

# DIGITIZATION FOR BEGINNERS



## Scan EZ

- ♦ Scans photos and documents to USB and email
- ♦ Located at the Second Floor and Kids department
- ♦ Copy time: Approximately 5 seconds per page



## Vinyl to MP3

- ♦ Located in the Creative Studio Room B
- ♦ Copy time: Length of Record



## Cassette to MP3

- ♦ Located in the Creative Studio Room B
- ♦ More difficult to use
- ♦ Copy time: Length of Cassette



## VHS to DVD or Digital File

- ♦ Located in the computer commons area
- ♦ Four check-out converters available for home use
- ♦ Copy time: Length of VHS
- ♦ Elgato Video Capture, with computer & software, create MP4 video files



## DVD to DVD & CD to CD (Duplicator)

- ♦ Located near the copiers
- ♦ Extremely easy to use
- ♦ Cannot copy copyrighted DVDs
- ♦ Copy time: 2-7 min



## Negative/Slide Scanner

- ♦ Located at Creative Studio & Extraordinary Things Collection
- ♦ Copy time: a few seconds per slide/negative



## Film to Digital (Wolverine MovieMaker)

- ♦ Located in Extraordinary Things Collection
- ♦ Converts 8mm and Super 8 film reels to digital MP4 files (will not convert audio)

# SCANNING BASICS

## Scan EZ Station



- ◆ Available on Second Floor and Kid's Library
- ◆ Easy-to-use touch screen; 11 x 17 scan bed
- ◆ Scan pictures, documents, books to:
  - ◇ USB, FAX, Email, Smart Phone/Tablet or GoogleDrive (all but FAX are free\*).
- ◆ Save scans as:
  - ◇ PDF, Searchable PDF, Word Doc, TIFF, JPEG
  - ◇ Color, Grayscale, Black and White
  - ◇ Standard or High Quality Resolution
- ◆ 20 MB limit on email

\*FAX your scan for a flat rate: \$1 Domestic/\$5 International

## Flat-Bed Scanner

- ◆ Available in public computer area and Creative Studios
- ◆ Control settings with provided graphics software
- ◆ Scan documents, books, pictures, negatives and slides
- ◆ Save as PDF, JPEG, TIFF and other format
- ◆ Online Help – [files.support.epson.com/htmldocs/prv3ph/prv3phug/index.htm](http://files.support.epson.com/htmldocs/prv3ph/prv3phug/index.htm)



## Copiers



- ◆ Available on Second Floor
- ◆ Scans photos and documents to USB
- ◆ Saves as PDF, Tiff, or JPEG
- ◆ Great for multi-page documents

# SCANNING BASICS

## How to Use the Epson Flat-Bed Scanner and Software:

1. Open the “Epson Scan” application on the desktop and choose your settings:
  - ♦ **Mode:** The default is “Home” which is good for most scanning. (Other modes are “Office” and “Professional,” if needed.)
  - ♦ **Document Type:** Photograph, Positive Film, Negative Color Film, Negative Black and White Film, Illustration, Magazine, Newspaper, Text/Line Art
  - ♦ **Image Type:** Color, Grayscale, Black-and-White
  - ♦ **Destination:** Screen/Web, Printer, Other
  - ♦ **Resolution:** Set it at a minimum of 300 DPI for printing. You can set it higher, but keep in mind that the higher DPI, the larger the file size. If you are scanning for screen or web, use 72 or 96 DPI.
  - ♦ **Target Size:** Defaults to “Original” but you can choose other sizes or create custom sizes.
  - ♦ **Image Adjustments:** Descreening (removes moiré pattern); Blacklight Correction (removes dark shadows); Color Restoration (may improve color and sharpness); Dust Removal (cleans up dust marks and light scratches); Text Enhancement (sharpens text)
  - ♦ **Brightness/Contrast:** Adjust if needed (you may need to check the preview first).
  - ♦ **Thumbnail view:** Check or uncheck box.
2. To scan a photo or document, place it face down on the document glass with the upper left corner of the photo or document at the lower, left corner of the scanner (see arrow).
  - ♦ Click on “Preview” to see the initial scan (in either the “Thumbnail” or “Normal” view).
  - ♦ Select the image with the marquee.
  - ♦ If the preview looks good, click “Scan.”
  - ♦ Choose a location where you want to save the file (may default to “Pictures” folder).
  - ♦ **Type:** Save as **JPEG**, Multi-TIFF, **PDF**, PICT, Print Image Matching II (JPEG and TIFF), **TIFF** (NOTE 1: Photos are usually saved as JPEGs or TIFFs.) (NOTE 2: For a multiple page document, save it as a PDF and it will give you the option to scan additional pages.)
  - ♦ **Options:** Quality (used to adjust compression – high or low quality)
  - ♦ Check or uncheck boxes at bottom (the defaults are as follows):
    - ♦ Overwrite any files with the same name (unchecked)
    - ♦ Show this dialog box before next scan (checked)
    - ♦ Open Image folder after scanning (checked)
    - ♦ Show “Add Page” dialog after scanning. (checked)
  - ♦ Click OK to scan.

