Transfer VHS-C and S-VHS-C to Digital Movie

A VHS-C can usually be distinguished by its small size, as it is about half of the size of a regular VHS tape. There will be a VHSC logo somewhere in the middle of the tape. **Do not load a VHS-C tape into a regular VHS deck!**

You will need an adapter that can be requested by staff at the Tustin service desk.



Step 1. Connecting the device to the VCR.

- Connect the power adapter to an outlet.
- Turn on the Video2Digital Converter by pressing the power button (**U**). If the device does not turn on automatically, **press and hold** the power button. The device will automatically be in "Capture" mode when you turn it on.
- Plug in your USB flash drive or SD card in the appropriate slot. With most USB/SD flash drives, the side with the logo should face away from you as you insert it. The converter will save the recorded digital videos onto this drive. If using a memory card, insert the card with the gold connectors facing up.
- Turn on the power button of the VCR. It is located on the left side of the device.



• Insert your VHS tape into the VCR. Make sure that your VHS has already been rewound to the beginning. If not, please do so now.

Hook up the video transfer cables (the cables with red, white, and yellow connectors) and connect them to your VCR and the Video2Digital Converter. The **OUT** port on the VCR as seen below should connect with the **IN** port of the Video2Digital Converter. For S-VHS, use the red, white, and S-video cable. All cables should already be connected to each deck.



a The Panasonic's audio/video connectors are in the front of the VCR.



b. Toshiba's audio/video connectors are at the back of the VCR.



- The converter's preview screen will remain blank until the device detects a live signal from your video source.
- Press Play on the VCR. Press Rec on the Video2Digital converter to convert your video to digital format!
 - Your video should appear on the Video2Digital's converter screen. If your video looks jerky during recording or playback, don't worry. When the file gets transferred to your computer, the video should appear normally.

- When the recording is completed, press **Stop** on the VCR and **Rec** on the Video2Digital converter to stop the conversion process.
- Pull out your USB drive/SD card and turn off the Video2Digital converter and the VCR.

Step 2. Compress and Save Your Video File

Capturing your video results in a very large MP4 file. One hour of video can result in **100 GB**. Compressing a large MP4 file not only makes it more manageable for you, it also save space on your USB or external hard drive. The following software can covert 100 GB into just 4 GB!

- Insert your USB drive or your external hard drive to the MacBook. If inserting a memory card, make sure the gold connectors are facing DOWN.
- Open Handbrake software on the MacBOok. The icon looks like this:
- Select **Open Source** in the upper left corner of the window and select your MP4 file that you just captured.

Open Source	Add To Que	ue Start Pa	II) ause	Unt 🗟	itled 01.	mov			Presets	Preview	Queue	Activity
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Preset: Fas	st 720p30	✓ (R)	eload Save	New Pres	et							
	(Summary	Dimensions	Filters	Video	Audio	Subtitles	Chapters				
Format: Tracks: Filters: Size:	MP4 File Web Optimized Align A/V Start iPod 5G Support H.264 (x264), 30 FPS PFF AAC (CoreAudio), Stereo Comb Detect, Decomb 1280x720 Storage, 1280x	720 Display										
Save As: De	eathInVenice1.mp4				То:	🏠 Digitiz	ationstation	4 > 💼 Movie	25		Brow	se
Encode Finish	ed.											

• The following window as seen below will display a multitude of settings for your video file. You can adjust the **Constant Quality** from its default RF 20 (for a standard definition DVD) by moving the slider between 0 (highest quality) and 51 (lowest quality). **It is recommended to stay in between 17-21**. The lower the RF, the bigger the file size of your video.

	HandBrake		
Source Start Pause Add to Queue Show Queue		Picture Settings Preview Wi	ndow Activity Window Toggle Presets
Source Untitled 01.mov			
Title: Untitled 01 1 - 00h00m17s	Angle: 1 ᅌ Chapters ᅌ	1 ᅌ through 1	Ouration: 00:00:17
Destination			
File: /Users/memorylabuser/Desktop/My Archving Project/Untitled	01 1rf20.mp4		Browse
Output Settings: Normal (Default)			
Format: MP4 File 📀 🗌 Web optimized	iPod 5G support		
Vide	Subtitles Chapte	rs	
Video Codec: H.264 (x264) ᅌ Codality: 🔇	Oonstant Quality RF 20		
Framerate (FPS): Same as source			
• Variable Framerate	Average Bitrate (kbps): 2500		
Constant Framerate	12-bass encoding		
Encoder Options			
Preset:			
Tune: none 💿 🗍 Fast Decode			
Profile: main Otions	5:		
Level: 4.0			
x264 Unparse: level=4.0:ref=1:8x8dct=0:weightp=1:subme=2:mix	ked-refs=0:trellis=0:vbv-bufsize=250	000:vbv-maxrate=20000:rc-loc	okahead=10
Picture Settings: Source: 720x486, Output: 720x486, Anamorphic Picture Filters:	c: 648x486 Loose, Modulus: 2, Crop	o: Auto 0/0/0/0	
			No encode pending

- If you see a combing effect in your movie (where white, horizontal lines run across the screen), you can select the **Picture Settings** at the top and then select **Deinterlace**.
- Select the **Browse** button to find your storage option that you plugged in.
- If you did not do so earlier, you can change your file name to something of your choosing.
 - **Make sure that you did not delete .mp4 in your saved file.** Not including the file extension will not allow you to save the file properly.
- Press the **Start** button to begin the encoding and compression process. The compressed file will automatically save to your storage destination. When completed, the message below will display.



Step 4. Give your digital video file a descriptive name so you know what content is contained in the file.

Step 5. You're Done!

- Delete the original uncompressed MOV file on the desktop by either pressing the **Delete** button on the keyboard or moving it to the recycle bin.
- Open the recycle bin and select the **Empty** option to permanently delete your file and prevent others from seeing it.
- Safely eject your external device from the computer.
- Don't forget to eject your VHS-C tape from the VCR!
- Inform library staff that you are done with the VHS conversion station.
- Return the VHS-C adapter to the Tustin service desk.

FAQ

- 1. How much storage space will I need?
 - One hour of compressed video = **4 GB**. It is recommended to have a USB drive that is at least **32GB** or more or an external hard drive that is at least **1TB**.
- 2. There's audio but no video playback?
 - Confirm first that there is no image displaying on both the CRT monitor and within the BlackMagic Media Express software.
 - Make sure that your VHS-C tape is **NTSC** and not **PAL**.
 - Confirm with library staff that the wiring is correct.
 - Do not attempt to adjust any settings without consulting a library staff member first.
- 3. I'm receiving a "too large for volume format" message. What do I do?
 - Re-format your USB or external hard drive to exFAT or FAT32 so that your drive can save larger files.
 - You can use the Quicktime Player to **split your clips** into smaller chunks.
 - You can reduce the file size by encoding it in Handrbrake at a higher quality (RF) rating or choose not to deinterlace the file.