hitachi products I've field-calibrated, less than the high-end Hitachi and the JVC D-ILA set I reviewed earlier, and much less than the more expensive (and calibrated) Sony Grand Wega that I tested several issues ago. Since Panasonic also has a similarly-sized DLP-based RPTV that's not a whole lot more

money, you might also want to look at that, since it's likely (though I haven't tested it) to have improved contrast and do dark scenes much better.

Technical

The PT-52LCX65 was a surprisingly competent performer in several tests. Resolution, in particular, was noteworthy. At 720p (the set's native resolution), the highest band in the multiburst pattern was reproduced well (but with noise) via component inputs but with textbook perfection (for a 1280x720 set) with an HDMI connection. Likewise, the focus test pattern looked superb, even with a 1080i input. Alignment of the LCD panels was outstanding as there was virtually no color fringing around white lines. The screen, however, gave a slight "screen door" effect at closer viewing distances.

The primary color blue was dead

on SMPTE standards. The small error in red thankfully went less toward orange. Green was considerably oversaturated but with less of a yellowish look than usual with LCD. The color decoder was accurate with no red or green emphasis whatsoever.

Color temperature (the critical "color" of a black-and-white picture before color is added) in NORMAL, the most useable mode, was slightly more bluish than the D6500 gray standard, measuring 8000K on bright patterns (80 IRE) dropping to 6900K on medium gray patterns (50 IRE). Below and above that, the grayscale became considerably bluish, especially below 50 IRE, where it was well over 10,000K as "black" was approached. This non-linearity and excess blue were probably the entire reason for the loss of color in darker scenes. WARM measured 6000K at 80 IRE, dropping to 5400K at 50 IRE (both unacceptably reddish), but also went very bluish below that. This non-linear grayscale

SPECIFICATIONS

Panasonic PT-52LCX65 LCD RP-HDTV

Price: \$2499 (matching stand \$499)

Technology: LCD (rear projection)

Native Resolution: 1280 x 720

Screen Size: 52"

Aspect Ratio: 16:9

Video Inputs: One RF, three composite,

three S-video, three component, one

HDMI (HDCP), one VGA computer

(D-Sub 15)

Dimensions: 48 3/8" x 35 1/4" x 17"

Weight: 83 lbs.

Warranty: 1 year in home (parts + labor)

Manufacturer Information

PANASONIC CONSUMER
ELECTRONICS

One Panasonic Way

Secaucus, New Jersey 07094

(800) 211-7262

www.panasonic.com

Associated Equipment

Pioneer DV47A and DV59AVi DVD play-

ers, V, Inc. Bravo 1 and 2 DVD players

Zenith HD-SAT520 set-top box,

Test Equipment by PhotoResearch,

Gretag-MacBeth, Sencore, and

Progressive Labs, Tara Labs Air-One

video cables and interconnects,

Eichmann eXpress Power AC cords

definitely holds the PT-52LCX65 back. Unfortunately, it's *not* correctable with an ISF calibration. Insufficient controls are given in the factory service menu.

Light output was 90fL (above average) with a 100 IRE window pattern and nearly that with a full white screen. Black level measured a high 0.18fL giving a peak contrast ratio of 500. Subjectively, though, contrast was good only on bright scenes due to the high black level. ANSI contrast using a checkerboard pattern was low at only 130.

Black-level retention, the ability to hold a constant black level from dark to bright scenes, was very good. Geometry and centering were very good.

Randy Tomlinson is an independent ISF-certified calibrator in the Atlanta area and can be contacted via his Web site at:

www.advancedtechservice.com

B&K AVR 507 Series 2: Low Key and High Octane

Finally, a future-proof, PC-friendly AVR that sounds great, too.

Never underestimate the power of a first impression. With a killer instinct for trends, the A/V industry knows that it's the buttons, lighted dials, and marquee-style displays that net more impulsive credit-card swipes than any red-eye-inducing spec list of power ratings and harmonic distortion numbers. Today's A/V receivers are such exhibitionists that only the missing set of 22" chrome spinners keeps them from a guest spot on *Pimp My Ride*. What's up, then, with the stately and dignified B&K AVR 507 Series 2? While its competitors bristle with a bazillion buttons, the B&K's sophisticated software has reduced the clutter on its brushed-aluminum front panel to a pair of knobs, a few identical pushbuttons, and a spacious, highly-legible display. This seriously complex (and seriously heavy) seven-channel AVR is loaded to its heatsinks with the features and specs that truly matter.

The B&K AVR 507 sports 150Wpc, delivered up by a MOSFET output stage, Class A pre-driver input stage, and computer-grade electrolytic

While its competitors bristle with a bazillion buttons, the B&K's sophisticated software has reduced the clutter on its brushed-aluminum front panel to a pair of knobs, a few identical pushbuttons, and a spacious, highly-legible display.

capacitors. At its DSP heart is a Motorola 371 processor with 24-bit/96kHz A/D and 24-bit/192kHz D/A converters. Future-proofing is a guiding philosophy at B&K. Thus the AVR 507 was built around a modular design that will allow for DSP, digital receiver, and D-A/A-D upgrades down the road. The complete menu of surround

decoders includes Dolby Pro Logic IIx, complemented by the ever-useful Cinema EQ mode to remove excessive brightness from film soundtracks. But purists haven't been ignored—DIRECT MODE offers a full stereo analog bypass. Video hasn't been disregarded either with three 100MHz component inputs and video transcoding (see Setup Notes). In further support of system integrators, the B&K has more connections than a room full of Washington lobbyists—dual IR inputs,

four 12V triggers, an RS232 data port with RJ-45 jack, and an IEEE1394 (FireWire) jack and internal driver. On the front panel a headphone jack is provided, but there are no A/V inputs for the impulsive gamer to hook into.

Bass-management capability is a cut above the norm, allowing the user to choose from a wide range of

crossover frequencies and high- and low-pass slope settings—a feature that takes into consideration the size and potency of the satellite speakers. Subwoofer phase can also be inverted. The ULTRA setting provides an LF feed to the subwoofer, while enabling the rest of the system to run full-range.

Sonically, the AVR 507 was on a par with the majority of other fine solid-state amplifiers. Although a bit dry in the treble, it was never edgy or coarse. There was a hint of warmth in the mids and a satisfying sense of weight in the lower mids and upper bass. Transient speed was excellent, although harmonics were not quite as sweet and extended as those of my reference Plinius stereo integrated. The AVR 507 quickly established its 150Wpc credentials with tight-fisted control in the lowest bass octaves and dynamics that never seemed to run short of breath, even during musical slug-fests like *Pictures At An Exhibition or the 1812 Overture* [Minneapolis/Dorati, Mercury]. Whether the material originated from a stereo or multichannel source, the B&K was never at a loss in the control department.

