



DVD PLAYER

Krell DVD Standard

Fred Manteghian

High-priced DVD players are an almost anachronistic concept in today's cheaper-by-the-minute world. In fact, if I set up a card table at the local warehouse price club and offered sips of unsweetened cranberry juice to shoppers while clandestinely questioning them about the going rate for an *expensive* DVD player, their predictable guesses of around \$500 would only confirm how out of sync audiophiles and videophiles are with the average Joe.

But that's not unusual. Connoisseurs have always been willing to forgo the unnecessary in their quest for the unneeded. I'm sure those prospective puckerberry-juice customers would spring a leak if I told them the high-end Krell DVD Standard player would set them back an icy \$8000.

"You're joking. Hey, how much does the *Deluxe* go for?"

Inside

The Krell DVD Standard is the first high-end player I've used that includes Faroudja Laboratories' latest chipset. While the Faroudja DCDi chipset can be found in some players hovering closer to that \$500 price tag mentioned by the berry brigade, any chip designer will tell you that, in any circuit topology, the supporting engineering is just as important. In this case, Krell has lavished their normal degree of care on designing the

power regulation, which, they claim, results in visible picture stability. Unlike most recent players, which use 10-bit video-processing circuitry, the DVD Standard uses 11-bit video processing, a fact certain not to be lost on the Spinal Tap crowd. The Standard combines two Faroudja technologies: FLI 2200 line doubling and FLI 2220 enhancement. The enhancement circuit works through either the player's progressive or interlaced outputs.

The Standard is blessed with a prodigious array of video options, divided into two banks. The interlaced bank contains a composite, an S-video, and standard component (Y-Pr-Pb via RCAs) outputs. The

very complete and flexible progressive bank offers component outputs (RCA), and RGB outputs using five BNC connectors. (RGB connectors require not just Red, Green, and Blue leads, but also horizontal and vertical sync signals, although internally, the Krell can be configured to pass synchronization over the green signal to accommodate some older projectors.) A small switch lets you select between the progressive component and progressive RGB outputs, so obviously only one progressive mode can be active at a time, but all the interlaced outputs are active at any time. With all these video options, you could easily use the Standard to drive mul-

SPECIFICATIONS

DVD Standard DVD player

Video outputs: interlaced composite, S-video, component (RCA), progressive component (RCA), RGB+H/V (BNC), DB-15 (selectable component or RGB), NTSC/PAL selectable

Audio outputs: coaxial, optical, 1 pair stereo analog (RCA), 1 pair stereo balanced (XLR)

Control ports: RS-232 & RC-5 remote-control inputs, 12V AC out

Dimensions: 17.25" × 5.65" × 16.45" (W×H×D)

Weight: 19.25 lbs

Warranty: 5 years limited (electronics), 3 years limited (hardware)

Price: \$8000

Manufacturer

Krell Industries
45 Connair Road
Orange, CT 06477-3650
tel. (203) 799-9954
fax (203) 891-2028
www.krellonline.com



tiple 16:9 displays in your home theater—say, a CRT projector for the serious stuff, and plasma because, well, just because.

Finally, a computer-style DB-15 output connection let me connect the Krell's progressive RGB plus sync video signal through the RGB pass-through input on my Dwin TranScanner video processor. This allowed me to easily switch between driving my Dwin HDP-500 projector directly from the Krell in progressive mode or from the Krell's interlaced output using the TranScanner as the active scaler.

The DVD Standard offers the usual digital audio outputs (one coaxial, one optical), as well as two channel-balanced (XLR) and single-ended (RCA) connections fed by the player's Burr-Brown 24-bit/192kHz DACs. For my 2-channel listening, I used the DVD Standard's DACs and fed the signal through the processor in what's called Preamp mode, an analog-direct version that never digitizes the signal.

