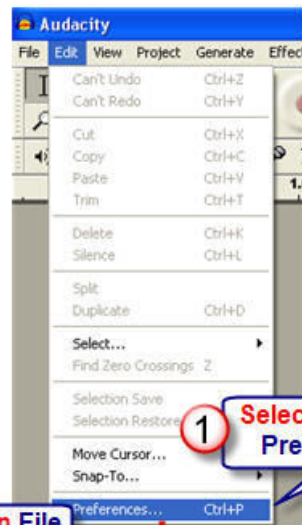# Getting ready to podcast

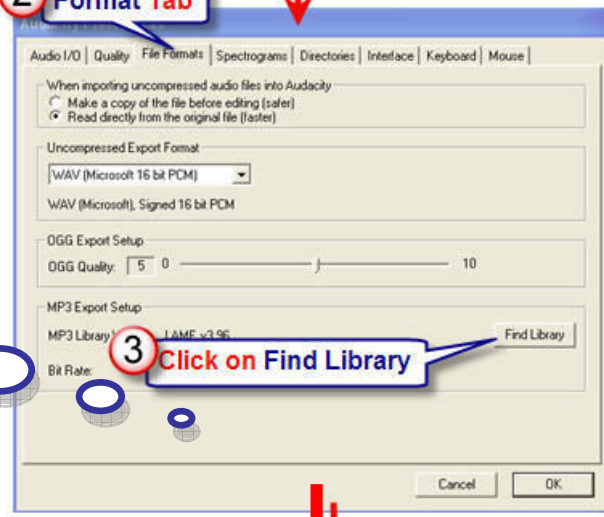## 1. Setting Audacity preferences on your computer

Prior steps – Download Audacity and LAME mp3 encoder
  - Launch Audacity

This tells Audacity where the LAME encoder is located

Where is lame_enc.dll?

Look in: lame-3.96.1

- Recent
  - ACM
  - html
  - misc
  - lame_enc.dll
- Desktop
- My Documents
- My Computer
- My Network Places

File name: lame_enc.dll
Files of type: Only lame_enc.dll
☐ Open as read-only

Open
Cancel

5 Locate and click on the LAME encoder file (from where you have saved it). Called **lame_enc.dll**

6 Click open

Audacity Preferences

Audio I/O | Quality | File Formats | Spectrograms | Directories | Interface | Keyboard | Mouse

When importing uncompressed audio files into Audacity
- ☐ Make a copy of the file before editing (safer)
- ☑ Read directly from the original file (faster)

Uncompressed Export Format
WAV (Microsoft 16 bit PCM)
WAV (Microsoft), Signed 16 bit PCM

OGG Export Set...
OGG Quality: ————|———— 10

MP3 Export Set...
MP3 Library Version:

Bit Rate: 64

Find Library

Cancel | OK

7 Change bit rate to 64

8 Click on OK

Audacity Preferences

Audio I/O | Quality | File Formats | Spectrograms | Directories | Interface | Ke...

Playback
Device: SigmaTel Audio

Recording
Device: SigmaTel Audio

Channels: 1 (Mono)

☐ Play other tracks while recording new one
☐ Software Playthrough (Play new track while recording it)

9 Click on **Audio I/O tab** (this is where you'll tell Audacity where to record your sound from and where to play it back).

10 From the drop down menu select the **output device that** you would like to route the sound through. E.g. to the sound card on your computer.

11 From the drop down window under **Recording**, select the sound source you want to record from (e.g. the Logitech USB Headset is the microphone that will be used in this example to record some voiceover narration).

