

DVD Terminology and Disc Explanation

- How do the various DVD formats differ?

DVD-ROM

DVD Read Only Memory, it is used to store data. Most commonly associated with just burning any kind of data to DVD for storage. This product is already beginning to surpass conventional CD-ROMs.

DVD-RAM

This makes DVD a virtual hard disk, with a random read-write access. Originally a 2.6 GB drive, its capacity has increased to 4.7 GB per side. It can be re-written more than 100,000 times.

DVD-R

Pronounced "dash R" not "minus R," is a single-layer disc with 4.7 GB of storage. The same as a single session CD-R, users can write only once to this disk.

DVD-RW

Similar to DVD-RAM except that its technology features a sequential read-write access more like a phonograph than a hard disk. Its read-write capacity is 4.7 GB per side. It can be re-written up to about 1,000 times.

DVD+R

A DVD disc that allows multiple layers for one disc where as DVD-R only allows one layer. Multi-layer DVD+R can allow extra capacity per disc than DVD-R, hence its higher cost.

ITV recommends the use of DVD-R discs only.

- How much video can a DVD hold, in minutes?

The amount of time a DVD can hold depends on the quality of the video. For the best quality video, a DVD can hold 60-120 minutes worth of video. If a person encoded at VHS quality, you can get as much as 300 minutes (5 hours) worth of video on a DVD. Note: this is for a single sided DVD-R.

- What is a dual-layer disc?

A dual-layer disc has two layers of data, one of them semi-transparent so that the laser can focus through it and read the second layer. Since both layers are read from the same side, a dual-layer disc can hold almost twice as much as a single-layer disc, typically 4 hours of video.

- Why does playback sometimes freeze for a second?

Some movies, especially those over two hours long or encoded at a high data rate, are spread across two layers on one side of the disc. When the player changes to

the second layer, the video and audio may freeze for a moment. The length of the pause depends on the player and on the layout of the disc. The disc producer usually tries to choose a point where the pause will be less noticeable. The pause is not a defect in the player, or the disc.

- Will DVD players replace VCRs?

Eventually. DVD player sales exceeded VCR sales in 2001. DVD recorders will hasten the death of VCRs once the price difference is small enough. DVDs have many advantages over tapes, such as no rewinding, quick access to any part of a recording, and fundamentally lower technology cost for hardware and disc production. Some projections show DVD recorder sales passing VCR sales in 2005. By 2010, VHS may be as dead as vinyl records were in 2000. *ITV recommends the VCR/DVD Dual Deck.*

- How long do DVD discs last?

Since DVDs are read by a laser, they never wear out from being played since nothing touches the disc. Pressed discs (the kind that movies come on) can last anywhere from 50 to 300 years.

- How long does it take to burn a DVD?

The time it takes to burn a DVD depends on the speed of the recorder and the amount of data. Playing time of the video may have little to do with recording time, since a half hour at high data rates can take more space than an hour at low data rates. A 2x recorder, running at 22 Mbps, can write a full 4.7GB DVD in about 30 minutes. A 4x recorder can do it in about 15 minutes.

Note: the -R/RW format often writes a full lead-out to the diameter required by the DVD spec, so small amounts of data (like a very short video clip) may take the same amount of time as large amounts.