# SCANNING BASICS

3. To scan film negatives or slides, begin by removing the white document mat from inside the scanner cover by gently sliding it up. Set it to the side and remove the film/slide holder.
  - ◆ **Film:**
    - ◇ Open the film strip holder and slide the film strip all the way into the holder; your images and wording should appear backwards on the side that faces up.
    - ◇ Close the cover and press down until it clicks.
    - ◇ Place the film holder on the glass document table so that it aligns with the tabs (the “film” icon on the holder fits in the tab with the same icon on the scanner).
    - ◇ Close the scanner cover and start the scan.
  - ◆ **Slides:**
    - ◇ Place the film/slide holder so that the “slide” icon fits into the tab with the same icon on the scanner.
    - ◇ Place up to four slides in the film holder; your images should appear backwards on the side that faces up.
    - ◇ Close the scanner cover and start the scan.

*When finished, be sure to carefully place the film/slide holder and white document mat back in the storage area inside the scanner cover.*

For more information, click on “Help” at the bottom of the Epson Scan settings window or see the User Guide at: [files.support.epson.com/pdf/prv37 /prv37 ug.pdf](https://files.support.epson.com/pdf/prv37_prv37_ug.pdf).

# SCANNING NEGATIVES AND SLIDES

## Jumbl & Kodak Slide/Film Scanners

- Check out the Jumbl or Kodak with your Elmhurst library card (For use to take home in our Extraordinary Things Collection).
- All scanners can convert 35mm, 110, 126KPK, super 8 slides and negatives to digital JPEG images.

## How to Use the Scanners

### What You Can Convert:

35mm, 110, 126KPK and Super 8 Slides and Negatives to digital images

### What You Will Need:

Slides/negatives to transfer and an SD card (optional)

### How It Works:

The scanner is a small, stand-alone device that gives you a preview on screen and scans in one single image at a time. These images can be saved directly to an SD card or they can be saved to a computer when connected via USB cable. The scanner comes with four adapters to fit Slides, Negatives, Super 8 and 110 Inserts.

1. Power the scanner by connecting the power adapter to a wall outlet. Press Power to turn on/off.
2. Use the Left/Mirror and Right/Flip buttons to scroll between menu items. Use Ok/Enter for selection.
3. Insert SD card into back.
4. Place film negatives or slides on the tray. Insert the tray on the right side of the scanner, marked by an arrow.
5. Select "Film Type" from the Home Menu. Select "color negative," "slide positive," or "B&W negative" from "Film Type" Menu.
6. Go back to Home Menu. Select "Capture." Frame up the slide in the display. Press "Convert/Mode." Select "Save."

When using your own SD card, be aware that this device may need to reformat your SD card before writing to it. Reformatting will erase all data currently saved to your card and you will be unable to restore the information.

For detailed instructions, refer to the manual included in the scanner's box.

### Source:

[elmhurstpubliclibrary.org/about-us/building-information/creative-studio/creative-studio-slides/](http://elmhurstpubliclibrary.org/about-us/building-information/creative-studio/creative-studio-slides/)



# SCANNING NEGATIVES AND SLIDES

## Wolverine Titan

- Check out the Wolverine with your Elmhurst library card (for use in the Creative Studio).
- The Wolverine Titan 8-in-1 High-Definition Film to Digital Converter can convert 35mm, 110, 126, 127, 8mm, super 8, and 35mm Archive Film, slides, and negatives into digital images.



## How to Use the Wolverine Titan 8-in-1 Converter

### What You Will Need:

Slides/negatives/film to transfer and an SD card (optional)

### How It Works:

The Wolverine scanner is a small, stand-alone device that gives you a preview on screen and scans one single image at a time. These images can be saved directly to an SD card or they can be saved to the device and transferred to a computer when connected via USB cable. The scanner comes with six adapters to fit Slides, Negatives, Super 8 and 110 Inserts.

1. Power the Wolverine by connecting the power adapter to a wall outlet. Press Power to turn on/off.
2. Use the Left/Mirror and Right/Flip buttons to scroll between menu items. Use Ok/Enter for selection.
3. Insert SD card into back.
4. Place film negatives or slides on the tray. Insert the tray on the right side of the Wolverine, marked by an arrow.
5. Select "Film Type" from the Home Menu. Select "color negative," "slide positive," or "B&W negative" from "Film Type" Menu.
6. Go back to Home Menu. Select "Capture." Frame up the slide in the display. Press "Convert/Mode." Select "Save."

When using your own SD card, be aware that this device may need to reformat your SD card before writing to it. Reformatting will erase all data currently saved to your card and you will be unable to restore the information.

For detailed instructions, refer to the manual included in the Wolverine Titan box.

### Source:

[https://www.wolverinedata.com/assets/downloads/F2D\\_Titan\\_Manual\\_V1.pdf](https://www.wolverinedata.com/assets/downloads/F2D_Titan_Manual_V1.pdf)



# VINYL-TO-MP3



## Using the EZ Vinyl Tape Converter Software

The latest version of the EZ Vinyl/Tape Converter for Macs automatically import the converted audio into iTunes, while the latest version of the EZ Vinyl/Tape Converter for Windows allows you to save your audio directly to your computer to any location that you choose. Windows users can then import the audio tracks into whatever audio software you choose.

**All of the steps and windows are the same for both a Mac and a Windows computer minus the very last step where a Windows user will choose a location for the audio track and a Mac user will automatically have the audio track convert into iTunes/Music.** The following steps walk through the process on a Windows operating system.