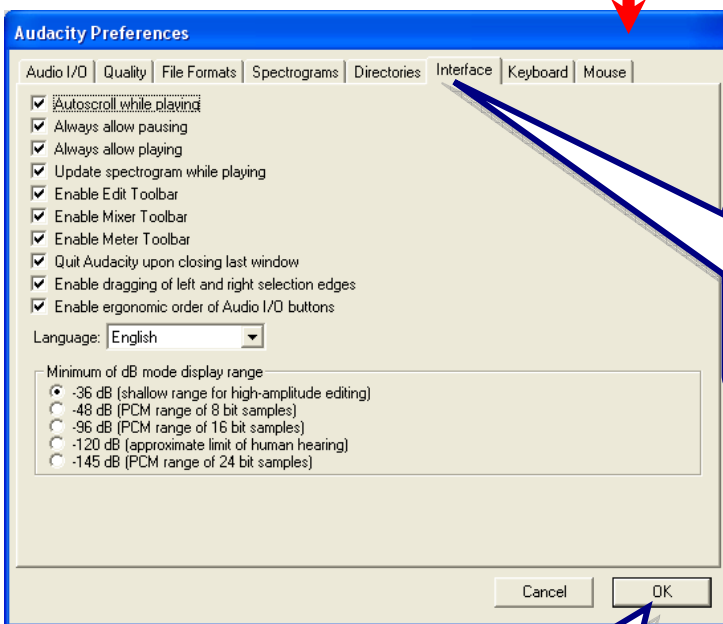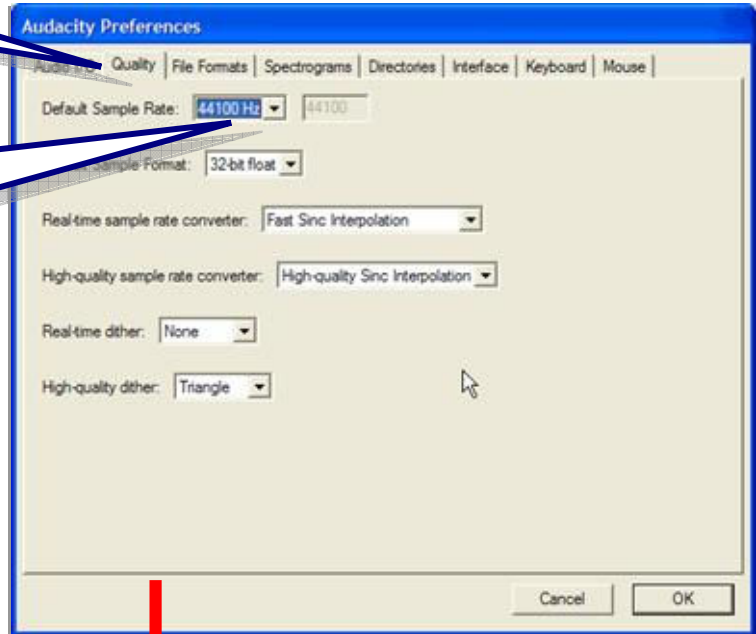**12** Leave this check box unchecked.

12 Select **mono wherever possible as stereo doubles the file size**. For most voice recordings mono is adequate. Only use stereo if you must feature quality music in your lesson or program, and only if the double file size is acceptable.

13

Click on Quality tab.

Audacity Preferences

Audio I/O | Quality | File Formats | Spectrograms | Directories | Interface | Keyboard | Mouse

Default Sample Rate: 44100 Hz ▼ 44100

Sample Format: 32-bit float ▼

Choose between 22, 000 and 44, 000 Hz for podcasts with mainly voice.

14

Real-time sample rate converter: Fast Sinc Interpolation ▼

High-quality sample rate converter: High-quality Sinc Interpolation ▼

Real-time dither: None ▼

High-quality dither: Triangle ▼

Cancel   OK

Audacity Preferences

Audio I/O | Quality | File Formats | Spectrograms | Directories | Interface | Keyboard | Mouse

☑ Autoscroll while playing
☑ Always allow pausing
☑ Always allow playing
☑ Update spectrogram while playing
☑ Enable Edit Toolbar
☑ Enable Mixer Toolbar
☑ Enable Meter Toolbar
☑ Quit Audacity upon closing last window
☑ Enable dragging of left and right selection edges
☑ Enable ergonomic order of Audio I/O buttons

Language: English ▼

On the Interface tab, make sure all the check boxes are ticked.

