

Audacity: Recording and Editing Audio

Created by Dr. Jen Andrella
Center for Digital Humanities, USM

CDH Hours: Monday-Friday 8am-4:30pm

Email: dh@usm.edu

For additional resources and tutorials, visit www.usmcdh.org

Download the [Sample Audio](#) to use with this Tutorial (podcast audio, intro/outro clips).
Search for other music/sounds using the [Free Music Archive](#) and the [BBC's Sound Effects Library](#)

Audacity: An Overview

Podcasts, oral histories, music recordings, and other forms of audio storytelling entail a multi-step process of recording and editing to produce the final product. Audacity is a free-access, open-source, multi-track audio recording and editing software with a number of useful features and effects, especially for preparing podcasts. Audacity is available for download onto PCs or Macs, and includes dozens of tools for editing and mixing audio. This tutorial will walk through downloading, recording, and editing audio with Audacity.

To rent the Abolition Lab's audio recording equipment or studio, please contact us or visit during open lab hours!

Best Practices

If you do not have access to recording equipment or soundproof spaces, some small adjustments can help improve your audio recording.

- Find a quiet space with soft surfaces (upholstered furniture, carpet) to keep sound from echoing.
- Try to remove anything that produces “white noise” – fans, running water, vents, etc.

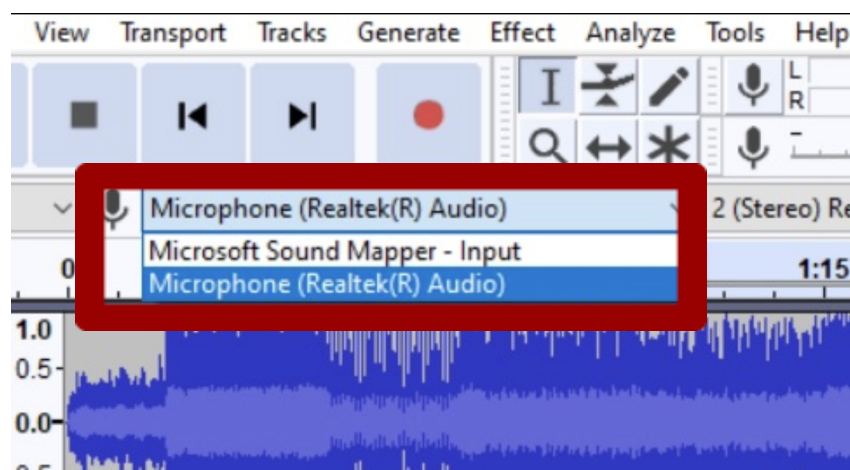
- Phones and computers can serve as good recording devices if you do not have an external microphone. Do a test-run with your equipment and listen to it before starting an actual recording.
- Wear headphones or earbuds so that your voice doesn't create feedback in the recording.
- Position yourself at the correct distance and angle from your microphone, about 6-12 inches depending on the mic.
- Record about 5 seconds of silence on the audio track at first– Audacity will use this to reduce background noise.

Download Audacity

1. Go to <https://www.audacityteam.org/download/>.
2. **Select the download option** for your computer system (Windows, Mac, or Linux).
3. Depending on your system, **your download should automatically start**.
4. Or, **select the installer package from your files** and follow the installation instructions.
5. For Windows, the program should automatically open on your computer. For Macs, the app will appear in your launchpad. You may need to restart your computer.

Recording Audio with Audacity

Audacity can record from a built-in computer microphone or an external microphone. If you wish to use an external microphone, **connect it to the USB port** before opening Audacity. If Audacity is not registering the mic, quit the app and try again. You may also need to select the drop down menu next to the microphone icon directly underneath the recording controls and select your microphone.



