BPLD Cassette Transferring

Guide to Recording, Editing, and Exporting Cassette Audio

Want to transfer your cassettes to a CD or an MP3 format? We got you covered. This step-by-step guide is meant to help anyone through the process. It goes through the recording, editing, exporting, and cd burning process of the cassette transfer.

Recording the Cassette

To be able to get any of the music or other recorded media from the cassette, you will need to record the cassette into Audacity. You can download Audacity for free from their website (https://www.audacityteam.org/). Keep in mind that this process is done in real time, so however long the recording is, is how long the recording process will be.
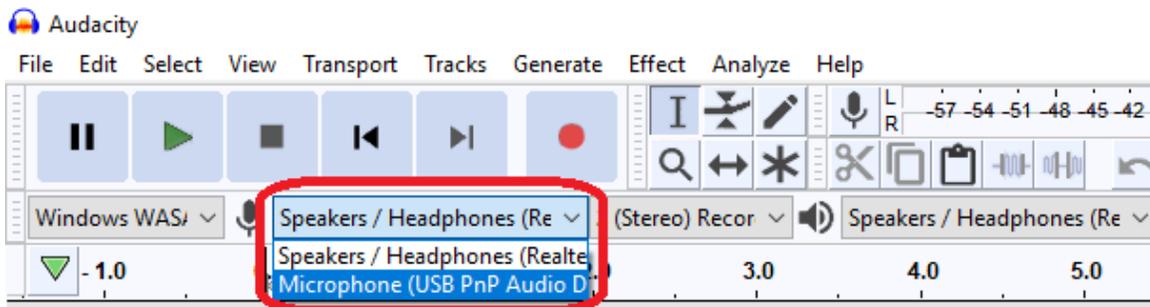
1. Insert the cassette into the cassette capture device. To do so, locate the open slider on the right side of the cassette capture device (looking from the front of the device), and slide it down.

2. Insert the side of the cassette you wish to record first. You will be able to stop and record the other side once the first side is finished.

3. Close the cassette capture device. You will not be able to close the device if the cassette was inserted incorrectly. Do not force the cassette into the capture device.

4. If necessary, rewind the cassette all the way. To do so, locate the "**REW**" button on the top of the cassette capture device, and press it in. If the cassette does not rewind, the batteries on the cassette may be depleted. If this happens, please inform Digital Services.

5. Once it is rewound all the way, press the "**STOP**" button right under the "REW" button.

6. Connect the cassette capture device to the computer using the USB cable that came with the device.

7. Once the cassette capture device is ready and plugged into the computer, open the **Audacity** software.

8. Before you start recording, you will want to make sure that the settings are correct in Audacity. Make sure that the "Audio Host" selection, right under the pause and play buttons in Audacity, reads "**Windows WASAPI**". If the selection does not read this, click the down arrow directly to the right to open the drop-down menu and select the correct host.
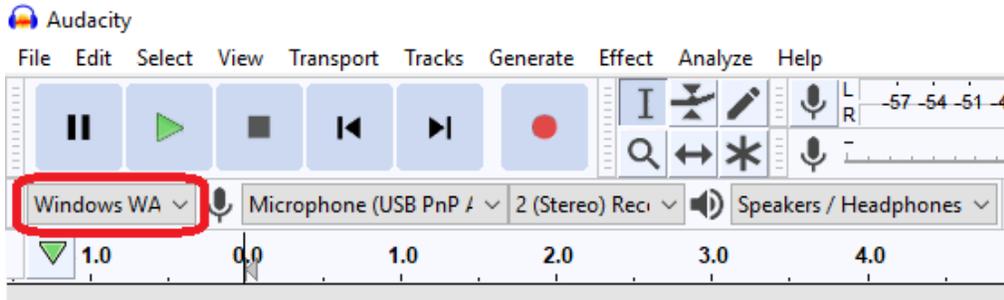

9. Locate the "Recording Device" selection, right under the stop, rewind, and fast forward icons in Audacity. It may read "Speakers / Headphones". Click the down arrow directly to the right to open the drop-down menu. Select "**Microphone (USB PnP Audio Device)**".

