

Audacity Tutorial 1

Play - Edit - Save

Audacity is an audio editing program that can record, playback and alter sounds and music.

Playing Music

DO Go to the menu **File>Open** and navigate following the teachers directions and locate and open the file 'Audacity tut5 song.mp3'. Press play and listen.

Another way of getting sounds into Audacity is by importing audio into existing songs.

Do Not close the current song, instead go to:

(Audacity version 1.2) **Project>ImportAudio** (Audacity version 1.3) **File>Import>Audio>** Follow the teachers directions and locate and open the file 'Once a Jolly Swagman.wav'. Press play and listen. Close the song by selecting **File>Close** and then select no to saving .

Audio editors like Audacity allow you to do much more than just play pre-recorded sounds. We will now alter the recorded sounds by adding effects processing.

Load Audacity, select **File>Open** and select 'To Be Or Not To Be.wav', press play and listen.

Duplicating the Track

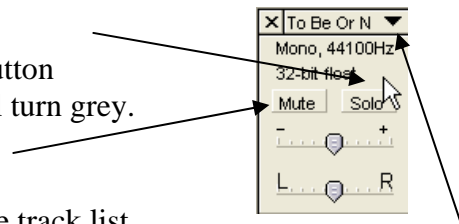
Before we alter this original sound, we will first duplicate, mute the original track and then rename the duplicate so that we always have an unedited version of the text, just in case we do something very horrible to it!

On the track titled 'To Be Or Not To Be'

- Move the mouse cursor just above the Solo Button (not on the 'Solo' text) left click and the track will turn grey.
- Go to **Edit Menu>Duplicate**
- On the top track, left click on the mute button

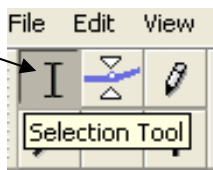
The duplicated track is always located at the bottom of the track list.

- On the duplicated track, left click on the inverted triangle to the right of the track name and select 'Name', rename the track 'Pitch Change'.



Selecting Sounds to Process

Activate the selection tool by left clicking on it



- Position the mouse at the beginning of the waveform picture.
- Left click, hold and drag to include the whole phrase.
- Do not include the second or so of silence before the text. The selected area becomes grey.

Pitch Change - The Chipmunks Meet Darth Vader

Go to **Effect Menu>Change Pitch**

There are several ways to shift the pitch of sounds. Try both ways and if you don't like what you've done,

Go to **Edit Menu>Undo** (Ctrl Z or ⌘Z and try again)

Method 1

Pitch from C

Select up or down

Select a new pitch letter

Select preview to hear a short version of the edit

Method 2

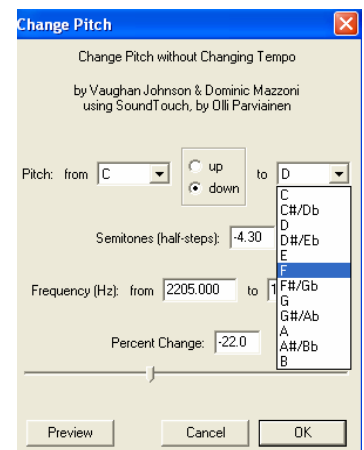
Percent Change

Move slider left or right (extreme values)

Select preview to hear a short version of the edit

Select OK to make a permanent change

Play the new edited sample



Experiment selecting just one word and wildly changing the pitch of the entire phrase.
When you have finished pitch editing, click on the mute button of the track titled 'Pitch Change'

☞ Duplicate another track from the now muted original, 'To Be Or Not To Be' and name this new track 'Reverse'.

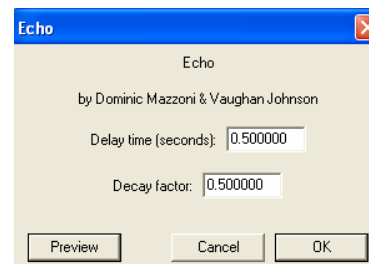
Reversing the Waveform – Playing Backwards

On the Track titled 'Reverse' select the audio to be processed. Go to **Effect Menu>Reverse**
Listen to your results. Mute the 'Reverse' track

☞ Duplicate the Original track again, unmute the track and rename this new track 'Echo'.

Echo – Echo Echo Echo

- Select the audio that is to have the echo
- ☞ • Go to **Effect Menu>Echo**
Set delay time to .500
Decay time to .500
- Use the preview button to hear what it sounds like.
- Experiment with different delay time values but keep the decay factor below .9 or else horrible things will happen in the universe!



Once you like what you hear press 'OK' and then play the whole sample back.

If you really don't like what you've done, Go to **Edit Menu>Undo** (Ctrl Z or ⌘Z) and try again.

