

How to Digitize Camcorder Videocassettes

Use this guide to digitize content from Digital8, Hi8, 8mm or Video8 videocassettes into MP4 files. An output resolution of 720x480 is sufficient quality for preserving home movies and for sharing with family and friends.



Figure 1: 8mm videocassette.

Equipment You Will Use:

- Memory Lab computer
- Headphones
- Vidbox Video Capture Unit
- Sony Digital HandyCam Camcorder

Software You Will Use:

- Vidbox Video Converter

Time Required:

- The runtime of the original video, plus 3-5 minutes to adjust settings and manage the digital files.
- **Allow 15 minutes at the end of your appointment to transfer the digital files to your external storage device or upload to the cloud.**

Step 1: Prepare the Computer

Prepare the Memory Lab Computer and a Temporary Storage Folder

1. Ensure the Memory Lab computer is on. If not, press the circular power button on the tower (see Figure 2).



Figure 2: Power button.

2. Connect headphones to a jack on the Memory Lab computer (see Figure 3).



Figure 3: Headphone jack.

3. Create a new folder on the desktop to store your files while you are working. *Saving to the computer while digitizing is faster than saving directly to external storage. At the end of your session, you will transfer your files to your own storage.*

Steps to create a new folder:

- On the desktop, right-click on an empty spot on the screen.
- In the menu that appears, move your mouse over **New**.
- Click **Folder**. A new folder appears on the desktop with its name highlighted.
- *Recommended:* Type a custom name to replace **New Folder**, and then press **Enter** to save it.

Step 2: Prepare the Equipment and Cassette

Please handle the camcorder with great care. Ensure it is always placed securely on a stable table and kept away from table edges. Press buttons gently.

Be careful not to press the Record or Delete buttons on the camcorder, which could overwrite or erase your cassette.

Prepare the Vidbox Video Capture Unit

1. Locate the white Vidbox Video Capture Unit (see Figure 4).



Figure 4: Vidbox Video Capture Unit.

2. Locate two connection cables (see Figure 5):

- The **USB cable labeled Vidbox**.
- The **3-RCA cable labeled CAM**. This cable has three color-coded plugs (yellow, white, red) on one end and a black jack on the other. *If an RCA cable is already connected to the Vidbox unit, confirm that it is labeled **CAM**; if not, disconnect it.*



Figure 5: USB and RCA cables.

3. Connect the cables:

- a. Plug one end of the **USB cable** into the Vidbox unit and the other into a USB port on the Memory Lab computer (see Figure 6).



Figure 6: Connect the USB cable to ports on the Vidbox unit and computer.

- b. Plug the **RCA cable's yellow, white, and red plugs** into the color-coded ports on the Vidbox unit (see Figure 7).



Figure 7: Match the colors when plugging the RCA (A/V) cables into the Vidbox.

- c. Plug the **RCA cable's jack plug** into the **Audio/Video ID-2** port on the camcorder (see Figure 8).



Figure 8: Plug the jack connector into the camcorder's Audio/Video ID-2 port.

Load the Videocassette in the Camcorder

1. Ensure your cassette is clean and in good condition. *Use a cleaning wipe if dusty. Remove any loose or peeling labels, which can jam the equipment.*
2. Confirm the cassette is fully rewound. Look through the windows to make sure all tape is on the left spool. In Figure 9, below, the cassette is fully rewound. *If your video needs to be rewound, you can rewind it in a later step.*



Figure 9: Cassette on the left is fully rewound; cassette on the right is only partially rewound.

3. Ensure the camcorder is plugged in. Plug one end of the camcorder power cord into the camcorder (see Figure 10) and the other into a power outlet.



Figure 10: The power cord inserted into the camcorder port.

4. Load the videocassette into the camcorder.
 - a. Open the lid above the cassette compartment (see Figure 11-1).
 - b. Press the blue **eject** button (see Figure 11-2); the cassette compartment will open and move up into loading position.