10. Once the settings are correct, at the top of the cassette capture device, press the "**PLAY**" button along with the **record** icon in Audacity. Colored audio waves should appear within Audacity. If you get error 9997, locate the "Project Rate (Hz)" selection in the lower left and change the value to 48000. If only a straight blue line appears after some time, the Audacity recording device settings may be incorrect (double check steps 8 and 9), or the volume on the cassette capture device may be all the way down (continue to step 11). If nothing is happening and no blue waves or lines appear, inform Digital Services.
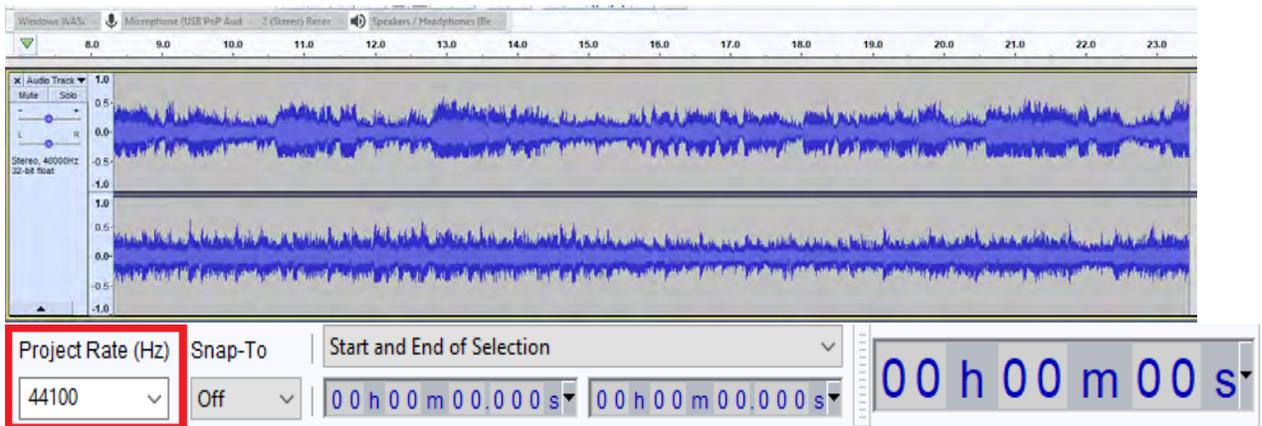
11. For volume purposes, watch the recording level at the top of the Audacity software (these are the moving green bars with a microphone symbol to the left) for the first song. This will help you indicate whether the recording is clipping by jumping and turning red. If the recording level clips, it may cause the recording to distort when converted. If you find the recording level to be clipping (going past the 0 dB mark), reduce the volume via the volume control wheel on the cassette capture device. Increase the volume with the control wheel if the recording is too quiet. Continue to observe the recording for the first song. A good place for the recording level to sit is around the -6 dB mark at <u>peak volume</u>.
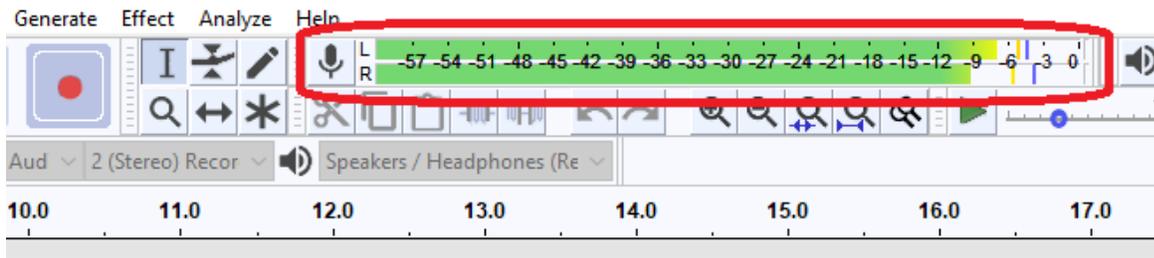

12. If no clipping occurred, and you didn't reduce or increase volume, continue to record. If the recording did clip, stop the cassette capture device and the Audacity recording (click the stop icon in Audacity), rewind the tape and the recording (click on the rewind icon in Audacity), and begin the recording process over. This time with the correct volume. The newly recorded audio will overwrite the old recording.

13. Allow Audacity to record the length of the cassette side, or as long as you wish.

14. Once finished, stop the recording in Audacity by hitting the **stop** icon along with the "**STOP**" button on the cassette capture device. You may flip the cassette to continue to record the second side. Just repeat the recoding process from where the first recorded side of the cassette stopped in Audacity.
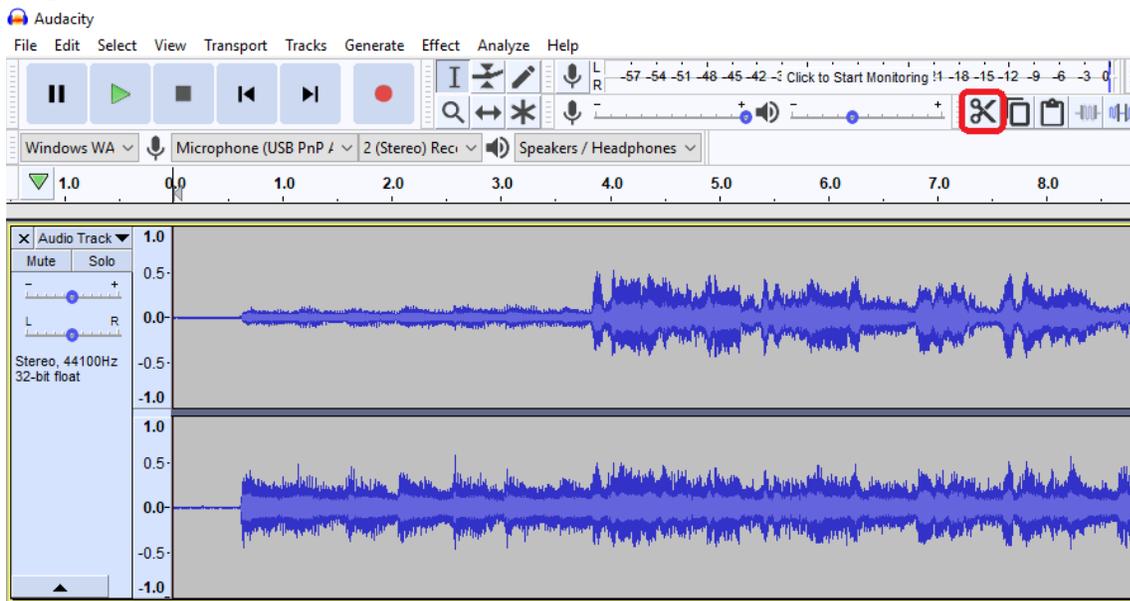
Editing the Recordings

Though these steps can be skipped in the transfer process, it is highly recommended to edit the recordings. This will make the recorded content sound better, and will help cut out any unwanted noise.