For more resources, visit [numark.com/kb/article/1778](http://numark.com/kb/article/1778).

# EZ VINYL CONVERTER WALKTHROUGH: WINDOWS

## Steps for Windows

1. First, connect the Numark turntable to the computer with the USB cable and ensure that it is powered on.
2. Next, open and run the EZ Vinyl/Tape Converter software. A window that says **Step 1: Get connected** will open up.
3. Press **Next**. In **Step 2: Get the music ready to play**, there are two very important items that can greatly affect your recordings: **GAIN** and the **Split recording into tracks**.

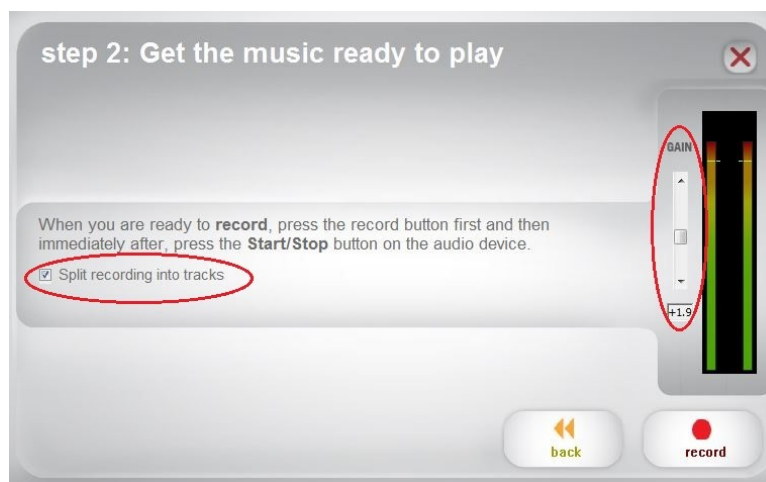


The **GAIN** slider is located next to the display meter.

Its purpose is to control how loud or soft you would like the recording to be. Bringing the slider up will increase the volume and down will decrease it. It is very important to make sure the level on the meter is not staying in the red. This is called clipping and will cause your recordings to sound very distorted

The second item is the **Split recordings into tracks** feature. When this box is checked off, the software will automatically advance the recording to the next track when it **detects 4-6 seconds** of silence. This option can be toggled on or off.

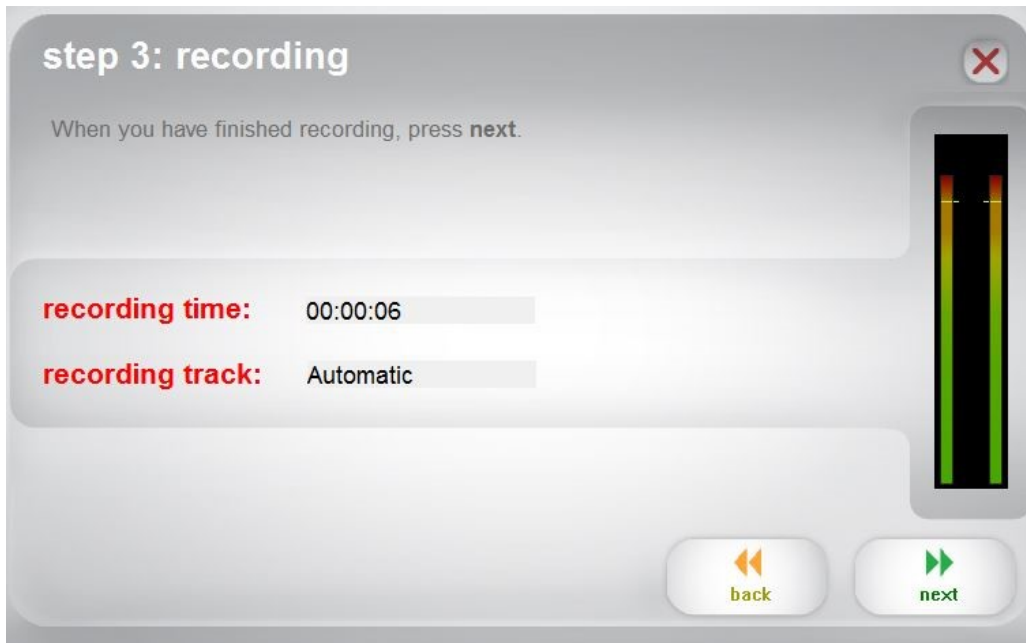
**Note:** This feature may not function properly on certain types of recordings such as spoken word, live recordings, and classical music. Songs with break downs and gaps of silence could trick the software into thinking the track is over and advance it to the next song prematurely. In this case is it best to un-check the box and record the songs manually.