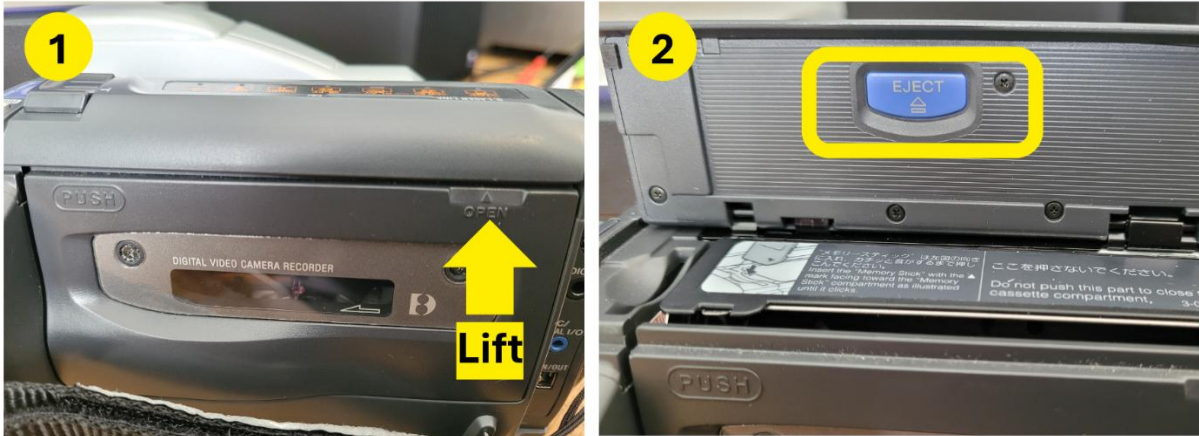


Figure 11: Lift the flap to access the cassette compartment (left); press eject (right).

- c. Insert the cassette into the compartment upside down. The shutter door should go in first, with the spool hubs facing inward (see Figure 12).
- d. Gently push the cassette door inward toward the camcorder. **Do not push down**—the compartment will automatically lower into place. (see Figure 12).

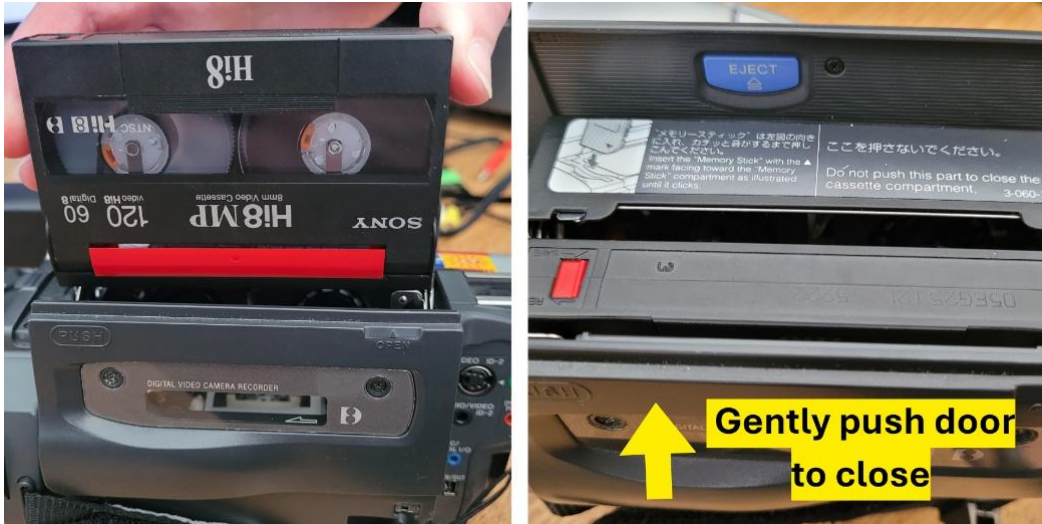


Figure 12: Insert the cassette (left), then gently push the door closed and wait for it to lower itself.