The AVR 507 played big and had plenty of headroom—an attribute that served it well during Green Day's



"Wake Me Up When September Ends" [*American Idiot*, Reprise], when the intimate, guitar-backed vocal gives way to the entrance of a huge drum and the fully-ignited band. It also exhibited a fine hand reproducing inner details like the double-tracked, John Lennon-like vocals of Justin Barans of The Redwalls [*De Nova*, Capitol]. It handled speakers of medium and even low sensitivity (the Focus Audio FS78SE and the ATC SCM20-2) with relative ease. During the second movement of the Mahler Fifth Symphony [St. Petersburg/Temirkanov, Water Lily], it wasn't quite as expansive and effortless with strings as I've grown accustomed to on this SACD recording. It didn't show the same sensitivity with finely layered pianissimos as it did with rousing fortissimos. A trailing-edge hardness crept over the brass section; the wind section was a little airless and dry. Its soundstaging was excellent, however, particularly in the width of the proscenium, though the B&K couldn't quite match that feat in the depth department because of its slightly forward perspective.

In multichannel mode, the "theater" of a live-broadcast sporting event can trump even a top-notch movie soundtrack. I recently watched U.S. Open Tennis in widescreen high-definition, and Dolby Digital carried over the UHD channel on DirecTV. But despite the vivid high-def images, it was the B&K's immersive and uniform surround-sound performance that utterly transformed the experience. Twenty-thousand screaming fans in the crater-sized stadium court energized the room with shifting waves of applause. The individual "oohs" and "aahs" during a well-played point made me feel like shouting support myself. Since microphones were placed at both ends of the court, the finer details also helped the drama play out—the constant chirp of tennis shoes, the occasional buffet of wind, a chair umpire's call, the flat rebound of the ball as it was nervously bounced between points by the server. (Thankfully B&K offers easy remote access to fine 0.5dB trims of level, for tailoring individual channel output to the source material.)

The home-theater experience is

lost without center-channel performance that is both naturalistic and articulate. And nothing is more revealing of the plusses and minuses of the center channel than a dialogue-heavy movie like that pulp-pleasure *Sin City*, which overlays reams of narration on the violence-heavy plot. What is significant is the timbre change between the distinct

The B&K AVR 507 Series 2 is geared for high-performance enthusiasts who don't get hoodwinked by buzz and gimmickry, who've matured beyond the basic "impulse buy," who take their home theater seriously.

worlds of narrator and actor. Clive Owen would be one instance. As narrator his voice is heavily damped, devoid of ambience, and forward, more directed and apart from the screen. As soon as the movie shifts into the actual scene, the character's dialogue drops back into the screen environment, where it rejoins the voices of the other actors, the sound effects, and the ambience.

The recently released extended version of *Gladiator* not only has some incisive and uproarious commentary tracks with Russell Crowe and director Ridley Scott, but a few well-acted, character-driven sequences that are worth a peek. One scene depicts a military execution where the emperor Commodus questions a lieutenant's loyalty and his willingness to carry out orders. Underscored by somber strings, military drumming, and wind gusts, the archers stand with arrows drawn-back at the ready; the creak of the bows under tension can be heard during the close-up, followed by the whistle of air upon the arrows' release, and the thud of impact as they pierce the chests of the accused. It's a scene built on small details—none of which are missed by the AVR 507.

The B&K AVR 507 Series 2 is

geared for high-performance enthusiasts who don't get hoodwinked by buzz and gimmickry, who've matured beyond the basic "impulse buy," who take their home theater seriously. It's got the features, flexibility, and future-proofing that matter most in a market riven with change. Bottom line: First impressions are important, but it's the

lasting impressions that make the difference. Game, set, and match to B&K.

Setup Notes: A Perfectionist's Paradise

Thanks to the clean OSD (on-screen display) and the redoubtable Home Theater Master MX-700 (fully tricked-out and pre-loaded by the B&K pit crew), the set-up procedure is as comprehensive as it is easy to master. The front-panel pushbuttons have multiple functions that correlate with the appropriate menu items depicted in the display. The B&K software also goes a couple steps beyond the predictable speaker set-up conventions of size, distance, and level. There is a whole host of presets for each and every input, so that users can choose a default processing mode, a decoder, a speaker-channel configuration, and source levels. Furthermore, there are 40 available custom presets (I haven't even mentioned macros!) that allow the user to take a virtual picture of preferential settings and save them for later recall. For example, if you want different trim-levels and EQ for a specific radio station, you can save them to a preset for that station. Very cool. The procedure however is a little

B&K AVR 507 Series 2 Audio/Video Receiver

STRENGTHS

- Excellent dynamics and bass control
- Smooth, uniform surround performance
- Superb flexibility
- Room resonance/EQ controls, are winners

WEAKNESSES

- Preset programming could be more intuitive
- Stereo sonics a bit dry

tedious, (each radio station needs to be input one by one), but B&K has hinted at some shortcuts it's considering.

Rather than deal with the unpredictable and often irreproducible nature of most auto-calibration procedures, B&K has created its own brace of equalization programs. The first is ROOM EQUALIZATION designed to improve timbre matching between speakers in user-selectable bass and treble ranges. This is especially useful to compensate for characteristically bright movie soundtracks or to smooth response when placing speakers behind a projection screen. Additional pre-programmed EQ settings like LOUDNESS (low-level listening), VOCAL (a nighttime mode, but also applicable for PCM or analog), and FLAT (no EQ) can be selected on-the-fly via the remote control.

Of even greater interest is the ROOM RESONANCE menu—a system of notch filters and shelving equalizers that can subdue in-room resonant peaks in the bass region that tend to muddy up lower-octave response and cloud the sonic picture further up in frequency band. With the aid of your

This is one very "PC" audio-video receiver. Mind you, you won't need a laptop to blast off into home-theater heaven, but if keyboard optimization and integration are your thing by all means take advantage of the SR10.1 Remote Editor Software (included) and the BK-Suite set-up software (a download from the B&K Web site).

own SPL meter, B&K's tone generator sweeps the listening room in the 20Hz to 300Hz range. The user notes the three highest peaks in that range, as well as the frequencies above and below the peak where the difference in frequency is less than 3dB. Using B&K's simple formula, you simply adjust the notch level and notch width (between 4.8Hz and 33.4Hz) accordingly. Tricky? Not at all—actually it's fun, sonically rewarding, and much more involving than "going couch potato" during conventional auto-cal.

This is one very "PC" audio-video receiver. Mind you, you won't need a laptop to blast off into home-theater heaven, but if keyboard optimization and integration are your thing by all means take advantage of the SR10.1 Remote Editor Software (included) and the BK-Suite set-up software (a download from the B&K Web site).

Even though the SR10.1 remote control comes pre-programmed with 10 input devices labeled to match the inputs on the back panel of the 507, the Remote Editor software makes it a drag 'n' drop delight to personalize the intelligence of the SR10.1 through controlling extra source devices,

adding macros, and creating punch-throughs. The BK-Suite software can more completely and easily optimize all system setup and preset functions and favorites for Zone A and B, and save them together in a *.bkd file.

