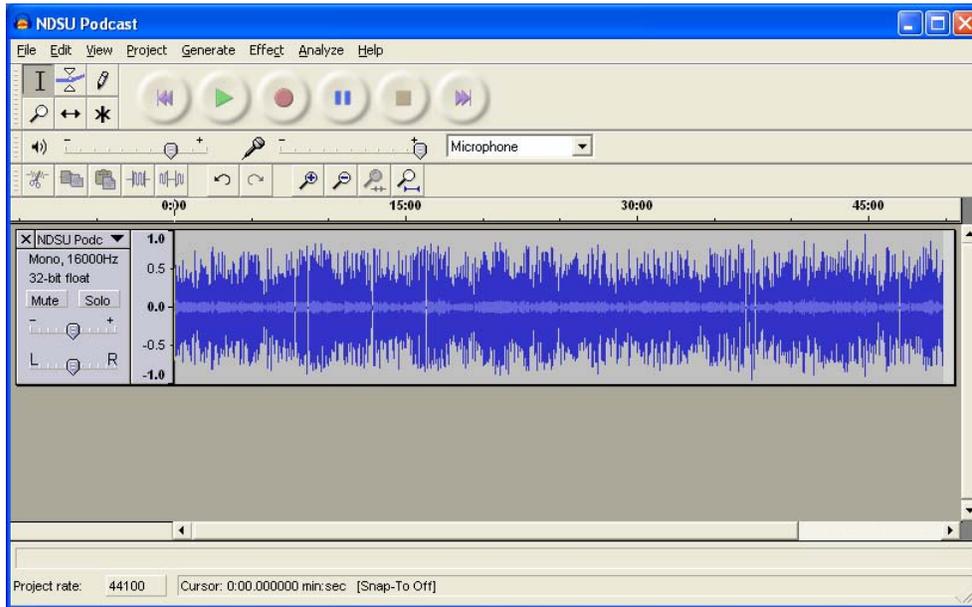


# Audacity Tutorial



## Initial Setup

### Installation

Native installation packages for your platform can be downloaded from [Audacity Download](http://audacity.sourceforge.net/download/) (<http://audacity.sourceforge.net/download/>).

### Mp3 Export

The first time you attempt to export an audio clip into mp3, you may be asked to locate the file lame\_enc.dll; to obtain a copy, go to [Lame library download](#). You may need to unzip the file.

### Preferences

The default settings is suitable for most purposes; if you wish to view or change any settings, go to Edit > Preferences.

## Basics

### Control Toolbar



Notice two leftmost buttons; the top one is the **Selection Tool** and the bottom one is the **Zoom**

**Tool**. Round buttons are used for playback control, the red dot starts recording. The yellow square stops the recording.

### Mixer Toolbar

Left slider controls **Playback Volume**, the right one **Recording Volume**, and the dropdown lets you choose the input source (this will normally be your microphone).



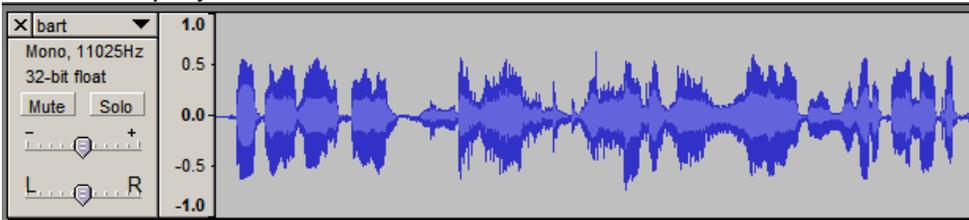
### Edit Toolbar

Edit Toolbar provides shortcuts to: **Cut, Copy, Paste, Trim Outside Selection, Silence Selection, Undo, Redo, Zoom In, Zoom Out, Fit Selection, Fit Project.**



### Track View

The track section provides a convenient view of the tracks in your project. The waveform indicates the volume level. Use the "X" in top left corner to remove track from project.



## Import

### Recording Voice

Make sure the microphone is connected to the computer. Select Microphone as the Input Source. Simply press the red button on the Control Toolbar. When you're finished recording press the yellow stop button. Before recording for the first time, experiment with the microphone positioning and recording level (slider with a mic symbol).

### Use Existing Sound Files (such as a recorded lecture)

Simply choose Project > Import Audio and navigate to the sound file you want to use. Once Audacity is done importing the file, it will appear as a new track. No changes will be done to the original file; however until you export your final clip, do not move the imported sound files.

