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Reviewed by
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Ayre Acoustics D-1x DVD Player



FEATURES SNAPSHOT!

Description

Model: Ayre Acoustics D-1x

Price: \$11,500 USD (as configured)

Dimensions: 18"W x 5.5"H x 11"D (power supply: 13"W x 3"H x 8"D)

Weight: 25 pounds (power supply: 15 pounds)

Warranty: Five years parts and labor (two years for transport)

Features

- Fully-discrete analog circuitry (no ICs)
- Zero-feedback design
- Pure FET circuitry
- Completely balanced from input to output

Features (cont'd)

- Four 24-bit Burr-Brown PCM1704 DACs (two per channel) for balanced digital operation
- Burr-Brown DF1704 digital filter offers 8x oversampling at 96kHz
- Component video output
- S-video output
- Composite video output
- VR2 progressive-scan video card as optional upgrade
- Two discrete lasers: one infrared for CDs, one visible for DVDs
- Status indicators for 24-bit, 20-bit, and 16-bit data, and 96kHz, 48kHz, and 44.1kHz sampling rates
- Analog outputs for stereo playback
- Balanced digital output

In the nine years that Ayre Acoustics has been in business, products such as the K-1 preamp and V-1 amplifier have developed superb reputations for natural sound. Ayre's original D-1 DVD player was widely praised, not only for being a wonderful DVD player but also for being a great bargain as a CD player. We thought the



release of its new "x" update was the perfect time to put the Ayre to the test.



This thing is heavy!

When the D-1x arrived at my home, I thought Ayre had made a mistake and sent me their V-5x power amp instead. This thing is heavy!

After years of dealing with featherweight Asian

and European DVD players, I was amazed at the tank-like construction of this behemoth. It weighs 40 pounds and has two chassis: the 18"W x 5.5"H x 11"D DVD player itself, and its 13"W x 3"H x 8"D power supply. A hose-thick cable carrying dual power cords links the two.

Despite its weight and size, the D-1x is very attractive. The thick brushed-aluminum walls give it a sense of dependability, and its exterior design is just modern enough to be interesting without being overstated.

Although I was given only a "temporary" owner's manual, setup was fairly simple. When I called to request a manual, Ayre said, "It's a big project, and we just never got to finishing it." It seems they've put all their work into the player itself. Luckily, the only complicated part of installing the D-1x was the hookup, which the temporary manual covers clearly. After that, it's pretty much just "push Play." Still, for \$11,500, the dealer should install the D-1x for you.

The "x" upgrade includes several improvements. Ayre has taken heroic steps to make sure all parts of the D-1x have the utmost isolation from any noisy electric-company intrusions. The grounding has been reconfigured throughout. More RF filtering has been added in the power supplies for both the audio and logic circuits. Finally, the feet have been changed to keep to a minimum the transference of vibrations to the internal components.

As soon as I turned on the D-1x, I knew it had been based on a Pioneer design -- the bland graphic user interface gave it away. But don't think this is merely a tweaked Pioneer. Pioneer makes only the drive system; everything else is Ayre.

Responding to everyone's concerns about obsolescence, Ayre has included six printed circuit boards in the D-1x, each of which can be upgraded. The motherboard distributes signals and provides the digital audio output. The clock card has an Ayre-designed ultra-low-jitter master clock that uses discrete, zero-feedback voltage regulators. They use a Burr-Brown DF1704 digital filter (24-bit/96kHz). There's also a switch that lets you choose between the best frequency response or the lowest time distortion. Given the excellence of the D-1x's CD playback, most people will probably want to use it as their main CD player, and the switch makes a genuine difference. This is an especially nice feature -- thanks for the choice. (Low time distortion sounded best to me.)