The Standard's membrane-over-metal remote control looks nearly identical to the one used for the Krell HTS2 pre-pro, with the exception that *all* the buttons in the 9x4 grid are used; with the HTS2 remote, four of the grid locations near the top are not needed and hence not there. As a result, it was nearly impossible to properly orient the DVD Standard's remote in the dark. I developed eyestrain shifting the remote around, looking for the four white buttons

on the remote that served as my northern star. Once orientation was complete, all operations commenced with picking a corner and finger-counting up or down until landing on the needed control, the more common of which were memorized in short order. Still, one mistake and . . . well, my worst error occurred while watching the two hours and 27 minutes of *Mulholland Dr.*, which director David Lynch, in his infinitesimal wisdom, chose to release as a single chapter. I was about two hours into the movie when I tried to rewind or something and ended up hitting Eject. Which brings me to my second complaint about the Krell DVD Standard. Two fast-forward speeds aren't enough, especially since the first speed is pretty much just "play with mute on." Twenty minutes later, I was watching *Mulholland Dr.* again.

The Standard's front panel offers the most important controls and a large, red-lettered LED panel above the disc drawer. The display goes blank after a minute, making it perfect for home theater. The tiny blue power light, however, remains on the whole time. I have a thing about blue lights. Blue is the most annoying color in a darkened room, and the lights called attention to themselves every time the picture on the screen faded to black. I just covered them up. I love the color, I'm not azurephobic or anything, but I wish manufacturers would realize that boring old LED green is so

much easier on the eyes in a home theater.

The Standard is built like a tank and, at nearly 20 lbs, weighs as much as most home-theater receivers. Compare that to the 4- and 5-lb Pioneers and Toshiba's, and you begin to get the idea that Krell expects the DVD Standard to withstand its share of stray bullets. Like the rest of Krell's Standard series (the Home Theater Standard pre-amp-processor and the Theater Amplifier

REVIEW SYSTEM

Sources

Pioneer DV-626D DVD player
Zenith DTV1080 hi-def/DirectTV receiver

Preamp-Processor

Krell Home Theater Standard 2

Power Amps

Ayre V-6
Krell Theater Amplifier Standard
Sunfire Cinema Grand Signature

Speakers

MartinLogan Prodigy Home Theater Center,
Requests, Descent subwoofer
Thiel CS1.6 (5)
Velodyne FSR-18 subwoofer

Cables

Digital coax: Straight Wire Silverlink
Interconnect: Straight Wire Rhapsody, balanced & single-ended
Speaker: Straight Wire Virtuosity Gold, Quartet



Standard 5-channel amplifier), the DVD Standard combines satiny chromed faceplates with shiny chromed corners for a look that is as aesthetic as it is timeless.

A Picture Paints a Thousand Words

Here's how the review process works: I receive a component and use it for a bit, then I write the review and send it in. I then box up the product and send it to Los Angeles, where Tom Norton and his elves take pictures and give it the ol' alien probe. Then we send the pictures and the words and the probe results to press and, a few weeks later, you open your mailbox and get the results. So while you're getting all excited reading about some product, I'm sitting on a park bench in the rain, caressing a product brochure, full of longing and memories, muttering something about "We'll always have Paris." That's why I'd like to publicly apologize to Krell for taking so long with this review. The DVD Standard is the nicest DVD player I've had in my system since the Theta David II, and I'm only human.

Because my projector was completely Gannonized by our former technical editor and ISF savant, John J. Gannon, it's a scary-good tool and a wonder to behold. The Krell DVD Standard made every movie I watched an event. With it, I could easily and impres-

sively toss around terms like "overenhanced" and "great black level" and know from whence I spoke. That's not to say the Krell made the bad worse, a phenomenon all too common in high-end audio. Even movies with warts came off as enjoyable, provided the player's internal controls were set properly.