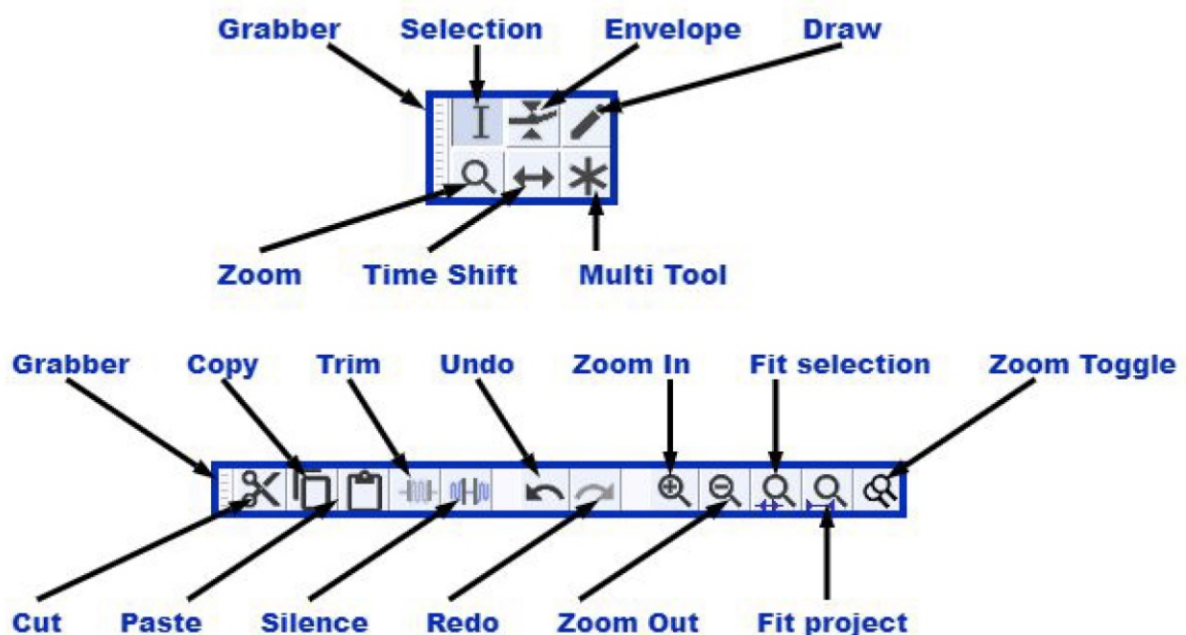
1. To start recording, press the **red record button**. You will see the time in the bottom right corner start counting upwards and sound waves will begin to appear in the editing pane. You may pause or stop recording at any time.
2. When recording through Audacity or another device, **record 5 to 10 seconds of silence** before speaking. Audacity is able to filter out some background noise with its Noise Reduction feature. This feature is discussed later in this guide.
3. Always make a copy of your original recording and store it on your computer.

Importing External Audio Files in Audacity

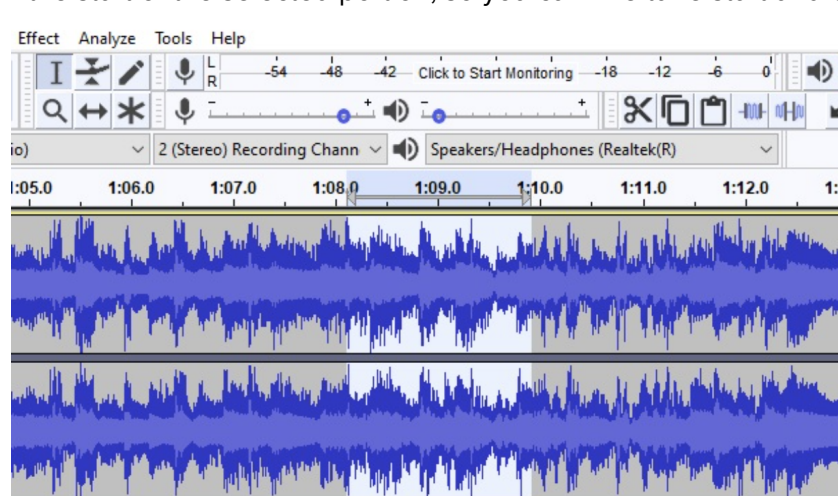
4. Audacity can use audio recorded from another device (.wav or mp3 files).
5. To import audio into Audacity, select **File > Import > Audio**. If you attempt to open a second file by clicking File and then Open, it will open the file as a new project in a separate window.
6. Once your audio file opens in Audacity, you can add additional tracks (such as music or effects) to your recording and merge them into a single file.