Ayre uses two multibit Burr-Brown PCM1704Ks DACs per channel, set up in a differential configuration. These hand-selected DACs -- Burr-Brown's highest grade -- are 24-bit devices capable of 8x oversampling at 96kHz or 4x oversampling at 192kHz. The audio card, getting the benefit of Ayre's prior work in preamps, uses an ultra-simple signal path and offers both balanced and unbalanced outputs. The digital output card offers 24/96 data from an XLR output (an adapter for XLR to RCA is available from Ayre). The video output card offers composite, S-video, and component outputs. Ayre also offers an optional VR2 progressive-scan card that uses a tweaked Silicon Image chip with 14-bit converters.

The final upgradeable feature is the separately housed power supply, which actually contains *two* supplies: one each for the video and digital circuits. Power goes to the main chassis via two different cables -- again, one each for video and digital.

The D-1x comes in seven flavors. The basic transport costs \$5250; adding regular video

(composite, S-video, component) or SDI adds \$750; balanced and single-ended two-channel audio outputs cost \$2750; and Ayre's VR2 progressive-scan card costs \$3500. My review sample had the most common configuration: balanced audio outputs and VR2 card. List price as configured, \$11,500.

The D-1x has one irritating drawback: The remote control is a Pioneer model with typically poor Pioneer ergonomics and an Ayre badge stuck on. Lots of little buttons don't make for a remote that's easy to use in a dark home theater. For these prices, I'd like to have seen backlighting at the very least.

Is it worth \$11,500?

While I was keeping an open mind, I anticipated that my \$250 Panasonic DVD CP-72 would probably put out a picture similar in quality to the Ayre D-1x's. After all, the important thing is the video processing, and the Panasonic's Faroudja chip had to be as good as the Ayre's Silicon Image. Or so I thought.

I first used the D-1x with the [PLUS Avanti DLP projector](#). Granted, it might be a little diabolical to match an \$11,500 DVD player with a projector that costs 70% less, but I was curious. The first DVD I played was *Austin Powers: The Spy Who Shagged Me*. I was looking for any troubles the Ayre might have coping with the camera panning across the stair rails. No problems at all. Next I tried a well-recorded black-and-white film, [The Philadelphia Story](#). The rich fabrics in Katherine Hepburn's clothes were reproduced with photographic texture. Then I noticed an intriguing anomaly: The Ayre's picture was softer *and* more detailed than the Panasonic's. How could that be?

Here's an analogy: People seduced by the pleasures of LPs will usually tell you that their sound is more continuous and less harsh than CD. It is almost as if your brain can distinguish the rapid on/off patterns in the CD's digitization and prefers the analog continuity. An LP's analog signal sounds whole, and that wholeness pleases the ear, making it easier to listen to. That ease lets you listen deeper into the soundstage, and so you end up with sound that's softer on the ears while yielding more detail. If you've never heard good LP playback, CDs or even MP3s might sound great to you. But once you've heard a great LP, a CD sounds like stress.

I think something similar happened here. Before the Ayre came to my house, the Panasonic's images looked fastidiously accurate. Now I know that there's something seriously better. After its terrific performance with an 800x600 DLP display, I wanted to see what the Ayre could do with a high-definition set. I switched the Avanti out and put in the InFocus ScreenPlay 7200. The beautifully photographed *Far From Heaven* has a rich, burnished look that was gorgeous through the D-1x. Edward Lachman's color cinematography emphasizes umbers, ambers, and russets, and they all looked authentic -- plush and strong, with virtually no grain.

A perfect example of the Ayre's holistic reproduction was in the opening of [2001: A Space Odyssey](#). Stanley Kubrick and his crew created some of the most beautiful images of sunrise and sunset ever committed to film. Through my Panasonic CP-72, the pictures were gorgeous. Through the D-1x, they took on a clarity and fidelity reminiscent of the old Ansel Adams large-format photos of the western US. I could also see the holistic reproduction in *Sen to Chihiro no kamikakushi* (*Spirited Away*). Hayao Miyazaki's dazzling animation took on new depths -- I could see the various techniques he used with his palette.

Next, I put the Ayre to an unfair test, comparing it with a JVC D-VHS high-definition player. I had copies of *Galaxy Quest* in the D-VHS and DVD formats, and tried running both simultaneously to the InFocus 7200. I couldn't make exactly instantaneous comparisons -- the InFocus takes a few seconds to sync to a new source -- but after spending some hours switching back and forth, I found a few reliable differences.

