

# OPPO DV-981HD DVD PLAYER

**The good:** Excellent image quality; upscaling to 1080p over HDMI; attractive, understated black design; multichannel SACD and DVD-Audio over HDMI; DivX/Xvid support; aspect-ratio control; can be made region-free with a simple hack.

**The bad:** Worth it only for use with 1080p TVs with an HDMI input; no component video output.

**The bottom line:** Performing nearly as well as players costing four times the price, the Oppo DV-981HD is an unbeatable bargain for videophiles and enthusiasts.



REVIEWED BY  
**Matthew  
Moskoviak**

EDITED BY  
**David  
Katzmaier**

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Editors' rating:

**Excellent**  
**8.3**  
out of 10

Over the last couple of years, Oppo has garnered a reputation for making great-performing DVD players at reasonable prices. We tested and liked the Oppo DV-970HD, so we were definitely excited to get our hands on the company's newest model, the DV-981HD (\$230). The DV-981HD is very similar to its predecessor, the DV-971HD (which we did not test) but there are two major differences between the models: the DV-981HD offers upscaling to 1080p over its HDMI output, and it lacks a component-video output. While the lack of a component output makes the DV-981HD less versatile, it also reinforces the fact that the real target market for this player is videophiles with 1080p, HDMI-capable HDTVs who want the best DVD upscaling performance at a reasonable price. If you fit that description, the Oppo DV-981HD delivers.

## Design of OPPO DV-981HD - DVD player

When we reviewed the Oppo DV-970HD, we knocked the design a bit because we thought its silver plastic looked a bit cheap. While the DV-981HD has a similar design, we think the changes Oppo made really increased the attractiveness of this player. The basic, all-black design with little button clutter gives it a simple and refined look. It doesn't have the high-gloss finish that is currently in style, but we actually preferred the more muted look — and it's certainly less prone to fingerprints.

To the far left is a power button, with the disc tray to the right. Further right is the open/close button followed by the LED screen, then the Play and Stop buttons. We would have liked to have seen front panel chapter-forward/backward buttons—in case the remote goes missing — but they're not essential.

One gripe we have with a lot of DVD players is the bright lights that are often sprinkled across the front panel. While some may think they enhance the way the product looks, home theater purists often lament that they can distract from the movie watching experience. The DV-981HD offers the best of both worlds — it has the blue lights, but it also has the options to turn them off. Not only that, but the options are extensive — you can keep everything on, just turn off the blue LED lights, turn off the LEDs and dim the display, or turn everything off. With everything off, there is still a very small LED light on the power button, but sticklers can cover it up with a piece of tape if it's still too much. This is the kind of flexibility and attention to detail that has given the Oppo such a sterling reputation among home theater enthusiasts. The only nitpick we had was that the DV-981HD didn't remember the All Off setting when we turned the unit off — when we turned it back on, all the LEDs came on. This problem doesn't occur with Dim or LED Off selected — hopefully Oppo fixes the All Off issue in a firmware update.

One worry we had when we tested the DV-970HD was that the disc tray was a little thin and flimsy. The DV-981HD sports essentially the same disc tray, in black. While it still appears to be fragile, we have to admit we haven't had a single problem with our DV-970HD, nor have we heard any reports of the disc tray snapping off. While it still may not be the best choice for

those with little kids, the bend-but-don't-break disc tray may be more durable than it appears.

The remote has the exact same layout of buttons as the DV-970HD — just a few of the button labels are different. Most of our gripes are the same: the buttons don't have enough differentiation, the labels are small and it's not backlit — although it does glow-in-the-dark. Having lived with Oppo's remote for a longer time now, we did come to appreciate the glow-in-the-dark buttons more — they're a good compromise between better-but-battery-hungry backlit remotes and completely nonbacklit models. And we always liked the large amount of functions that can be accessed from the remote.

## Features of OPPO DV-981HD - DVD player

At first glance the Oppo DV-981HD appears more limited than the DV-970HD. There are no media card readers or USB ports — the DV-981HD sticks strictly to disc-based media. It is, however, comprehensive in the discs that it supports. On top of DVDs and CDs, it also handles DVD-Audio and SACD discs, as well as the even more obscure HDCD format. It also handles a wide range of digital media files burned on a CD or DVD, such as DivX, Xvid, MP3, WMA, and JPEG.