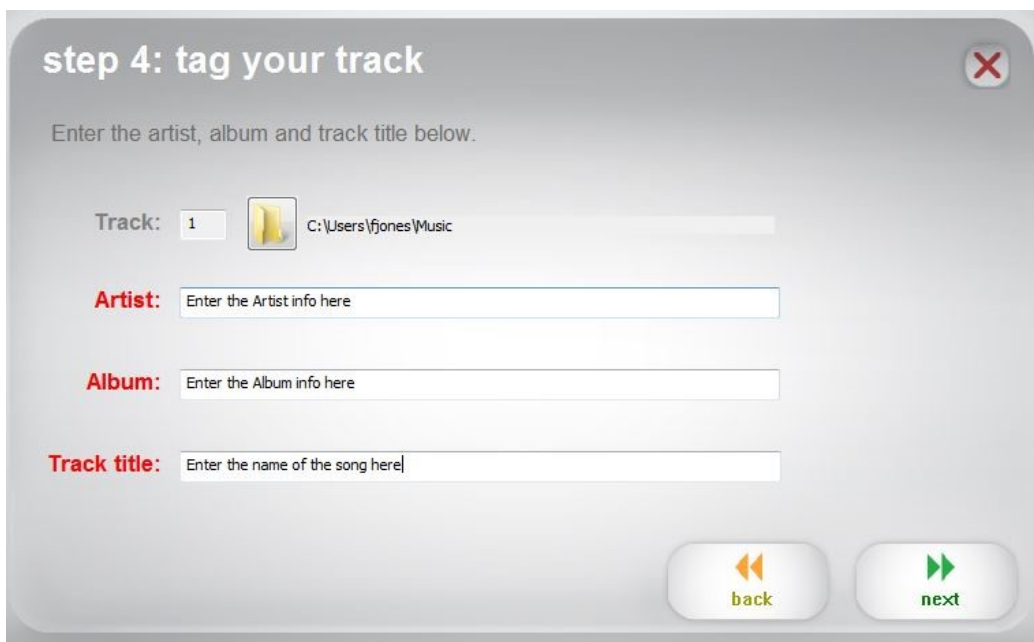


# EZ VINYL CONVERTER WALKTHROUGH: WINDOWS

4. Once the GAIN is set to the proper level and you have toggled the Split recordings into tracks function on or off, click on the **record** button to start recording your audio.



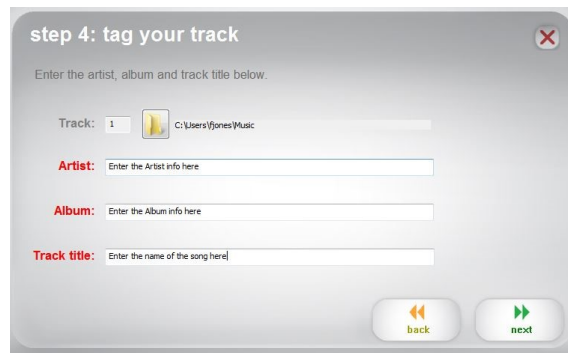
5. When the recording is complete, choose **next**. Then name the **Artist**, **Album**, and **Track title** in the appropriate locations.



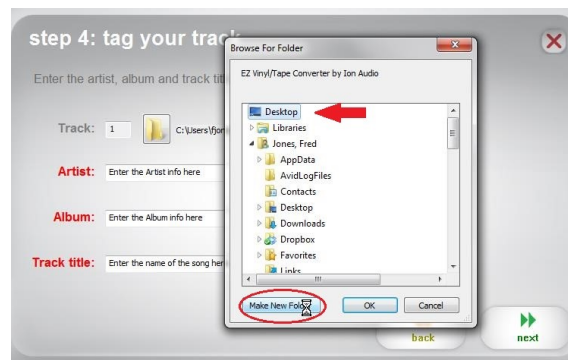
# CHANGING WHERE THE SONGS ARE STORED: WINDOWS

By default the audio recordings are saved to the **Music** folder. If you wish to save them in a different location, such as your Desktop for example, here is how.

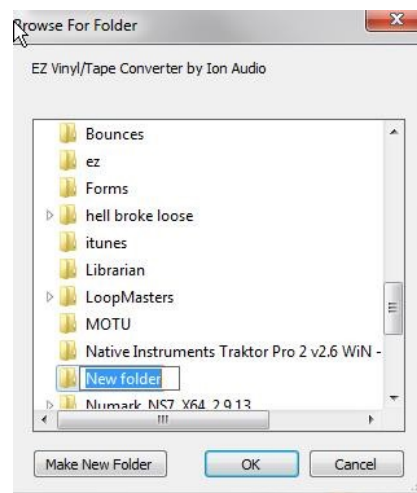
1. Click on the **folder** icon.



2. Highlight **Desktop** then click **Make New Folder**.



3. **Name** your folder, then click **OK**. Now by default all of your music will be recorded into that folder.



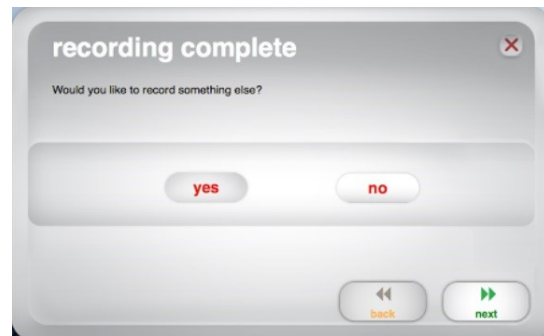
# STORING FILES ON MAC

The EZ Vinyl/Tape Converter software steps 1-4 are the same for both Mac and Windows computers. However, when using a Mac computer, the EZ Vinyl/Tape Converter software will guide you to step 5 after naming the Artist, Album, and Tracks and will automatically import the files to iTunes.

