

STANFORD UNIVERSITY LIBRARIES
PRESERVATION DEPARTMENT

**Guidelines for Storing, Handling, and Marking Optical Media
in SULAIR Collections**

Storage

Housings

Standard housings known as jewel cases are acceptable, because the center locking crown suspends the disc by its hub, preventing the top and bottom surfaces from coming into contact with materials that can scratch or otherwise degrade the media.

Avoid the use of sleeves or envelopes made of paper, plastic or Tyvek for storing optical media. These housings do not provide adequate protection.

Positioning

Optical media should be shelved vertically.

Environmental Conditions

Generally speaking, optical media can be safely stored in room temperature conditions. Like all library materials, optical discs should be stored in dry, clean environments where the temperature and relative humidity levels do not fluctuate greatly. Do not store optical media (alone or housed in a case) in direct sunlight.

Handling

Hold optical discs by their edges or by the hub. Fingerprints and smudges on the disc surfaces can interfere with the laser's ability to read the data.

Cleaning

Optical media do not require routine cleaning. If dust or dirt is apparent on a disc's surface, avoid wiping; try using canned air to blow it off first.


If wiping is necessary, use a soft, clean cotton cloth and wipe in a radial fashion (from the inner hub straight to the outer edge), not in a circular direction. Rinse under water to remove heavy dirt accumulation. Avoid using cleaning fluids of any kind.

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Marking

Marking collection items is necessary for materials control, but marking methods routinely employed in libraries present a number of potential causes for damage and deterioration to optical discs. The following table outlines the problems and suggested ways to avoid them.

Labels And Barcodes Adhered To Disc Surface	
<i>Known Problems</i>	<i>How to Avoid Them</i>
<p>Adhesive of label or barcode fails over time, causing the label to become detached.</p> <p>A partly detached label or barcode may cause disc to become jammed inside drive.</p> <p>The forced removal of a label or barcode could result in the removal of disc material underneath the adhesive, which may damage the disc and render it unreadable.</p> <p>The weight of a label or barcode can affect the balance of the disc, and as the disc spins in the drive during the read process, the imbalance can cause errors preventing data access.</p>	<p>Do not apply labels and barcodes to the surface of optical media, including the disc hub area.</p> <p>Instead, apply labels and barcodes to the media item's housing ("jewel case").</p> <p>If a label or barcode is becoming detached from the disc, do not attempt to peel it off. Take steps to copy data from the affected disc to new media or to replace the item.</p>

Writing with pen or ink on disc surface	
<i>Known Problems</i>	<i>How to Avoid Them</i>
<p>The sharp point of writing implements, such as ballpoint or fine tip pens, can depress or scratch into the top layer of a disc. If the scratch is deep, it could interfere with the drive laser's ability to read the disc or it could allow atmospheric moisture or pollutants to interact with, and adversely affect, the metal layer where data is recorded.</p> <p>The ink used in many markers, such as Sharpie pens, contains solvents which are known to damage optical media.</p>	<p>Do not write on the surface of an optical disc.</p> <p>Most recordable discs have a unique number printed on the disc hub by the manufacturer. This number can be used to catalog the disc and identify its contents.</p> <p>If writing on the disc is unavoidable:</p> <ul style="list-style-type: none"> • Use only a writing implement with water-based ink and that is specifically designed for marking optical media. Recommendations include the Dixon Redisharp Plus or the Mitsui CD Marker • Write only on the inner hub of the disc (see illustration below), an area where no data is recorded. <div style="text-align: center;">  </div> <p style="text-align: center;">The disc hub is the clear inner ring.</p>