SPECIFICATIONS

B&K AVR 507 Series 2

Price: \$3498

Decoding formats: Dolby Digital Surround EX, Pro Logic II, DTS-ES, and Neo:6

Number of channels: Seven

Power output: 150Wpc (20-20kHz into 8ohms)

Audio inputs: Analog, seven; digital, six coax and five optical

Video inputs: Three component-video, seven S-video, seven composite, IR, RS232

Audio outputs: Analog, three and 7.1 pre-amp out; digital, two coax and one optical

Video outputs: One component, four S-video, five composite

Dimensions: 17.12" x 7.62" x 16.19"

Weight: 55 lbs.

MANUFACTURER INFORMATION

B & K COMPONENTS, LTD

2100 Old Union Road

Buffalo, New York 14227

(800) 543-5252

www.bkcomp.com

ASSOCIATED EQUIPMENT

Video: Sony 32" XBR-400,

Zenith HD-SAT520

Front End: Digital-Sony SCD-C222ES,

Sony DVP-9000ES

Tuner: Magnum Dynalab MD-90

Integrated amplifier: Plinius 8200 Mk2,

Speakers: ATC SCM20SL, ATCSCM35.

PSB T55. REL Britannia B3

Accessories: Richard Gray 400S

conditioners

Speaker cable and Interconnects:

Nordost Blue Heaven, Kimber Kable

BiFocal XL, Wireworld Equinox III, CPCC,

Wireworld Silver Eclipse power cords.



Onkyo DV-SP502 Universal Player

An affordable universal player with core elements that "get it right."



Since the DVD format was launched in 1996, DVD players have been introduced with progressively better audio and video performance, improved features, and vastly lower prices. The first players were well over \$1,000, and now DVD players far below \$100 have been spotted in the grocery store! Onkyo's \$299 DV-SP502 universal player continues the trend toward providing more performance per dollar, though we can safely guarantee you won't find it next to the frozen foods section. In this

Onkyo's \$299 DV-SP502 universal player continues the trend toward providing more performance per dollar, though we can safely guarantee you won't find it next to the frozen foods section.

review, I'll compare the features and performance of the Onkyo player with that of other comparably priced players and with the performance of a much higher-priced unit—the award-winning Yamaha DVD-S2300 universal player.

The Onkyo DV-SP502 is the firm's first universal player (though Onkyo's high-end Integra division has offered many over the years). The DV-SP502 supports DVD-Video, DVD-Audio, SACD, MP3, WMA and JPEG still picture playback, plus other formats listed at the end of this review. DVD-Audio

and SACD playback capability separate this Onkyo player from the company's entry-level model. Leading features include built-in Dolby Digital and DTS decoders, 192kHz/24-bit audio DACs and progressive scan video output with 108MHz /12-bit video DACs.

Audio Performance

I connected the six analog audio outputs of the Onkyo player to the multichannel analog inputs of my Yamaha RX-V3300 A/V receiver to evaluate the digital to analog converters and

decoders in the player, bypassing those in the receiver. I also connected the coaxial digital output for CD audio.

SACD

I played several two-channel and multichannel SACD recordings and was initially impressed with the overall sound quality of the Onkyo player. One of my favorites is Bela Fleck's *Drive* [Mobile Fidelity Sound Labs], a great combo of banjos, guitars, fiddles, and bass. On the "Slipstream" track from that album the Onkyo revealed tight, articulate bass response that quickly

had my feet tapping with the music. Midrange reproduction was clean, although I noted a lack of high frequency detail, which created a slightly veiled presentation. Monica Mancini's beautiful voice in *Ultimate Mancini* [Concord Records], a hybrid SACD, sounded very good both in two-channel and multichannel mixes, but I again noticed a similar lack of high frequency detail and openness. The multichannel mix produced a very full, three-dimensional soundfield, but with just slightly less high-frequency detail than I'm used to hearing. Similarly, James Taylor's *Hourglass* SACD [Sony Records] had very good bass with clear, open midrange but fairly subdued treble response. The lack of high-frequency detail also reduced imaging precision. After comparing the sound quality of the same discs played on my reference player I would describe the SACD reproduction of the Onkyo player as fair.

DVD-Audio

Steely Dan's "Shame About Me" and "Jack of Speed" from the *Two vs. Nature* [Giant Records, DVD-A] had full, tight bass response, with midrange and high frequency response that sounded much more open and detailed than any of the SACDs I tried. Likewise, Fleetwood Mac's *Rumours* [Warner Bros. Records, DVD-A] sounded detailed, open and clean, with exceptional bass response, while Linda Ronstadt's *What's New* [Elektra, DVD-A] sounded

as good as I've ever heard it, capturing Ronstadt's voice with all of the dynamic range and clarity I'm used to hearing. My conclusion: This player does a significantly better job with DVD-A playback than it does with SACD material.

CD Audio

I tried Diana Krall's "Let's Face the Music and Dance" from *When I Look in Your Eyes* [Verve Records], through the DV-SP502, and although playback was enjoyable in most respects, I

found the player made Krall's voice sound somewhat distant—not veiled or obscured, just slightly distant. I might have overlooked this characteristic had I not listened to this disc extensively on my reference universal player. However, when I listened to Alison Krauss and Union Station's *New Favorite* [Rounder Records], the "distant quality" was gone. In fact, the Onkyo demonstrated exceptional clarity, detail and midrange presence on this recording. As with DVD-A playback, bass response on CDs was excellent, very quick and tight. I would conclude that the Onkyo DV-SP502 performs very well with CD and DVD-A material, but is only fair on SACDs. Overall, the player does a good job on both two-channel and multichannel playback.

ent tests are "Picture Detail," which can be used to evaluate both interlaced and progressive scan displays, and the "Color Bar/Vertical Detail" test. Before performing the detail test I ensured that the sharpness controls on the player and the display were set in the default position. The "Picture Detail" test revealed that the Onkyo player produced excellent detail, in fact, better than my near-\$1,000 reference player.

Missing from the Onkyo DV-SP502 are DVI (Digital Video Interface) or

Correlation De-Interlacing, a circuit designed by Faroudja, Inc., which processes a progressive scan image on a pixel-by-pixel basis rather than a (scan) line-by-line basis and produces excellent picture quality. If you are considering a DVD player with progressive scan output, you may want to compare the DV-SP502 against a player with DCDi. A few DVD players in this price range offer DCDi de-interlacing.

Ease of Use and Operation

As we see it, a player's user interface



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Video Performance

I performed video tests using a video test disc from Silicon Optix—the *HQV Benchmark* DVD. However, since I have an interlaced television, most of the tests do not apply because they are intended to evaluate progressive scan displays. In all of the tests I connected the player to the monitor with an S-video connection. Two of the rel-

HDMI (High-Definition Multimedia Interface) outputs. DVI is a relatively new, all-digital interface format that carries video signals only, while HDMI carries both audio and video signals. There are a few DVD players at or even below the Onkyo's price that offer HDMI and/or DVI connectivity, so that you may want to take this factor into account when deciding if the DV-SP502 is right for you—especially in light of the fact that a growing number of other components in your system, such as video displays and A/V receivers, are beginning to offer DVI or HDMI compatibility.