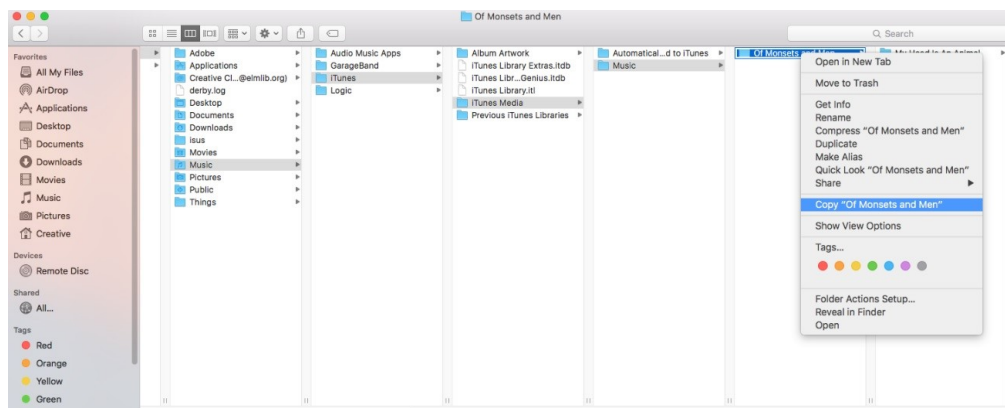
1. After the Artist, Album, and Track names have been enter, press **next** and the EZ Vinyl/Tape Converter software will continue to **Step 5: Exporting to iTunes**.



2. When the songs have finished exporting to iTunes, the EZ Vinyl/Tape Converter software will ask if you would like to continue recording another album.



3. Even though the recordings have been auto-imported into iTunes, the album can still be located in the Music folder on the Mac in the iTunes Media folder. Once located in the iTunes Media folder, the album or tracks **can be copied to a USB**.

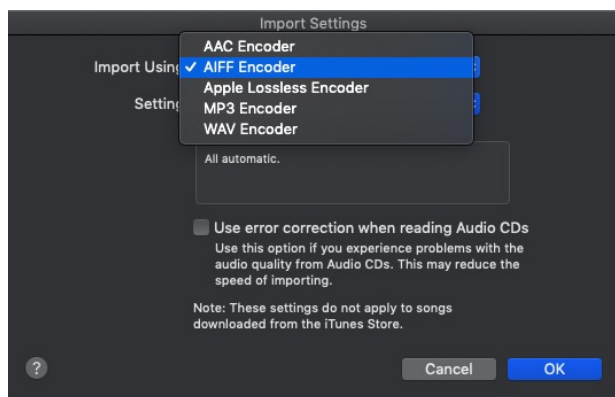


# Burning a CD with iTunes

## Import Songs into iTunes Library

Songs must first be imported into iTunes. Songs can be imported using different compression rates to optimize storage on your device. To see what your default Import settings are go to **iTunes\_>Preferences\_>Import Settings...**

- \* AAC: Use for most music. Use in iTunes, iPhone, iPad & iPod models.
- \* **AIFF: Use if you want to burn high quality CDs without losing audio quality.**
- \* Apple Lossless Encoder: Uses much more disk space. Use if you plan to listen on audiophile systems without quality loss.
- \* MP3 Encoder: Use if you plan to listen to music in apps other than iTunes or on MP3 players other than iPod, iPhone, & iPad.



## Adding Songs to Library

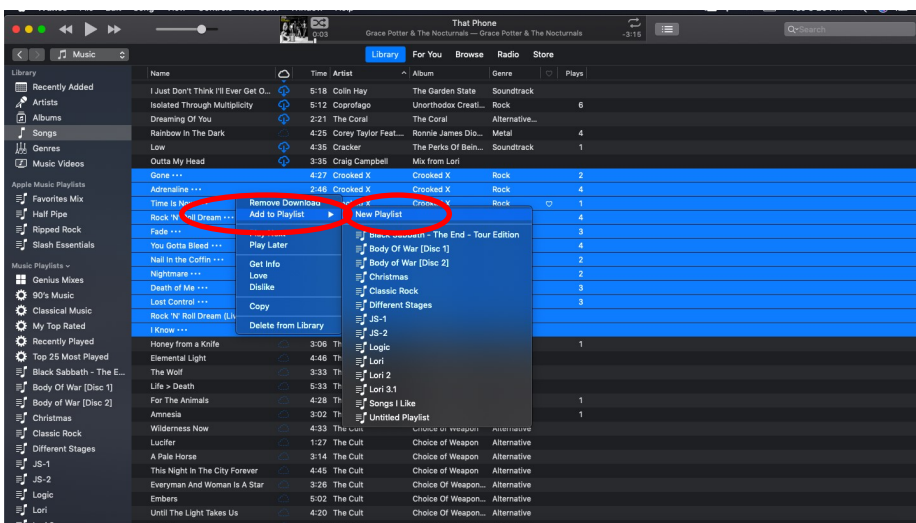
Go to **File\_>Add to Library** and select song files on your computer that you would like added to your iTunes Library. iTunes organizes your music into Artists, Albums, and Songs.

