

Helpful tips for preserving your precious documents and memorabilia

Preserving CDs and DVDs

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CDs and DVDs are optical media, meaning they use laser light technology for data retrieval. There are many different varieties of CDs and DVDs. Most handling and storage guidelines are applicable to all formats, and we have tried to indicate a few important variations. As these are relatively new technologies, little research has been done at this point to determine how long these disks will last and be usable. Following these guidelines should prolong the life expectancy of your CDs and DVDs.

General Tips for both CDs and DVDs:

Tip #1—Store disks in a cool (room temperature or cooler, but not in the freezer) environment in which the air is clean.

Tip #2— Avoid exposure to direct sunlight, which can deteriorate the reflective data layer and the protective plastic layers.

Tip #3—Avoid prolonged exposure to moisture, as this can ruin the disc.

Tip #4— Never use stick-on labels, as the adhesive can make the disc unreadable.

A permanent, water- or oil-based (non-solvent based), felt-tip pen is best for labeling.

Tip #5—Store discs upright (book style) in plastic cases designated for CDs and DVDs. When possible, leave discs in their original packaging.

Tip #6—Handle discs by the edge. Fingerprints and scratching can cause skipping.

Tip #7—Wipe discs with a soft cotton cloth, from the center, in a straight line, to the edge. DO NOT wipe in a circular motion, which can lead to scratching.

Tip #8—When necessary, clean discs with mild solution, such as rubbing alcohol. Avoid harsh cleaners, like acetone.

Tip #9—Keep playing equipment clean and in good working condition.

Tips for specific disc formats:

CDs

- Be especially careful with the “label side” of a CD; it’s closer to the actual data layer.

Burned CDs

- Do not remove recordable discs from original plastic packaging until ready to use.
- For long-term preservation, burn data onto gold CDs.

DVDs

- Be especially careful with the “back side” of a DVD; it’s closer to the actual data layer.
- Never store a DVD in a jewel case designed for CDs, as this can put too much stress on the inner hub.

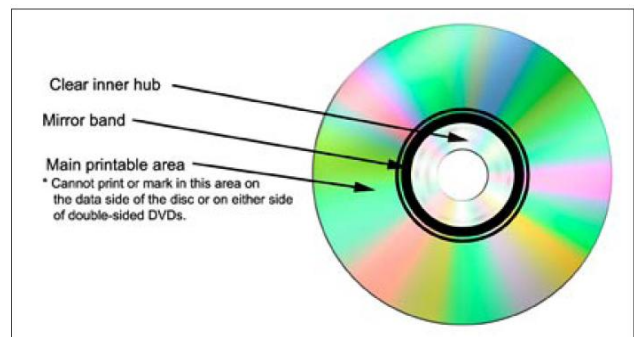


Figure 12. Printable or markable areas of the disc

Tip #10—Never use a ballpoint pen, pencil, or fine-tip marker to write on the disc. Only write on discs in the clear inner hub at the center of the disc. See illustration at right (*image taken from Beyers*).

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Tip Sheet: Annotated Bibliography

Anglim, Chris. "Preserving the CD-ROM." *Technical Services Law Librarian*. 22:4 (June 1997).
<http://www.aallnet.org/sis/tssis/ts11/22-04/presrv.htm> Viewed on 02/26/2005.

This article is a brief, straightforward discussion of care and handling procedures for CD-ROMs. Most helpful are the list of Dos and Don'ts and the extensive bibliography Anglim provides.

Beyers, Fred R. *Care and Handling of CDs and DVDs: A Guide for Librarians and Archivists*. (NIST Special Publication 500-252 Information Technology) 2003.
<http://www.itl.nist.gov/div895/carefordisc/CDandDVDCareandHandlingGuide.pdf>

This article takes an in-depth look at the structure of CDs, DVDs, CD-ROMs, DVD-ROMs, CD-Rs, DVD-Rs, CD-RWs, and DVD-RWs . It also includes detailed information about the storage, handling, and cleaning guidelines for each type of disc. NIST has also supplied a detailed glossary in the article.

CD-Info Company. "Customizing CDs." <http://www.cd-info.com/CDIC/Technology/CD-R/Labeling/> 1997. Viewed on 02/28/2005.

This web site from the CD-Info Company provides detailed guidelines for a variety of methods that can be used to personalize CD labels. It describes the advantages and disadvantages of making paper labels and using marking pens for manual labeling. Information about using ink-jet printers, wax-transfer printers, and silk screening label CDs is detailed the article as well.

Labriola, Don. "DVD Rot, or Not?" *PC Magazine*. June 2004.
www.findarticles.com/p/articles/mi_zdpcm/is_200405/ai_ziff126783. Viewed on 02/28/2005.

This article contains basic information about the structure, handling, and care of DVDs. The author also compares and contrasts the difference between the structure, handling, and care of CDs and DVDs.

Langa, Fred. "Langa Letter: Time To Check Your CDRs" *Information Week*. 3 Nov 2003.
<http://www.informationweek.com/story/showArticle.jhtml?articleID=15800263> Viewed on 02/26/2005.

Langa looks into the longevity of recordable CDs and offers suggestions for preserving your recorded data for at least ten years. One of the most helpful tips he provides is the discovery that stick-on CD labels are extremely detrimental and can lead to almost immediate data loss.

Library of Congress. "Cylinder, Disc, and Tape Care in a Nutshell." 6 Nov 2002. <http://www.loc.gov/preserv/care/record.html> Viewed on 03/04/2005.

This article, at the Library of Congress preservation website, offers care and handling guidelines for a variety of audio formats, including records, tapes, and discs. Though not

intended for the general public, there is an interesting section which describes environmentally-friendly cleaning solutions for CDs and DVDs.