The Onkyo utilizes the MediaTek MT1389EE chip, a combination MPEG decoder/video processing chip, although I did not evaluate its performance since I have an interlaced display. Some DVD-V players have a feature known as DCDi, or Directional

and overall ease of use can be just as important as audio and video performance, especially over the long term. In particular, there are two front panel/remote control convenience features that I believe are vital in a universal player: An SACD/DVD-A/CD Audio button to switch between disc formats, and a two-channel/multichannel switch. On the Onkyo DV-SP502 player these controls are found *only* in the on-screen set-up menu, so that the disc must be stopped before any changes in disc format or channel configuration changes can be made and the TV or monitor must of course be on to view the necessary menus.

Bass Management

The Onkyo player does not include any bass management features other than SUBWOOFER ON/OFF, which we see as a serious omission. Bass man-

I tried Diana Krall's "Let's Face the Music and Dance" from *When I Look in Your Eyes* [Verve Records], through the DV-SP502, and although playback was enjoyable in most respects, I found the player made Krall's voice sound somewhat distant—not veiled or obscured, just slightly distant.



agement is an important issue for any system that includes one or more powered subwoofers, and players should ideally provide settings to specify the

many other players in this price range do provide full bass management controls, we think it is high time for Onkyo to include them.

The Onkyo DV-SP502 Universal DVD player is a good value at \$299. With multi-format playback capability it offers popular basic features, though it lacks DVI or HDMI outputs and comprehensive bass-management controls.

subwoofer crossover frequency, and to set delay times (distances) and volume levels. Although many A/V receivers and controllers include bass management, these circuits are usually bypassed when using the multichannel analog inputs for SACD or DVD-Audio recordings. So unless the universal player has bass management functions of its own, you have no way of properly directing the bass signal to the appropriate speaker(s) at the appropriate frequencies and levels, and with correct delay timing. Since

However, despite not offering comprehensive bass management controls, the Onkyo nevertheless exhibited excellent bass response in all of my listening tests.

Summary

The Onkyo DV-SP502 Universal DVD player is a good value at \$299. With multi-format playback capability it offers popular basic features, though it lacks DVI or HDMI outputs and comprehensive bass-management controls. Although you can find competitively-priced players that offers these features, it is important to realize that additional features sometimes come at the expense of shortcomings in core performance. Fortunately, the DV-SP502 gets many of the core elements right.

I use my reference universal player as much or more for music as for movies, so the audio performance of any player is a crucial factor for me, and I found I could listen to the Onkyo player for hours on end without listening fatigue, a good indicator of sound

quality. The Onkyo's CD and DVD-Audio performance were very good—significantly better than its SACD reproduction for the reasons described above. The player also performed very well with DVD-Video programs, at times outperforming my reference player in terms of picture detail.

Consider the Onkyo DV-SP502 if you're shopping for a low-to-mid-priced universal player that gets the basic elements of sound quality mostly right, and that offers excellent real-world picture quality. Just don't expect to find it in the grocery store.

SPECIFICATIONS

Onkyo DV-SP502 Universal Player

Price: \$299

Formats: DVD-Video, DVD-Audio, Video CD, Super VCD, Audio CD, CD-R, CD-RW, MP3, WMA, JPEG, SACD multichannel, DVD-R, DVD-RW

Types of Outputs: one 6-channel analog, two digital audio (one optical, one coaxial), one composite video, one S-video, one component video

Dimensions: 17 1/8" x 3 3/16" x 12 3/16"

Weight: 7.5 lbs.

MANUFACTURER INFORMATION:

ONKYO USA

18 Park Way

Upper Saddle River, NJ 07458

210-785-2600

www.onkyousa.com

ASSOCIATED EQUIPMENT:

Yamaha RX-V3300 A/V receiver and DVD-S2300 DVD/SACD player, Morel IS-9A powered subwoofer and SoundCenter 5 center channel speaker, Paradigm Reference Studio 100 loudspeakers, Klipsch KSB-2 Surround Speakers, Sony KV-3535 television, MIT Terminator speaker cables and interconnects, AV Deco furniture

Onkyo DV-SP502 Universal Player

STRENGTHS

Excellent sound quality on CDs and DVD-As, picture sharpness rivals that of more costly players, reasonably priced.

WEAKNESSES

SACD sound quality is just fair, no DVI or HDMI outputs, needs better bass management controls, would be nice to have direct (non-menu driven) switching for disc formats and stereo/multichannel mixes.

Dynaudio Focus 220 Loudspeaker

These Scandinavian speakers show why clarity is its own reward.

It bears repeating: Today, we can put together a high-performance, highly musical system for a fraction of what that cost a decade ago. And we have choices in each category to suit our musical tastes. The Dynaudio Focus 220 joins my list of fine reasonably priced loudspeakers.

This Danish company, which has been building speakers since the late 1970s, was long known in the U.S. as an OEM manufacturer of drivers that were low in distortion, extended in dynamic range, and high in power-handling capabilities. I once had speakers with Dynaudio drivers and they were wonderfully clean and clear. As I increased the quality of the system around them, they met every occasion with grace. Dynaudio's own loudspeakers always sold well in Europe, and in 1995 they appeared in the U.S.

The Focus 220 is a floor-standing model, simple and handsome. It matches in looks and undoubtedly in

experience, not only doesn't allow bi-wiring, but doesn't need it. This is also one in which spikes matter and grille cloths do not. Since I have dogs with dangerous tails, I ended up with the grilles on, since I heard no difference with and without. And though I don't have a carpet, the spikes increased the perception of soundstage air and light, and so remained in use.

As the owner's manual warns, the 220s need break in. Out of the box, you can hear the Dynaudio clarity, extension at both frequency extremes, and richness in the midrange. But I also heard a touch of graininess in the treble, described by one listener as "whishiness" on high percussion (which may be wishy by nature), high strings, and flute. This effect went away in about a week, and the overall frequency balance just gets better and better. I also heard a slight forwardness in the upper midrange, which lingered.

The bass is deep and clean. The

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sound quality the others in the Focus series, a home-theater package with satellites, center channel, and subwoofer. This could be a boon for those who want to expand into multichannel sound.

I had the 220s out of their boxes and hooked up in about 20 minutes. This is a design that, unusually, in my

overall sound of these speakers is powerful and smooth, exciting when music is, as calming as a deep clear voice when music calls for that. And goosebumpily thrilling when, again, the music is. All this depends a great deal on that clear, deep, beautiful bass.

And the 220 is "fast." I usually



avoid this word like the very devil—never until recently did I hear a comprehensible explanation of it in audio terms. But in a note sent to *The Absolute Sound* last month on TAS founder Harry Pearson's latest system, designer Carl Marchisotto wrote about an amplifier: It is "fast, but not just in the normal ways. ... The modulation of one instrument or voice by another, which is common in reproduced music, seems to have been eliminated, and this adds greatly to the feeling of experiencing 'live sound.'" This, indeed, describes what I sense as "fast." And the description is quite true for the Dynaudio. The "normal" way of system speed I translate as transient information so clean, clear, and crisp that it drives the music with sparkle. This too the Dynaudio accomplishes. And the crossovers are so smooth and the drivers so matched, you hear no seams in these sensitive spots, where seams appear if seams there be.