## Creating a Playlist

To create a playlist you can choose **File\_>New\_>Playlist**

or

Select multiple songs and **Right-Click** to select **Add to Playlist\_>New Playlist.**

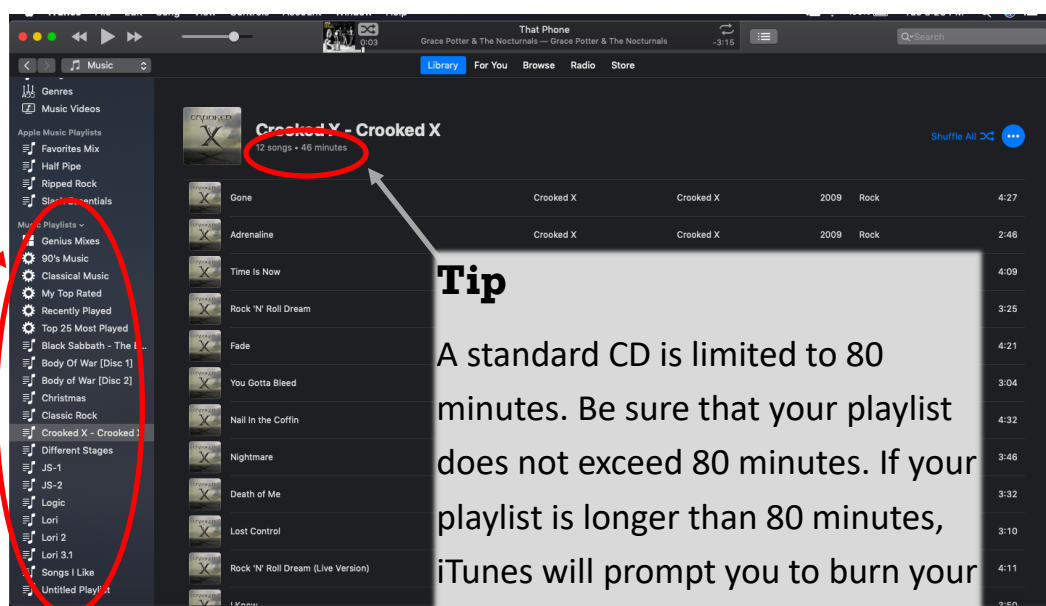


# Burning a CD with iTunes

## Adding and Arranging Songs in a Playlist

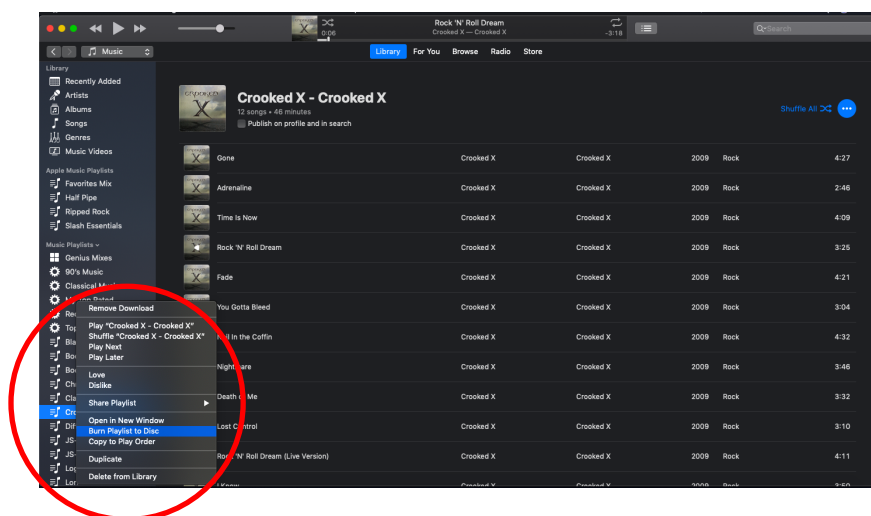
- Once you've created a new playlist you can easily add songs by dragging and dropping them from your Music Library to your playlist.
- To rearrange songs in your playlist simply click on each track and drag it up or down until it is in your preferred order.

Playlists will be listed on the side panel.