15

Minimum of dB mode display range
⦿ -36 dB (shallow range for high-amplitude editing)
○ -48 dB (PCM range of 8 bit samples)
○ -96 dB (PCM range of 16 bit samples)
○ -120 dB (approximate limit of human hearing)
○ -145 dB (PCM range of 24 bit samples)

Cancel   OK

Click OK. (Leave other settings alone).

16

2. Preparing the computer to record sound

- **Turn off unnecessary programs** - Turn off all unnecessary programs to free up memory and to ensure smooth running of the recording software.
  - o Recording sound, as well as processing and editing audio files requires a lot of computer power. The more available memory your computer has, the less likely the audio recording will be interrupted and the faster any processing of audio files will occur.

- **Turn off anything that could create a sound while you are recording**, especially programs that can give alerts such as email programs, instant messaging etc.

- **Plugging-in the microphone and headphones** - plug your microphone and headphones into the correct sockets on your soundcard.
  - o Pink is for the microphone input. On your laptop it has a microphone icon
  - o Green is for the speaker output connection. On your laptop it has a headphones icon.
  - o Blue is used for high-level line in, like a tape recorder.

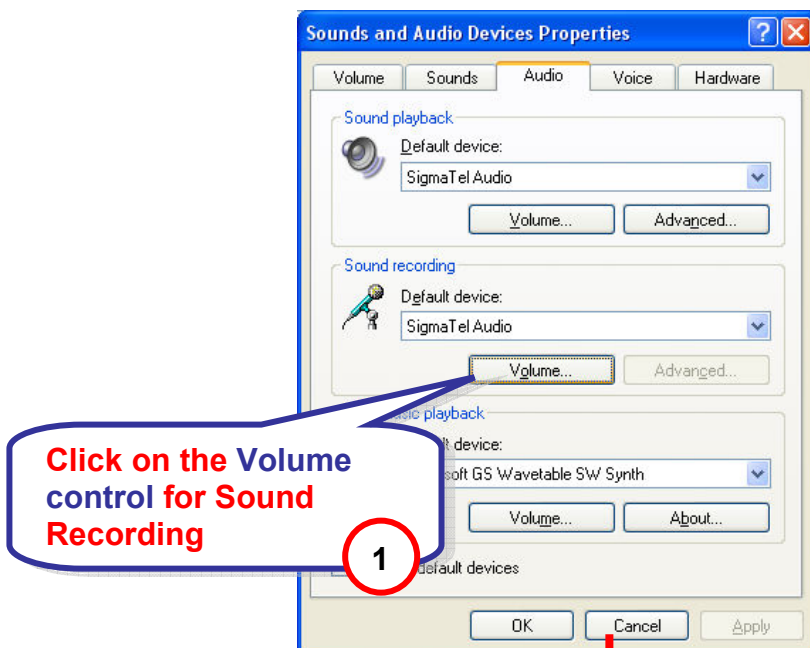- **Setting Recording Levels –** You need to set the correct recording level of the microphone in the soundcard.

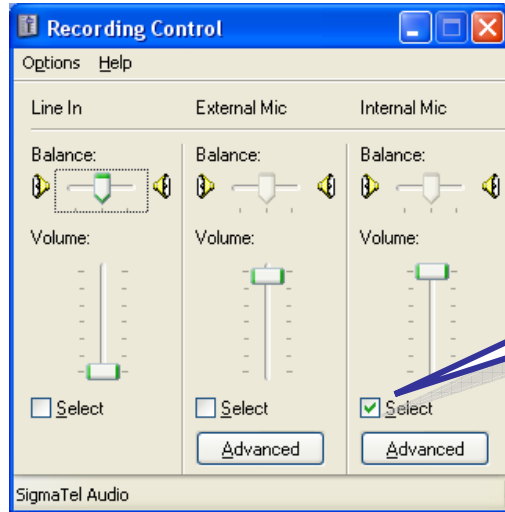 Every sound card has two mixing panels:
  - o one for adjusting audio playback levels
  - o one for adjusting audio recording levels

