

Title:

Blu-Ray: How HD-DVD And Blu-Ray Differ

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Summary:

DVDs continue to be the prominent medium for home theater entertainment. The technology is being refined and improved upon by a number of manufacturers, making its future slightly uncertain though it is definitely clear that it will continue is one format or another. Many of you have probably been hearing about Blu-ray and HD-DVD discs and their path as the next generation of DVDs. The discrepancies between the two are confusing many home theater buyers, so it's important to ...

Keywords:

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Article Body:

DVDs continue to be the prominent medium for home theater entertainment. The technology is being refined and improved upon by a number of manufacturers, making its future slightly uncertain though it is definitely clear that it will continue is one format or another. Many of you have probably been hearing about Blu-ray and HD-DVD discs and their path as the next generation of DVDs. The discrepancies between the two are confusing many home theater buyers, so it's important to know just what each of these new technologies has to offer so that you can make an informed decision on what to purchase and when.

Let's start by discussing just what Blu-ray is. Chances are, if you've stepped into any of the leading home theater and electronics stores in the country, you've seen Blu-ray discs advertised in the DVD section. In truth, Blu-ray discs are somewhat like traditional DVDs, except that they have the ability to record, rewrite, and playback high definition (HD) video that is compatible with the growing number of HD televisions finding their way into home theaters every year. Unlike traditional DVDs, Blu-ray discs can hold nearly five times as much data. On a single layer disc, they can hold 25GB of data, and 50GB can be stored on a dual layer disc. By being able to hold so much more, Blu-ray discs are able to easily store the advanced information necessary to provide content in HD format.

HD-DVD offers the same technology, though it isn't able to hold as much

information as Blu-ray. Developed by Toshiba and NEC, it is able to hold three times as much data as traditional DVDs. While this may be less than Blu-ray, the data capacity of HD-DVDs still exceeds the amount needed to watch major blockbusters in high-definition. HD-DVD also came out much sooner and was first quoted to be the successor to the standard DVD format. HD-DVD is completely compatible with HD-DVD players, which in turn are compatible with HD televisions. High definition technology is certainly the wave of the future for home entertainment, and HD-DVD was the first disc technology formatted for it.

Both Blu-ray and HD-DVD discs use a new form of laser that improves on what the standard DVD used. While older, standard DVD models used a red laser to transfer content from disc to player to screen, these two technologies use a blue-violet laser instead. The main benefit with using blue-violet lasers is that they have a shorter wavelength than red lasers. This means that they can be focused with a much higher rate of accuracy.

As you can see the differences between these two formats are very few, In short, Blu-ray is able to hold more information than HD-DVD, but HD-DVD has been around for much longer and still holds an adequate amount for any applications currently in the market. Both formats use blue-violet lasers to better read the information.

The biggest question right now is which format will end up on top. Blu-ray has the added advantage of being backed up by some major players in the movie business. Seven of the eight major Hollywood movie studios have released films in Blu-ray format recently, while five of them are releasing films exclusively on Blu-ray. HD-DVD has the backing of several major consumer electronics manufacturers but does have some ground to make up with the production companies. However, with the added experience of being in production longer and having consumers more familiar with the name, it's very possible for them to pull ahead. The race to be the top home entertainment format will continue on and the consumer will simply need to wait to see which one wins. In the meantime, players are available for both formats and some manufacturers have players that satisfy both formats available.

~Ben Anton, 2007