# Audacity Tutorial 3
Microphone Recording

Audacity can record any audio signal that is played into the computer soundcard. This could be sound from a microphone, guitar or CD/record/cassette player. The recording process is quite simple. The problems tend to occur with; faulty leads, connections, signal path within the computer and audio preferences within Audacity. We will assume that all the leads are plugged in correctly and nothing is faulty. Complete the following check list to ensure that you are ready to record using the microphone.

Windows XP Volume Mixer

DO ☞

- Left double click on the Volume speaker icon on the task shortcuts.
- In the Volume Control mixer, go to the menu **Options>Properties** and select **Recording,** then press OK
- Select the 'Microphone' as the source and adjust its volume to ¾.
- Go to the Recording Control menu **Options>Advanced Controls** select the Microphone Advanced menu and tick the Microphone +20 dB Boost.
- Connect the microphone to the 'Mic In' on the soundcard
- You may also want to boost the volume of the 'Wave' and 'Volume Control' in the Windows 'Volume Control Mixer'
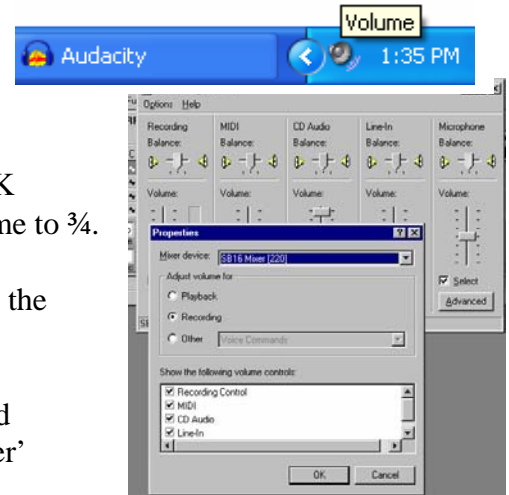
Mac OS X

DO ☞

- **System Preferences>Sound>Input>**
- Select Internal microphone
- In the Volume Control mixer, go to the menu **Options>Properties** and select **Recording,** then press OK

Audacity Mixer Toolbar

Audacity contains its own mixer and this controls the settings of the windows mixer. It is easier to use the Audacity mixer once you have adjusted the initial Windows mixer settings.
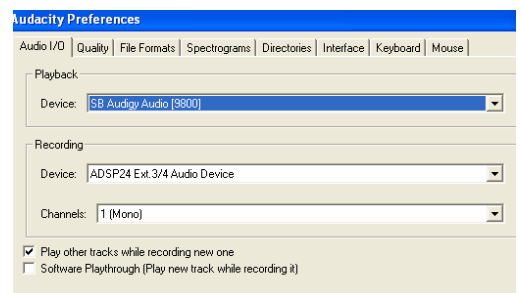
Output Volume   Input Level   Input
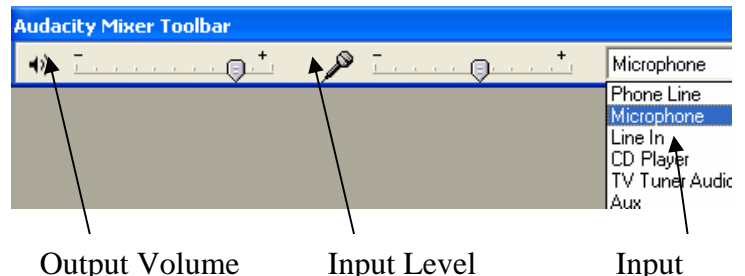
Setting Preferences

Located: Mac -Audacity Menu: Windows – File or Edit Menus

☞

- Start Audacity and with a New Project open (grey desktop)
- Locate the **Preferences** menu
- Select **Recording Channels** to be '**1 (Mono)**'
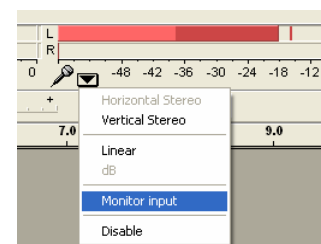- Activate (tick) Play other tracks while recording

Meter Toolbar

The Meter toolbar is a visual way of checking that audio is going into or out of Audacity when you record or play.
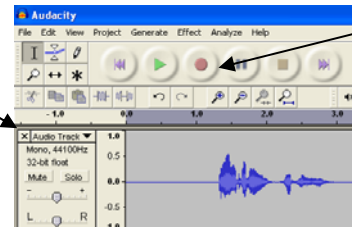
☞
Locate the Meter Toolbar alongside the play controls and activate the Monitor Input button.

A Red Volume level bar should now be visible when you speak into the microphone

Recording Your Name

☞ Press the red record button in the Control Bar Delete Track   Record
and say your name loudly and clearly

Your screen should now have 1 track containing an audio
waveform picture.

☞ Press play and listen. - If you think you could do better, delete
the track by clicking on the '**X**' indicated and try again.

Repeat this process until you have 1 recording of your name that you are satisfied with.

Audio Filters - A Cheap Radio Voice
The quality of the loudspeakers or headphones may dramatically effect or alter the sound you are
listening to. Small cheap radios often sound very 'bright' without any 'low or bottom end' sounds.
An editing device called a filter can produce this effect. It works by selecting a sound frequency eg
300 Herz (Hz), and then only allows sounds higher than this frequency to pass, this is referred to as a
'high pass filter'. If it only allows frequencies lower than say 300 Hz for example to pass, it would be
called a 'low pass filter'.

☞
- Select the track that contains your recorded name. (It now becomes highlighted)
- Go to the menu **Effect>High Pass Filter**
- Type in the value 300 and select OK.
- Listen to the change in the sound.
- To undo this effect and get back to your original recording
- Go to the menu **Edit>Undo**
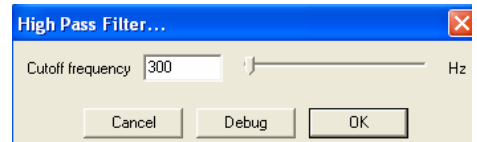
As we increase the Hertz value, so the sound will lose its low frequencies and become brighter.
☞ Repeat the above steps using values 600, 1000, 1,500, 2500 Hz.

Return to your original recorded sound and now experiment with filtering out the high frequency
sounds using the 'Low Pass Filter'
☞
- Select the track that contains your recorded name. (It now becomes highlighted)
- Go to the menu **Effect>Low Pass Filter**
- Experiment with values from 1000, 500, 250, 150 to 50 Hz

Tasks
Complete the following tasks by first recording the text, then adding one effect, and then the next.

☞ 1/   Counting down from 5 to 1, with a High Pass Filter set to 500 Hz, then an Echo with delay time
0.5 and decay time 0.3.

☞ 2/   A long, scary Lion roar, with a Low Pass Filter set to
800 Hz, then a Reverb setting (Freeverb 2) with these
approximate values –
(If no reverb is available in Effect menu, use Echo again)
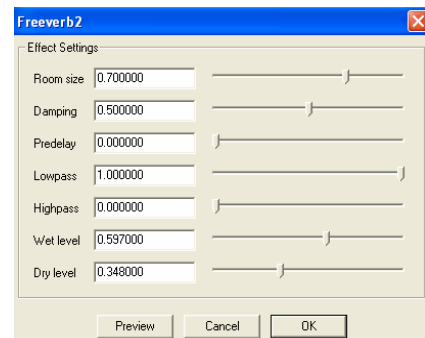
Saving and Exporting your Work

☞ Save your current project work, and following the MP3 exporting steps in the first tutorial, create
an exported version of these tasks so that they can be played back using an audio player.