Editing Audio with Audacity

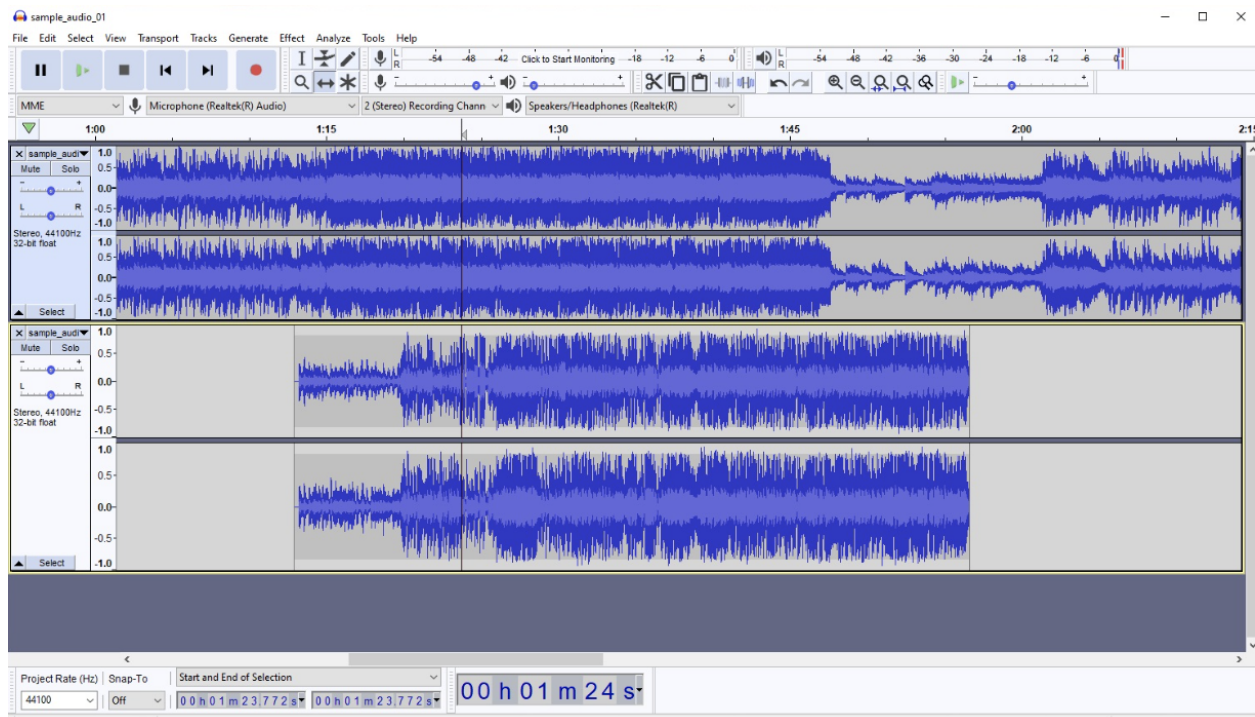
Once you have completed your recording or imported an audio file into Audacity, you can use a variety of tools for editing. Hovering your cursor over the tool will show its name.



- **SELECTION** allows you to highlight a section of a track.
 - **ZOOM** allows you to zoom into a track for precise cuts and adjustments to your audio.
 - **TIMESHIFT** allows you to slide different tracks. **UPDATE:** Drag the **title** of the track to move it to another location
 - **DELETE** removes a selected portion of the audio.
 - **CUT** removes a selected section but saves the selection in the clipboard.
 - **UNDO** reverts the last change.
 - **COPY** duplicates the selected section.
 - **PASTE** inserts a selection from the clipboard created by COPY or CUT.
7. Clicking on the sound track with the **selection** tool will create a vertical line. You may click and hold to drag the line to highlight a section of the track. Clicking play at this point will play from the start of the selected portion, so you can fine tune start and end points.



8. Selecting **Cut** from the **Edit menu** will remove the selected section.
- a. Audacity will automatically merge the remaining sections.
9. If you have multiple sound tracks, you can align them using the **Timeshift** tool.
- a. For example, you may have uploaded a music or sound effect you wish to play at a certain point in your podcast. When tracks are imported into Audacity they are all aligned to start playing at the same time, 0.00 on the timeline. Once this tool is selected you may slide tracks around the timeline so they play at certain points. In the image below, the second track has been moved so it starts playing at one minute and twelve seconds into the first track. Using **Timeshift** will allow you to add music and effects to any point in your recording. Note that the two tracks will play together.