1. The first thing you will want to do is trim any extra recorded portions at the beginning and the end of the recording. Using the "**Selection Tool**" (F1), left click and drag to highlight the portion of the track you wish to remove. Make sure to leave some space at the beginning and the end of each recording.
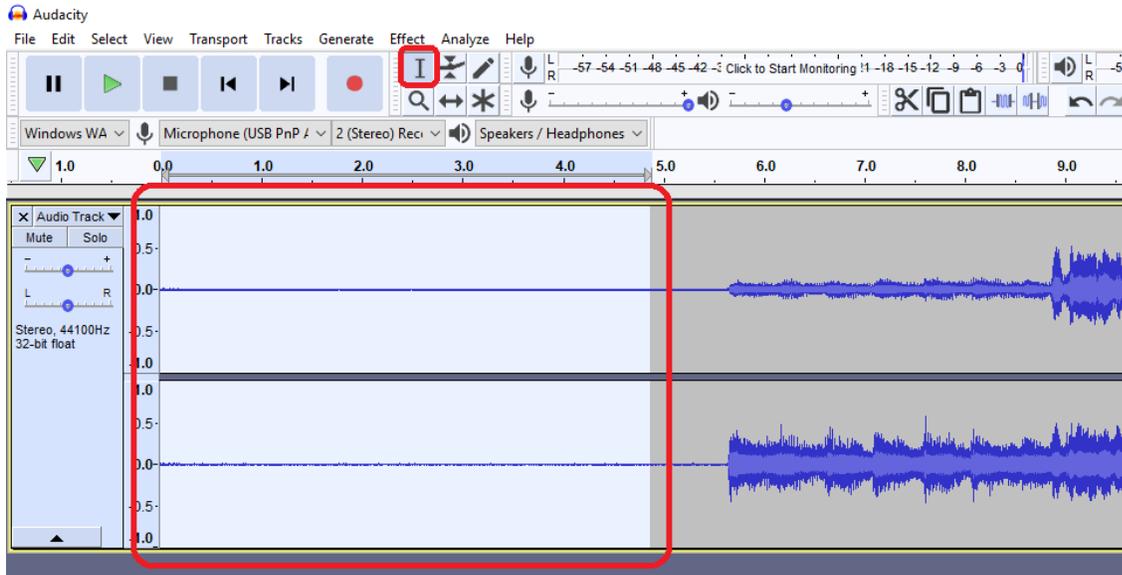
2. Once the part that you wish to remove is selected, use the "**Cut Tool**" (Ctrl+X) to delete the selected length.


3. If at any time you make a mistake, simply hit the "**Undo**" icon (Ctrl+Z) to reverse the mistake.
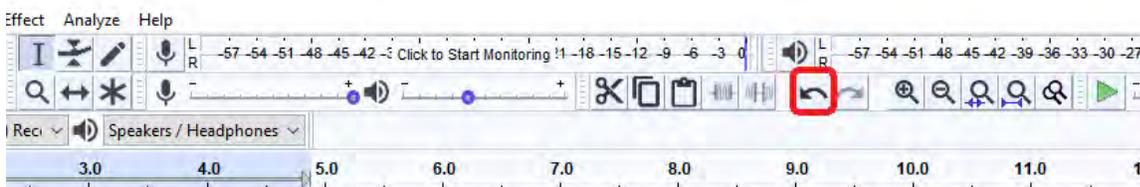
4. After the extra portions are subtracted from the recording, there may be portions of white noise before, between, and after the tracks that you may wish to silence. First select a small portion of recording right before the tracks start. Once selected, go to the "**Effect**" tab and then "**Fade In**". Do this at the beginning of each track of the recording.
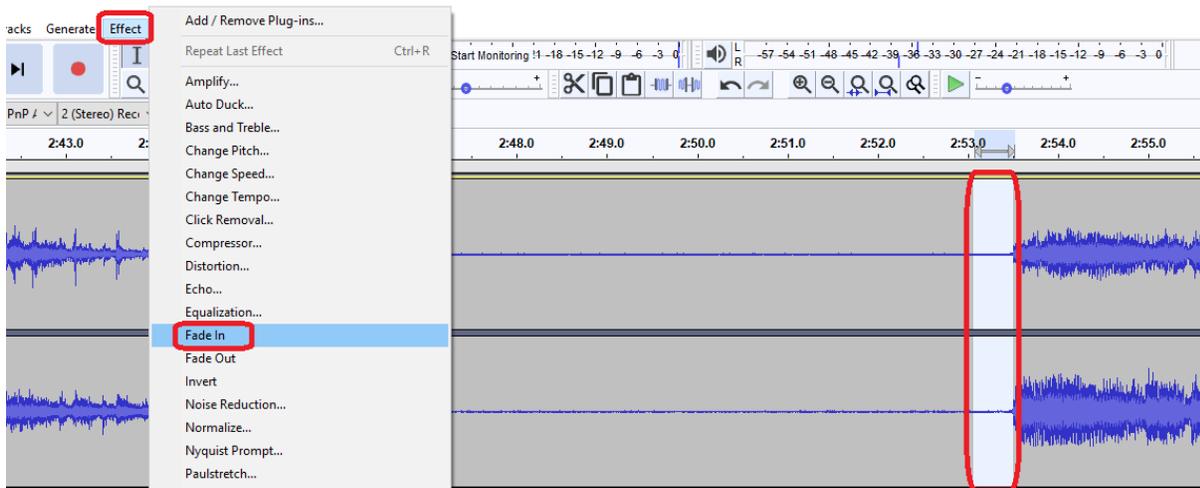