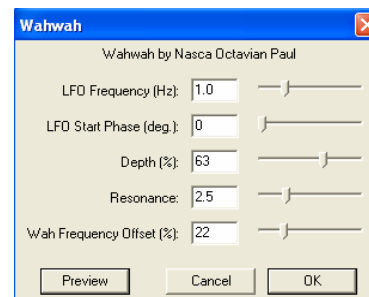
Once you are satisfied, mute the 'Echo' track.

☞ Duplicate the Original track again, unmute the track and rename this new track 'Wahwah'.

Wahwah – Tone Change

This is like wildly changing the tone controls on your music player as the song plays. Electric Guitarists create this effect by using a foot pedal as they play.

- Select the audio that is to have the Wahwah
- ☞ • Set the following values
LFO freq = 2.5
LFO start = 0
Depth = 80
Resonance = 4.3
Wah Freq off = 16
- Use the preview button to hear what it sounds like.
- Experiment with different values.



Once you like what you hear press 'OK' and then play the whole sample back.

If you really don't like what you've done, Go to **Edit Menu>Undo** (Ctrl Z or ⌘Z) and try again.

Saving Your Work

This allows your audio project with all of its various sounds and edits to be saved for later editing. This is a large file size so make sure you have enough drive space.

☞ Go to **File>Save Project** - Navigate to where you want to save the file, name the project 'Audacity Tutorial 1' and press save

Viewing all of the Audio Tracks

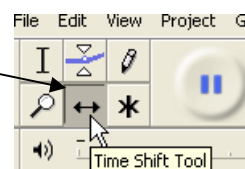
When you have a lot of tracks the easiest way to get an overview of the songs timeline is to:

- ☞ • Go to **View>Fit Vertically**
- Go to **View>Fit in Window**

Time Shift - Arranging The Tracks

To rearrange the tracks so that each processed track plays one after the other:

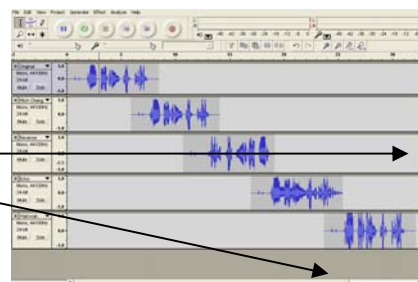
- Unmute all of the tracks
- Select the time shift tool from the tool palette
- On one of the track audio waveforms,
- Left click hold and drag to the right.



The wave form may go off of the screen area so redo

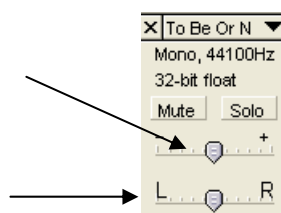
View Menu>Fit in Window (Ctrl+F or ⌘F).

- Use the Vertical and Horizontal scrollbars to view all of the Tracks.
- Shift the tracks so that they play one after the other



Balancing The Mix

On the left end of each track are the Track Volume Gain and Left and Right panning sliders. What they do will be self evident when you play the track and adjust the sliders. Be careful with the volume gain as sounds can easily distort.



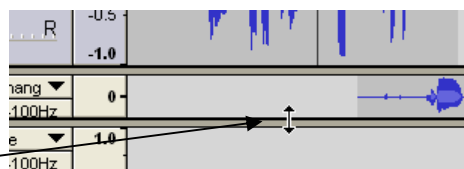
Resizing Track Widths

Now that you have a lot of tracks you will want to resize the Track widths by positioning the cursor tool just underneath the track, left click and drag.

Once you have ordered your tracks in a creative way, play the song and listen to your efforts. Rearrange again if need be.

You may need to resize a track if you want to alter the volume gain and panning sliders.

Save your work again.



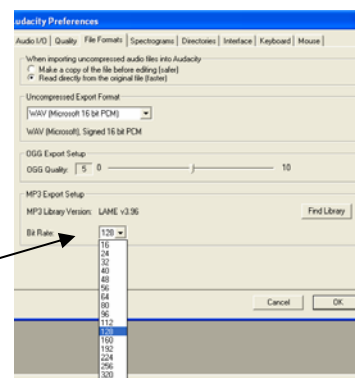
The Mix-Down - Exporting to a stereo sound file

Your current song will only playback using the Audacity program. To make your song accessible to other people who may not have this software, we export the song in a stereo format. This is a two track mix containing a left and right channel. Audacity allows us to export a mix-down in a number of formats.

Export as MP3

The MP3 format compresses an audio waveform so that when it is saved to a computer it becomes a much smaller file. This is good for internet distribution and iPod style players. There is a loss of audio quality in this format however this is determined by the bit rate value you select. Above 128 and it should sound fine. To select the bit rate quality, do the following

- File Menu>Preferences>
- File Formats Page
- MP3 Export Setup
- Adjust bit Rate value to 128 (You may like to experiment with this setting later)



Go to **File Menu> Export as > MP3**

Navigate to where you want to save and rename appropriately. Close the Audacity project and play your new MP3 file using a different audio player such as Windows Media or iTunes players.

If you would like your own copy of this program it is available at <http://audacity.sourceforge.net>