

Oppo Digital DV-983H DVD Player

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DVD PLAYERS



Introduction

The DV-983H from Oppo Digital represents a lot of firsts. It is the first flagship design from Oppo, it is the first DVD player on the market to use the ABT-102 chip from Anchor Bay Technology(DVDO), and it is the first player to ever score a perfect 100 in the Secrets DVD Benchmark™. Oppo has continually impressed us with their attention to detail and their ability to continue to push the envelope of price/performance with their DVD players and universal transports.

The 983H is Oppo's first "flagship" player, but it isn't some huge beast of a player like you see from so many other manufacturers. It is only slightly larger than what we've seen before from Oppo. The build has a bit more robust feel than previous players and the front panel has a slightly more refined look to it.

Specifications

- Codecs: SD DVD, DVD-A, SACD
- Upsampling: 480p, 576p, 720p, 1080i, 1080p
- MPEG Decoder: Mediatek 1389/S
- De-interlacer: Anchor Bay Technology ABT-102
- Audio Frequency Response: 20 Hz – 20 kHz ± 1 dB
- Outputs: HDMI, Component, S-Video, Composite, Digital Coaxial, Digital Toslink, 7.1 Analog
- Dimensions: 2" H x 16.8" W x 10.5" D
- Weight: 5 Pounds
- MSRP: \$399 USA

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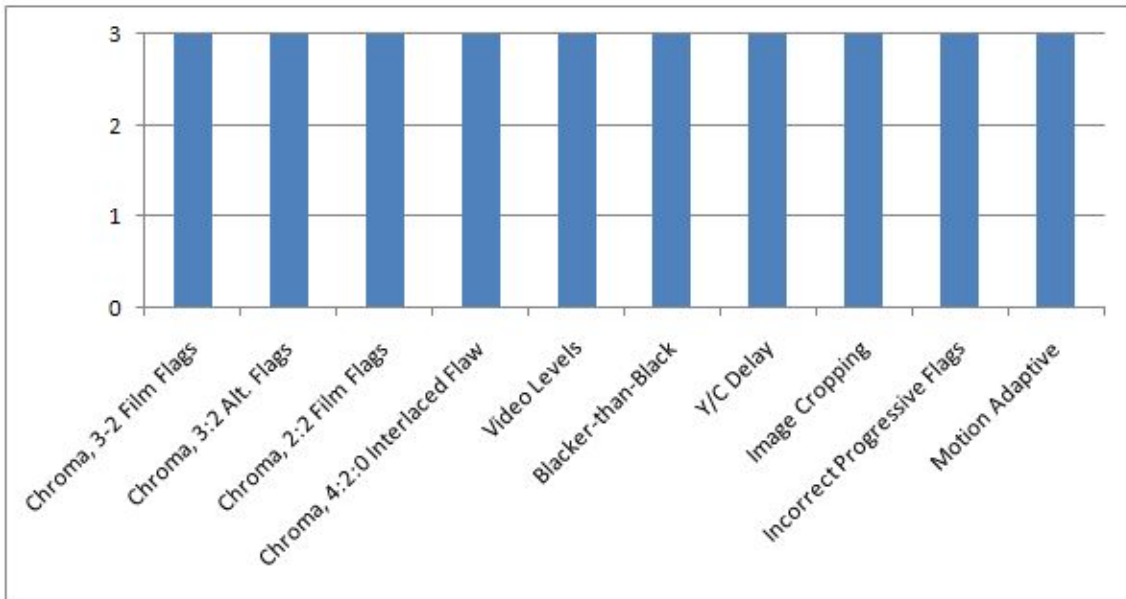
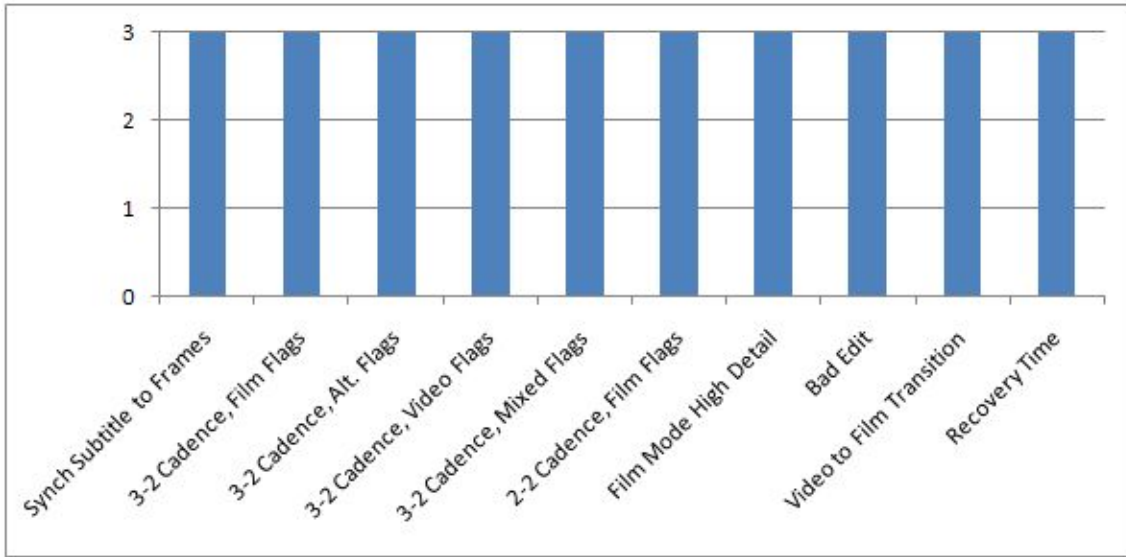
The Design