5. Turn the **power** dial on the camcorder to **VTR**. Push in the turquoise button to allow the dial to move (see Figure 13).

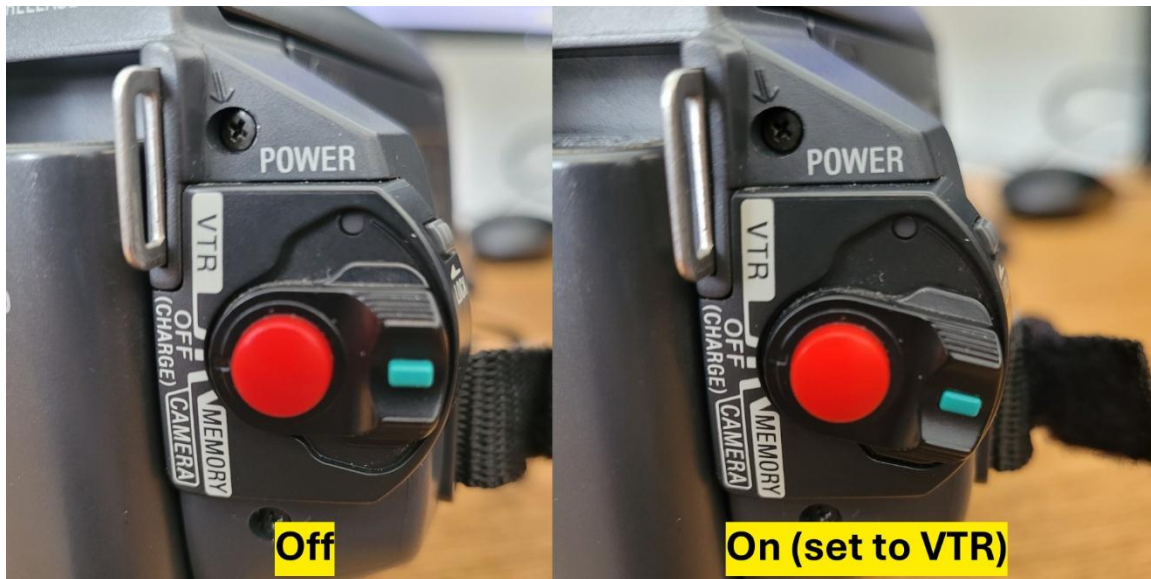


Figure 13: Push in the small turquoise button to rotate the **Power** button.

Prepare the Vidbox Software

1. On the desktop of the Memory Lab computer, double-click the **Vidbox** icon.

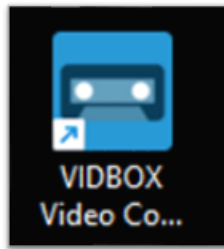


Figure 14: Software icon.

2. When the Vidbox window opens, click **Easy Mode** (see Figure 15). *Experienced users may use Advanced and Audio Modes at their own discretion, but this guide only covers Easy Mode.*

