

Digital Preservation of Moving Images: A Case Study

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Special Collections: AV Archives

- Variety of moving image and audio collections
 - Digitize for patron access
 - Digitize for donors

Analog AV formats in SPC

- Motion picture film
 - 8mm, Super8mm, 16mm
- Video
 - U-Matic, Betacam, VHS
- Audio
 - Phonograph record, Reel-to-Reel audio, audio cassette

Digital Preservation Project

- Digitize entire collections for AV Archives as opposed to patron-driven digitization
- Collections for digitization chosen by Archivists
- Decisions based on age/condition of material and access needs of Archivists

Acquiring equipment

- VHS deck
- Dual audio cassette deck
- Mini DV recorder
- U-Matic deck
- 16mm film flashtransfer datacine

Acquiring equipment

- Online vendors
 - B&H Photo and Video Supply
 - eBay
 - Craigslist
 - University Communications/Film Departments
 - MWA Professional Film and Audio Products

Equipment research

- Professional association listservs
 - Association of Moving Image Archivists (AMIA)
 - Association of Recorded Sound Collections (ARSC)
 - Utah Academic Library Consortium's Digitization Committee (UALC-DIGIT)

Obsolete equipment: buying used

- U-Matic deck
 - No new models in production
 - No warranty to speak of
 - Difficult to negotiate online sale (eBay, etc)
 - Buy second deck for future parts?
 - Qualified repair person locally?

Digitization equipment

- Canopus ADVC 110 Analog to Digital Convertor
- M-Audio Firewire Solorecording device
- RCA cables, etc.

16mm Flashtransfer SD



Flashtransfer Specifications

- Frame CCD image sensors
- High speed image and sound track quality
- **Control functionality - stable picture up to 250 fps**
- LED array light source
- **Light color adjustable**
- **Optical sound heads** for white halogen, red LED, and SR*D
- **Magnetic audio heads** tracks optional
- **High precision transport system**
- Variable play speed 5-25 fps
- Bi Phase output and Genlock input for synchronisation
- RS422 and IEEE1394 machine control
- **Integrated scratch reduction system**
- **Two integrated color corrections**
- **Nearly sprocketless design**

Negotiating the purchase

- Looooong process!
- German company, only one U.S. Rep
 - Ted Langdell (ted@flashscan8.us)
- Strategic financing due to Dollar/Euro conversion
- Lots of discussions with other U.S. owners of Flashtransfer during process

Workflow between departments

- Archivists evaluate which collections to bring us
- Archivists inspect and clean very fragile film first
- Archivists drops off film and fill out paperwork and spreadsheet

AV Digitization Workflow

- Digital Operations inspect and clean newer collections
- Color correction and other tests
- Digitization of film material
- Raw files placed on production server during editing
- Archival files placed on archival server

Formats so far...

- Archival: AVI
- Access: Mp4
- Investigating for future archival:
 - XMF wrapped MJPEG2000

Challenges

- Space issues
- Putting portions of collections online?
- Organization of objects to be ingested into future DPS
- Metadata (METS, PREMIS, DC)
- Entire library working together as a team

Questions?

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