## Edit

Editing consists of selecting segments of tracks and applying actions or effects to them, this way you can easily remove unwanted parts, add your own voice recording to a music track, combine parts of multiple tracks together, and more. Until you save your project, any editing can be undone. Once you master several basic skills, you will have a powerful tool at your hands.

### Selection

Being able to select segments from a track is a crucial skill in editing sound clips, follow these steps:

1. Make sure the selection tool is active
2. Click somewhere on the track waveform and drag until you have selected the desired segment
3. Release the mouse button

To make sure you selected the right part, you can replay the selection (click the green round play button).

To adjust the selection:

1. Move the cursor over the start or end of the selection until it becomes a pointing finger
2. Click and drag to change the selection
3. Repeat those steps until you are satisfied.

Additionally, to perform a selection you can place the selection cursor somewhere on the waveform by single-clicking, and go to Edit > Select > Start to Cursor or Cursor to End.

### Editing

#### Deleting

To delete a segment choose Edit > Delete or press the Del button.

#### Cutting

To cut a segment out choose Edit > Cut.

#### Pasting

To paste a segment choose Edit > Paste.

**Fade In/Fade Out** To have the volume increase or decrease gradually, choose Effects > Fade In or Fade Out.

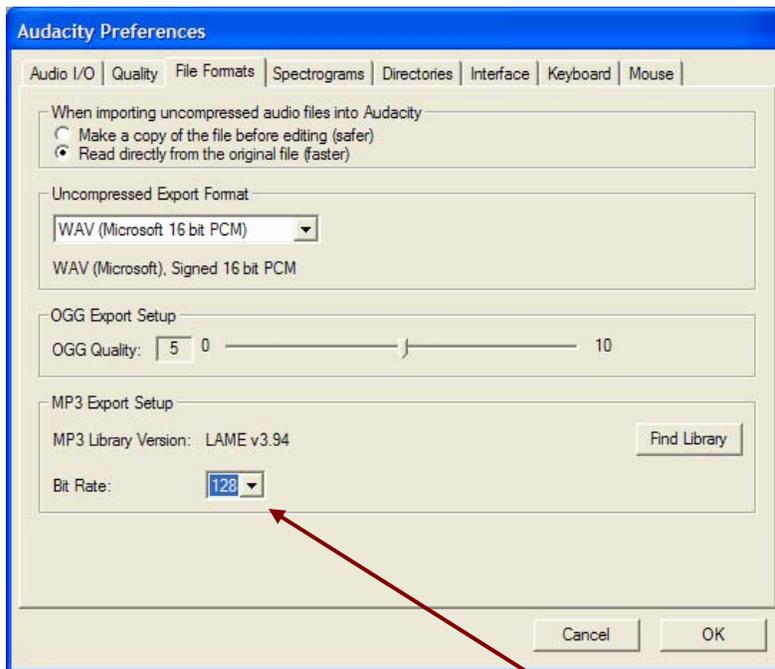
# Export

## Sound File vs. Project

Audacity works with project files; those cannot be opened by other software. In order for others to be able to play your sound clip, you need to export it first.

## Exporting sound clips

Preferred format for exporting sound clips will be mp3; mp3 reduces file size considerably allowing for easy transfer over a network, it can be played on any computer. The quality/file size is determined by the bit rate: the lower the bit rate, the smaller the file size but also lower quality. Before exporting, adjust the bit rate settings accordingly (choose Edit > Preferences... File formats tab):



- 128kbps is well suitable for music
- 32kbps provides reasonable quality for voice recordings

Once you are finished editing your sound clip, go to File > Export MP3 and select a file name and location for the exported file.

Use this Bit Rate tab to change the compression your mp3 file. A lower number produces a smaller file size. Higher data rates will have better quality audio with greatly increased file size. For lectures, try starting with 32kbps Bit Rate

[Audacity Documentation Website.](http://audacity.sourceforge.net/docs/faq)

The table below can help you estimate the kind of mp3 quality/compression and bit rates to use for your own applications. We also give you approximate file sizes to help you compare. For most in-class audio lectures 32 kbps will work. For supplemental recordings that are shorter in length, 64kbps-96kbps will offer better audio quality.

Format	Bit rate	File size/ minute	Notes
WAV	uncompressed	10 MB	If the wav file was sampled at 16 bits/44.1kHz, you've got CD quality sound
MP3	160 kbps	1.5 MB	Very low compression, superior sound quality
MP3	128 kbps	1 MB	The standard "CD quality" bit rate
MP3	96 kbps	700K	Considered "near CD quality"
MP3	64 kbps	400K	Slightly lower than FM radio station
MP3	32 kbps	250K	Lower quality audio, low file size. Good for recording long lectures and keeping file size small