



Preservation Recommendations for Audiovisual Assets

General Recommendations:

Preparing audiovisual assets at an item level is a recommended step towards preservation. The level of asset preparation is dependent upon many factors, including whether preservation will be performed in or out of house, and in the case of film preservation, whether or not the lab will be inspecting, cleaning, and repairing film. You may wish to prepare all assets at once, before batch digitization, or save specific tasks to occur before each item is digitized, at the time of digitization.

Preparing audiovisual assets for preservation can help you identify and mitigate risks, such as in the instance of dust, damage, or mold. Re-housing and repair of assets during preparation provides a level of conservation.

The purpose of preparing an asset is to streamline and inform the preservation process and to ensure that each asset is identifiable and in an ideal state for digitization. During preparation, set aside assets with special problems, such as physical damage, mold, or serious visible decay. These assets can be repaired and treated by a vendor that can handle advanced issues. **Mold can spread among assets in a collection and is a health hazard.** Any assets that exhibit signs of mold should be sealed in plastic and moved out of the collection.

Format specific recommendations:

Grooved discs (LPs)

Discs should be stored vertically in polyethylene sleeves. Do not store discs of different sizes against each other, as this can lead to physical warping. Handle grooved discs by the edges of the label only. Physical preparation for grooved discs include cleaning according to best practices and re-housing discs that are in good condition, and noting issues such as physical damage, flaking, or substrate migration.

[Care, Handling, and Storage of Audio Visual Materials](#)

Magnetic media (Open reel)

Open reel tapes (video and audio) should be stored vertically in plastic storage boxes of polypropylene or polyethylene. Cardboard sleeves and inserts should be removed and discarded, as paper fibers can damage magnetic tape. Physical preparation for open reel magnetic media includes performing a visual inspection that notes any tape deformation (ex: wavy lines in wind), edge frilling, brittleness, shedding, a poor pack, odors (specifically vinegar-like), the presence of mold, or other notable damage. Hydrolysis, commonly known as “sticky shed syndrome,” is a common issue with magnetic media and a direct result of exposure to high levels of humidity. This is readily

identifiable with open reel media, as outer revolutions of the tape will stick to itself if you attempt to allow the reel to unwind. Any sign of hydrolysis should be noted so that the asset can be treated before playback is attempted.

[Videotape Identification and Assessment Guide](#)

[Independent Media Arts Preservation Online Resource List](#)

Magnetic media (Cassettes)

Store audio and video cassettes vertically in plastic storage boxes of polypropylene or polyethylene. Cardboard sleeves and inserts should be removed and discarded, as paper fibers can damage magnetic tape. Physical preparation for magnetic media includes inspecting cassettes for breakage, removing record tabs to prevent overwriting content, performing a visual inspection that notes odors, poor winds, the presence of mold/ crystallization, or other notable damage. Hydrolysis, commonly known as “sticky shed syndrome,” is a common issue with magnetic media and a direct result of exposure to high levels of humidity. Any signs of humidity-related damage, such as water stains on a case or a moldy odor should be noted so that the asset can be treated before playback is attempted. Re-housing is not usually recommended for cassettes, since their lifespan is relatively short, preservation level housing is not usually available, and funds to purchase such housing may be better directed towards preservation activities. The unit may decide to re-house at its own discretion.

[Videotape Identification and Assessment Guide](#)

[Independent Media Arts Preservation Online Resource List](#)

Film

Films should be wound on a 3” archival core and stored in archival polypropylene or polyethylene cans. Remove film from plastic bags, remove rubber bands and acidic paper.

[National Film Preservation Fund: The Film Preservation Guide](#)

Optical Media

Store vertically in a dark, controlled environment with consistent temperatures. Use individual cases to minimize scratches. Make copy and store digital files according to digital media recommendations below.

[The Life Expectancy of Optical Media](#)

Digital Media

Identify all your digital files on cameras, computers, and removable media, such as memory cards and external hard drives. Decide which files are most important. If there are multiple versions of important files, save the ones with highest quality and final versions. Organize selected files in a centralized storage system, like a shared hard drive. Create a directory (folder) structure and give individual files descriptive names. Use sustainable file formats. Follow the 3-2-1 Rule: 3 copies on 2 different types of storage media, and 1 copy in a different geographical location. Develop an access control policy to limit access to master copies and sensitive files. Pick a storage solution

that you can afford and manage long-term. Use existing tools to inventory digital assets quickly in large batches, like Exiftool and DROID.

[Guidelines on the Production and Preservation of Digital Audio Objects](#)

[Library of Congress Recommended Formats Statement](#)

Physical Storage Recommendations:

The conditions in which audiovisual assets are stored are crucial to preservation. Audiovisual assets respond to fluctuations in atmospheric conditions by expanding and contracting, resulting in changes which may inhibit their ability to playback accurately. Temperature and humidity play a dominant role in defining proper environmental conditions, but there are other factors to consider including light, level of cleanliness, and the physical features of the space where the assets are stored. Considerations include:

- Storage area should be well insulated and sealed in order to maintain proper temperature and relative humidity levels as well as to keep out pests and animals.
- Storage area should be without windows in order to keep out ultraviolet rays from natural light.
- Assets should be stored off the floor on shelves. Shelving should provide for ample air circulation around assets.
- Precautions should be taken to mitigate the introduction of water through condensation, floods, leaks and faulty sprinklers. Storage areas should not be below ground level where water damage is most prevalent.
- Carpet, which retains moisture and traps insects and dust, should be avoided.
- The room should be fireproof and should not contain wooden boxes, wooden shelving or other easily combustible materials. If an overhead water sprinkler system is installed, the shelving should be designed so that sprinkler water will not spray directly on the assets.
- A sticky floor mat, like those used in "clean rooms," can be placed in the doorway of the entrance to the tape storage room. This mat will prevent debris from being tracked into the area.
- The walls, floors, and ceiling should be made of a dust-free, easy to clean material.