

How to Digitize DV or MiniDV Cassettes

Use this guide to digitize content from DV or MiniDV cassettes into MP4 files. An output resolution of 720x480 is sufficient quality for preserving home movies and for sharing with family and friends.



Figure 1: DV cassettes.

Equipment You Will Use:

- Memory Lab computer
- Headphones
- Vidbox Video Capture Unit
- Panasonic AG-DV2000 DV/MiniDV Player/Recorder

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

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 DV** with three color-coded plugs (yellow, white, and red). *If an RCA cable is already connected to the Vidbox unit, confirm that it is labeled **DV**; if not, disconnect it.*

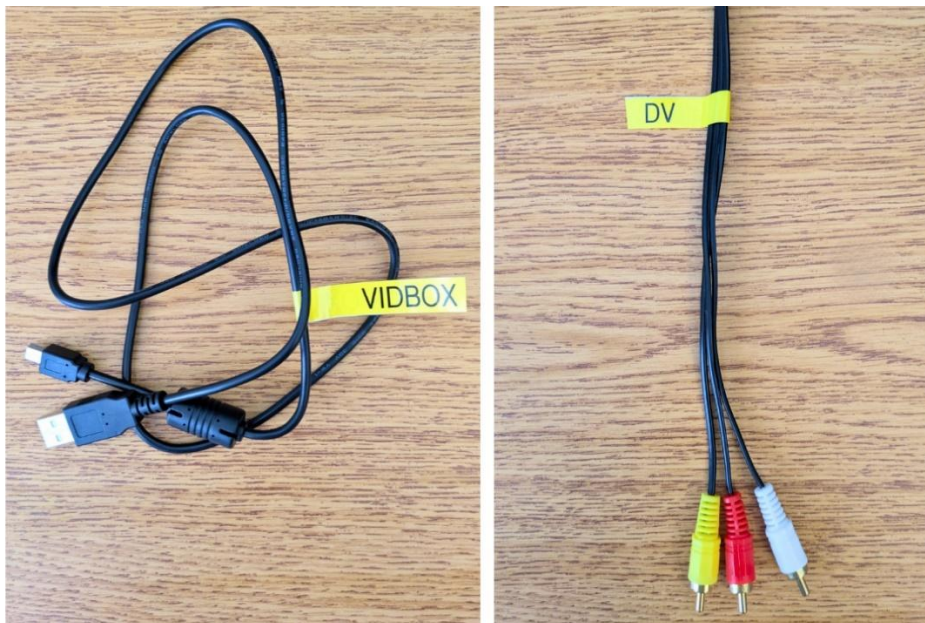


Figure 5: USB cable and 3-RCA cable.

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). *The opposite end of the cable should already be connected to the DV/MiniDV player. If it is not, ask staff for assistance.*



Figure 7: Match the colors when plugging the RCA cables into the Vidbox.

Load the DV/MiniDV Cassette into the Panasonic Player/Recorder

1. Ensure your DV/MiniDV 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. Press power on the DV/MiniDV player (see Figure 8).



Figure 8: The DV/MiniDV player power button..

3. Insert your cassette into the player:
 - a. Press the **Open/Close** button on the upper right of the player. The front door control panel will open.
 - b. Press the **Open/Close** button a second time. The cassette deck tray will open.
 - c. Position the cassette on the black deck plate with the shutter door facing into the machine (see Figure 9). *DV cassettes fill the entire plate. MiniDV cassettes sit in the center of the plate. When properly inserted, the cassette should not shift in any direction.*



Figure 9: A MiniDV sits in the center of the deck plate.

- d. Press the **Open/Close** button to close the cassette deck tray.
- e. Leave the front panel down so you can use the playback controls during the recording process.

Prepare the Vidbox Software

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

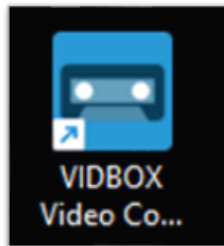


Figure 10: Software icon.

2. When the Vidbox window opens, click **Easy Mode** (see Figure 11). *Experienced users may use Advanced and Audio Modes at their own discretion.*