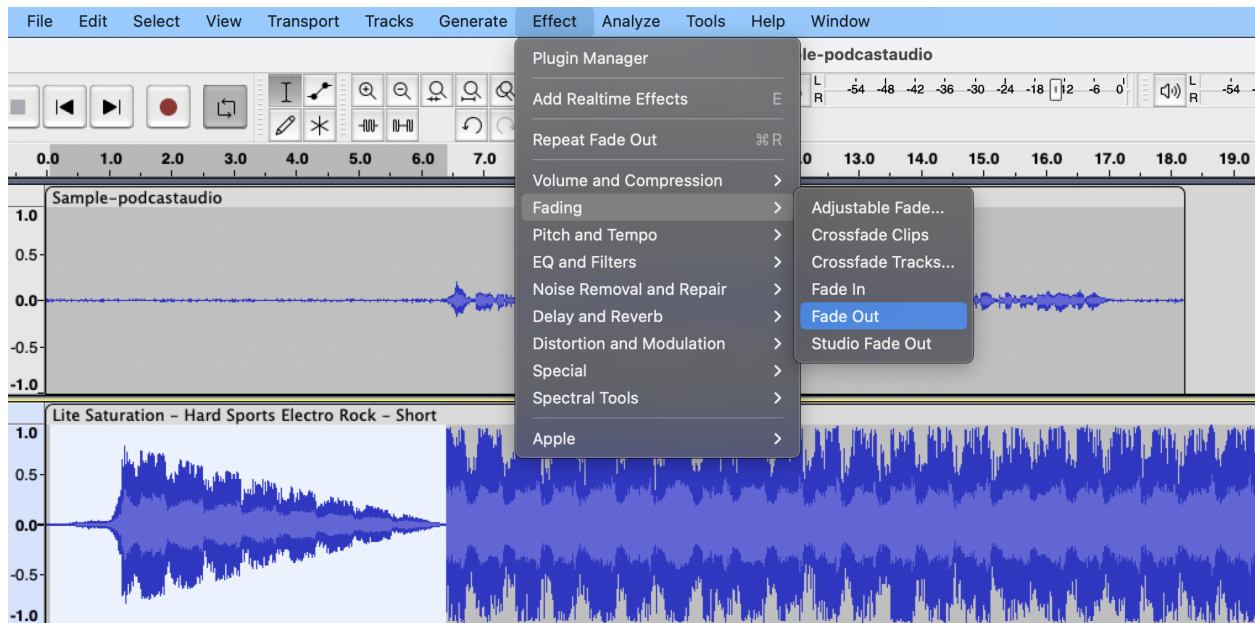
12. If you want to add another file into the middle of another track, you can **Copy a selection** from another imported track and then **Paste it** directly into a track. This is helpful if you want to insert music into a point of your project without having two tracks playing together.

13. At any time you can delete a track by clicking the X on the upper left of the track.

Audio Effects: Fading In and Out

There are a number of effects in Audacity, but two of the most useful are fade in and fade out. These can be used to blend two audio tracks together with a smooth transition.

14. Align the timing of the tracks to prepare for fading in/out. Use your cursor to select the portion of the audio track you want to fade. In the menu bar, select **Effect > Fading > Fade Out** or **Fade In**. You will see the sound wave change as depicted below. You may select and cut the remainder of the audio that you don't need.



Other Editing Options

Mixing Tracks

When you have completed working with different tracks you may merge them into a single track. This is useful if you are content with the mixing and editing completed so far but wish to continue editing and do not want to have too many tracks open.

Reducing Background Noise

If there is excess background noise on the recording, you can attempt to remove the noise using Audacity's noise reduction tools. Keep in mind it is always easier to adjust your recording environment to reduce noise than it is to use Audacity to remove unwanted background interference.

15. Select a portion of the audio that has only background noise. This is why recording 5-10 seconds of ambient sound at the beginning of a recording is useful.

16. Go to the top menu and click **Effect > Noise Removal and Repair > Noise Reduction**. Select **Get Noise Profile**. Select the entire remaining audio track. Click **Effect > Noise Removal and Repair > Noise Reduction**. This time only click OK. The noise reduction filter will be applied to the entire track.

Saving Your Work

17. If you want to save your project as an Audacity project to return to later, go to **File > Save Project**. As an Audacity project, it cannot be played in other media.

18. To create a final version of your project, export it as a new file type. Go to **File > Export Audio**. Select **WAV** if you still plan on editing the audio. If your work is final, you can save it as an MP3. Include at least the artist and the trackname (you should use your name and the project title). This information will always stay with the MP3 file and can be useful when looking for information on it later.

Extras: Audio Clips and Sound Effects

Look for free, open-access audio online such as the [Free Music Archive](#) and the [BBC's Sound Effects Library](#) to add in to your recording!