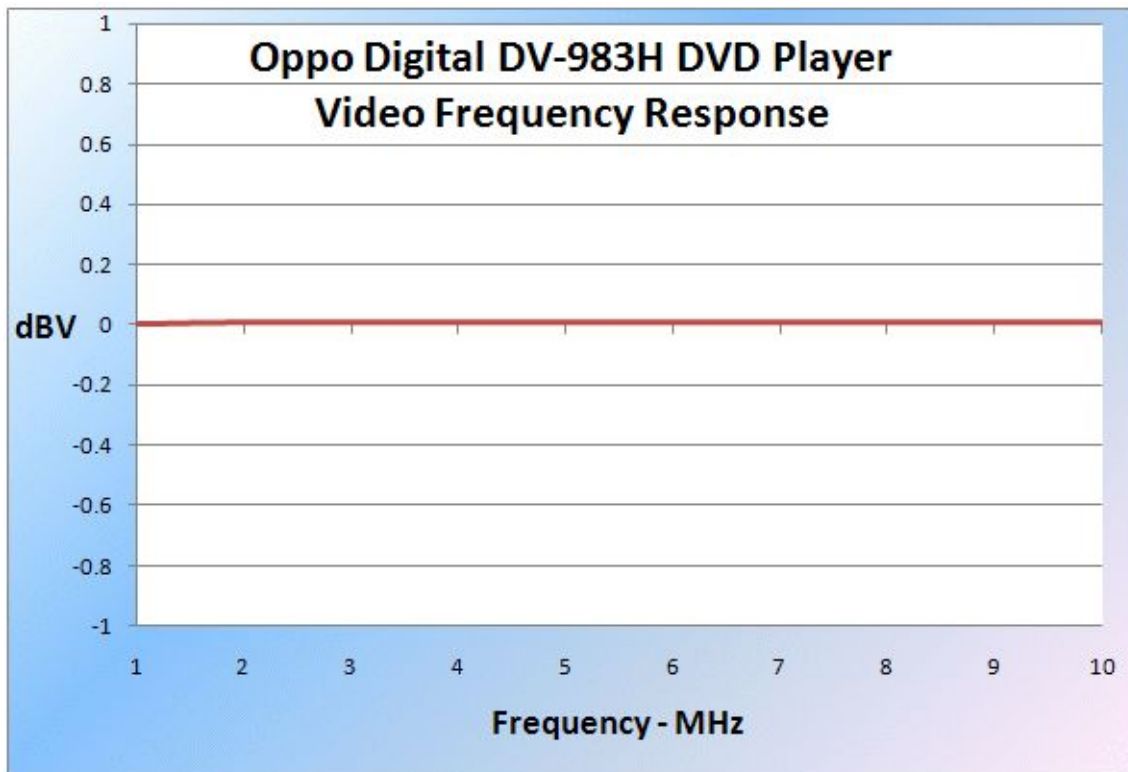
The inside is where the biggest changes occurred. Oppo researched several video processing solutions during the design of this player and settled on one of our favorites, Anchor Bay. The 983H uses the same video processing solution as the DVDO iScan VP30 with the optional ABT 102 board. We tested the VP30 quite awhile ago and loved its performance with SD content. The 983 takes advantage of most of the ABT processing and has quite a wealth of features available for tweaking in the video. This includes color space conversion, CUE correction, frame rate conversion (PAL/NTSC), and upconversion to 1080p60.

The 983H is also a true universal DVD player, offering DVD-Audio and SACD playback via HDMI (v1.2) or analog outputs. The 983 does not offer a pure DSD output though for SACD. The custom Mediatek decoder does not offer this output. The DSD signal is converted to PCM (not really a problem because just about every player does this).

The Benchmark Results

Now, with a score of 100 you would think that meant this player was absolutely perfect. That is not the case. I've said many times that the score only indicates what our test criteria lay out for video decoding and processing, but there are other factors that make a great player. The only area this player comes up slightly short is transport times. Some of the previous Oppo designs were a bit faster with load times and navigation. Make no mistake, this is still a very fast player, but a hair slower than some previous units. The 983H also has a very short layer change. While almost undetectable (roughly a quarter of a second), it is not the seamless performance offered by a few other Oppo designs. Oppo Digital states this is a limitation of the Mediatek chip and something they are aware of.





As far as video processing goes, this player is nearly without equal. The ABT-102 solution, combined with the custom Mediatek decoder gives the 983H a level of performance that we've only seen from designs costing a lot more than the 983H. We've seen this level of de-interlacing before from some Denon DVD player offerings, but we were a bit disappointed with their decoder performance. Not the case here. The 983 passed every test we threw at it (and a few more that aren't part of our Benchmark) with flying colors. The 983 offers a few different video modes, but the "Auto" option breezed through our tests with no issues at all and gets our nod as the recommended setting.

The core video performance was superb. The player isn't clipping any of the active image, retains the full dynamic range, and doesn't show any signs of CUE. It even has a CUE filter that can be toggled on and off for 4:2:0 material.

Update – 4/15/08: Here are the Benchmark test results in our new Benchmark chart format, which began with Adrian Wittenberg's first Benchmark review in April, 2008. Click on the small chart to see the large version, and then click on the small square in the bottom right hand corner if need be, to bring it to full size.



Conclusions

The tentative release date of the Oppo DV-983H is March 10, 2008, and if you're looking for reference video playback performance, this is it. Oppo has produced one heck of a machine. Its performance matches any design I've tested to date, and its performance via HDMI with both video and audio is outstanding. My highest recommendation.

Note: John Johnson is preparing a review covering the rest of the performance, including audio bench test results, which will be published soon.