  Access the Volume Control panel:
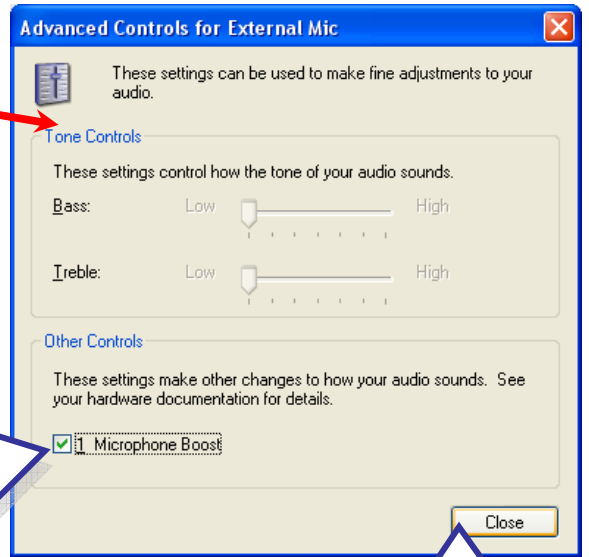 Select: Start > Settings > Control panel > Sounds and audio devices
  This control panel will enable us to hear if the microphone is working correctly as we make our recording. It also mixes various other devices that we need to hear.
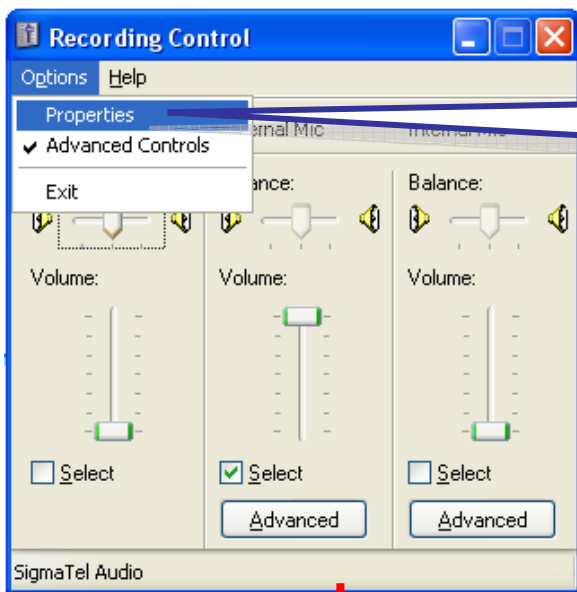

Click on the Volume control for Sound Recording

Recording Control

Options   Help

Line In	External Mic	Internal Mic

SigmaTel Audio

2 Tick to select the Internal microphone and push the slider to maximum.
3 Click the Advanced button.

Advanced Controls for External Mic

These settings can be used to make fine adjustments to your audio.

Tone Controls

These settings control how the tone of your audio sounds.

Bass: Low   High

Treble: Low   High

Other Controls

These settings make other changes to how your audio sounds. See your hardware documentation for details.