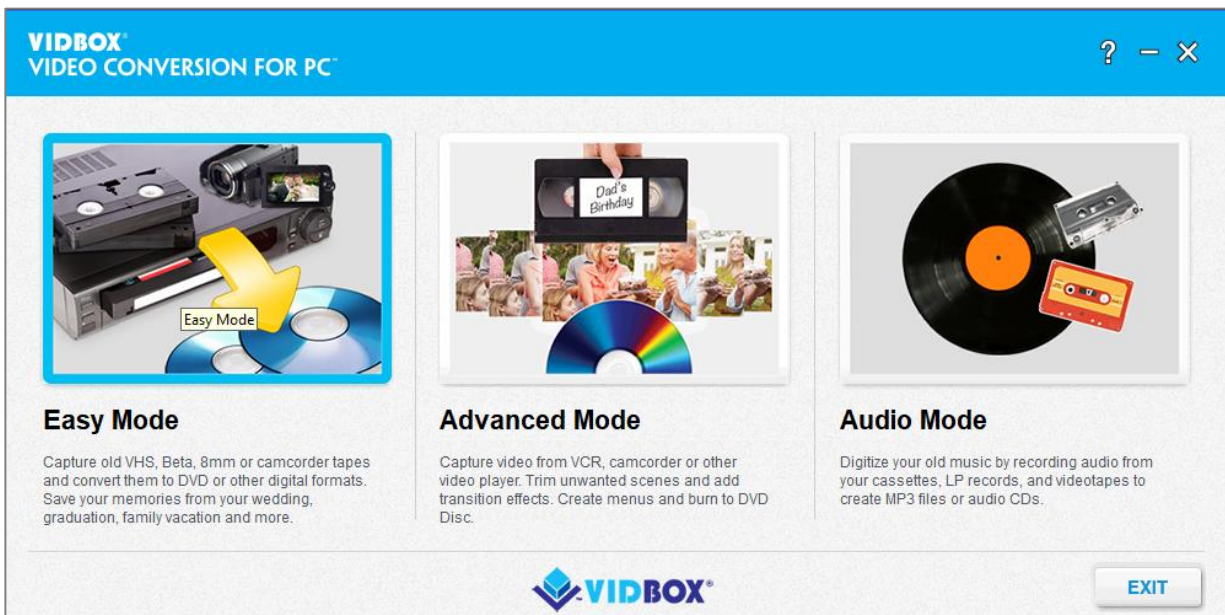


Figure 11: Easy Mode.

3. In the **Step 1. Select Your Video Converter** window, select **RCA (Composite)** as the cable connection type (see Figure 12). Then click the blue **right arrow** button at the screen bottom to advance.

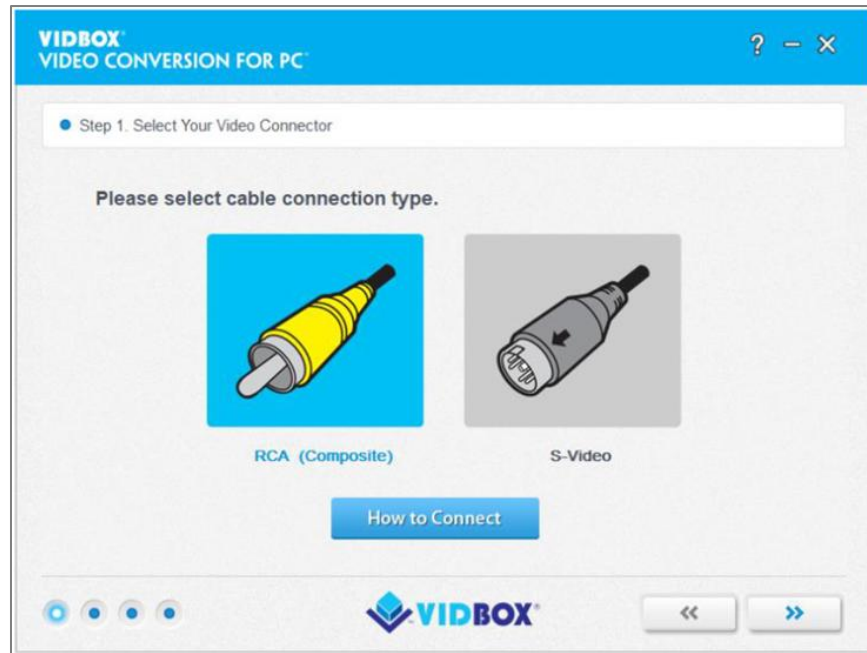


Figure 12: Select RCA (Composite).