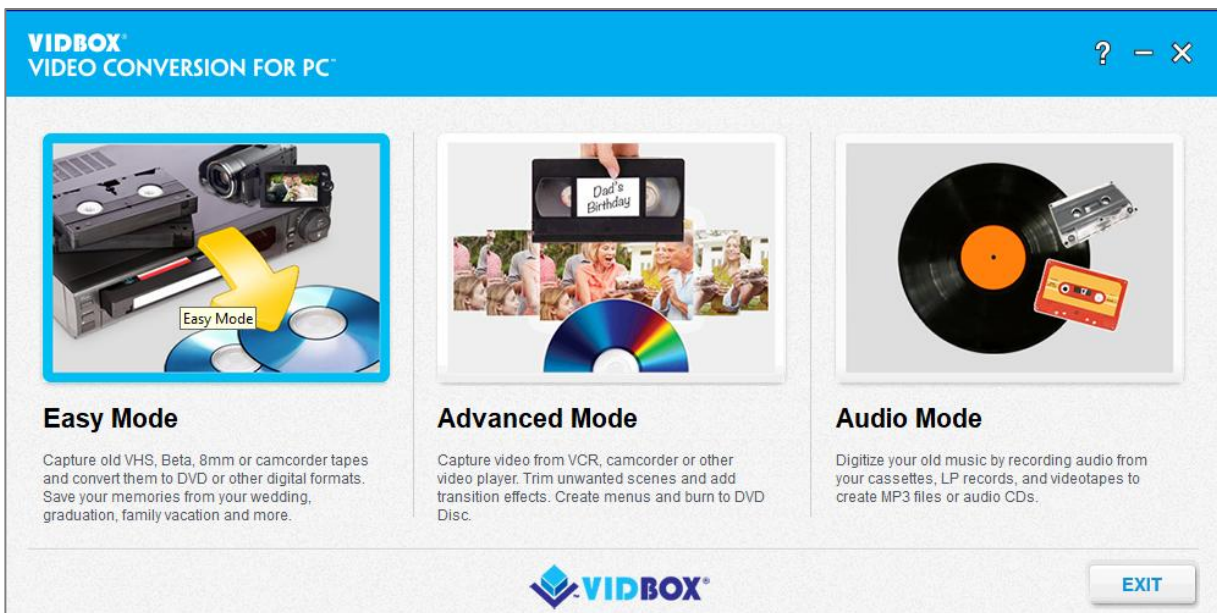


Figure 15: Select *Easy Mode*.

3. In the **Step 1. Select Your Video Converter** window, select **RCA (Composite)** as the cable connection type (see Figure 16). Then click the blue **right arrow** button at the screen bottom to advance.