## Burning a Playlist to CD

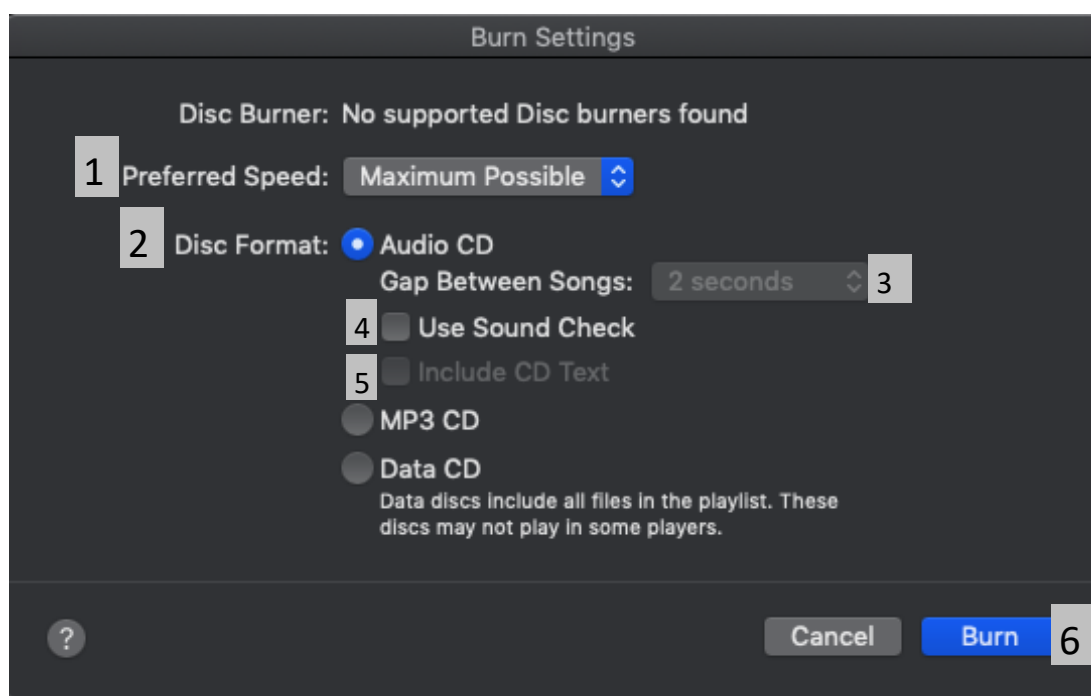
The steps to burn a CD once you have your playlist created and in order, are simple. Locate your playlist on the side panel and **Right-Click** to select **Burn Playlist to Disc**.



# Burning a CD with iTunes

## Burn Settings

1. **Preferred Speed:** can be left at the default unless you experience frequent burn failures. If you experience failures, you should select a low speed setting or best match the setting listed on your blank media/CD-R Disc.
2. **Disc Format: Audio CD** is the selection you want if you desire this disc to be playable in all standard CD players.
3. **Gap Between Songs:** This is your preferred empty/silence space between tracks in your playlist. Note: This time does get added to the total playtime of the disc which cannot exceed 80-minutes. You can select “None” as an option if you wish.
4. **Use Sound Check:** Make this selection if you wish to have all of your tracks play at the same volume.
5. **Include CD Text:** Make this selection if you want to include information that can be displayed in some vehicles and computer systems.
6. **Burn:** This will prompt you to insert a blank disc to begin the burning process.





# CASSETTE TO MP3

## The Tascam CD-A580

The Tascam CD-A580 is a device that will convert cassette tapes to MP3 formats stored onto a flash drive. It will also digitize CD's to MP3, and will allow users to create cassette tapes. The Tascam does not “burn” CD's.



## Getting Started

- ◆ Bring a flash drive large enough to store music from your cassette
  - ◇ Music files are roughly 10MB per minute—one hour cassette tape will need about 60MB of free space
- ◆ Call Elmhurst Public Library to reserve Creative Studio B for an adequate amount of time
  - ◇ The machine converts in real-time, so 1 hour of music will take 1 hour to convert

## How to Transfer Songs from a Cassette to a USB Drive

1. Load the cassette into the Tascam and place the USB drive into the port on the machine
2. Press the **SOURCE** button repeatedly to select **Tape**
  - ◆ It will scroll between CD, TAPE, or LINE
3. Press the **RECORD USB** button to prepare the USB for recording
4. The red indicator above the **RECORD USB** button and the **REC** icon on the display will blink
  - ◆ Preparation for USB recording takes a few seconds. USB flash drives with larger capacities might take more time. When “Record Prepare” is shown during preparation, pressing buttons will have no effect
5. Before recording, adjust the recording level. Failure to do so could cause the recorded sound to be distorted or noisy
  - ◆ Play the source (cassette tape) to be recorded
  - ◆ Plug headphones into the jack to listen to the tape. (Headphone volume can be adjusted with the knob just to the right of the headphone jack.)
  - ◆ Use the **REC LEVEL** knob to adjust the recording level so that the loudest sound never lights the “**OVER**” indicator on the peak level meter shown on the display
6. Prepare the tape by cueing it to the place where you want to start the recording
7. Press the **RECORD USB** button again. The red indicator above the **RECORD USB** button and the **REC** icon on the display will remain solid, and the tape will automatically play and begin recording to the USB.
  - ◆ If you want each song to be a separate file, you will need to divide the files manually. This process is described on page 30 of the user manual.
8. Press the **USB Stop** or **Cassette Stop** to finalize and end the recording. Display will say **RECORD ENDING**.

For additional information, see page 28 of the user manual: [tascam.com/content/downloads/products/922/cd-a580\\_om\\_e\\_vb.pdf](http://tascam.com/content/downloads/products/922/cd-a580_om_e_vb.pdf)

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  - ◆ It will scroll between CD, TAPE, or LINE
3. Press the **RECORD USB** button to prepare the USB for recording
4. The red indicator above the **RECORD USB** button and the **REC** icon on the display will blink
  - ◆ Preparation for USB recording takes a few seconds. USB flash drives with especially large capacities might take more time. When "Record Prepare" is shown during preparation, pressing buttons will have no effect
5. To record all the tracks/files on a CD, stop the disc first
  - ◆ To record only some of the tracks, pause at the beginning of the part that you want to record
6. Press the **RECORD USB** button again. CD will begin playing and recording will begin.
7. The red indicator above the **RECORD USB** button and the **REC** icon on the display will remain solid
8. Press the **USB Stop** or **CD Stop** button to finalize and end the recording. Display will say **RECORD ENDING**.

