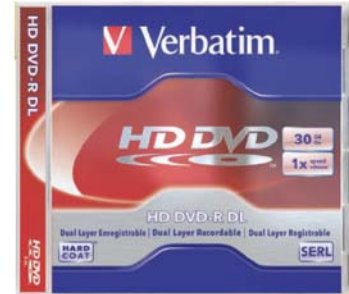




HD DVD

With the growing popularity of high definition televisions (HDTV's) and high definition programming, Verbatim is now manufacturing a high capacity storage solution called HD DVD "High-Density DVD." These are capable of holding large capacity files associated with high definition video.

HD DVD technology uses a blue laser with wavelength = 405nm (nanometers) to read and write data. This is much shorter than the 650nm red laser used to burn DVD. The blue laser's shorter wavelength makes it possible to form smaller data pits, thus increasing the data density and boosting the storage capacity of an HD DVD disc to 15GB (single layer).



HD DVD comes in three different formats:

- HD DVD-ROM for read-only (similar to DVD-ROM)
- HD DVD-R for write-once discs (similar to DVD-R)
- HD DVD-RW for rewritable discs (similar to DVD-RW)



Will HD DVD be backwards compatible with DVD?

Players and discs can be backwards compatible with DVD; however, it's really up to each manufacturer to decide if they want to make their products backwards compatible with DVD. Just as DVD hardware supports both CD and DVD, most of the new hardware is expected to support DVD and HD DVD. Several leading consumer electronics companies such as Toshiba and NEC have announced products supporting HD DVD/DVD/CD read/write capabilities.

How does Verbatim/MKM differentiate its HD DVD media?

Well known as the leading developer of organic dyes for CD-R and DVD-R media, MKM developed a new recording AZO dye specifically designed for HD DVD-R. Highly sensitive to blue laser light, the new recording dye delivers three key advantages:

1. **Superior Compatibility.** High recording sensitivity plus the wider power margin of the new recording layer ensure a low error rate, regardless of drive power fluctuations or smudges on the disc surface.
2. **Read Stability.** Uncompromised read stability from day one to more than 1.5 million ^{**1} read cycles ensures years of ultra-reliability.
3. **Long Life.** Highly stable recording characteristics for a lifetime of high performance--even after long periods of storage for both recorded and unrecorded media. Like the patented Metal AZO recording dye used with Verbatim's DVD-R media, the new dye is highly resistant to sunlight and heat.

The recording characteristics of Verbatim HD DVD-R discs are further enhanced by the disc's physical attributes. Features such as a uniform groove shape, consistent substrate thickness and flatness of the disc have been proven to optimize the performance and longevity of Verbatim media.



Who promotes HD DVD?

HD DVD is the next-generation DVD format standardized by the DVD Forum, an international association of about 240 consumer electronics, IT, entertainment software, disc manufacturing and other related companies around the world. HD DVD is promoted by Toshiba, NEC, Sanyo, and, most recently, Microsoft, HP, and Intel. Verbatim/MKM is a member of the DVD Forum and the HD-DVD Promotion Group.

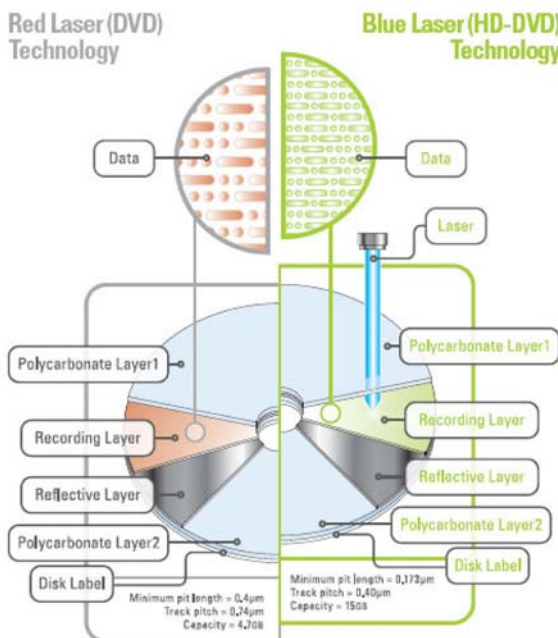
What are HD-DVD discs used for?

The applications for HD DVD products span the entire storage spectrum--Data, Audio, Photo and Video storage. They include personal and professional video production, personal and business storage, backup, archiving, radio and television broadcast storage, education, healthcare and government applications.

Why is high-definition better than DVD?

Standard definition (SD), the video most of us are used to seeing on our TVs today, has up to 480 visible lines of detail, whereas high-definition video has as many as 1,080. With 5 times the resolution of normal television, high definition video looks sharper and clearer than regular video. Consumers will also benefit from other improvements over current DVD technology including enhanced menu navigation, increased capacity for bonus features and new interactive capabilities.

Standard DVD vs. HD-DVD



*1 Achieved read stability more than 1.5 million read cycles by testing resulted base on HD DVD-R specifications ver.1.0.