5. Select a small portion of the recording at the end of each track, and go to "**Effect**" and then "**Fade Out**". Do this at the end of each track of the recording.
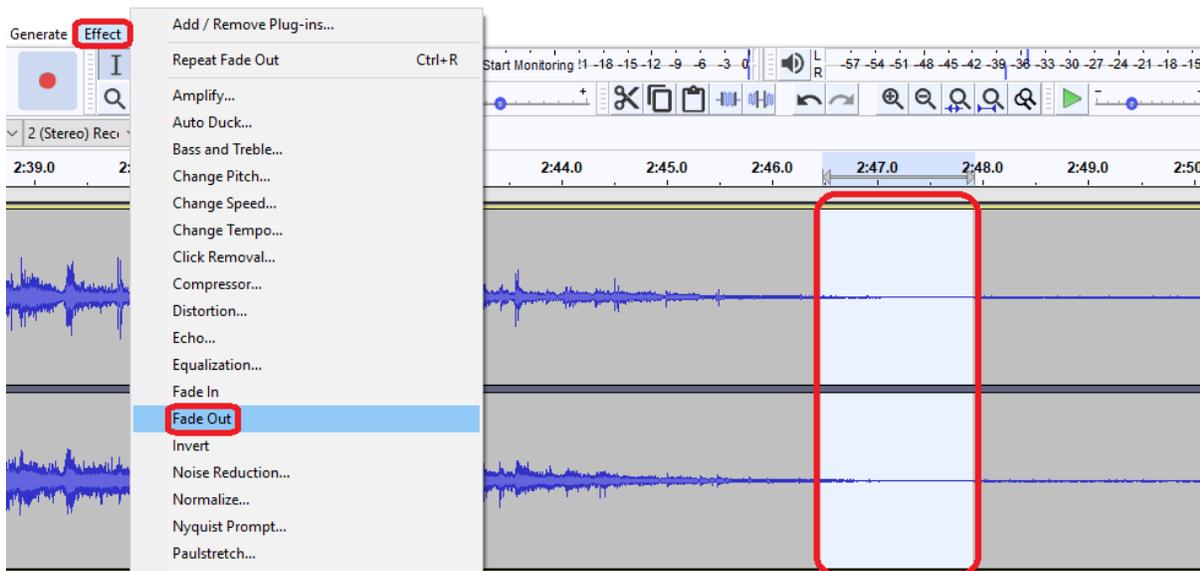
6. After the recordings have been faded in and out, select the portion of the noise in between the two effects that you just placed. Once that portion is selected, go to "**Edit**", "**Remove Special**", and then "**Silence Audio**" (Ctrl+L). This will completely silence any white noise from the cassette recording between the tracks.