Video connectivity is sufficient, with an HDMI output, an S-Video output, and a composite video output. For audio, there are both optical and coaxial digital audio outputs, as well as an analog stereo output and a multichannel analog output. Of course, HDMI carries both audio and video, so it can be used for audio as well. A really nice feature for fans of the dying high-resolution audio formats is that the DV-981HD's HDMI output can carry both multichannel DVD-Audio and SACD signals to a compatible receiver (it needs HDMI version 1.1 or later).

The big news in terms of connectivity is that there's no component-video output. In other words, if you don't have an HDMI-capable TV, there's really no reason to get the Oppo. The DV-981HD is the first DVD player we've seen in a long time that lacks a component-video output. To be fair, very few DVD players are capable of upscaling over their component outputs anyway, but it would be nice to have them, regardless.

Another feature we were happy to see on the DV-981HD is aspect-ratio control. Some HDTVs, such as the HP LC3760N and the Philips 42PF9831D, do not have aspect-ratio control when fed high-def sources, so it's nice to have the upscaling DVD player handle it. This is not an issue for most high-quality DVDs, which are anamorphic, but nonanamorphic wide-screen discs will look distorted via the Oppo unless you change the aspect ratio. To correct for this, engage the 16:9 Wide/Auto under TV Display on the General Setup screen. Then it will automatically detect nonanamorphic discs and squeeze them into the proper aspect ratio, leaving a small window-boxed (black bars on all sides) image on the screen. At that point, you can either zoom the image with the Oppo — which has discrete zoom points of 1.2x, 1.3x, 1.5x, 2x, 2.5x, 3x, 3.5x, and 4x—or zoom with your TV if it has zoom control.

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We tested this using Carlito's Way on the Vizio GV47LF. The DV-981HD correctly squeezed it into the correct aspect ratio; we were then able to fill the screen using the zoom mode. It wasn't quite perfect — we would have liked a zoom mode between 1.5x and 2x because 1.5x didn't completely fill the screen and 2x chopped off a small part of the picture — but it was better than the Denon DVD-3910, for example, which can correctly squeeze the image into the correct aspect ratio but doesn't offer a zoom mode. Since many TVs don't offer adequate aspect ratio controls on high-def inputs — including the Vizio GV47LF we were using — this is a nice feature.

We also liked some of the additional options available for those that like to watch DVDs from outside of North America. The Oppo has no problem with PAL discs, and can be made into a region-free player by entering a simple remote code.

Oppo has an excellent comparison between their three upscaling DVD players on its site, so you can get a good feel for the features differences in the lineup.

## Performance of OPPO DV-981HD - DVD player

Before getting into the nuts and bolts of the Oppo DV-981HD's performance, we'd like to quickly explain the benefits of buying an upscaling DVD player. Despite some of the marketing hype espousing that they'll make your DVDs appear in HD picture quality, the increase in picture quality will never come close to matching that of HDTV, and the increase is also completely dependent on how good the upscaling technology in your TV already is. Every HDTV is already capable of upscaling; the only benefit an upscaling DVD player can bring to the table is to do it better. In some cases the difference is easily discernable, while in others it's much more subtle. The bottom line for every upscaling DVD player is that it might be able to make your DVDs look better, but the difference will probably be worth it only to image-quality enthusiasts.

To test the Oppo DV-981HD's video quality, we started off with Silicon Optix's HQV Test suite in 1080p mode. The first resolution test looked solid, clearly demonstrating the DV-981HD's ability to display the full resolution of DVDs. We did notice some slight shakiness on some of the horizontal green lines, but it was relatively minor on the Westinghouse LVM-47w1, slightly more noticeable on the Pioneer Pro-FHD1, and nonexistent on the Vizio GV47LF. The next two tests involved a rotating line and three shifting lines, and they were nearly perfect — sure, we could see some very slight artifacts on both of them, but it was good as we've seen with reference-level DVD players such as the aforementioned Denon. The next few tests, involving a waving flag as well as some highway footage, also looked excellent with sharp detail and very few jaggies. On the highway images, we could see some blurriness on the bottom of the steps that followed cars as they passed, but again, this is something we see on even the best DVD players. The DV-981HD also showed off its 2:3 pull-down detection capabilities on some footage of a race car speeding by a grandstand. It snapped into film mode in about a second; not the fastest we've seen, but it is still very good.

