BACKUP TO THE FUTURE:

PRESERVING ANALOG MEMORIES
@ ROCHESTER PUBLIC LIBRARY

LIBTECH MARCH 20, 2019
• **Access** to analog media is priority
• Rely largely on “guerilla techniques” for digitizing
• Do-it-yourself (with library staff help)
**Equipping the Convert-O-Lab**

- $7,000* budget to get started
- Used equipment from eBay, local record store, staff donations
- New equipment from amazon.com or other online stores

*not including donations and existing equipment*
# Convert-O-Budget Part One

- Reel-to-reel tape player (used) $200
- Mini DV and Hi8 video cameras (used) $430
- Betamax player (used) $300
- Super 8 / 8mm Film digital converter (new) $550
- Windows computer, 2 monitors, lots of RAM (new) $1500
- Elgato video conversion software (new) $90
- Braun Multimag slide scanner (new) $1800
- Hama video transfer screen (new) $100
<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio cassette player (new)</td>
<td>$200</td>
</tr>
<tr>
<td>Record player (new)</td>
<td>$250</td>
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<tr>
<td>Microcassette player (used)</td>
<td>$75</td>
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<tr>
<td>Epson Fast Foto scanner (new)</td>
<td>$300</td>
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<tr>
<td>DAT player (used)</td>
<td>$230</td>
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<tr>
<td>S-VHS VCR (used)</td>
<td>$300</td>
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<tr>
<td>VHS to C-VHS adapter (new)</td>
<td>$40</td>
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</tbody>
</table>
**CONVERT-O-BUDGET PART FREE**

Donated or already-owned equipment and software

- Epson Expression 11000CL Large flat bed scanner
- Adobe Premiere Elements (for burning to DVD)
- 2 VHS decks, backup Hi8 video camera
- 8mm/Super 8 film reviewer
- RCA, S-Video, and assorted cables
- Manual switch for audio
- Tuner for switching SVHS/VHS/Beta video
- 16mm film projector
CONVERT-O-BUDGET PART MORE

Purchases after initial set-up

- 8mm Film splicer & tape (used) $50
- Blank audio cassette cases (new) $20
- Canon Digital SLR camera (new) $500
- Small tripod for camera (new) $20
USING THE CONVERT-O-LAB

- Free to use
- Arrange training session
- Copyright / Liability waver
- Book Convert-O-Lab time on library website
- 3 hours / day limit
- Teaser in library newsletter
- Initial users mostly found it by accident
- Word is getting out
- Users sometimes use once; sometimes use for weeks
- Presentations at local Senior Centers
STORAGE DEVICES

- USB Flash Drive / Thumb Drive (2GB and up)
- External Hard Drive
- SD Card
- Blank CD-R
- Blank DVD-R
Audio
- Have players for these formats
- Use computer & Audacity to digitize
- Bring storage device(s)
Audacity and Sound Editing

- Free Software available on PC, Mac, Linux
- Lots of export options (.mp3, .wav, .flac)
- Takes time to breaking audio into individual tracks
- Use iTunes to burn to CD
- Some issues when patrons pull out headphones or output jack
VHS / S-VHS / BETAMAX

- Use stand alone players
- VHS most popular
- Use computer and Elgato software to convert to MP4
- Can make DVD copies, too
8mm Video 8 Hi 8 Mini DV

- Popular 1990s camcorder formats
- Purchased video cameras for playback
- Use computer and Elgato software to convert to MP4
- Can burn to DVD
**8mm Super 8 Film**

- Hammacher Schlemmer 8mm to Digital converter
- Digitizes each frame, saves to SD card
- Have had issues with machine
- 2 min film = 30 min to scan
- Scans at 1080p
- 10 min film = 1.5 GB of space
- Cannot play film without scanning
16MM FILM

- 16mm projector
- Hama Video Transfer screen
- DSLR camera - adjust ISO, aperture, and shutter speed
- Converts to .mov or .mp4
- Added monitor
- Work in progress
PHOTOS
Braun Multimag SlideScan 6000
- Good images, still slow 30 - 60 seconds/slide
- Connected to computer, software not great
- Still working out how to deal with different slide frame widths
- Scans at 600dpi
- .jpg or .tif formats
PRINTED PHOTOS

- EPSON FF-640 FastFoto
- Fast and easy
- Good for most non-mounted photos
- 300dpi (1 second/photo)
  600dpi (3 seconds/photo)
PHOTOS I SLIDES I NEGATIVES

- Epson Expression 11000XL
- Has special mounts for strips of negatives, slides
- Very slow scanning, but good quality
- Highest resolution with this scanner
- 40+ patrons trained
- 295.5 hours of use
- Needed to train more staff
YOU ARE INVITED TO A CHIPMUNK WEDDING!
LONG LIVE THE HIPSTER VINYL-ONLY PODCAST?
THE MAN WITH THE INVISIBLE VOICE
REALLY? THAT'S A DVD FORMAT?
YOU CANNOT HAVE SYNCING ISSUES WITH NEW AGE DOLPHIN MUSIC
THE SCREWTAPE MAKE-IT-BETTER
FLIP PHONE MESSAGE IMMORTALITY
THE SPLICE OF LIFE DOESN’T NEED TO BE FOREVER
SERIOUSLY, YOU DON'T HAVE A LASERDISC PLAYER?
NOT QUITE THE WATERGATE TAPES
Transferring Video using Sony Handycam DV Camera

In order to transfer video from MiniDV tape, we need to use our Sony Handycam DV camera to play back the video to record it on the computer.

First, make sure the power cord is plugged into the back of the camera under the REC button. Then plug the other end into a power strip on the desk.

Convert-O-Lab
Equipment Instructions
Please keep this binder in the Lab

Rochester Public Library
MOST POPULAR FORMATS

- VHS videotape
- 8mm/Hi8/Video8 videotape
- Super 8 / 8mm film
- Audio cassette
- Photos slides
- Print photos
NOT-AS-POPULAR FORMATS

- C-VHS videotape (compact size VHS)
- Mini DV videotape
- Vinyl
- Microcassette
- Reel-to-reel audio tape
- S-VHS
WILDLY UNPOPULAR FORMATS

- DAT audio tape
- Betamax video tape
- 16mm film
FUTURE OF THE CONVERT-D-LAB

- Additional computer(s)
- More space
- 8mm projector or better preview equipment
- More permanent hookups for video cameras
QUESTIONS?
Thank you!

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