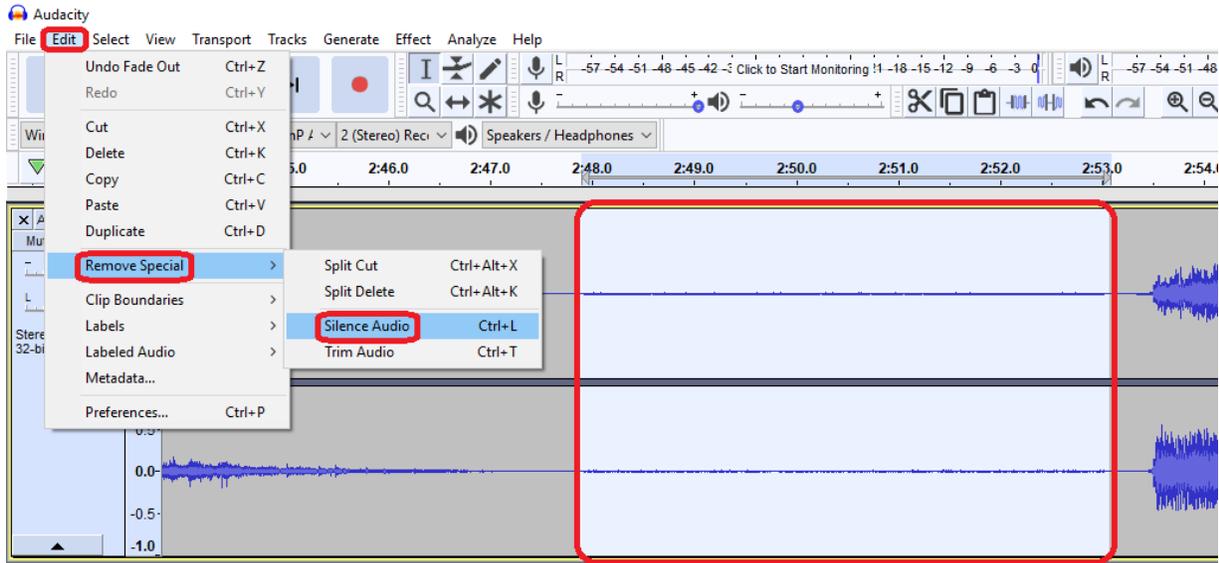
7. Finally, select all of the recording (Ctrl+A), then go to "**Effect**", and then "**Normalize…**". A box will then pop-up.
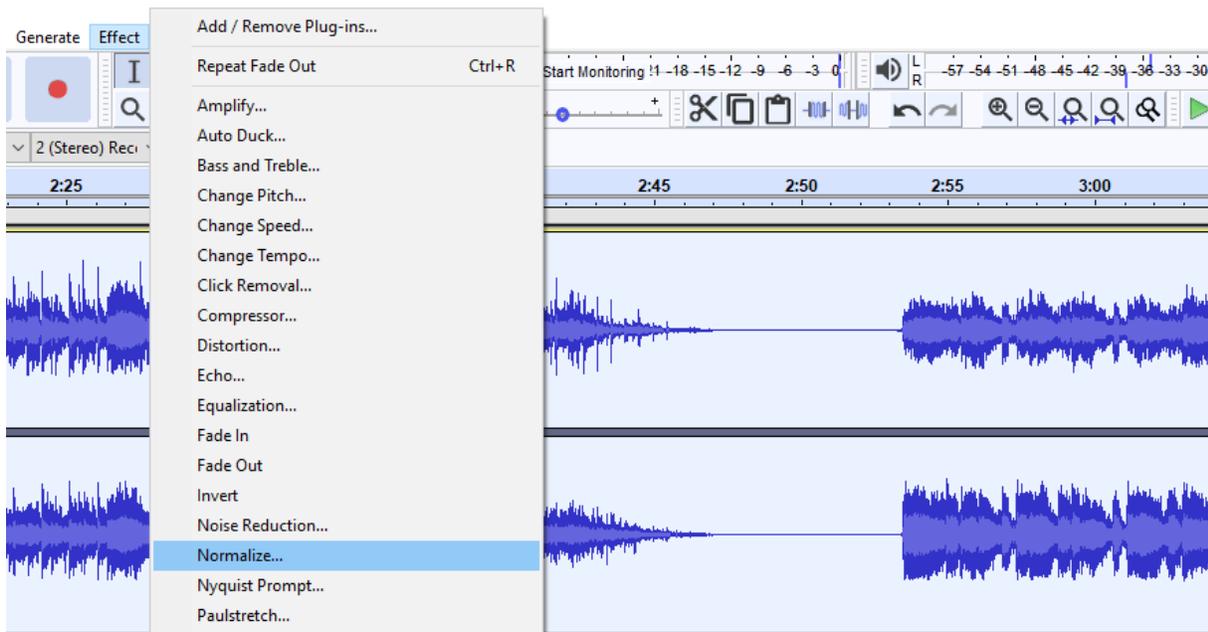
8. Make sure that the first 2 check boxes are marked, and that the text box shows "-1.0 dB". If this is all correct, hit "**OK**". It may take a couple of seconds to process.
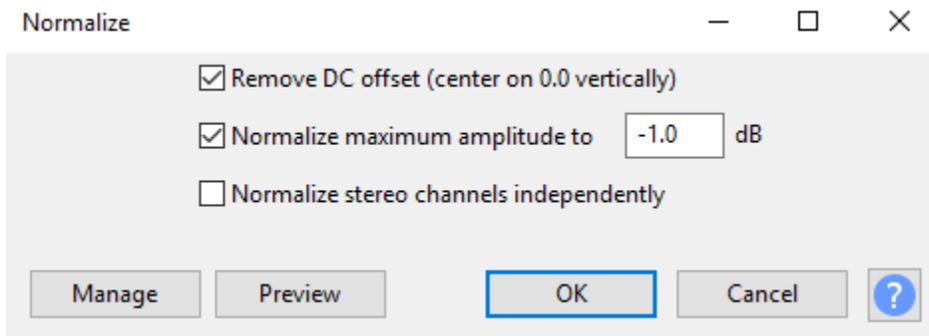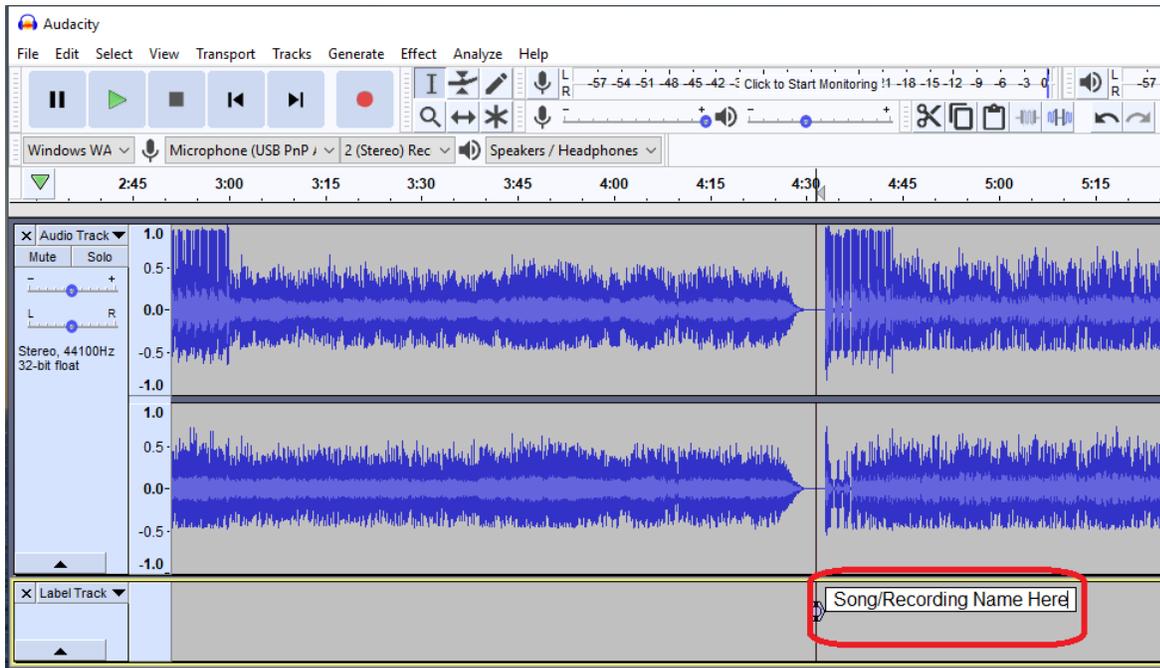

