

Technician's Guide to Care and Handling of Magnetic Media

This guide gives basic instructions for technicians on the safe care and handling of magnetic media to minimize physical harm to or contamination of the media object, avoid changes to the recorded signal, and ensure the safety of the person handling the media. Most of this information is based on common sense and should quickly become second nature when handling media objects frequently. The [Manager's Guide to Care and Handling of Magnetic and Audiovisual Media](#) provides more information on storage environments as well as recovery and remediation strategies when dealing with damaged or contaminated media.



Before you begin

Clothing and jewelry:

- Remove loose jewelry or lanyards, rings, and watches.
- Tie back long hair.
- Roll up long or loose sleeves as they could catch on objects or cause contact damage.

Clean hands or gloves:

- Wash and thoroughly dry hands before handling any magnetic media.
- Alternatively, wear lint-free cotton or nitrile gloves. Do not use hand lotion before putting on gloves. Oily residues can transfer from your hands to the gloves and then to the objects.
- Refrain from touching your face or hair with clean hands or gloves.

Your work area:

- Always work on a well-lit, clean, uncluttered surface.
- Keep liquids in a sealable container away from workspaces with media.
- Keep food and drink away from all media. It is good to have a “no food policy” in areas where precious media will be handled. If this is not practical, then ensure that surfaces are well cleaned before bringing media into the area and keep food away while media are present.
- Be aware of any strong magnets in your environment and keep them away from any recorded magnetic media. This mostly refers to small, powerful, rare-earth magnets or strong electromagnets such as a bulk tape-eraser. These types of magnets can completely erase recorded signals if they come into close proximity to audio or video tapes. It is a good precaution to not store magnetic media close to desktop speakers or equipment with motors or transformers.

Care and handling

Working with contaminated material

Be careful when working with any material that has mould or other contaminants that might be unsafe for people. See [Manager's Guide to Care and Handling of Magnetic and Audiovisual Media](#).

- Do not disturb the contaminant, as this could cause it to become airborne or contaminate other things in your environment.

- *Be careful not to breathe any spores or dust. Wear an appropriate N-95 mask if available.*
- *Wear disposable gloves that can be discarded after working with contaminated material.*
- *Be especially careful not to touch your face when working with these materials.*
- *Generally, the protocol for contaminated material is to seal the media in an airtight plastic bag and develop safe cleaning processes, or send these materials out to be professionally cleaned and digitized.*

Handling containers (boxes or trays) of media

- *Always assess the sturdiness of the container. Cardboard can lose integrity if subjected to moisture, glues can fail with age, and plastic containers may have hairline cracks that are difficult to see, or the plastics can become brittle with age. If you have concerns about the structural integrity of a container, transfer the media objects to another container before moving the media.*
Note: *Be sure to record any pertinent information that is written on a container before discarding it. Some guidance for recording this information is in the [Inventory Guide](#).*
- *Before moving a group of media objects within a larger container, be sure that they are secure, will not shift around, and that the media is not stacked higher than the edges of the box or tray.*
- *Before moving a container of media, make sure that there is a space cleared for the container at the destination location and that the pathway is clear of hazards.*

Handling media in cases

Cases for analog media take various forms such as simple sleeves, shallow boxes with lids, or hinged boxes that open in different ways. Some audio cassette cases have fragile hinge parts that tend to break. This can cause those cases to separate instead of swinging open as they should. As you work with the media collection, take notice of how different cases open. Figure out how to support those cases to ensure that they remain closed while moving them from one place to another.

Handling cassette formats

- *If a condition assessment has been performed, make note of any pre-existing damage that would affect the safe handling of the item.*
- *Handle by the body of the outer cassette shell only. Avoid putting stress on hinged guard panels for video cassette formats.*
- *Do not hold or carry cassettes by the reel hubs. Only turn these hubs when testing the forward and backward movement as part of a condition assessment procedure. Keep in mind that video formats will have reel locks that prevent movement. Only use gentle pressure when turning these reels.*
- *Never touch the actual recording surface (tape) unless during an assessment or repair process.*

Handling open reel formats

- *If a condition assessment has been performed, make note of any pre-existing damage that would affect the safe handling of the item.*
- *Handle gently by the plastic or metal flanges (sides) of the reel or the sides of the centre hub.*
- *Avoid touching the actual recording surface (tape) unless performing an assessment, playing, or repairing the media.*