4. In the **Step 2. Record Settings** window (see Figure 13), complete these steps:

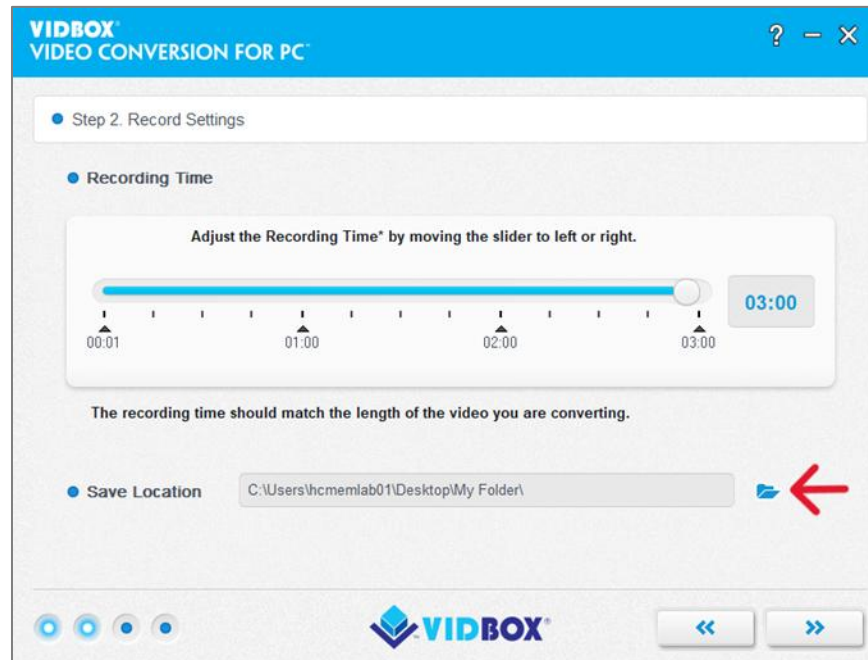


Figure 13: Select RCA (Composite).

- 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 13).
 - ii. Beside **Desktop**, click the **>** symbol to expand a list (see Figure 14).
 - iii. Select your specific folder and click **Ok**.

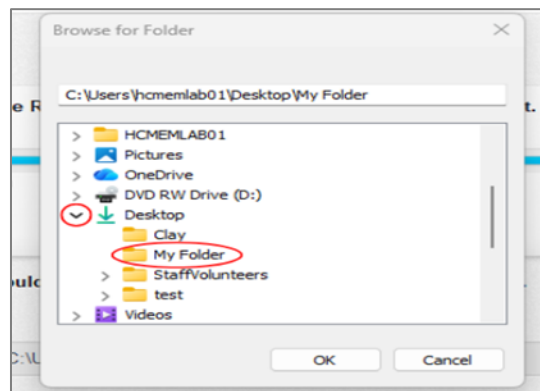


Figure 14: Select a folder to save to.

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

5. In the **Step 3. Record** window (see Figure 15), complete these steps:

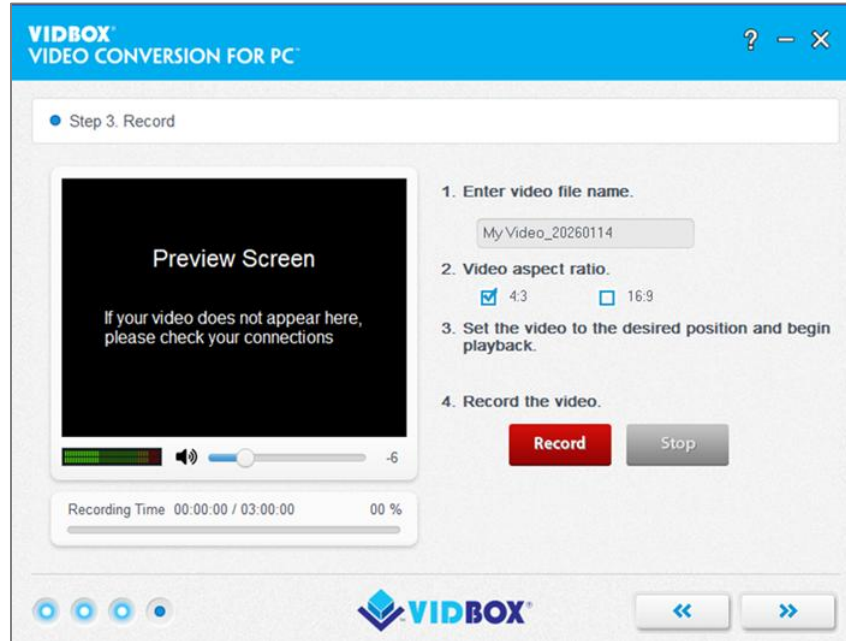


Figure 15: Set recording options.

- Under **1. Enter video file name**, enter a **custom file name** in the input field.
- Under **2. Video aspect ratio**, choose **4:3**. Most DV/MiniDV 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.
- For **3. Set the video**, press **Play** on the Panasonic player control panel (see Figure 16) to view your video in the **Preview Screen**. Use the other control panel buttons to rewind or fast forward your video as desired.



Figure 16: Playback controls.

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

Step 3: Digitize the File

Record the Video

1. To begin recording, click the red **Record** button on the computer screen (refer back to Figure 15).
2. Promptly press **Play** on the Panasonic player.

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 Panasonic player 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 17).