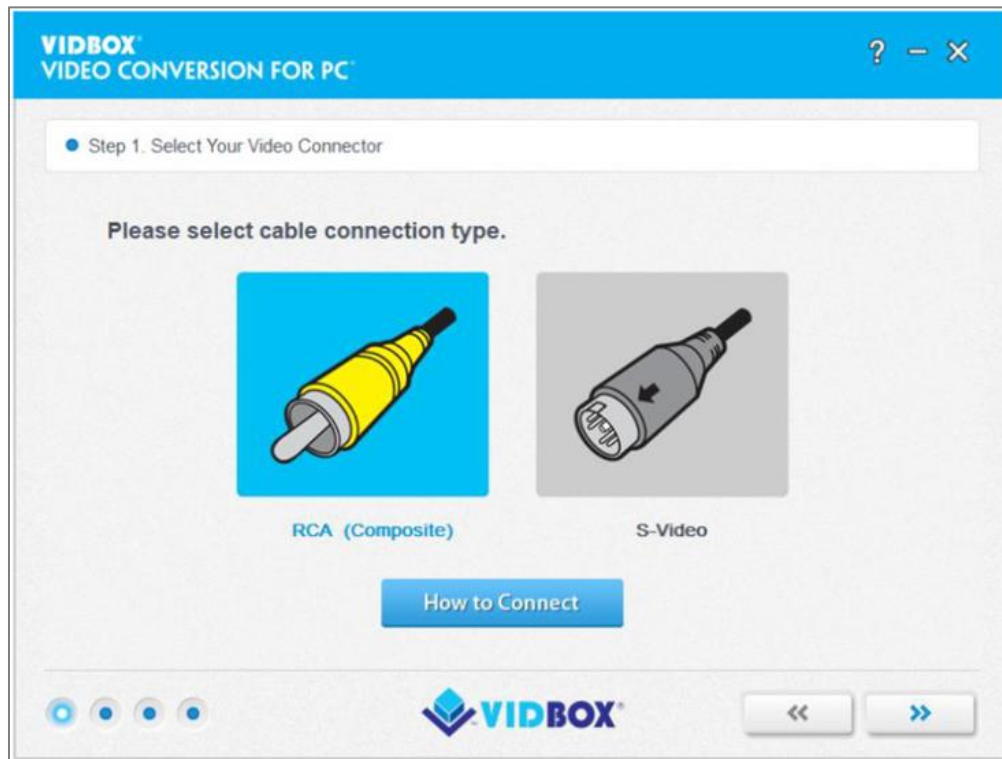


Figure 16: Select RCA (Composite).

4. In the **Step 2. Record Settings** window (see Figure 17), complete these steps:

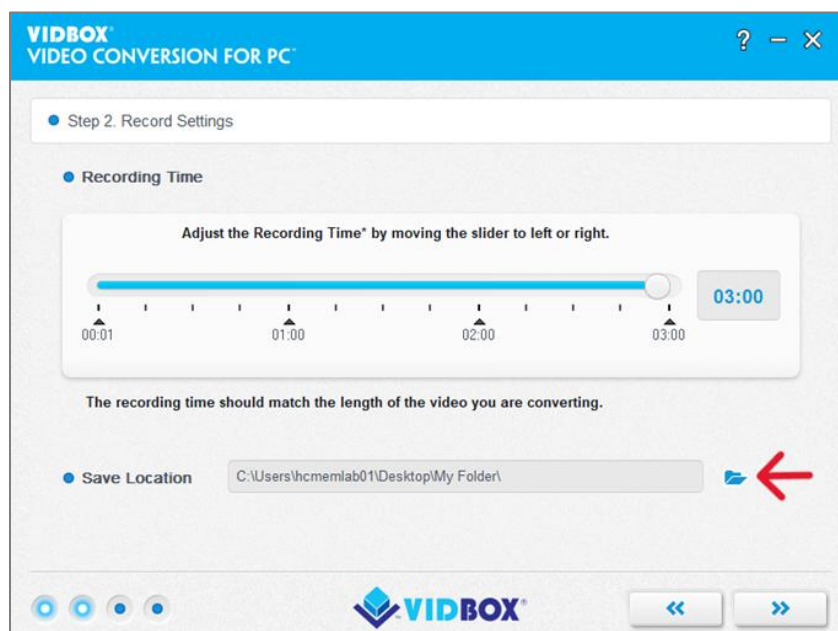


Figure 17: Adjust recording settings.

- a. Move the slider in the **Recording Time** box to the **3:00** mark unless you know precisely how long it is.
- b. Beside **Save Location**, choose where to save your recording.
 - i. Click the blue folder icon (see red arrow in Figure 17).
 - ii. Beside **Desktop**, click the **> symbol** to expand a list (see Figure 18).
 - iii. Select your specific folder and click **Ok**.

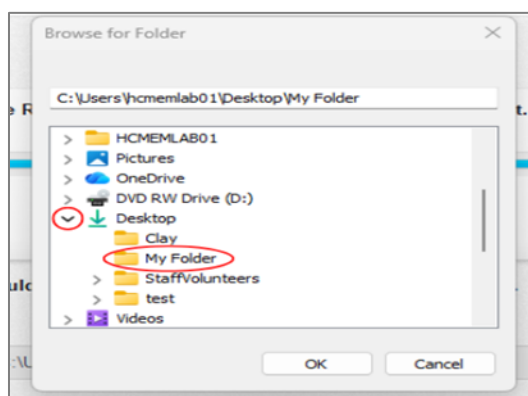


Figure 18: Select a folder to save to.

- c. Click the blue **right arrow** button at the screen bottom to advance.