Exporting the Recording

Now that the cassette is recorded, it's time to export it and turn it into a digital format. This will allow you to burn it to a CD, place it in your mp3 player, or simply have it in your collection.

1. If there are multiple sections on the cassette, you may want to insert labels to indicate where they are. This will also help in the exporting process. With the selection tool (F1) click where you would like the section to start.

2. Go to "**Edit**", and then "**Add Label to Selection**", or hit Ctrl+B. A label will appear under the recording.
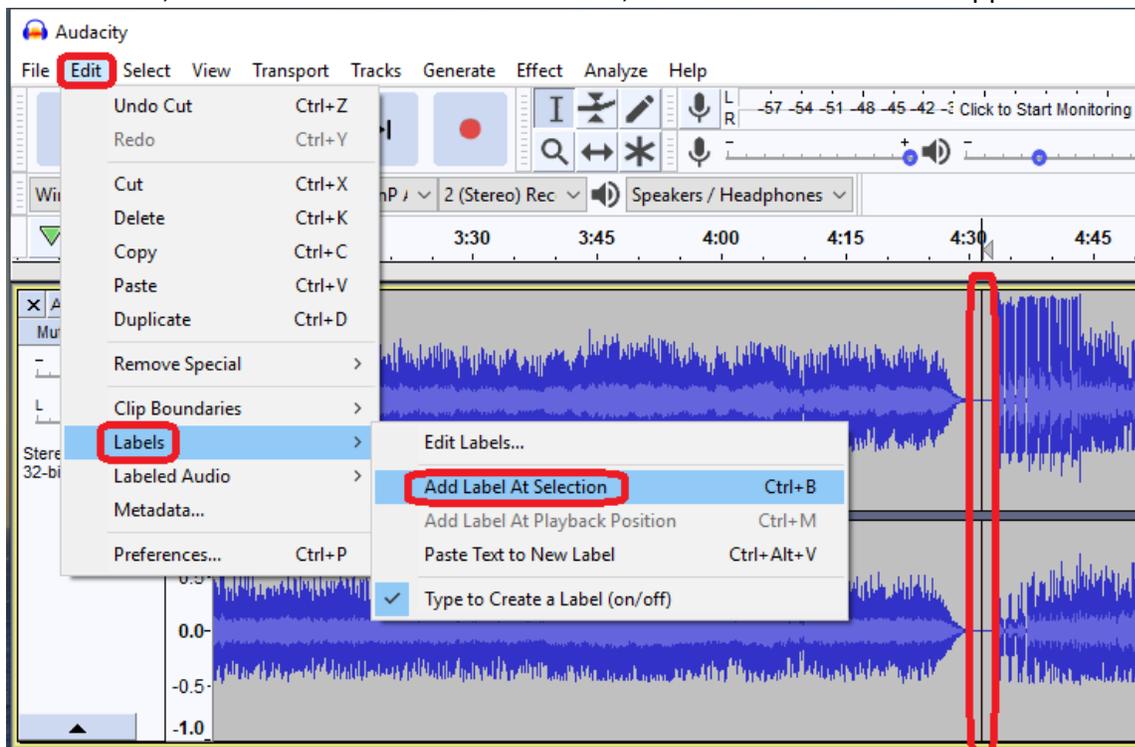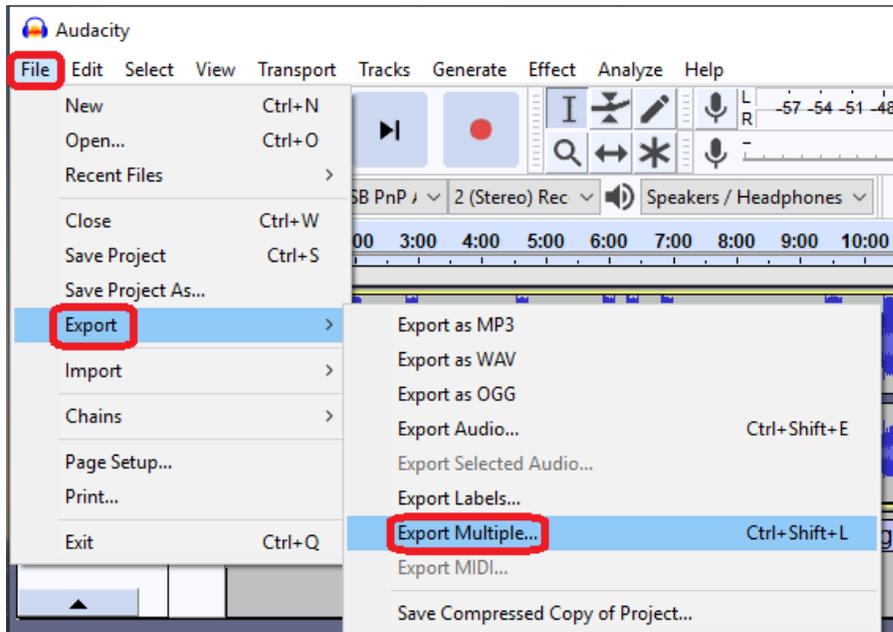
**3.** Type in what you wish the section to be labeled as.

4. Repeat steps 1-3 of this process for the different sections through the rest of the recording.
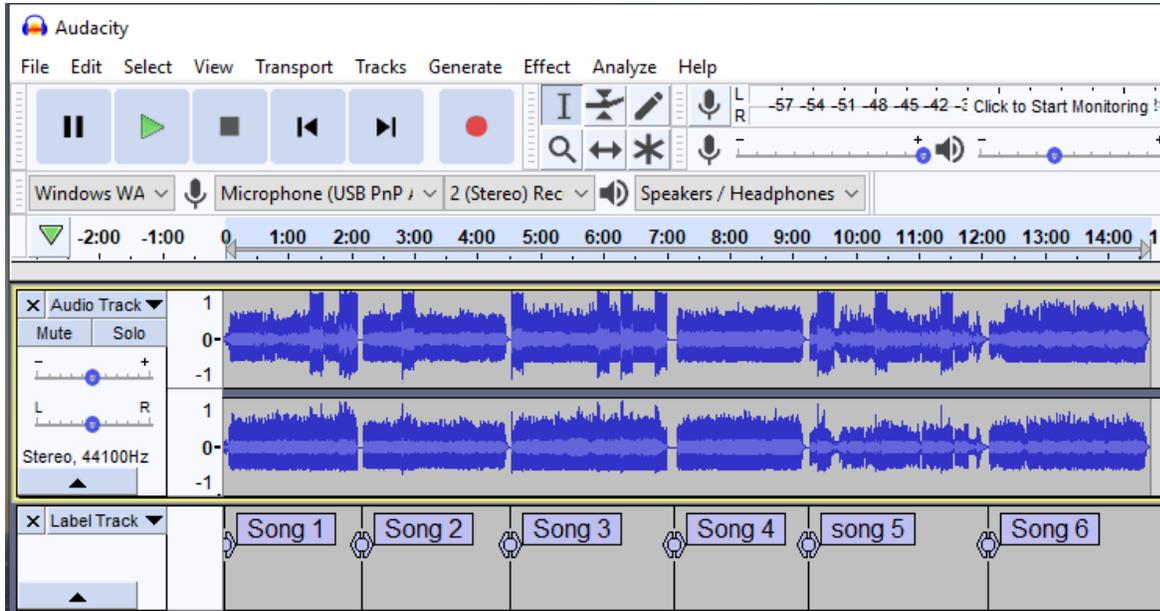
5. After all the tracks are labeled, go to "**File**", "**Export**", and then "**Export Multiple…**" (Ctrl+Shift+L).

