

# Editing Audio with Audacity

**Audacity** is a free, *totally free*, audio editing program. Get it here:  
<http://audacity.sourceforge.net/>

## Installing Audacity

1. **Download** Audacity to your own computer.
2. The file you downloaded is an installer file. Do whatever your operating system requires to install it (e.g., double-click and put into Program Files, or drag and drop the DMG into Applications).
3. You could start editing audio immediately, but don't.
4. **Download the LAME encoder file.** Follow these instructions to do so: <http://audacity.sourceforge.net/help/faq?s=install&i=lame-mp3>
5. Unzip or uncompress the downloaded LAME file.
6. It is very important that you know *exactly* where you saved the lame\_enc.dll or LameLib file. Reason: The very first time you try to export an MP3 file from Audacity, it will ask you: **Where is the LAME encoder file?** You must *show Audacity where the file is*. You will do this only *once*.

*If you don't follow steps 4, 5 and 6, you will not be able to export MP3 files from Audacity. However, you will not have a chance to do **Step 6** until you have some audio to export.*

**So, make a note for yourself:** The first time you export an MP3 file, you must remember where you put that LAME file *after* you unzipped it.

## Opening an Audio File

How do you open any file in any program? **File** menu > **Open**.

**Note:** Audacity *cannot open* WMA files. If you have WMA files, you must convert them first (convert to the WAV format, for example). Conversion can be done with **Switch** (Mac and Win) or **EasyWMA** (Mac only)

- Switch: <http://www.nch.com.au/switch/index.html>
- EasyWMA: <http://www.easywma.com/>

## Dubbing Audio in Real-time (Mini-disc recorders)

1. Connect your mini-disc recorder via the headphone jack to the line-in jack on your computer using a stereo-mini to stereo-mini cable.
2. Cue the track you want to record and ensure the volume on the mini-disc recorder is near maximum.
3. Open Audacity and click the record button (red button).



4. Press play on your mini-disc recorder.
5. Once you have everything recorded, stop Audacity by pressing the stop button (yellow button) and press stop on your mini-disc recorder.



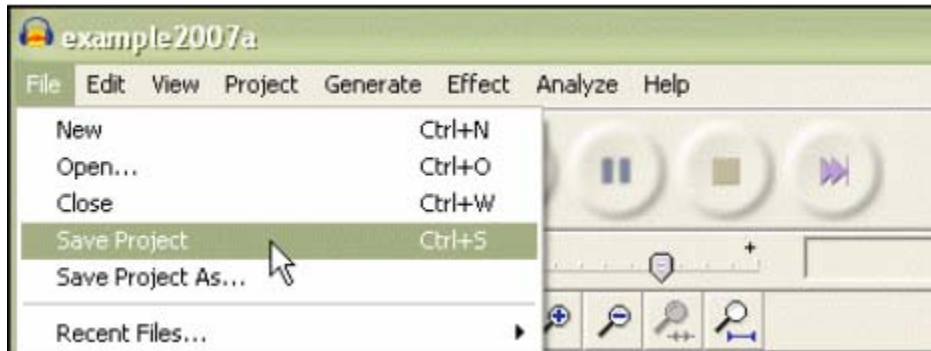
6. Your audio is now ready to edit!

## Recording Your Own Voice

1. Connect a microphone.
  - a. If your computer has a **Mic In** port, plug in a microphone.
  - b. If your computer has a **Line In** port, get a USB microphone or an audio adapter such as the iMic: <http://www.griffintechology.com/products/imic/>
  - c. If you have a built-in mic, okay, but it won't be the best quality.
2. Open Audacity.
3. Click the record button (red button).
4. When you've finished, click the Stop button (yellow button).

**Tip: Since the computers are located in a noisy newsroom, it's better to record your voice-over using your mini-disc recorder or Olympus USB recorder and dub or import your audio into Audacity.**

## Saving Your File

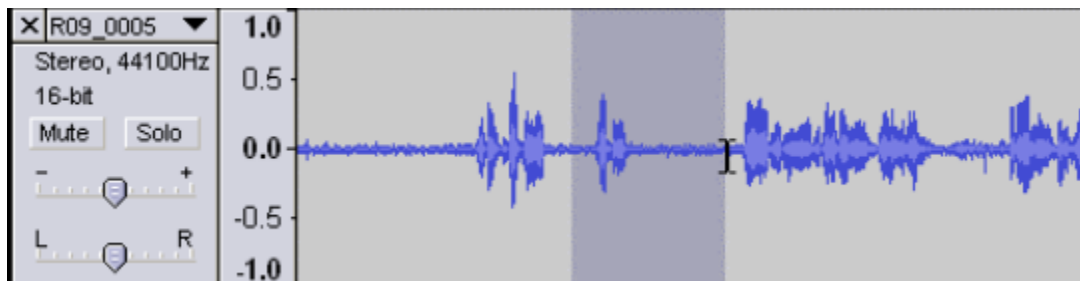


Like many audio editing programs, Audacity wants you to **save a “project”** and not a file—until you are completely finished with your editing. When you are finished, you will **export** a new file. But until then, you will just go on saving your project as many times as necessary to avoid losing your work.