5. In the **Step 3. Record** window (see Figure 19), complete these steps:

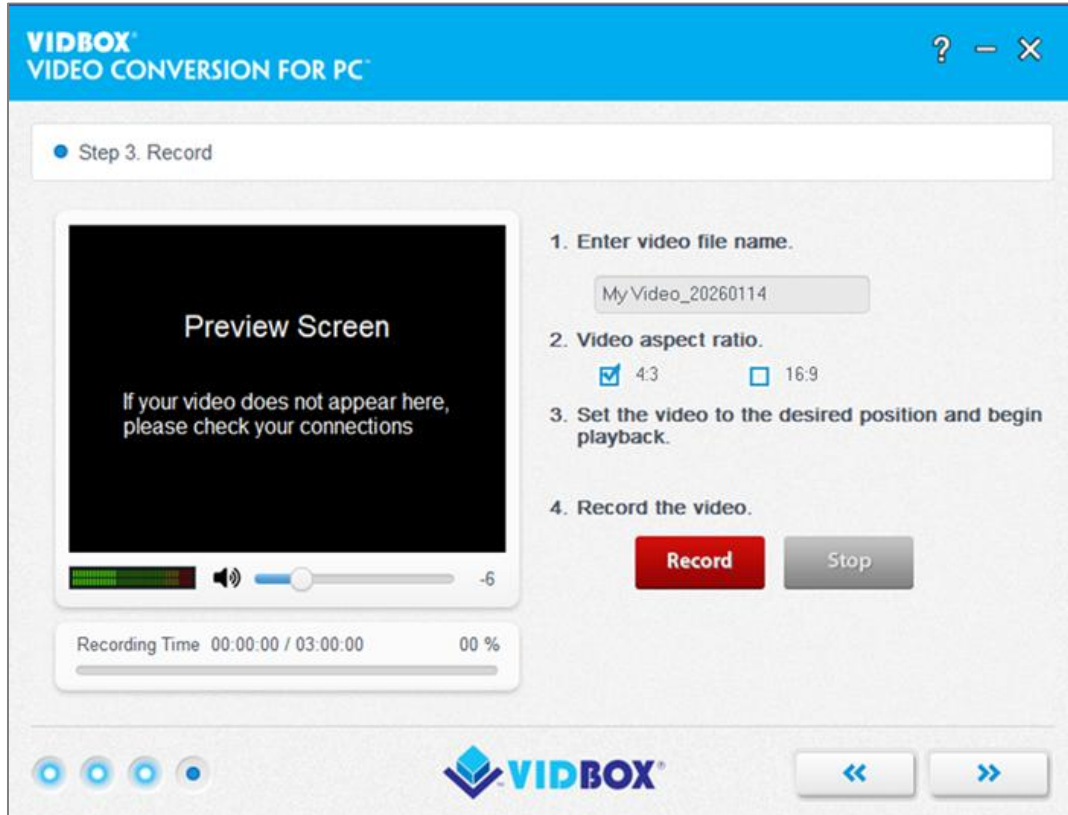


Figure 19: Set recording options.

- a. Under **1. Enter video file name**, enter a **custom file name** in the input field.
- b. Under **2. Video aspect ratio**, choose **4:3**. *Most Video8/Hi8 recordings are 4:3. If during playback, your video appears squished or cut off, it may be 16:9. Return to this setting to adjust if needed.*

- c. For **3. Set the video**, press **Play** on top of the camcorder (see Figure 20) to view your video in the **Preview Screen**.
- Use the playback buttons on top of the camcorder to rewind or fast forward your video as desired.
 - To rewind while viewing, press and hold **REW**. Release **REW** to resume playback. (If the tape was paused before rewinding, it will return to pause when you release **REW**.)
 - To do a full rewind, press **STOP**, then press **REW** once. The screen turns blue and the tape rewinds automatically. Press **PLAY** at any time to resume playback.



Figure 20: Playback controls on the top of the camcorder.

- d. Once you find the video section that you want to begin recording from, press **Pause** or **Stop** on the camcorder.

