

What Are The Differences Between DVD Formats???

If you are like me, I did not know the differences with all the different DVD formats.

How do I figure out which DVD format is compatible with my existing system?

I used to just put a DVD movie in the DVD player and be done with it. The quality was far better than the old VHS format and I soon abandoned the VHS player.

I only became interested in the DVD formats when it was possible to record on them and also when I got my DVD recorder.

The big difference between the standards is based on which standard each manufacturer goes by.

The term DVD describes the way data is stored on or written to the disc itself. These are called physical formats.

The different formats are as follows: DVD+R, DVD+RW, DVD-RAM, DVD-R, DVD-RW, & DVD-ROM. I will explain each one of them. I will also explain what are some of the other formats that are out.

DVD+R and DVD+RW

DVD+R and DVD+RW formats are supported by Philips, Sony, Hewlett-Packard, Dell, Ricoh, Yamaha and others.

DVD+R is a recordable DVD format similar to CD-R. A DVD+R can record data only once and then the data becomes permanent on the disc. The disc can not be recorded onto a second time.

DVD+RW is a recordable format similar to CD-RW. The data on a DVD+RW disc can be erased and recorded over numerous times without damaging the medium.

DVDs created by a +R/+RW device can be read by most commercial DVD-ROM players.

DVD-R, DVD-RW and DVD-RAM

These formats are supported by Panasonic, Toshiba, Apple Computer, Hitachi, NEC, Pioneer, Samsung and Sharp.

DVD-R is a recordable DVD format similar to CD-R and DVD+R. A DVD-R can record data only once and then the data becomes permanent on the disc. The disc cannot be recorded onto a second time. There also are two additional standards for DVD-R disks: DVD-RG for general use, and DVD-RA for authoring, which is used for mastering DVD video or data and is not typically available to the general public.

DVD-RW is a re-recordable format similar to CD-RW or DVD+RW. The data on a DVD-RW disc can be erased and recorded over numerous times without damaging the medium. DVDs created by a -R/-RW device can be read by most commercial DVD-ROM players.

DVD-RAM discs can be recorded and erased repeatedly, but are compatible only with devices manufactured by the companies that support the DVD-RAM format. DVD-RAM discs are typically housed in cartridges.

DVD+R DL and DVD-R DL

Dual layer technology is supported by a range of manufacturers including Dell, HP, Verbatim, Philips, Sony, Yamaha and others. Dual layer technology provides two individual recordable layers on a single-sided DVD disc. Dual Layer is more commonly called Double Layer, and can be seen written as DVD+R DL or DVD-R DL.

DVD+R DL (also called DVD+R9) is a Dual Layer writeable DVD+R. DVD-R DL (also called DVD-R9) is a Dual Layer writeable DVD-R. The dual layered discs can hold 7.95GB.

The dual layered discs (DVD+R9 and DVD-R9) can hold 7.95GB and double sided dual layer (called dvd-18) can hold 15.9GB.

HD-DVD

Short for high definition-DVD. It is for recording high-definition video on a DVD. In general, HD-DVD is capable of storing between two and four times as much data as a standard DVD. The two most prominent competing technologies are Blu-ray and AOD.

Blu-ray Disc (BD) - uses a 405nm-wavelength blue-violet laser technology, in contrast to the 650nm-wavelength red laser technology used in traditional DVD formats. The rewritable Blu-ray disc, with a data transfer rate of 36Mbps (1x speed) can hold up to 25GB of data on a single-layer disc and 50GB on a dual-layer disc. On a 50GB disc, this translates into 9 hours of high-definition (HD) video or approximately 23 hours of standard-definition (SD) video. The Blu-ray format was developed jointly by Sony, Samsung, Sharp, Thomson, Hitachi, Matsushita, Pioneer and Philips, Mitsubishi and LG Electronics.

Advanced Optical Disc (AOD) - AOD and Blu-ray are similar in that they both use 405nm-wavelength blue-violet laser technology, while Blu-ray has a storage capacity of 25GB on a single-layer disc, AOD has a storage capacity of 20GB on a single-layer disc and the capacity to hold 30GB on a dual-layer disc. AOD was developed jointly by Toshiba and NEC.

DVD-ROM

DVD-ROM was the first DVD standard to hit the market and is a read-only format. The video or game content is burned onto the DVD once and the DVD will run on any DVD-ROM-equipped device. DVD-ROMs are similar to CDs.

Non-standardized DVD formats

DVD-VCD is a DVD-Video disc that has data on it that has been encoded by using the MPEG-1 video format with the same definitions VCD has.

DVD-SVCD is also not a valid DVD standard, since the DVD standard does not support the SVCD resolution. The term DVD-SVCD is used to describe a hacked, or non-standard DVD-Video disc that has SVCD compatible content on it.

DVD-MP3 is created with and contains only digital audio files in the MP3 format. Not all DVD players can play DVD-MP3 discs.

A Note on DVD Burners

In 2003 Sony introduced a multi-format DVD burner (also called a combo drive or DVD-Multi) and today many manufacturers offer multi-format DVD burners which are compatible with multiple DVD formats.

History: The first DVD players and discs were available in November 1996 in Japan, March 1997 in the United States, 1998 in Europe and in 1999 in Australia.

As you can see there are different formats and some are very similar. For the ones that are similar, the only differences would be the name and who the actual manufacturer is.