The Krell's Faroudja circuitry lets you select among increasing degrees of "enhancements," beginning with Off and proceeding through Low, 1, 2, 3, 4, 5, 6, and High. As soon as I got the player, I found the Low setting to my liking, and though I occasionally selected 1 or Off, Low turned out to be the best compromise. All the other settings were, on a properly calibrated display, too ugly to be useful.

The player also lets you select from different TV Modes of operation, including Standard, Cinema, Animation, Sports, and Black and White. The otherwise excellently written manual is woefully terse on most technical details, referring to the TV Modes feature as a way of modifying the player's "Brightness, Contrast, and Sharpness settings." However, when I changed the modes, there were no changes made to the Enhancement parameter of the Faroudja processing menu, so I'm not sure why Krell mentions the Sharpness setting. My guess is the control simply modifies the gamma

level, effectively stretching the picture's dynamic range at low IRE settings, to provide varying amounts of detail and crush in black level. I selected Cinema and stuck with it.

Faroudja is known for their motion-compensation technology, which they developed and staunchly defend. But their competition hasn't stood still. I couldn't see much difference between the three settings of Full and Adaptive motion-detection correction, so I left it in the latter. Faroudja 3:2 pulldown mode can be turned off, but it appears to still detect 3:2 pulldown and to automatically enable itself when film is detected, regardless of what the menu shows, which is fine. I just left it on. Perhaps when Steven Soderberg's latest film, *Full Frontal*, which was shot mostly on digital video, comes out on DVD, this feature will come in handy. All I can say is, Faroudja's reputation for motion-detection technology is well-deserved.

Turning to the test signals from the *Video Essentials* test DVD: The Standard's chroma delay was only average via the interlaced outputs, but completely nonexistent via the progressive outputs. What this means is that there was very little horizontal color smearing, a subjective effect that manifests itself as a softer, less defined look that has a lot of parallels with cheap videotape. I



Everything I saw convinced me that the Krell's progressive circuitry was rock-steady, and as sharp and detailed as any I've seen.

casually measured more than 450 lines of horizontal resolution in my setup, while the high-frequency test patterns indicated that the Krell went out very cleanly to 5.5MHz with only the slightest droppoff.

The progressive signal once again trumped the interlaced output on the green and pink candy-stripe test pattern on *VE* (title 18, chapter 15). Here, the green vertical bands were not book-ended by the darkened-magenta vertical bands of a retarded pink signal. The cotton-candy-pink bands were quite pure.

For reasons I'll detail shortly, I spent 95% of my time watching through the DVD Standard's interlaced outputs. The combination of the Dwin equipment and Krell transport was a wonder to behold. Even with a less-than-perfect picture, what was there to be enjoyed *was* enjoyed. DVDs with great black-level detail, like *Donnie Darko* (20th Century Fox 2004057), looked superbly dynamic on the screen, even with the occasional softening that keeps this disc from getting a 4-star rating. *The Glass House* (Columbia TriStar 06252), on the other hand, was both sharp and blessed with a great deal of black-level information, and the Standard projected an incredibly involving image. Thankfully, I don't have good light control in my home theater and am forced to wait until dark to put on a movie, or I might never have gone to work

in the morning!

The progressive image was very sharp and detailed, very hi-def-like. Scan lines were only occasionally visible on my 78-inch-wide screen, even from 12 feet away, but they didn't intrude or call attention to themselves unless I was looking very hard. On a slightly smaller display, such as a 50-inch plasma, I'm sure those scan lines would be effectively banished.

Of course, I had the same problem with the Standard's 480-line progressive output as I have with the 1080i outputs of my Zenith DTV-1080 hi-def tuner: the optimum gray-scale setup was slightly different for the different sources. My projector was optimized for DVDs viewed through the TranScanner. As a result, watching movies through the Krell's progressive output meant slightly desaturated colors, coupled with a green push and lean reds. But I emphasize that this had nothing to do with the Krell. From what I could see via test patterns, the Standard's output was pristine, sharp, and balanced.

