

## Technology Tips: Storage

**How much video can be stored on an external storage device such as a zip disk? CD? DVD? External hard drive? What's the shelf-life of these devices?**

*As a reminder, one minute of our video equals approximately 1.8 megabytes (mb). One megabyte is roughly the size of a floppy disk.*

**Zip Disks:** (made by Iomega) Shelf-life of ten years and 100/250/750 MB of memory is available. These sizes would hold roughly 25 minutes, 50 minutes, or 375 minutes worth of video (this does not include any multimedia application files). Prices have dropped significantly: a 750 MB can be found as low as \$149.00. Zip disks cost approximately \$13.00 for three.

**CDs:** Shelf-life of a CD has been estimated to last about ten years, if the CD is handled and stored correctly, and also kept clean. 700 MB of memory is available and a CD holds approximately 350 minutes of video. CD burner prices have significantly dropped - some can be found as low as \$19.00. However, you will get what you pay for. Plan to spend around \$75-\$200.00 (USA Today, 2003). Also, the CDs themselves are very important: the cheaper the disc the shorter the lifespan. Do not sacrifice your video to inferior products. Most burners will include a list of recommended media. Often Memorex, Pioneer, and Imation are mentioned in this literature. Expect to pay \$30.00 for a spindle of 100 CDs.

**DVDs –** A DVD holds 4.7 GB (or 7 CDs' worth of video)

The shelf-life of a DVD is roughly the same as a CD: about ten years, again with proper handling and care. On one DVD, you can store 2450 minutes' worth of video. If you are considering a DVD burner, please know that you need a FireWire or USB 2.0 (not the original USB). For an external burner, your cost will jump approximately \$75.00 or more (your price range for a DVD burner: \$350 - \$500.00). Many new computers are now coming with an internal DVD burner. Models to review: Sony's DRU500A for an internal drive or Hewlett Packard's DVD Writer DVD 200E. Note: If you were thinking of playing United Learning's videos on your home Entertainment DVD Player, it will not work (only on your computer).

**Memory Fobs -** A newer piece of storage hardware. The fob is small and can be attached to your key ring, belt, even worn as a necklace! It can store anywhere from 16 MB to 1 GB of space (and the prices will vary from \$25 - \$1,000 depending on the amount of memory you purchase). The fob has a USB port that you simply insert into your computer and save your work directly to the fob. This is a great portable tool for carrying your presentations, lessons, and video clips.

**Authored by United Learning, February 2003**

You do not have to worry about your host's computer not having the other hardware peripherals mentioned in this article, and it gives you a little more flexibility. As long as the computers you will be using have a USB port, your multimedia will work every time, with no need for additional software on any machine. According to Info Tech Partners, some fobs also include password protection. Some companies selling these fobs are Agate, Targus, PenDrive, and Memory Suppliers to name a few (Info Tech Partners, 2003).

**External Hard Drives** – Specifically speaking, aka a “FireWire drive.” Most are FireWire, but USB can also be purchased. This is a high speed, external hard drive that can hold up to 500 GB. An external hard drive would really only be needed if you are working with large files, transporting massive amounts of data, or for temporary storage of files. However, these drives are basically IDE that transport data incredibly fast, making them delicate and temperamental. SO be careful when storing, setting up, or transporting these drives, because their half-life depends on you and proper care. Various companies that make these external hard drives include: Maxtor, LaCie, Acomdata. Prices range from \$219.00 for 80GB to \$950.00 for 500GB. Other external hard drives also to consider: the iPods which are for Mac and PC (expect to pay \$300 - \$500 for 5 – 20 GB of space).

As with any technology, the cost for these devices continues to drop. A cd burner will probably give you the most bang for the buck, but as we all know: we always need more storage space (and therefore, you will pay a significant amount more for a DVD burner or external hard drive).

And for all: always check for compatibility, a good warranty, and a return policy. Many vendors are willing to work with you, and provide some IT support.

**Article Sources:** USA Today article, December 4, 2002; CDNET (<http://www.cdnet.com/cd/>) and ZDNET (<http://www.zdnet.com>) websites, viewed December 5, 2002 and Info Tech Partners, retrieved February 14, 2003 at <http://www.itpna.com/Vision/2002/20020823%20USB%20Memory%20Fobs.htm>

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