☑ 1 Microphone Boost

Close

4 In the Other Controls section, select 1 Microphone Boost (bottom left) with a tick.

- Microphones have a very small output voltage and by amplifying the tiny signal we can record at the correct audio level.
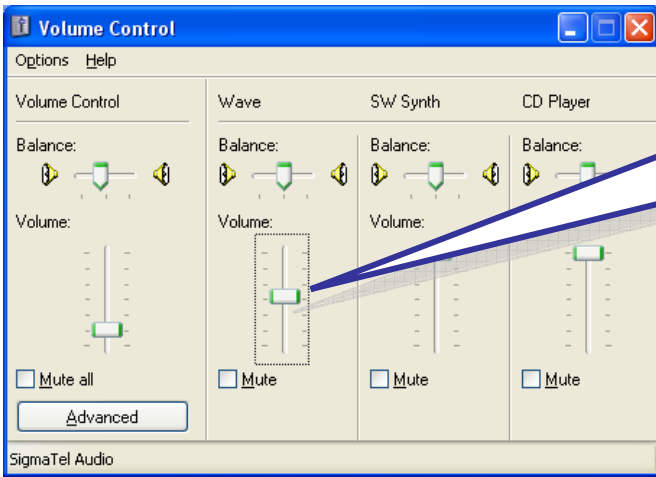- If the recording level is too high when you perform your test, untick this box.

5 Close the panel and return to the main Volume Control panel.

Recording Control

Options   Help

Properties
✔ Advanced Controls
Exit

| | Internal Mic | Internal Mic |
| Balance: | Balance: | Balance: |

Volume: Volume: Volume:

☐ Select   ☑ Select   ☐ Select
Advanced   Advanced

SigmaTel Audio

6 Select: Options > Properties to adjust the volume for recording to the hard drive.

Properties

Mixer device: SigmaTel Audio

Adjust volume for
- ○ Playback
- ⦿ Recording
- ○ Other

7

Select Recording.

Show the following volume controls:
- ☑ Line In
- ☑ External Mic
- ☑ Internal Mic

OK   Cancel

Volume Control

Options   Help

Volume Control	Wave	SW Synth	CD Player
Balance:	Balance:	Balance:	Balance:
Volume:	Volume:	Volume:	Volume:
☐ Mute all	☐ Mute	☐ Mute	☐ Mute
Advanced			

SigmaTel Audio
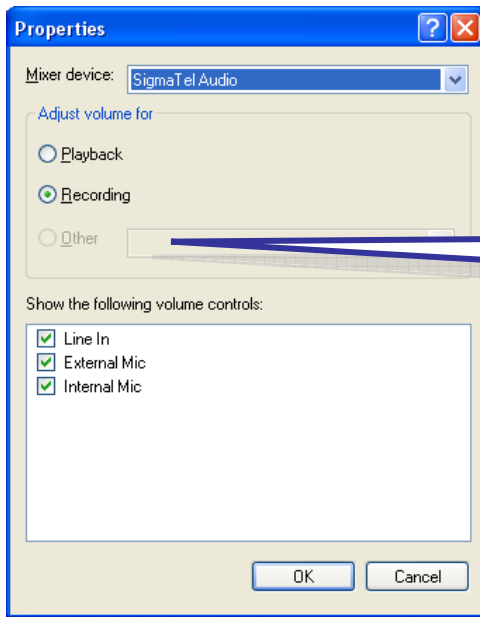
NOTE

Sound Out - gets replayed off the hard drive via the WAVE sliding fader. Adjust this until there is no distortion on replay.

Access this control by right clicking on the Speaker icon in the Task pane.

Open Volume Control
Adjust Audio Properties

9:27 PM
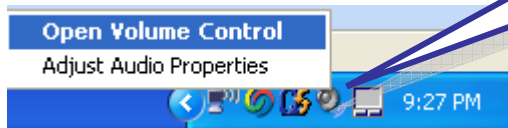
- **Setting Audacity's recording level**

  Ideally for podcasting you want your audio to fluctuate between +0.5 and -0.5. If it is a lot less than ± 0.5 you have to either:
- spoken too softly
- or your microphone volume needs to be increased

  Most people when they first record with Audacity tend to talk too softly. Remember to talk reasonably loudly!

You're now ready to start recording your audio.

References:

http://www.guidesandtutorials.com/audacity-tutorial.html
http://podcastingwa.wikispaces.com/audio+
http://www.nswlearnscope.com/wiki/index.php?title=Audacity#Preparing_the_computer_to_record_sound