Focus 220 2.5-way
Floor-Standing Loudspeaker

STRENGTHS

Clarity, power, spectral balance, wonderful bass. Joins with others in the Focus series to make up a home-theater package.

WEAKNESSES

A slightly protruding upper midrange off-axis, and highs that can be bettered, but not by many in its price range.

All these characteristics I assayed with Saint-Saëns' *Carnival of the Animals*, the middle piece on a spectacular (old) recording from EMI that also includes Prokofiev's *Peter and the Wolf* (nearly flawless) and Britten's *Young Person's Guide to the Orchestra*. This *Carnival* is deliciously performed by the Philharmonia Orchestra under Efram Kurtz, with Hephzibah Menuhin and Abbey Simon on pianos. The flute/piccolo parts—a passage that starts out on flute and ends on piccolo as seamlessly as the Dynaudio's performance—are a good test for treble wishiness. There were, after break-in, no impurities.

Even two weeks in, though, I was still hearing that small forward thrust in the upper midrange, particularly when I was listening slightly louder than normal (for me). On Patricia Barber's *Live in Paris* [EMI], at jazz-club volumes, she was front and center and intimate, her silvery voice delivering sentiments wry and biting. This CD seemed to well recorded, but the band, which is excellent, was, oddly, at once loud and recessed. The voice dominated in ways not entirely normal.

Then I adjusted my listening height (down until tweeter was dead-on at ear level), and lo! the pesky forwardness vanished, and the stage locked in. The overall sound was clear as a mountain stream, tinkling and dancing and plunging into the depths, and Barber's musicians took on the living quality that she had possessed all along. I eased up in the seat—the soundstage constricted around her voice, which seemed to swell. Back down, again—perfection. Sweet-spot magic.

After playing with this phenomenon on many recordings, I have concluded that in my room, not only do the 220s need extra-careful positioning (here,

slightly toed in, about 30" from the rear wall—I did not use the supplied "bungs," didn't need them, as I also didn't need a subwoofer). But the listener requires the same care. I measured, as suggested in the manual, the same distance between the speakers as that from the inside edge of each speaker to the listener's chair—an equilateral triangle, for me, at 70.5 inches. (And don't forget the ears at tweeter level, which you may be able to achieve by adjusting the height of the front spikes). Off-axis, the effect on non-critical listening is not disturbing. But if you want to really hear and feel your music, you need to be seated properly.

And then, what a treat you're in for. This speaker, on good recordings, will melt you into their loveliness. Less than well recorded CDs are revealed for what they are, though. On the exquisitely performed *If You Love Me*, with mezzo Cecilia Bartoli [London], the audibly dull recording robs these love arias of that final drop of heaven.

To see how much these characteristics might owe to a synergy between speaker and amplifier, I replaced the Musical Fidelity kW500 integrated amplifier, a hybrid design, with the all-tube Prima Luna amplifier and pre-amp, which are a hair "softer" in sound. The differences were slight—yes, softer, but not too. Then I put in the MF X-150 integrated, less powerful than the kW500, and of a price more in keeping with the speaker. The quality of the sound was still gloriously clean and clear. The volume just needed to go up a bit—no surprise. So these speakers seem to get along nicely with a variety of good amplifiers.

The words that best describe the 220s for me are "powerful," "clear," and "exciting." Intimate groups come out into the extensive soundspace with air and light and force. Orchestras (a rarity, in my experience, for smallish systems) are satisfyingly spread out beyond, behind, and above—and dynamic. Featured instruments in good recordings sparkle. The organ at St. Mary's in San Francisco [Reference Recordings] rattled body and floor, yet the individual timbres remained precise. Chico Freeman's miraculous saxophone on *Saudades*

[Water Lily Acoustics] was in turn reedy, breathy, and sinuous—you feel as though you're eavesdropping on a jam session, an intense Brazilian body-jazz, a whirlwind tour of heart and mind. The fellows were having fun, so there is, o rara avis, not a *single* boring cut on this CD. And the playing—ah, this playing is surely some of the best in the world, and deliciously reproduced through the Dynaudios. This wonderful recording appeared in 1990 and vanished with hardly a ripple. If you're lucky, you might find a used copy online.

You will be lucky as well if you treat yourself to the Dynaudio Focus 220. At \$3000, it is a spectacular bargain. Alongside my reference, the Spendor S8e, also \$3000, it holds its own. These two splendid speakers are both clear and rich in midrange and mid-bass. The Dynaudio's treble, though extended and fine, is not as sweet and lovely as that of the Spendors. And the Spendors are more forgiving in placement. But the Dynaudios go further down in the bass.

So maybe you are triply lucky: You get to let your music make a difficult choice easier. The Dynaudio will have the edge over most of its competitors on hard rock and on the full spectrum of complex orchestral music.

SPECIFICATIONS

Focus 220 2.5-way floor-standing loudspeaker
Price: \$3000
Driver complement: (two mid/bass drivers; one tweeter)
Sensitivity: 87dB
Power handling: 250 watts
Impedance: 4 ohms
Dimensions: 8.1" x 38.6" x 11.6"
Weight: Approx. 42 lbs.

MANUFACTURER/DISTRIBUTOR INFORMATION

DYNAUDIO NORTH AMERICA
1144 Tower Lane, Bensenville, IL 60106
(630) 238-4200
www.dynaudiousa.com

ASSOCIATED EQUIPMENT

Musical Fidelity kW500 and X-150 integrated amplifiers; Prima Luna Three pre-amp, Five amp; MF C5 CD player; Nordost Blue Heaven cables; Monster Cable HS3500 powerline conditioner.

Best of CEDIA EXPO 2005

Our editors pick the best of the best from CEDIA 2005.



This year the editorial staffs of *AVguide Monthly* and *The Perfect Vision* joined forces to cover CEDIA Expo, 2005, and you'll soon see the results of our reporting efforts in two ways. First, you'll soon be able to explore avguide.com's online CEDIA 2005 Show Report, which will include photos and brief descriptions of well over 100 new products, ranging from displays and loudspeakers to AVRs and convergence products—and everything in between. Second, you'll find in-depth analysis of industry trends and product developments as observed at CEDIA in an upcoming issue of *The Perfect Vision*.

But in our experience, the very first question fellow enthusiasts pose whenever we return from CEDIA is this: "What did you see that was *really* hot?" In an attempt to answer that very question, five of our editors offer their picks for the best products (or technologies) seen at CEDIA in their respective areas of expertise. Enjoy.

Chris Martens,
Publisher/Editor, *AVguide.com*
and *AVguide Monthly*

Best of CEDIA 2005: Front Projectors & Non-Display Video Products

Scott Wilkinson,
Video Editor, *The Perfect Vision*

Texas Instruments 1080p DLP Front Projection

My favorite video demonstration at CEDIA was not a forthcoming product, but rather a glimpse at the future of front projection. After much hue and cry from everyone in the industry, Texas Instruments finally



JVC's HD-ILA Rear Projection Television

announced the imminent availability of a true 1920x1080 DMD (Digital Micromirror Device), the imaging chip at the heart of DLP.