6. Select where you would like the tracks/parts to go, along with the format that you would like the audio file to be in. If you want to burn the cassette recordings onto a CD, select "WAV signed 16-bit*****" format. If the tracks are going onto a storage device select "MP3".
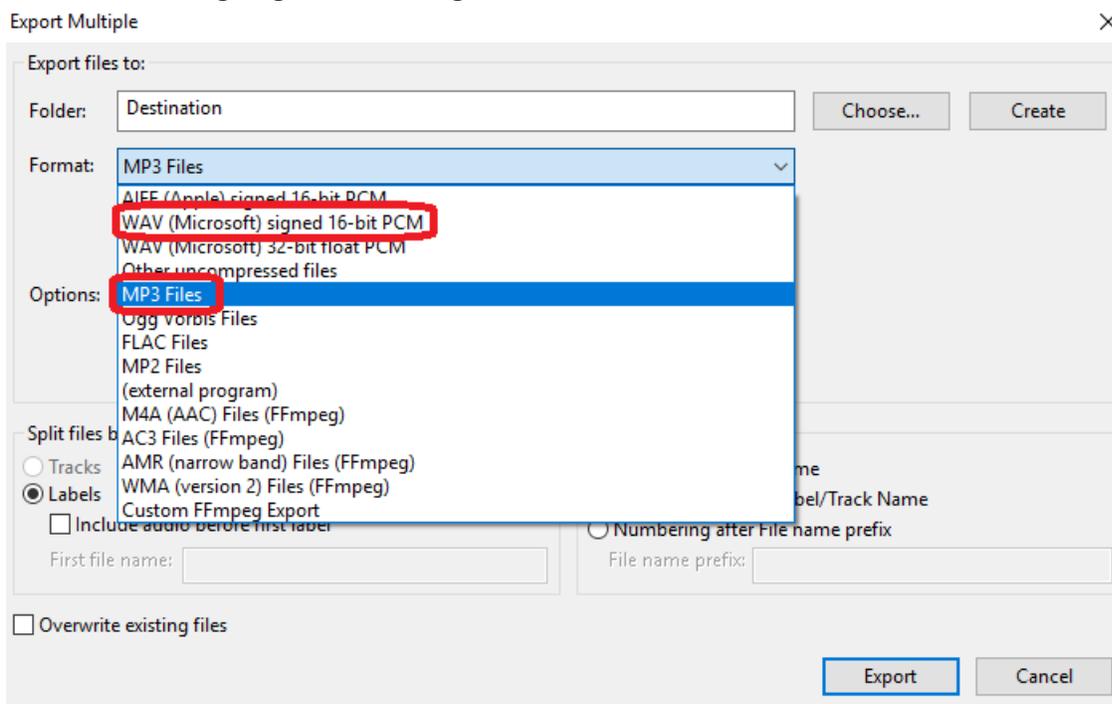
7. If you choose to export the files as MP3's, you may increase the quality of the audio. This is optional, and you can just keep it at the default 128 kpbs. Keep in mind that the higher the quality, the more memory it'll require.

> ***** Keep in mind that WAV files are larger, and require more storage, than MP3 files. Make sure there is enough open storage on the computer or storage device before exporting. If there is an error while exporting, it is more than likely because there was not enough room on the device to store the files.

8. Make sure that in the "Split files based on:" box, that "Labels" is selected.

9. Once everything looks correct, hit "**Export**".

10. After hitting Export, the "Edit Metadata" box will appear. Here, you can put in all the data of the tracks, such as the artist and the album. This is optional. Once finished, hit OK, and Audacity will continue to export your extracted cassette audio.

Burning to CD

Now that all the recordings from the cassette are exported, we can burn all our tracks to a CD. You must have a blank writable (CD-R), or rewriteable (CD-RW) CD to burn the recordings.

1. Once the exporting process is complete, and you wish to burn the extracted audio to a CD, open **Windows Media Player**.


2. Once the software is open, insert a blank writable CD into the computer. Make sure the CD that you wish to burn your extracted audio to has enough free space for audio files.