Step 3: Digitize the File

Record the Video

1. To begin recording, click the red **Record** button on the computer screen (Figure 19).
2. Promptly press **Play** on the camcorder.

Video capture occurs in real time, so the recording process takes as long as the original video runtime. Do not use the Memory Lab Computer for other tasks during the recording.

3. When the recording is complete, click **Stop** in the Vidbox software. *The screen will ask you to confirm that you want to stop recording. Click **Yes**.*
4. Press **Stop** on the camcorder to stop playback.

Convert the File to MP4

Your digital file has been created in MPG format in your saved folder. Follow these instructions to convert the MPG to the recommended MP4 format.

1. In the **Step 4. Review and Publish** window, select **Convert to MP4** (see Figure 21).

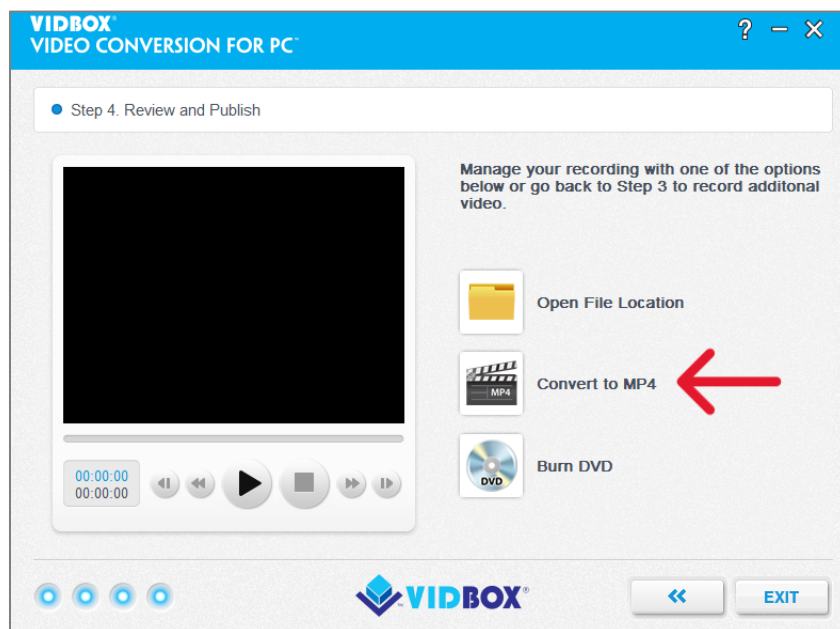


Figure 21: Select **Convert to MP4**.

- In the **Convert to MP4** window, **click the blue plus (+) icon** to find the desired file to convert (see Figure 22).