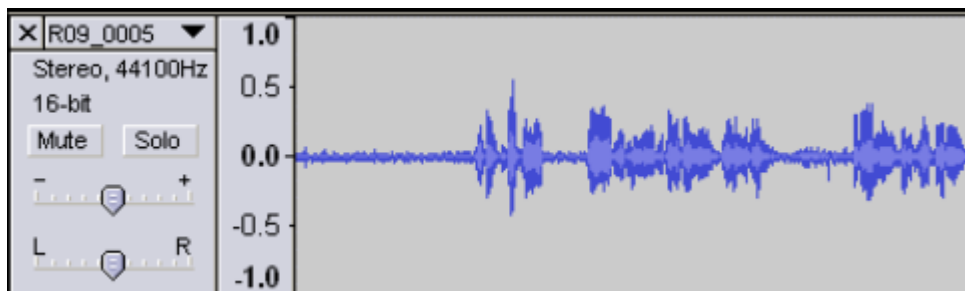
## Basic Audio Editing

### Deleting Audio

To **delete something**, first you will click, hold and drag to select the section.



Then press the Delete key on your keyboard. (**Note:** The player must be **stopped**, not paused, or else this will not work.)

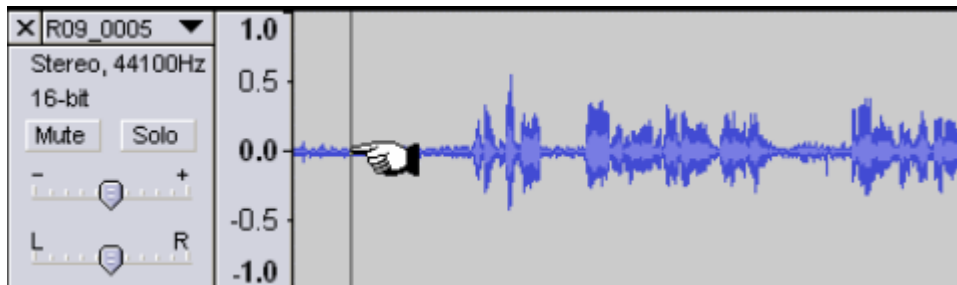


If you make a mistake, hold Ctrl (Win) or Cmd (Mac) and press Z.

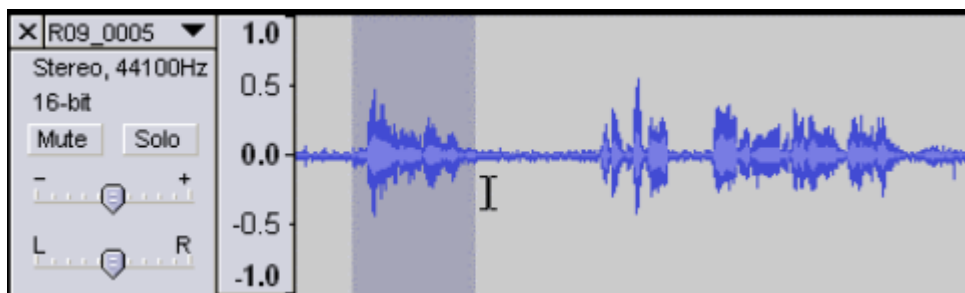
## Moving Audio

To move a section from one place to another, first select it, but hold Ctrl (Win) or Cmd (Mac) and press x (for cut). This is exactly the same as Microsoft Word. **Cut, copy** and **paste** all work in your audio editor.

Move the cursor to where you want to add the cut section, and click once.

