A STARTER'S GUIDE TO VIDEO DIGITIZATION

Video digitization may seem overwhelming to many people. A station has many different components and each of them has its own characteristics. A video digitization station can run from simple to extremely complex. Moreover, when embarking in a digitization plan, there's much more to consider than just transforming those electric signals to ones and zeros. Here is a basic set of questions you may want to answer before starting a video digitization project and useful resources that can help you make the right decisions for you or your organization.

#1 WHAT DO I HAVE?



- Which formats? There are many! Some of the most popular ones:
 VHS, MiniDV, Betacam. Not sure? Check the resources for help.
- How much? Figuring out the total number of items and duration can help you plan.
- What is it? Are the tapes labeled? Is there a list? It's a good idea to create an inventory of the tapes in a spreadsheet as a first step.

#2 HOW DO I PLAY IT?

- Can you play the tape? Different formats have different playback devices. A camera is often just as good as a deck.
- What type of signal? Some videotapes record analog video, but many record digital video too. No need to re-digitize digital video!
- How do I connect this? You want to make sure you have the right connectors for your playback device and your A/D converter.



#3 HOW DO I GET THE VIDEO IN THE COMPUTER?



- What do I need? (1) hardware, analog to digital converter or A/D (pronounced A-to-D), and (2) capture software.
- Which signal types are there? Be sure to understand what type of signal your playback device is sending out, both video and audio.
- Which hardware and software is best? Most capture software is hardware dependent. Budget, but also media type, will be the two biggest factors in selecting a device.

#4 HOW DO I MONITOR WHAT I'M DIGITIZING?



- How does it sound? Playback devices often have "meters" that show sound levels and headphone outputs. Best case scenario, run the audio through a mixer so you can also adjust audio levels.
- What does it look like? Send the video signal to a monitor before sending it to the computer so you can see the picture.
- **How does it look?** Use objective measurements to assess the video signal, not your eye. Waveform monitors and vectorscopes are the best way to do this, if you have access to them.

5 HOW DO I CREATE A VIDEO FILE?

- Which file format do I choose? Two factors to consider when selecting a format are: data storage and use of the material.
- What other factors affect file size? Consider technical factors such as sampling rate, bit depth and chroma sub-sampling.
- How do I name the files? File naming is important to properly ID the content in your files. Linking info from your inventory is recommended.



#6 HOW DO I CHECK MY WORK?



- How do I make sure the picture isn't clipping? "Clipping" refers to the loss of picture information outside of broadcast range. QCTools is great for checking files to find values outside of broadcast range.
- How do I make sure I created the right files? You can check files to make sure their technical specifications are correct using MediaInfo.

#7 HOW DO I SHARE?

- How do I create files to share in other platforms? You can create "derivatives", i.e. compressed, lower-quality files from preservation masters to publish content and protect your masters.
- Am I allowed to publish this content? Privacy and copyright issues must be considered before publishing content. Some works may be also defined as "orphans".



RESOURCES:

Visit https://github.com/amiaopensource/apex video_kit_docs to get more detailed information, written resources and recommended tools that will help you plan your digitization efforts.