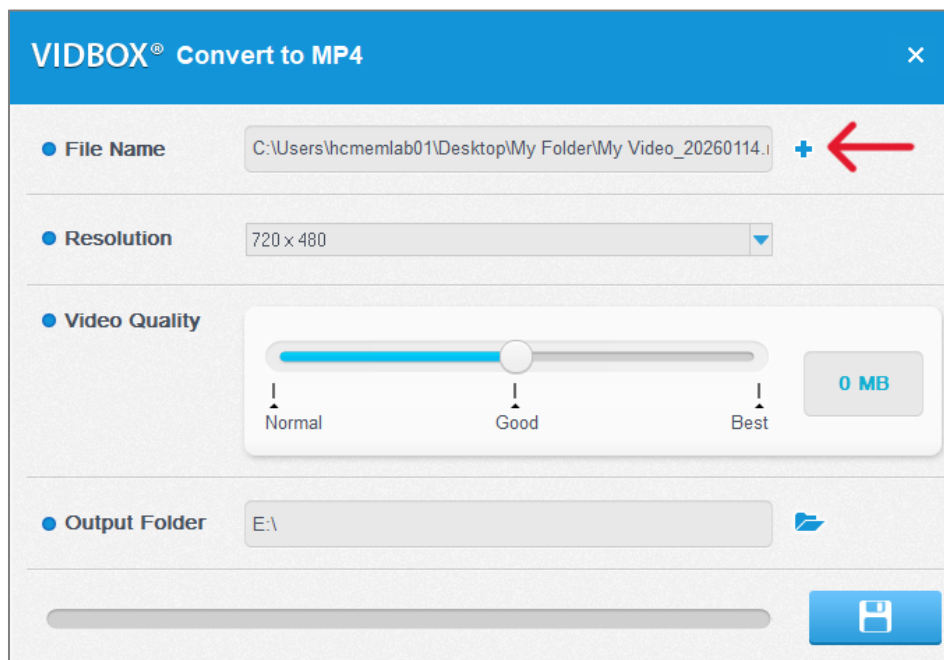


Figure 22: Convert to MP4 options.

- Select a **resolution** for your conversion. The **720x480** size is sufficient for preserving and sharing easily with friends and family. *Larger resolution sizes are available but require more storage and will not be as easy to share.*
- Set **Video Quality**. “Good” is sufficient. “Best” will require more storage.
- Choose an **Output Folder** to save the converted file. *You can use the folder where the original file is or create a subfolder. The file names will be the same, but the file format (.MPG and .MP4) will differ.*
- Click **Save** (the blue icon with a floppy disk) in the bottom right.



Figure 23: Save icon.

- When the conversion status bar shows “100%,” the conversion is complete.

Finish with Vidbox and the Equipment

1. Click the **X** in the Vidbox software screen to close the program.
2. Remove your videocassette from the camcorder:
 - a. Lift the flap above the cassette compartment.
 - b. Press the blue **eject** button; the cassette compartment will open and move up into unloading position.
 - c. Remove the cassette.
 - d. Gently close the cassette door; the compartment will automatically lower back into position.
3. Switch the camcorder **Power** dial to the off position (one notch counterclockwise).

Continue to the next page for instructions to transfer your files and complete your Memory Lab session.

Step 4: Transfer Files and Complete Memory Lab Session

Transfer your new digitized files from the desktop folder to your own storage using one of the options below. **Large files or multiple files may take up to 15 minutes to transfer.**

OPTION A: Use an external storage device (e.g. a hard drive or thumb drive):

1. Connect your external device to a USB port on the Memory Lab computer.
2. Double-click your folder on the desktop to open it.
3. Select all files by pressing **Ctrl + A** (or by clicking and dragging over them).
4. If **File Explorer** isn't already open, click the yellow folder on the taskbar.
5. Click **This PC**, then locate and select your external storage device.
6. Drag the files from the desktop folder to your external storage device. A file transfer progress bar will show the status of the transfer; see Figure 24.
7. Once complete, the files should appear in the external storage device.
8. After all files have transferred, right-click on your desktop folder and select **Delete**.

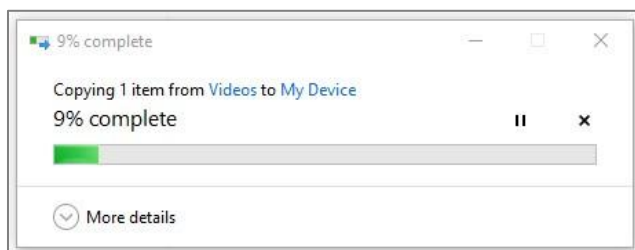


Figure 24: File transfer progress bar.

OPTION B: Upload to a cloud storage service (e.g. Dropbox or Google Drive)

1. Use a browser on the Memory Lab computer to access the internet.
2. Log in to your web-based email or cloud storage service to upload your documents.
3. After all files have uploaded, right-click on your desktop folder and select **Delete**.

Before You Leave:

- **Confirm your files are saved to your personal storage.**
Files are deleted daily from the Memory Lab computer!
- **Collect your original media from the Memory Lab equipment.**