Of course, 2048x1080 DMDs are currently available for commercial digital-cinema projectors, but this is the first so-called 2K chip intended for the consumer market. The new 0.95-inch DMD has an array of 1920x1080 mirrors, which means it does not need "wobulation" (a pixel-shifting technique that TI calls SmoothPicture) to display 1920x1080 pixels on the screen. By contrast, all current 1080p DLP rear-projection displays use 0.85-inch DMDs, each with an array of 960x1080 mirrors, requiring wobulation to display full 1080p resolution.

TI's demo at CEDIA included two front projectors—single-chip and 3-chip—that were hand-built by the company's engineers to demonstrate the capabilities of the new DMD. The projectors were fed from a DoReMi video server at a data rate of 30Mbps and fired onto a 15-foot-wide screen. Both used DarkChip3 technology to enhance the black level and contrast, and they also incorporated Silicon Optix's Realta HQV processing. The all-HD material included custom skiing

footage, the trailer for *Star Wars Episode III*, and clips from *The Island*, *Madagascar*, and *Kill Bill 2*.

The image was jaw-dropping. Blacks were deep and rich, and colors were well-saturated and very lifelike. I was sitting way too close to the screen for its size (the demo area was pretty small), yet I saw absolutely no evidence that the image consisted of discrete pixels. If this is the future of home-theater front projection, there'll be little reason to venture out to the local googolplex.

Best of CEDIA Expo 2005: Flat Panel and Rear Projection Displays

Gary Merson,
Senior Editor, *The Perfect Vision*

JVC HD-ILA and Sony SXRD 1080p rear projection television

The display segment at CEDIA was loaded with new 1080p displays including flat panel LCDs and microdisplay-driven rear projectors based on LCoS (with entries from Sony, JVC, Brillian, and LG), DLP (with



Phase Technology's dARTS System

new entries from HP, Mitsubishi, Toshiba, Samsung), and LCD technologies (Epson). All these sets put 1920x1080 pixels on the screen and produced razor sharp images, and most produced very bright images, but to me there were two standouts, both using LCoS technology: JVC's HD-ILA and Sony's SXRD rear projectors.

Sony's new SXRD offerings include the 50" KDS-R50XBR1 and 60" KDS-R60XBR1, priced at \$4,000 and \$5,000, respectively, which are shipping now. Both sets produced fantastic, full high-definition images using three of Sony's newly-developed .61" SXRD chips. In comparison to models based on other technologies, several things stood out about Sony's LCoS sets; specifically, they showed significantly fewer digital noise artifacts than the competition, while producing very deep blacks and bright whites. The new SXRD chip touts a remarkable 5,000:1 chip contrast ratio, and promises long life thanks to an inorganic crystal alignment layer.

I was similarly impressed with JVC's second-generation rear projectors that now use three .7" 1080p HD-ILA chips. The line consists of the 56" HD-56FH96, the 61" HD-61FH96, and the 70" HD-70FH96, priced at \$4000, \$4500, and \$6000, respectively, and slated to become available in October. Like Sony's SXRD chips, JVC's HD-ILA chips also have an inorganic alignment layer and, again like the Sonys,

use a dynamic iris system to produce deep blacks with very bright whites. The JVC sets also had low noise, no doubt aided by the firm's digital and mosquito noise suppression circuits. An additional benefit: The JVC sets will accept native external 1080p signals.

Best of CEDIA Expo 2005: Loudspeakers

Chris Martens,
Publisher/Editor, Avguide.com and
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Phase Technology dARTS (digital audio reference theater system)

For decades Phase Technology has been a behind-the-scenes loudspeaker manufacturing powerhouse, acting quietly as the OEM producer of speaker systems that carry the logos of some of the most respected high-end firms in our industry. But now, with the advent of the firm's new digital audio reference theater system (dARTS), we think Phase Technology will achieve broader recognition in its own right—and rightfully so.

dARTS is an extremely high performance, audiophile-grade, DSP-controlled, multichannel loudspeaker system that comes with its own Class D amplifiers. To create dARTS, Phase Technology teamed with two technology partners: D2Audio, developers of the dARTS amplifier, and Audyssey

Laboratories, developers of the DSP control system.

Many speakers use DSP to manage loudspeaker crossover points and to set voicing, equalization, and time-alignment parameters, and Audyssey's MultEQ XT system does all this and more. Specifically, MultEQ XT measures and models room acoustics and room-speaker interactions, then applies advanced, "fuzzy logic" algorithms to generate individualized, DSP-driven speaker compensation curves that—get this—enable the system to optimize frequency response at *multiple locations* within the listening space at once. Almost unbelievably, the system works like a charm!

In fact, the MultEQ XT system works with such speed and precision that Phase Technology needed to develop faster-responding driver units to tap the system's full potential. The result: A landmark speaker system that is chockfull of purist-grade audiophile virtues and that sounds good not just in one central "sweet spot" but virtually *everywhere* in the room.

Best of CEDIA Expo 2005: A/V Receivers, Controllers and Multichannel Amplifiers

Neil Gader,
Associate Editor, *The Absolute Sound*
and *The Perfect Vision*

Harman Kardon AVR 740 (\$3499; Q1, 2006)

Harman Kardon's handsome 7.2-channel AVR 740 exemplifies the ever-changing state-of-the-art in home theater. It may be the ultimate expression in the here and now of converging technologies providing the consumer with more entertainment options. First, it makes home radio sexy again by building in an XM satellite receiver—a device already embraced in the automotive and hand-held markets. Just add an XM antenna and go online to subscribe. Second, the HK integrates the ubiquitous iPod, a mini hard drive that made wearing ten thousand songs around your neck trendy. With the simple addition of the "The Bridge," an optional, single-wire, powered docking station it will not only power up and

recharge the iPod but will provide remote control access to the little Apple's menus and navigation systems. And the entire enchilada will be displayed from the AVR 740's front panel or OSD, a feature that most AVRs haven't caught on to yet.

HK hasn't short-sheeted this receiver in the specs department either. The AVR 740 offers an impressive *real world* power rating of 85Wpc into seven channels, driven simultaneously at full bandwidth. Texas Instruments has provided its 32-bit, 250MHz DSP chips and there are premium AKM 24-bit/192kHz DACs. The extensive surround decoding options include Lexicon's premium Logic7 modes. Thanks to onboard Faroudja DCDi video processing the receiver can upscale 480i and 480p sources to 1080i via its HDMI version 1.1 output—the digital connection that is fully compatible with DVD-A. Finally, the AVR 740 includes the latest version of Harman's EzSet/EQII automatic speaker calibration and room equalization system, which can even equalize stereo subwoofers individually—hence the 7.2-channel moniker.

The all-new TC-30 color LCD remote control mimics Logitech/Harmony's activity-based unit and includes software and USB hookup. The receiver is A-BUS ready and can stream XM to multiple zones in an A-BUS distributed-audio system.