The JVC was sharper and more detailed. On close-ups of the *Galaxy Quest* crew, I could see the

threads on the fabric of their uniforms and the individual hairs on their heads. Tim Allen's complexion came through with every ex-zit scar shown in perfect detail. The colors were more intense, almost as if someone had found a way to bump up the primary colors at the cost of the pastels. The picture was exciting, intense, and accurate in the way looking through a window is accurate.

The D-1x looked just slightly de-focused after the D-VHS. The threads on the fabrics were still there, but the detail level looked more like what you'd see in a movie theater. Tim Allen's complexion looked merely lived-in, not scarred. Most important, the colors seemed more accurate, if slightly more muted. The picture was exciting, intense, and accurate in the way watching a film from about halfway back in a movie theater is accurate.

But remember, this was an unfair test: 480p vs. 1080i. The fact that the D-1x acquitted itself so well is a testament to its excellence.

The sound shared the unusual clarity of the picture. Peter Gabriel's score for the stunning film *Rabbit-Proof Fence* resulted in some of the deepest bass I've ever heard -- well-controlled, with definite pitch. Even better were the subtle details and sound effects that tinkled in the background.

Given Ayre's reputation in the world of high fidelity, I decided to try running the stereo audio outputs into the pass-through of the [Sunfire Theater Grand III processor](#). What I heard made me want to get rid of my Lexicon MC-1. While the Lexicon processor has excellent DACs, it offers no pass-through -- analog signals must be digitized, then reconverted to analog.

The Ayre through the Sunfire produced the best CD sound I've ever heard in my system. I started running through all my usual test music, but before long I was just pulling out favorite CDs for the pure joy of the sound. Given the astronomical prices of high-end CD players and the superior sound of the Ayre, the D-1x begins to look as much like a bargain as any \$11,500 piece of equipment can.

Final thoughts

Back in the late 1970s, Linn boss Ivor Tiefenbrun raised eyebrows when he recommended that buyers finance their purchases of his expensive Linn Sondek by cutting back on their speaker and electronics budgets. His contention was that a Linn with cheap speakers would sound better than a direct-drive turntable with expensive speakers. People thought he was crazy -- until he began demonstrating his point at the Consumer Electronics Show.

After my experience with the inexpensive PLUS Avanti driven by the Ayre D-1x, I began to wonder whether the same might hold true for DVD players. I have no doubt that the D-1x will show its best with a great projector, and indeed it did look better with the InFocus ScreenPlay 7200. But I preferred the Ayre-Avanti combo to the Panasonic-InFocus. This is an important lesson -- your DVD player makes a bigger difference than you might think. Don't be too ready to throw all your money at the projector. When out looking for a new system, try a 50/50 budget split between DVD player and projector. See for yourself whether it results in a better home-theater experience than a 5/95 split.

The price of the D-1x will take it out of contention for many. Just like every other high-performance device, whether a car, a watch, or home-theater equipment, the price-performance curve is exponential. You can get a 90%-good DVD player, such as the Panasonic DVD CP-72, for \$250. A 99%-good player such as the Ayre, though expensive, offers a different level of enjoyment.

Review System

Speakers - ATC SMC 50A (mains), Sonance Symphony (surrounds), KEF 100 (center), Sunfire True Subwoofer Signature

Processors - Lexicon MC-1, Sunfire Theater Grand Processor III

Amplifier - B&K Video 5

Sources - Pioneer DV-434 DVD player, Panasonic DVD CP-72 DVD player, JVC HM-DH30000U D-VHS recorder, Rega P-25 turntable, Rega Super Elys cartridge, Musical Fidelity XLPS phono stage, Philips DSR6000 PVR

Cables - Canare, Straight Wire

Projectors - Runco Cinema 750, BoxLight Cinema 20HD, PLUS Avanti, InFocus ScreenPlay 7200

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