

# APEX VIDEO KIT ELEMENTS

<b>Video Deck</b>	Tape playback device. What kind of video deck you need depends on the format of video tape you want to digitize. Equipment not included in kit, but kit works with most playback devices. A camera can also be used.
<b>Time Base Corrector (or TBC)</b>	It is important for stabilizing the video signal during the transfer process. The TBC can also correct for some processing errors inherent to the original analog video signal (brightness, contrast, hue, and saturation), including compensating for minor dropout and ensure the values of the video signal are within legal broadcast range.
<b>Distribution Amplifier</b>	A distribution amplifier can send the same video signal to multiple locations simultaneously while retaining its strength and quality in each piece of equipment.
<b>CRT Monitor</b>	Video monitor. Using a CRT as a reference monitor during digitization can help maintain the authenticity of the original by matching as closely as possible to the digital video to the pre-digitized video. It must be calibrated when possible. Equipment not included in kit.
<b>Analog Waveform Monitor and Vectorscope</b>	These are important tools for calibrating the video signal prior to digitization as it shows objective information about the video signal. The waveform monitor displays the luminance of the video signal (the black and white levels) and the vectorscope displays the chrominance (color) information of the video signal, which can be adjusted using the TBC. Equipment not included in kit, but capture software often include a digital version of these.
<b>Direct Box (DI)</b>	A direct box is used to convert unbalanced audio to balanced audio and to switch audio connectors (from RCA to XLR for example). A DI may be needed depending on the audio connections of your deck and capture card.
<b>Audio Mixer</b>	The audio mixer is used to make adjustments to the audio levels. This includes raising or lowering the audio levels (making them louder or quieter), equalization (adjusting levels by frequencies), distributing the audio signal to multiple equipment, and monitoring levels using meters.
<b>Speakers &amp; Headphones</b>	The audio levels should be checked on both the pre-digitization and post-digitization sides of the video digitization system in order to ensure that the integrity and quality of the audio signal is maintained throughout. Headphones and speakers can be used to monitor the pre and post-digitization audio levels during transfer.
<b>Capture Card</b>	This is where the magic happens! The capture card is the device that converts the video and audio signals from analog to digital information. There are different types of capture cards available that can work with different kinds of computers and software.
<b>Cables and Connectors</b>	The brand and type of each piece of equipment you use will determine what kinds of video and audio cables and connectors you will need. You may need BNC, RCA or S-Video cables for the video and XLR for the audio. You may need digital connection cables as well, such as Thunderbolt or FireWire depending on your capture card and computer.
<b>Computer and Digitization Software</b>	In order to digitize video, you need a computer and software that is compatible with both the capture card and the computer you are using. There are many different types of software. The BlackMagic Ultra Studio Express capture card comes with its own software called Blackmagic Media Express, but you can also use vrecord. Other common capture software are Adobe Premiere, DaVinci Resolve, or Final Cut Pro.