And did I mention that the blue-lit silver-black design is a real looker?

Best of CEDIA 2005: Convergence Products

Arnie Williams,
Managing Editor, *AVguide Monthly*
and *The Perfect Vision*

Microsoft: Windows XP Media Center Edition 2005

Dolby Laboratories: Dolby Sound Room, Dolby Home Theater, and Dolby Master Studio

Dolby Laboratories has been working with Intel for a couple of years now to develop quality sound capabilities at the motherboard level. That coupled with Microsoft's work on



Harman Kardon AVR 740

Windows XP Media Center Edition 2005 is helping to stimulate PC-controlled media centers as an increasingly sought-after part of home audio and home theater systems. Media Center PCs are available from the standard PC giants such as Dell, HP, Sony, Gateway, and Toshiba, but the field is also seeing development from specialist companies such as Alienware, Aphanix D-Vine, and Niveus Media.

At CEDIA, Dolby was demonstrating several of its Intel-based products. Dolby Headphone, through a Philips iteration, allowed wireless listening in 5.1 surround sound. Dolby also provides three levels of surround-sound capabilities to PC makers. Dolby Sound Room includes Dolby Digital, Dolby Pro Logic II, Dolby Headphone, and Dolby Virtual Speaker, transforming any stereo content into 5.1-channel surround. The technology is compatible with Windows Media Player, iTunes, Musicmatch, DVD players, streaming media players, personal video recorder (PVR)/TV tuners, and

personal media libraries.

A next-level technology called Dolby Home Theater adds Dolby Digital Recording or Dolby Digital Stereo Creator and Dolby Digital Live features. Users can create their own DVDs with Dolby Digital Technology. Games and DVDs can be enjoyed in stereo converted to 5.1 surround or through up to 7 speakers for more natural surround sound. A single digital connection to an A/V receiver allows playback of all PC-based audio.

Dolby Master Studio adds Dolby Digital 5.1 creator and Dolby Digital EX. The technology gives you the ability to author DVDs with discrete 7.1 channels. This level is aimed especially at PC gamers, providing high-quality, realistic audio. It also transforms stereo and 5.1-channel content into full 7.1-channel surround sound.

Each level of Dolby technology sports its own unique logo that appears on Media Center PCs to identify the motherboard capability.

Dolby Sound Room, Dolby Home Theater, and Dolby Master Studio



T.H.E. Show Report 2005

Jon Valin shares high-end discoveries from Indy's other A/V show.

My CEDIA assignment this year was to cover surround-sound loudspeakers at T.H.E. (The Home Entertainment) Show—an alternative, off-site exhibition which, as those of you who read our sister publication, *The Absolute Sound*, already know, runs concurrently with both CES and CEDIA. Though plenty of high-end loudspeaker manufacturers play on amid the din of the convention center (or simply have static displays), T.H.E. Show offers exhibitors private rooms in which their products don't have to compete against the soundtrack from *The House of Flying Daggers*, which seemed to be blaring from virtually every booth, hut, or lean-to on the CEDIA show floor.

I'll begin with a two-channel system, the **Tyler Acoustics Linbrook Signatures** (\$7200/pair)—tall, three-way, quasi-D'Appolito floorstanders that are sold factory-direct by their congenial designer Tyler Lashbrook (www.tyleracoustics.com). Mated up with some very fine Edge electronics (the Signature 1.1 preamp, G8 amp, and Edge's new CD player—all reviewed in *The Absolute Sound*), the



Tyler Acoustics Linbrook Signatures

Linbrook Signatures were commendably sweet and smooth overall, though not the last word in detail and a bit forward and sibilant in the midrange. How they might fare in a surround system I can't say, though their excellent low bass and midbass probably bode well.

Next, I visited the **Vandersteen/Audio Research** room, where **Vandersteen Quatros** (\$7000/pair)—time-and-phase-aligned, four-way floorstanders with integral powered subs (rather like baby 5As)—were serving as the left/right duo, coupled with Vandersteen's exceptional **VCC-5 Reference Center** center-channel (\$1995), **VSM Signatures** surrounds (\$1795/pair), and four powered **2Wq** subwoofers (\$1295 each). The Vandie system was being fed by **Audio Research's MP-1 Multichannel Preamplifier** (\$6995)—an analog-only unit that is, in fact, a true six-channel preamplifier and not a processor—and ARC's excellent **150M Modular Multichannel Power Amplifier** (\$9200 in the 7-channel version I heard). The multichannel soundfield—on all sources, film and music—was unusually spacious and cohesive, with superb ambience retrieval and lovely tonality. (I was particularly impressed by the seamless way the center channel blended with the front L/Rs.) Though a little on the dark side and a bit soft on transients (for instance, on the timp strikes of the Telarc recording of *The Rite of Spring*), the Vandie system was one of the better sounds at T.H.E. Show.

It wasn't the sonics of the May Audio Marketing exhibit that caught my fancy; it was the technology. A British company called **Sonneteer**—distributed in the U.S. by May—was demo'ing an exceptionally clever wireless audio-distribution system called the **Bardaudio System**. Bardaudio works like an ultra-high-bandwidth FM

radio transmitter (using the 2.4GHz band), beaming the digital signal of a CD/SACD/DVD-A player from a transmitter pod (called a **BardOne Tx**) to a remote receiver—or "recevier" as we like to spell it at TPV—pod (called a **BardOne Rx**), where it is converted to analog and piped via conventional interconnects to your processor's stereo analog inputs. The Bardaudio System also offers a powered receiver



Bardaudio System

pod (the **BardThree**), which not only decodes the digital signal of the BardOne Tx but amplifies it via a built-in user-adjustable 25W amplifier. All you have to do is plug a BardThree into a spare wall socket and attach loudspeakers to it via its integral speaker cables, and you can listen to music virtually anywhere in your house without having to purchase and set up another amp and preamp. Get a second BardThree, and you can do the same in any two rooms. On top of this, the BardOne Tx broadcasts signals in eight separate stereo channels simultaneously, so you can hook it to eight different stereo sources and listen to one or more of them in any or all of the rooms of your house in which you

have a BardOne Rx or BardThree! No cables to run through walls or under floors; no computers or hard drives to configure or Ethernet switchers to manage; no menus to navigate. A truly elegant solution to whole-house audio distribution. (The "broadcast" distance of the BardOne Tx/Rx/BardThree is claimed to be 40 meters or so in any direction.) The BardOne Tx is packaged with the BardOne Rx for \$895. The BardThree is priced at \$1295.