We moved on to more DVD test footage and looked at the Windows DVD Test Annex. We checked to make sure the DV-981HD didn't have the chroma bug error in every resolution, and it passed with flying colors. We also looked at some test footage from Avia Pro, and it mostly confirmed our conclusions from the other discs. One issue we noticed on the EOL Horizontal tests was that 1080p was sharper than 1080i on the Pioneer Pro-FHD1, the Westinghouse LVM-47w1 and the Vizio GV47LF. This indicates that, at least for the tests we observed, the de-interlacing capabilities of the DV-981HD are superior to those of the TVs on which we noticed this. To double-check that there wasn't a problem

with the DV-981HD's 1080i output, we looked at the same pattern using the Denon DVD-3910 in 1080i mode, and the same softness was present. The fact that the Oppo's 1080i de-interlacing is superior to several modern HDTVs is important because if they were exactly the same, it would be hard to justify the extra cost for a 1080p upscaling DVD player vs. a 1080i upscaling DVD player — you could just let the TV do the de-interlacing.

Of course, DVD performance comes down to more than an HQV scorecard, so we looked at some actual program material to see how it stacked up. We started off by watching the introduction to Sea Biscuit, which causes problems on less-capable DVD players. The DV-981HD handled the intro excellently, as we could make out absolutely no jaggies, and the black-and-white images looked very sharp for a DVD. We switched over to Star Trek: Insurrection and watched the introduction, our favorite torture test for 2:3 pull-down detection. As we suspected, the DV-981HD was solid — the arch of the bridge and the hulls of the boats were smooth, and the pan across the village was free of the excess juddering that we've seen before.

We would have loved to do a side-by-side test of the Oppo against the significantly more expensive Denon 2930CI, but unfortunately we did not have one on hand. Instead, we put the Oppo DV-981HD head to head with the older Denon DVD-3910, using the Aeon Flux DVD. This isn't an ideal test — since the Denon upscales only to 1080i, and the TV has to de-interlace to 1080p — but the processing on the Pioneer Pro is very good. We've watched this movie a lot on Blu-ray, so we have to admit we're a little spoiled. Standard-def DVD, even when upscaled by players as capable as the DVD-3910 and the DV-981HD, looks surprisingly soft when you've become accustomed to Blu-ray and HD DVD. That aside, the performance differences between these two players were very minor. We watched chapter 9, which is full of fine detail and pans, and we felt the performance was nearly identical. When you consider the price difference between these players, it's hard to justify the extra money for the Denon.

Of course, any high-end upscaling DVD player is now subject to the question: why not just get one of the increasingly affordable HD DVD players, which also are excellent upscaling DVD players? That's a good question, considering — at the time of this review — we could pickup Toshiba's new HD-A2 for less than \$400 online. We didn't have the HD-A2 on hand, but we did have the HD-A1, which we praised for its upconversion abilities in its review. Head to head, we'd have to give the nod to the Oppo, which bested the A1 on several HQV tests. On the other hand, HD DVD image quality from the HD-A1 blows away DVD. Which of the two is better for you depends on your media-viewing preferences, and how long you think HD DVD will last.

The only major video-quality issue that we've heard of with the DV-981HD is that it is susceptible to macroblocking — that is, when the gradations between colors are not smooth and visible "chunks" can be seen — especially on DLP TVs. We didn't have any DLPs on hand, and Oppo's site recommends the DV-981HD with DLP TVs only with careful calibration. The DV-970HD, which we also tested, is not susceptible to this issue according to Oppo's chart, although its overall video processing is not quite as good. We didn't see any macroblocking in our tests, but eagle-eyed owners of DLP TVs should be aware that they could run into this issue.



OPPO Digital, Inc.  
453 Ravendale Dr. Suite D • Mountain View, CA 94043  
(650) 961-1118 • www.oppodigital.com

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