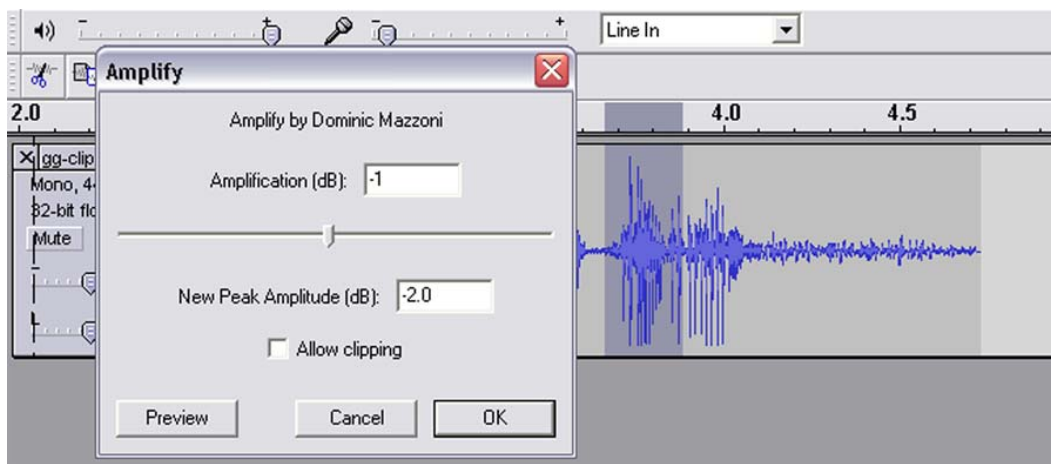


Then hold Ctrl (Win) or Cmd (Mac) and press v (for paste):



## Adjusting Audio Volume

1. To adjust the amplitude of the audio wave form (i.e., increase/decrease volume), first select the area you want to adjust and choose **Effect** menu > **Amplify...**



2. To increase the volume of the selection, enter a positive number in the "Amplification (dB)" field, i.e., 1 will increase the volume 1 dB. To decrease the volume of the selection, enter a negative number in the "Amplification (dB)" field, i.e., -1 will decrease the volume 1 dB.

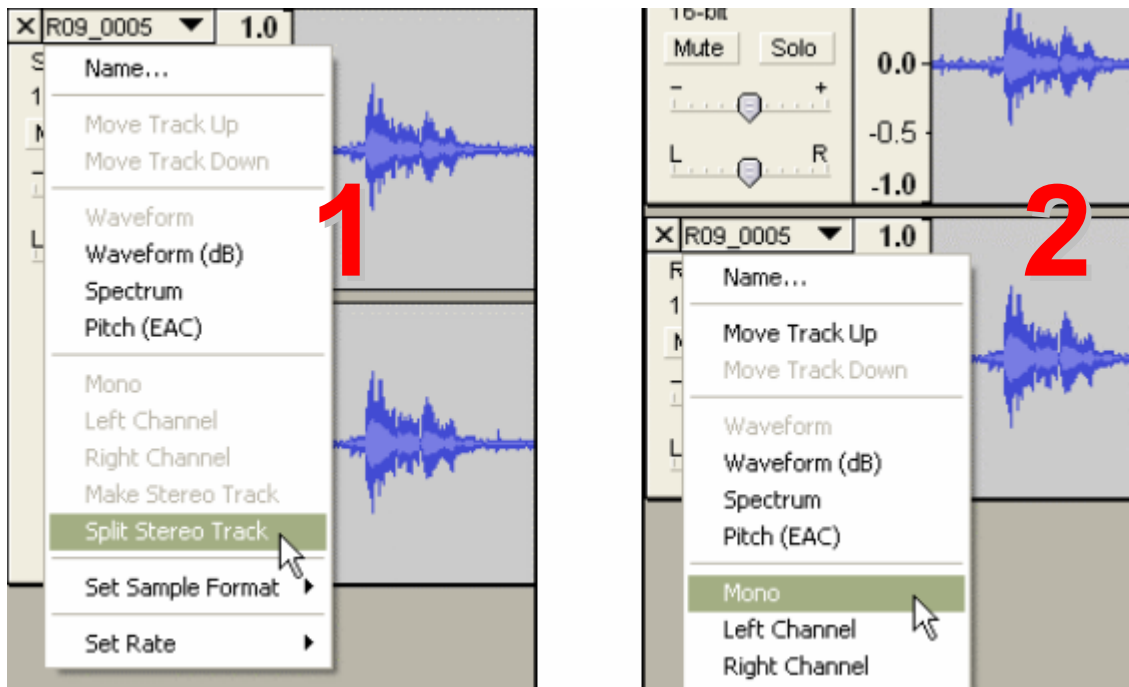
3. Click the OK button.

## Before You Export the Finished File

### 1. Convert Stereo to Mono (if file is not mono already)

When you've completed your editing, you will want an MP3 file. First, you should convert a **stereo** file (two tracks) to a **mono** file. This reduces the file size by 50 percent.

