

Audacity Sound Workshop

These instructions are a step by step guide specifically designed by lab.3000 for use within the lab.3000 Incubator Audacity Sound Workshops.



Audacity

Using Audacity to record, play, and edit sound.

Familiarising with the Audacity workspace

menu

- file, edit, view, project, generate, effect, analyze, help

selection/editing tools

- selection, envelope, draw, zoom, time shift, multi-tool

audio levels

- speaker, microphone

playback toolbar

- skip to start, play, record, pause, stop, skip to end

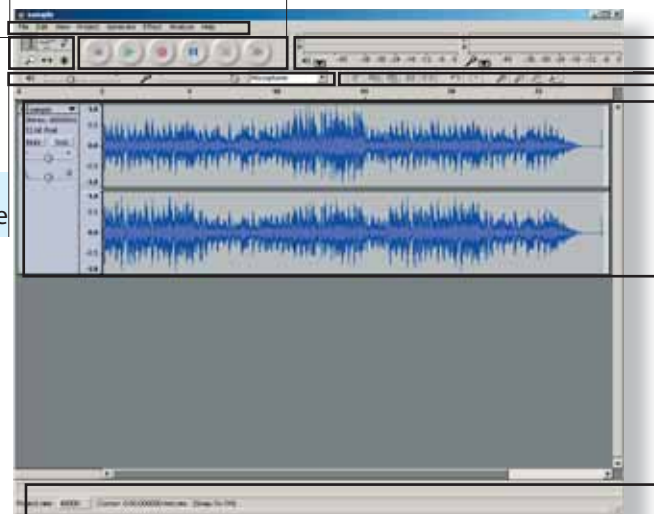
left/right channel sliders

standard tools and shortcuts

- cut, copy, paste
- trim outside selection, silence selection
- undo, redo
- zoom in, zoom out, fit selection in window, fit project in window

workspace

status bar



Basic terminology:

Decibel (dB)

measure of the sound level

<http://www.phys.unsw.edu.au/~jw/dB.html>

Amplitude

measure of the magnitude of maximum disturbance in the medium during one wave cycle.

<http://en.wikipedia.org/wiki/Amplitude>

Pitch

dictates the sound's character

http://www.rtagroup.com.au/wizard/definition_acoustics.html

Tempo

the speed in which beats are played

http://en.wikibooks.org/wiki/Introduction_to_IB_Music#Tempo



Audacity

Using Audacity to record, play, and edit sound.

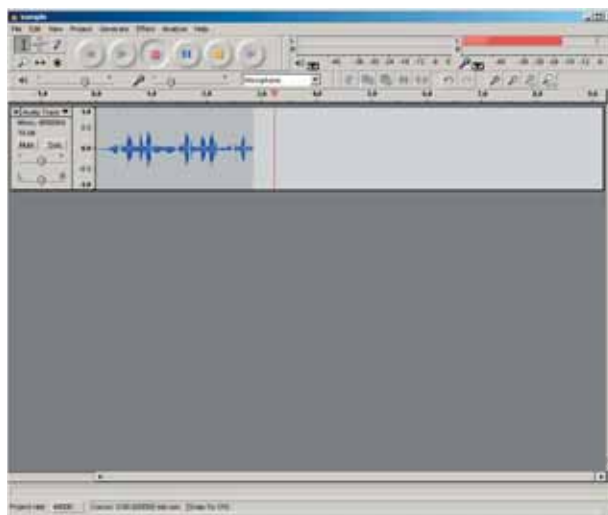
Before proceeding, ensure that the audio input and output levels on your computer are turned on and calibrated. This is dependent on the operating system that you are running. Please seek advice from the instructor.

Capturing audio input

1. Connect a microphone (or minidisk with a recording) to the audio input (microphone inlet) of your computer.
2. Click on the red "**Record**" button and either start speaking on the microphone or play the minidisk.



3. The workspace will load a new layer (track) for every recording made. These tracks would have waves of lines, this is the visual representation of the digitised voice or sound (analog).



new audio track

4. Click on the yellow "**Stop**" button to stop recording.



5. Save your recording. **File > Export as WAV...** then save the WAV file in your computer.

Note: An export is done rather than a Save Project because it allows you to cross on other sound editing or playback program to edit or play the recorded sound.





Audacity

Using Audacity to record, play, and edit sound.

Editing through the effects menu

1. Using the selection tool

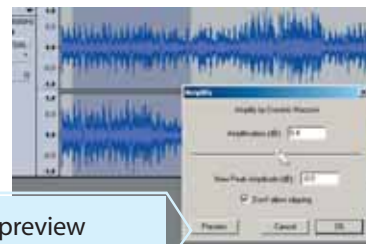


Select a portion of the recording.



selection

2. From the **Effects** menu, select **Amplify**. This will increase/decrease the volume of the selection by the level of decibel boosts/cuts that is applied.

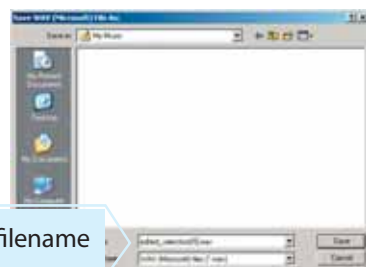


preview

Preview the new amplification of the selection by pressing the **Preview** button, when you are happy with the new amplification, press the **OK** button.

3. Try the other effects on your selection and preview the results of the changes.

4. Export the selected portion, **File > Export Selection as WAV...**
Save it with another name such as **edited_selection01.wav**



give a new filename



Editing using the selection/editing tools

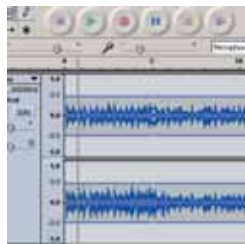
1. Open your original WAV file.
2. Select the **Envelope tool** from the selection/editing tools panel.



white bar appears

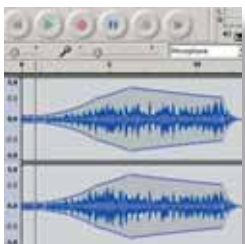
Notice that the track appears to have a white bar inside gray bars rather than the previous all gray bar.

3. Place your cursor (which now changes to the envelope cursor) in the middle of the wave track then click.



Notice that the wave level is cut in half. This means that the amplitude of the sound is now halved.

4. Try clicking and dragging the envelope cursor in your wave track.



This allows you to control and vary the amplitude of the sound.

5. Use the other tools and experiment on the different effects these would have on your sound wave.

About this guide:

All trademarks, and product names remain the property of the respective companies.

This guide has not been endorsed by the Audacity team, and has been created specifically for the Audacity Sound Workshops held by Lab 3000.

Lab.3000 and RMIT will not be held accountable for any errors caused to your system as a result of using the above steps.

Check with your network administrator, and/or an expert on your computer system before applying this information to your environment.

The screen shots above may differ in appearance to your computer screen dependant upon your system settings.

Check that your system fits the requirements a defined by the relative programs, before purchasing and loading on your computer.

This guide does not guarantee that your system can produce the desired finished result.