

Audio Cassette Digitization Example Workflow

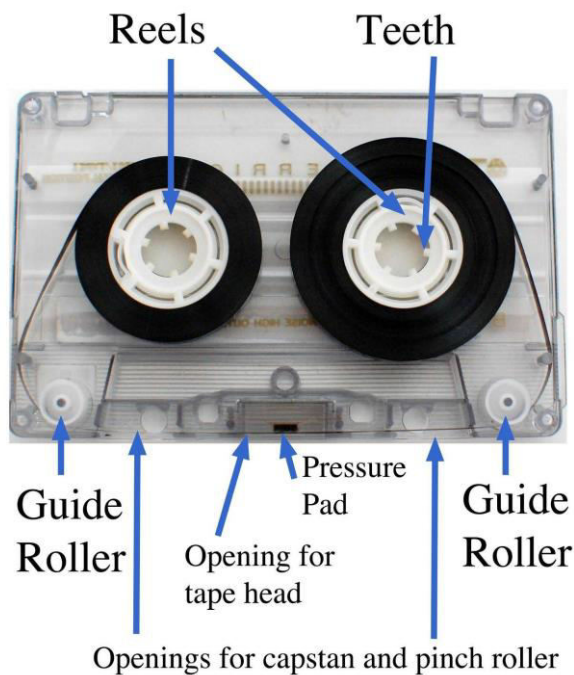
Digital Stewardship Curriculum

Equipment

- Computer with
 - Free software installed: Audacity for audio editing, BWF MetaEdit for metadata editing
- SoundBlaster soundcard
- Cassette deck with cables
- Headphones or speakers
- Supplies in case of repair (empty cases, screwdrivers, gloves)
- Digitization logs or spreadsheets (any other tracking documentation)

Pre-Digitization

- Remove write protection tabs to make sure item is not accidentally recorded over.
- Test winding of tape by turning slowly with a pencil or finger.
- Check for damage of casing and tape (broken case, teeth, missing pieces - especially the foam pressure pad, mold, metal flakes coming off the tape, tape sticking to itself or bunching up) and repair or rehouse in new casing if necessary.
- If damaged tapes are found, document the damage, set aside to repair or send out, and proceed with digitization of tapes that are in good condition.



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Digital Stewardship Curriculum
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- Check tape deck for correct settings, signs of damage - especially to tape head, need for cleaning. (It is good practice to have a maintenance log for any equipment, and a record of service).
- Check that cables are properly attached - tape deck connected to SoundBlaster soundcard, headphones in SoundBlaster output.
- Check capture software (Audacity), check that settings are correct, make any updates needed.

Digitization

- Open Audacity
- Check settings in Audacity
 - Recording device: Aux (SoundBlaster ZxR DBpro)
 - Playback device: Microsoft sound mapper - output
 - Recording channels: 2 (Stereo) Record
 - Adjust input signal level (maximum peak around -6.0dB)
- Load tape in tape deck
- Press red Record button in Audacity
 - Let it record for a few seconds before playing the cassette - you can edit this out later.
- Press Play on the tape deck
- Check input signal level
 - If levels need to be adjusted: adjust, rewind, and start over
- It is a good idea to continuously monitor the audio stream during recording.
 - If there is tape damage or something happens, you'll hear it immediately and can stop the tape deck.
 - If your workflow includes taking brief notes or identifying content on unknown tapes, you may want to do this while digitizing, rather than having to playback the audio file later.
 - You can either monitor over speakers, or with headphones.
- When finished, stop Audacity recording
- Rewind if needed (best to flip over and play at normal speed)
- Listen to selections of the recording, spot check quality of recording

Saving (using a predetermined unique identifier for each step)

- Save Audacity .aup project file
- Save uncompressed Preservation Master file (.wav)

- Save compressed Access file (.mp3)
- If any further editing needs to happen for presentation, save as new derivatives of access files in a compressed format (.mp3)

Metadata and Documentation

- Record descriptive, administrative, technical/preservation metadata for file (and all derivatives) and embed into file using BWF MetaEdit, and/or enter into metadata spreadsheet, database, or other documentation system
- Record digitization work in digitization log

Quality Control

- Supervisor or colleague will check for Quality Control, including technical specifications, metadata, file integrity, and audio sample inspection.