After Bard'ing it up, I paid a visit to the Avantgarde/BAT room, where a pair of 2-way spherical-horn **Avantgarde Duo Omegas** (\$26,000/pair), five 2-way coaxial-spherical-horn **Solos** (\$4900 each), and four powered **230** subwoofers (\$5500 each) were being fed by **Balanced Audio Technology's AV-7** seven-channel preamplifier/processor (\$7000), **VK55** power amplifier (\$3995, on the L/R Duos), and **VK5150** five-channel amplifier (\$3995, on the C/RS/LS/RR/LR Solos). The sound was very spacious, immersive, and, as one would expect from horn loudspeakers, dynamic, with Vandersteen-level ambience retrieval;

that said, some of the surround and rear-channel information seemed a bit localized to me (such is the nature of horns). If you can live with a system that occasionally calls attention to its parts, the Avantgarde home-theater can, with the right source material (*The House of Flying Daggers*, for instance), really flood the room with explosively dynamic sound.

After having the drums of *Flying Daggers* beaten into me by the Avantgardes, I sidled over to the **Cabasse/Bel Canto** room, where two of its triaxial-concentric "eyeball" **Baltic 2s** (\$4900 each), four dual-concentric **iO's**, and a single huge **Saturn55** subwoofer (with a 21" driver!) were playing back—you guessed it—*The House of Flying Daggers*. (The damn thing was inescapable—even at T.H.E. Show.) I'd have to say that the *Flying Dagger* drums were reproduced with slightly better decay than they were in the Avantgarde room and that the Cabasses filled in the peripheries of the room at least as seamlessly as the Vandersteens. Tonality, on all source material, was quite beautiful. The sub was, predictably, mighty impressive in power and extension,

though not the fastest such device I've ever heard. This, too, was one of the better sounds at T.H.E. Show.

Next I went to the **Pioneer** suite, where **Technical Audio Devices'** (TAD's) resident engineering genius Andrew Jones was demonstrating his latest creations, the **Pioneer EX** surround-sound system, comprising the floorstanding **S-1EX** L/Rs (approximately \$12,000/pair), the stand- or wall-mounted **S-7EX** center-channel (approximately \$4500), and the stand-mounted **S-2EX** surrounds (approximately \$8000). The EX speakers use the same beryllium tweeter as the highly acclaimed **TAD Model-1** concentrically mounted with a magnesium midrange (the Model-1 uses a beryllium midrange), and two smaller, somewhat less sophisticated versions of TAD's carbon-Aramid woofers. Driven by Bel Canto electronics (including its Class D multichannel amp), the system was *phenomenally* good in every respect save one. To my ear it was a bit steely in the upper mids—on the massed violins of the Reference Recordings Argenta CD, for instance. If this upper midrange hardness could be reduced (say by changes in room damping or, perhaps, amplification), the system would be hard to fault. As it stood, the EXes were exceptionally lively and lifelike on music and film—one of the two best demos at T.H.E. Show.

Which brings me to my favorite sound at T.H.E. Show—at least on music. That would be the **Magnepan/Bryston** exhibit. Maggie's surround system included the ribbon/planar **Magneplanar MG 3.6** left/rights (\$4450/pair), quasi-ribbon/planar **MG 1.6** surrounds (\$1775/pair), and its new ribbon/quasi-ribbon **MG 20.1/3.6 center channel** (\$TBA), driven by the ubiquitous Teac Esoteric UX-1, the **Bryson SP 1.7** pre-amp/processor, three **7B SST** monoblocks in front, and a **3B SST** stereo amp on the rear surrounds. The Maggie system had several obvious sonic shortcomings: Without a subwoofer, it lacked the bass weight and extension of the sub'd systems; I also thought its upper mids and treble were a bit too aggressive (but I always think the Maggie ribbon treble sticks out a



Avantgarde Duo's

bit compared to its quasi-ribbon mid/bass). Nonetheless, the Maggie system (like the Pioneer EX system) sounded so alive that I easily forgave its minor flaws. Although Wendell Diller was demo'ing the Maggies with CD/SACD music sources exclusively, the system's transient response, top-to-bottom clarity, and broad, transparent soundfield were so exceptional that I'd have to think it would do just fine on film soundtracks (provided, of course, that you can mate it up with appropriately fast, powerful, transparent subwoofers).

Before signing off I have to mention the **MBL 101 Es**, which, despite being demo'd in the worst possible circum-

stances (in the middle of a huge room filled, like a farmers' market, with dozens of noisy, stall-like exhibits), still stopped traffic with their extraordinary sound. Though they were being played two-channel (via MBL's world-class electronics) and didn't even have surrounding walls to reinforce their omnidirectional radiation, they still managed to deliver a faint but unmistakable taste of all the superlative sonic qualities that have made them my current reference loudspeakers. Maybe next year MBL will opt for a separate room at T.H.E. Show, where these babies can really strut their stuff in stereo and surround.

Most Significant New Product or Technology:

Sonneteer's Bardaudio System. Whole-house audio distribution usually necessitates long runs of speaker or CAT-5 cable, Ethernet routers, HTPCs, and hard drives. For the Bardaudio wireless audio distribution system, all you need are two clamshell pods and 875 smackeroos.

Most Important New Company:

Though scarcely a new company, **Pioneer** has taken a huge step up into the audio big leagues with its **EX Surround-Sound System**. These TAD-inspired products are truly high end, on music and on film soundtracks.

Greatest Bargain:

Magnepan's Surround-Sound System (comprising two MG 3.6s, two MG 1.6Qrs, and the MG 20.1/3.6 center channel) offers world-class sonics at a fraction of the cost of other world-class speaker systems.

Most Significant Industry Trend:

The spectacular, on-going drop in display prices. We've all seen what's been happening with plasmas, DLP projectors, and LCD/DLP RPTVs. Now Sony is offering a three-chip, 1080p SXRD projector for \$10,000! And it looked terrific.

Best Picture or Best Sound:

As impressed as I was (and I was) with Sony's \$10,000 SXRD-based, 1080p VPL-VW100 front projector, I would still vote for **FH Video's VPH-G90 9" CRT projector** as the best picture at CEDIA. The folks at FH have bought up all of Sony's remaining inventory of G90s, changed the green CRT to a true SMPTE green, added other tweaks and refinements, and priced the whole thing at \$29,950. To my tired old eyes, these technological dinosaurs still produce the best picture money can buy. No pixelization, no rainbows, no screendoors, no searing whites, no "gray" or crushed blacks. Just infinite dynamic range, beautiful colors, pure blacks, textured whites—a less analytical, more film-like presentation. With a native resolution of 2500x2000 pixels, the G90's not going to leave you wanting when it comes to HD programming, either. And I am told that Sony will be offering a retrofittable, plug-in, HDMI card to allow G90 owners, past and future, to enjoy the new high-definition DVDs that are just around the corner.

For best sound at T.H.E. Show, I would rate **Magnepan's Surround-Sound System** and **Pioneer's EX Surround-Sound System** roughly on a par. Both were more "alive-sounding" than the competition; both were a little bright (the Pioneers a bit brighter than the Maggies); both made music and musicians sound "there." The Maggies were a touch more natural-sounding in the upper midrange; the Pioneers were superior in the bass. Take your pick of either and you won't go far wrong—and you won't spend a fortune, either.

On the other hand, if you have a fortune to spend, the **MBL Surround-Sound System** (comprising three 111 E left/right/centers and two 121 surrounds) is very hard to beat.

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