

Today: VCR ..Tomorrow: DVD?



What is DVD?

DVD stands for **digital video disc** or **digital versatile disc**, depending on the source. Either way, it offers the ability to **store more in less space**. A standard DVD disc measuring 4.7 inches can hold a two-hour movie, extra scenes, a soundtrack, and a whole lot more. It aims to eventually replace audio CD, videotape, laser-disc and CD-ROM. DVD delivers 540 horizontal lines of resolution making for much sharper images than the standard VCR format, which has 210 lines. **DVD sounds better**, too: digital sound can be separated into discrete channels, making surround sound possible. DVD-videos require a DVD player connected to a TV monitor. Current DVD players cannot record (yet).



DVD Player

Can DVD videos be played on a computer?

Most new computers with DVD-ROM drives can also play DVD-Videos. The computer operating system or playback software must support regional codes (that are embedded in the discs) and be licensed to descramble copy-protected videos. Microsoft Windows 98 includes DirectShow 5.2, which provides standardized support for DVD-Video and MPEG-2 playback. DirectShow is available for download and can also be installed in Windows 95.

What are the advantages of DVD?

The quality and versatility of DVD-Videos and players offer many advantages in the area of education and knowledge advancement:

- ◆ Up to 8 tracks of audio for multiple languages.

- ◆ Automatic branching of video for multiple story lines; good for literature and social studies.
- ◆ Interactive features.
- ◆ Random access.
- ◆ Special effects playback: freeze, step, slow, fast and scan.
- ◆ Programmability: playback of desired sections in a pre-selected sequence.
- ◆ Durability: no wear from playing.
- ◆ Compact size: easy to handle, store and ship. Also players can be portable and easy to transport from one classroom to another.
- ◆ Cost of replication is small.

How much does it cost?

The production of DVD Videos involves, in addition to the development costs, the costs of mastering and replication. To prepare a master DVD, video, audio and control information must be encoded and multiplexed into a single data stream, and finally encoded in low level format. While videotapes do not have a mastering cost, DVDs cost about \$2,000 to master and about \$1.70 to replicate. The cost of replication is expected to drop to about \$0.50 soon. Videotapes cost about \$2.50 to replicate.

DVD players are currently sold at about \$300 and up. The price is expected to drop to the VCR levels within a few years.

Is DVD the video storage technology of tomorrow?

The advantages of the DVD in terms of quality and extra features coupled with projected drop in costs make it a viable alternative for videotapes, laser discs and CDs.

For further information:

- ◆ <http://www.videodiscovery.com/vdyweb/dvd/dvdfaq.html>
- ◆ <http://www.unik.no/~robert/hifi/dvd/>