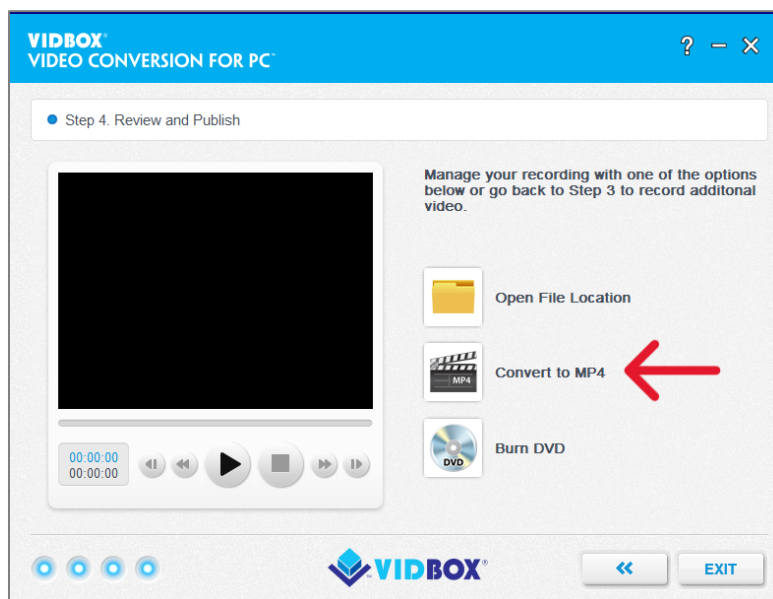


Figure 17: Convert to MP4 window.

- In the **Convert to MP4** window, click the **blue plus (+) icon** to select the desired file (see Figure 18).

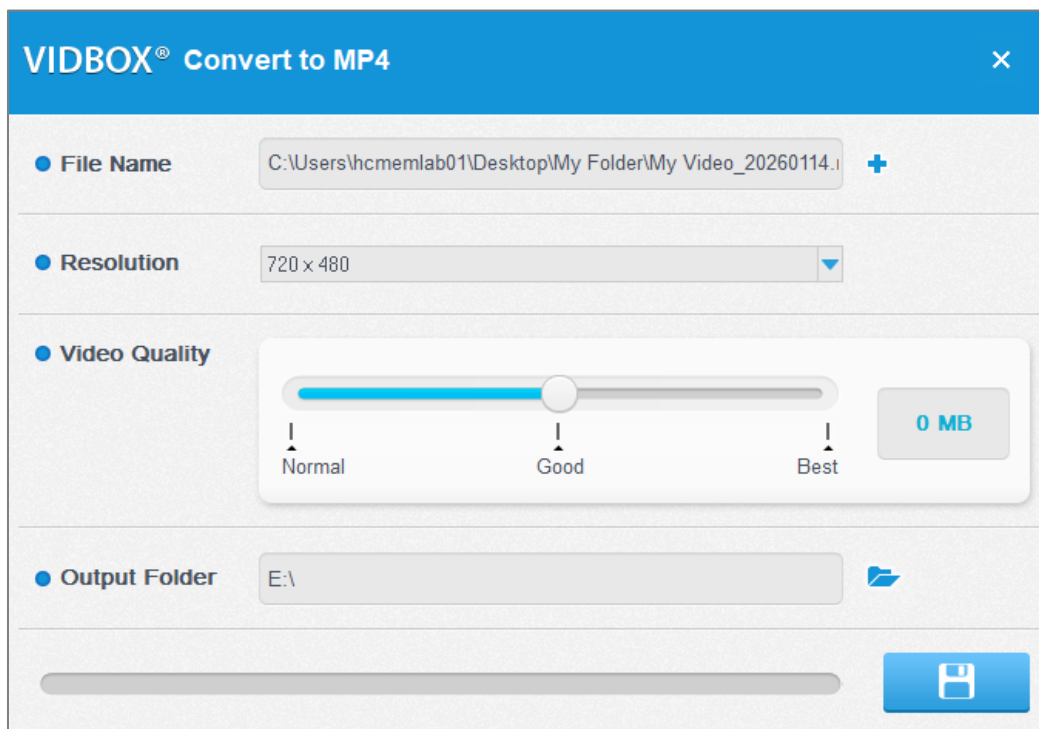


Figure 18: Convert to MP4 window.

- 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 19: 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. Press the **Open/Close** button on the Panasonic player to remove your cassette.
3. Gently close the front door control panel until it clicks.

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 20.
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**.

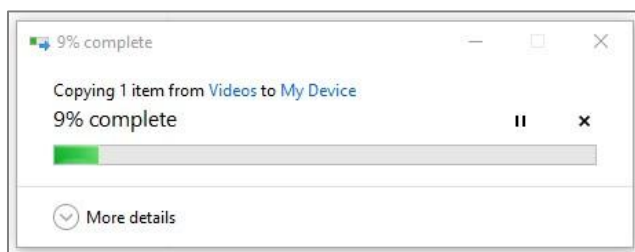


Figure 20: File transfer progress bar.

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.**