For additional information, see page 28 of the user manual: [tascam.com/content/downloads/products/922/cd-a580\\_om\\_e\\_vb.pdf](http://tascam.com/content/downloads/products/922/cd-a580_om_e_vb.pdf)

# VHS TO DVD FOR BEGINNERS

## What is digitization?

Digitization means changing print or physical materials into some kind of digital format.



## Get Organized

- ♦ Find your old family movies on VHS. Try to make an educated guess as to how many minutes of content they hold.
- ♦ Buy some DVD-Rs. When you are shopping for DVD-Rs, pay special attention to how many minutes of recording time the DVD-R can hold. For example, it might say “120 min.”
- ♦ Set aside some time to come to the Library to do your conversion. The machine works in “real time,” so 1 hour of video will take 1 hour to convert.

## Dubbing Your DVD

1. Insert the VHS to DVD-R into the machine.
2. Hit “Play.” Make sure the VHS is playing OK. Use the tracking buttons to smooth things out.
3. Rewind your VHS before the next step.
4. Hit the [DUBBING] button located behind the front panel. (You do not have to press “Play.”)
5. Grab a book and a cup of coffee and wait!

## Finalizing Your DVD

6. When your video is done, press [▲/■] on the VCR, then wait until the disc reads 100%.
7. You can put content from more than one VHS onto the same DVD. Just go back to step #1.
8. When you are completely done, use the DVD remote to Finalize:
  - a. Click [SETUP] on the remote
  - b. Select {DVD Menu} on the screen
  - c. Select {Finalize} on the screen
9. To eject your DVD, press [▲/■] on the DVD player.

## Help

- ♦ We are here to help, just ask!
- ♦ Toshiba DVD620 complete owner’s manual:  
[bit.ly/EPLdvr](http://bit.ly/EPLdvr)

## Checkout A Converter

- ♦ Converters are also available to take home. Check the catalog for availability at:  
[elmlib.org/checkoutvhsdvd](http://elmlib.org/checkoutvhsdvd)
- ♦ VHS-C adapters also available for checkout.

### Other Digitization Equipment:

- ♦ Vinyl to MP3 Converter
- ♦ DVD to DVD Duplicator
- ♦ Cassette to CD Converter
- ♦ Negative and Slide Scanner

Legal Information: A self-authored VHS tape that has not been published commercially may be converted into any other format, such as DVD, in single or multiple copies. Reproducing / converting a commercial movie is an infringement of copyright.

# Elgato Video Capture

## Convert Homemade VHS Tapes Directly to Computer File

Skip the DVD creation process altogether. Using the Elgato Video Capture device and software, video output signals from a VCR or other device can be converted directly to an MPEG or MP4 file that can be viewed and edited using a computer and creative software.

### Video Capture Software

Available for free download from the Elgato Website, the Video Capture software must first be installed in order for the device to work. This software may be installed on both Windows and Mac computers.

Visit the link below and download the version for your computer's operating system.

<https://www.elgato.com/en/video-capture/support>

**Disclaimer:** The copyright law of the United States (Title 17, U.S. Code) governs the making of photocopies or other reproductions of copyrighted material. The person using equipment is responsible for any infringement.

## Instructions After Installing Software

1. Connect the Elgato Video Capture device to an open USB port on your computer.
2. Open the Elgato Video Capture application on your computer. If it asks you to register your product, you may choose to "Skip Registration."
3. You should see a "Get Started" screen.
4. Enter in the name of your movie, for example "Wedding 1983."
5. Select the length of your video. If accurate, this will give you the estimated amount of hard disk space required to save this file onto your computer or flash drive.
6. Check your preferences to select where your recording will be saved on your computer.

From a Windows computer, "Preferences" is located at the bottom of the application window.

From a Mac, go to the top of the screen and click on "Elgato Video Capture" and select "Preferences."



# Elgato Video Capture

## Instructions Continued

7. Select "Continue."
8. Connect the RCA cables from the Elgato Video Capture device to the Video Output of your VCR, Camcorder, or other peripheral device.
9. Prepare your VCR, camcorder, or other peripheral device for playback. Once connected properly you should no longer see "No Signal" displayed on your computer; when you play your video you should see it play through your computer.
10. Select the proper aspect ratio: either 4:3 or 16:9. **Note:** most older videos will be 4:3. For best results, match the original footage aspect ratio. You will notice your video is stretched a bit if the wrong format is selected.
11. Select "Continue."
12. This next screen tests for audio playback. If your source video contains audio, you should see the audio levels and be able to hear the audio play back through your computer.
13. Select "Continue."
14. Now you are ready to record. You should see a large, red "Start Recording" button in the lower right side of the window.
15. Once you have the tape at the beginning, or where you would like to begin the recording, simultaneously hit play on the VCR, camcorder, or other peripheral device and click "Start Recording."
16. When your tape has finished, click "Stop Recording."
17. You will be brought to a trimming screen.
18. Here, dead footage at the beginning and end of your recording may be cut from the recording by using the trimming feature.
19. Drag the slider on the lower left to where you want the beginning to start and drag the slider on the lower right to the spot where you want your recording to end.
20. Click "Continue."
21. You will see that your video has been saved to your computer or external storage device and you can choose to quit or continue with the options Elgato provides.