Were these objections removed, theoretically at least, I'd still be left facing a decision about which I preferred: the 600-line progressive image created by the Dwin TranScanner from the Krell's interlaced 480i output, or the direct-to-projector 480p image from the Krell's progressive output. While HT fans normally don't sit and watch

test patterns, these tests can enlighten us as to what's going on behind the scenes. Everything I saw convinced me that the Krell's progressive circuitry was rock-steady, and as sharp and detailed as any I've seen. Film grain, for instance, deliciously prevalent in *The Stunt Man* (Anchor Bay DV11716), was clearly visible over the progressive outputs, while the processed 600p image derived from the TranScanner was more homogenized. The real irony here was that, the better your projector and setup, the more visible the scan lines will be. My projector will even show me scan lines with a 1080i hi-def image (but not with 720p, which exceeds the resolution capabilities of my 7-inch CRTs), but even so, the Krell put me as close to a hi-def picture from a standard DVD as I've ever been!

Deaf Men Get Religion

I was comparing some scenes from *The Fifth Element* (Columbia TriStar 82409) on both the Pioneer DV626D and the Krell DVD Standard, and what struck me as the greatest difference was the sound. True, both were feeding the same Krell HTS pre-pro, but the Standard presented a much more dynamic presentation off the same Dolby Digital 5.1 track. I hadn't touched the levels, but I had to turn up the Pioneer to get the same vibe.

When it came to 2-channel audio, the Krell worked fine from its digital output as a



CD transport, but I quickly developed a liking for it as a full-fledged CD player, used from its 2-channel analog outputs. The

24/192 Burr-Brown DACs were easily more effortless, open, and resolute than the 20-bit Crystals in the Krell HTS2. (The upgraded Krell HTS 7.1—review in progress—and new Showcase processor use the Burr-Browns as well.) No one is going to complain about the sound either way, but the Krell DVD Standard was an excellent DVD player on its own.

The DVD Standard's front panel suffers from a logo shortage. Nowhere to be found are the letters *SACD* or *DVD-Audio*. Look as you might, hither and yon, there's not a 5.1 multichannel analog output to be found. The DVD Standard is, above all, a DVD player, and if you're considering laying down \$8000 to pick one up, reconcile yourself to that fact. You can get an SACD player these days for a few hundred bucks elsewhere, and I recommend you don't spend much more than that for an SACD or DVD-A player just yet. While it would have been nice to get it all in one box, certain events—out of the control of such high-end luminaries as Krell, Theta, and Ayre, and *in* control of piracy-paranoid music companies—have conspired to make certain that that isn't going to happen anytime soon. Until the industry gets its ducks in order and lets manufacturers pass a multichannel *digital* output from player to processor, what good is a 6-channel analog output with only the K-Mart bass-management capabilities of most of the current crop of SACD and DVD-A players? Eventually, it will occur to the recording

industry that they can't sell multichannel digital music if they won't let manufacturers process the signal in the digital domain.

Report Card

My daughter Laura is taking a summer course in Micro-Economics. One of her professor's study questions dealt with the price elasticity of DVD players, and although it humorously referred to "improvements in vision technology" in forecasting hi-def blue-laser DVDs, his point was clear: There's something else coming down the road. There always is.

So do you drop \$8000 on a state-of-the-art DVD player just as they're about to blow the roof off the technology with a new Blue Light (literally) special? Why not? If you have hundreds or thousands of standard-definition DVDs, why *wouldn't* you want to see and hear them forever in the best light possible? New technology and some future medium may be better, but there aren't that many "White Albums" out there that you'll feel compelled to repurchase. Not when the player in question, the Krell DVD Standard, is so darn good. When I play *this* "White Album" backwards, all I keep hearing is, "Paul isn't dead, he's touring; tickets are expensive, but then, the best usually are!" Bottom line: If you're using a high-quality projection and sound system, the Standard will give you a home-theater experience that is enjoyable and highly addictive. 🍌