3. In Windows Media Player, click on the "**Burn**" tab.
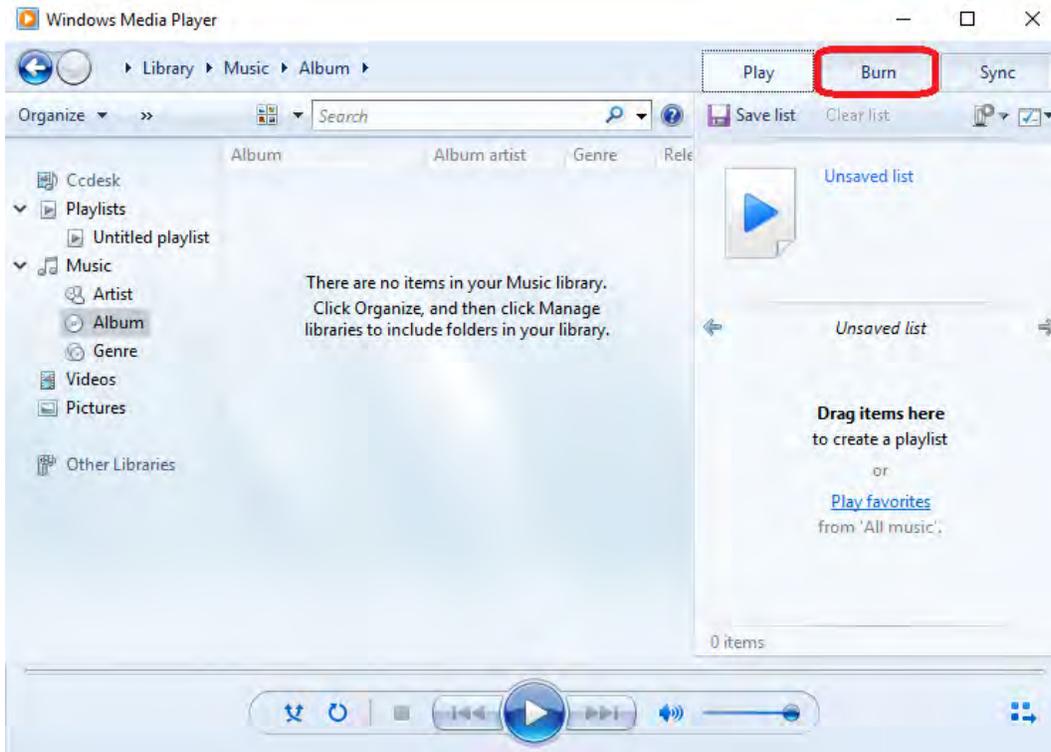
4. Locate where you exported the audio files to the computer.

5. Once the audio files are located, select them and drag them into the "Burn List" in Windows Media Player.
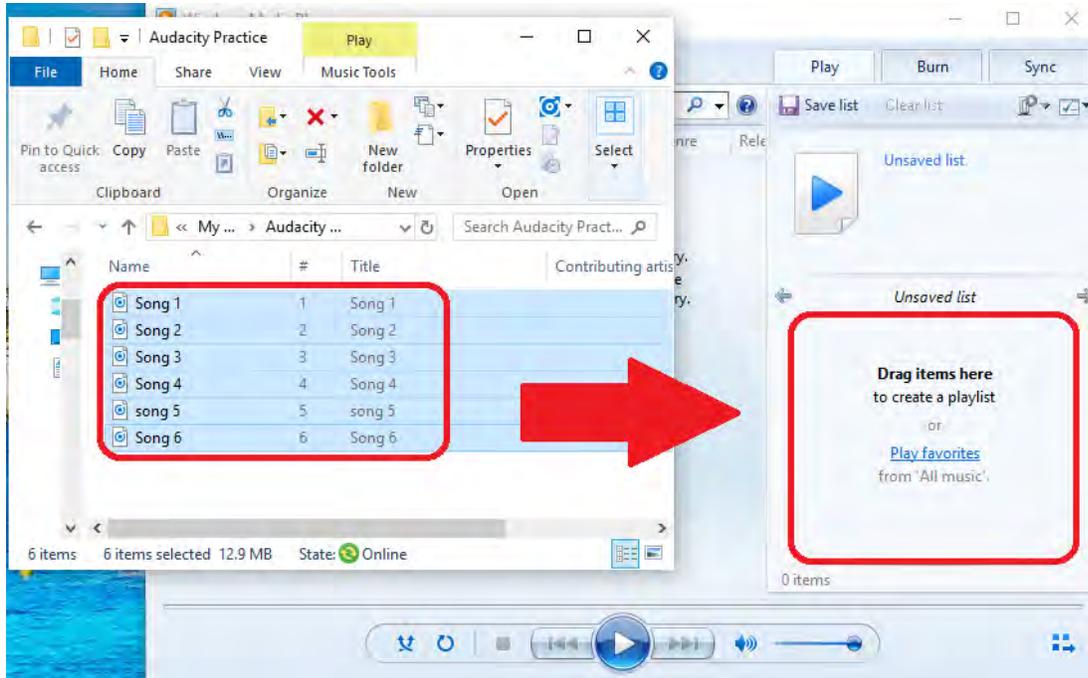
6. Once all of the tracks are in the list, and in order, hit the "**Start Burn**" icon to initiate the CD burn process. It may take a few minutes for the burning process to complete.
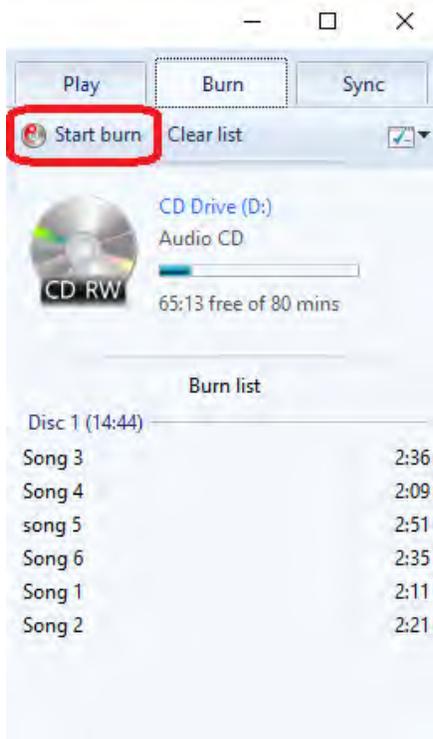
7. Once the burning process is finished, eject the disc, and enjoy.