1. Click track name to open menu. Select "Split Stereo Track."



2. After splitting, change EACH track to Mono.

3. Select **all tracks** by shift-clicking each track until all are highlighted.

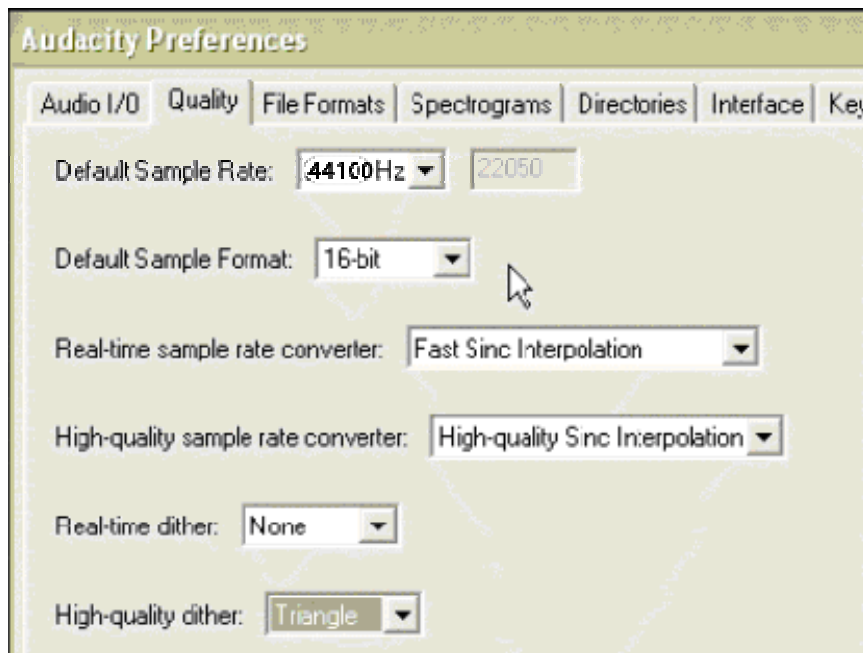
4. **Project** menu > **Quick Mix**

If you had only one track, you don't need to do this.

### 2. Adjust Output Settings

Next, you need to adjust your output settings. **Edit** menu > **Preferences**

On the "Quality" tab, you need 44100 Hz\* and 16-bit:



On the "File Formats" tab, you need a bit rate of 56. When finished, click OK in the Audacity Preferences dialog box.



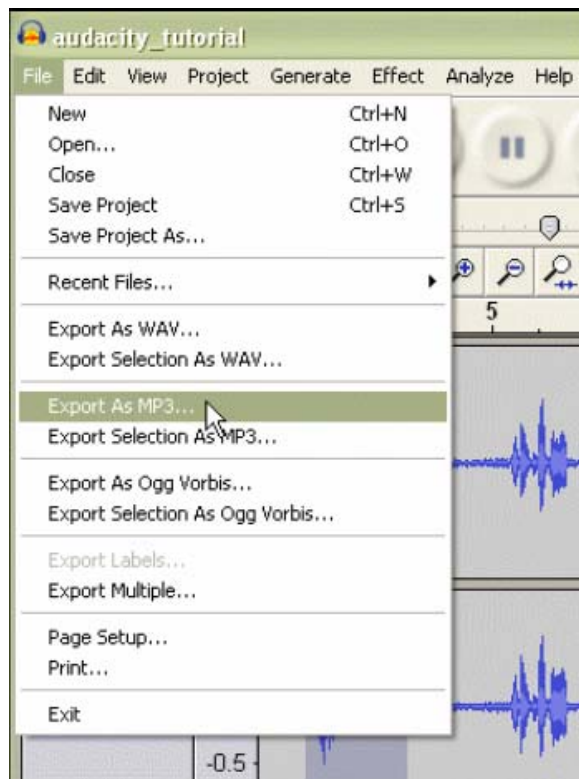
### 3. Gain Audio to -1 dB

Before exporting the finished file, you need to gain the volume to -1 dB. It's important to do so because the audio is not being broadcast but is played using a computer.

1. Select the entire audio file by holding Ctrl (Win) or Cmd (Mac) and press a (select all).
2. Choose **Effect** menu > **Amplify...**
3. Enter -1 in the "New Peak Amplitude (dB)" field and click the OK button.



### Exporting the Finished File



If you have completed all your editing, then it's time to export an MP3.

#### **File menu > Export As MP3**

You can leave the "ID3 tags" blank, or fill them in.

Voilà! You have an MP3 file suitable for uploading to the Web.

- With files from Mindy McAdams, [www.mindymcadams.com](http://www.mindymcadams.com)