

# 1 Recording with Audacity

Start Audacity – creates a new ‘project’.

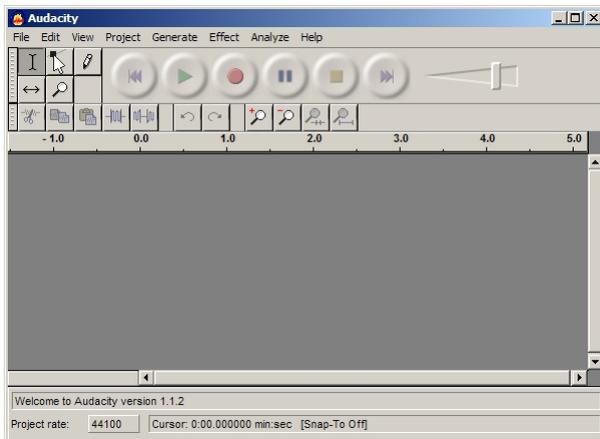


Figure 1 Audacity on Start-up

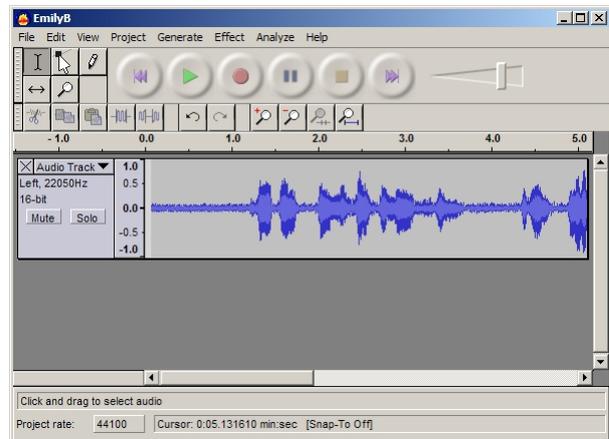


Figure 2 Audacity with a Project Open

- From the menu select **File | Preferences** and then on the following tabs check the settings:
  - **Audio I/O** – make sure it is the same as the Recording controls – probably your soundcard’s name (as in the bottom left hand corner of the dialog box). Tick "Record in Stereo", if you think stereo recording will be of use (though bear in mind this will double the size of the audio file created).
  - **Quality**: Sample rate: 22,050 Hz format: 16 bit – do not need CD quality for speech normally.
  - **File format**: WAV (Microsoft 16 bit)
- **File | Save As Project** – give it a name as an Audacity project \*.aup (\* = the name you give it)
- Click the **circular red record button** to start Audacity recording. You **MUST** do this before the next step or you may miss the beginning of your original recording.
  - The buttons in audio software applications often mimic the buttons on a standard audio player and recorder.
- Start playing the source, that is, press play on your connected MiniDisc or cassette player. If all is well, you should see a waveform appearing as in Figure 2.

- When your original recording has finished playing click the **yellow square stop button** to stop Audacity recording. It does not matter if you have some extra blank seconds at the end of the sound file – you can delete them very easily.
- **File | Save Project**
- To use in other programs you need to export the file:
  - **File | Export as Windows Wave...** (full quality) – good idea to keep one at full quality **OR**
  - **File | Export as MP3...** (slightly lower quality, but far smaller file size) – should be sufficiently clear speech for you to work from – and will be easier since a smaller file.

It would be a good idea to keep one in full quality format to use as an archive copy. This may be a large file: with the preferences suggested above a 1 hour recording will produce a file size of 303 MB.

## 2 Improving your recordings in Audacity

By exporting from Audacity you have created a WAV (PC), AIFF (Mac) or mp3 file. You can open these within Audacity to work on them.

### 2.1 Working with parts of a sound file

To select part of a sound file click and drag – this highlights the selection. You can then perform a number of actions upon the selection.

**Remember to save your copy file after editing - with a different name so that should something go wrong you can return to your original. It is prudent to save before each major edit you make.**

#### 2.1.1 Make quiet parts louder

Some parts of your recording may be quieter than others, making it hard to discern what is being said. You can amplify selected bit, producing a more even recording overall, which should aid your analysis and transcription. If it is significant that someone is speaking quietly rather than a technical accident such as their moving away from the microphone, you may want to note this in your analysis.



**Effect | Amplify** – accept the default suggestion in the dialog box. Ensure that "Don't allow clipping" is ticked – this will ensure that the overall range of the selection does not distort.

### 2.1.2 Blank identifying information

Sometimes you may want to do this after transcription possibly to conceal identificatory references.

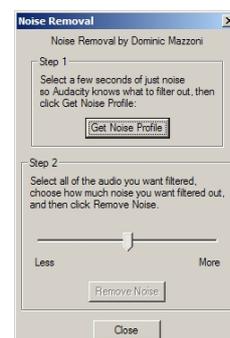
Click on **silence button** (the wave with the flat line in the middle). This does not delete the selected sound which would shorten the whole waveform. Instead it *replaces* the selected sound with silence. This ensures that anything else which is synchronised with it (such as a linked transcription) will remain synchronised after silencing.

### 2.1.3 Remove hiss

Sometimes the recording has hiss or noise interference either from the mechanics of the recording itself or the ambient noise in the recording environment. You can elect to remove this by indicating to the software a section which has no speaking in it (hence the suggestion to record a few seconds of 'situated silence' at the beginning of your recording). The software can then recognise the background noise and can remove it from the sections which have both noise and speech, leaving only speech.

There are two steps to removing hiss:

- Find a section which has hiss with no words. Highlight it and then select **Effect | Noise Removal | Get Noise Profile**
- Select the section you want the noise reduced for. Select **Effect | Noise Removal | adjust slider** to show how much noise you want removed and then click on Remove Noise.



Play the highlighted section to see if it has improved. If it has not (or has made it worse), select **Edit | Undo** and have another go. This is better than trying it incrementally.

### 2.1.4 Save brief extracts as separate files

Save the selection as a separate file to use in a presentation (subject to confidentiality agreements):

**File | Export Selection as Windows Wave...** OR **File | Export Selection as MP3...**

## 3 Downloading Software

### 3.1 Audacity – to create sound files

Free software to create sound files – download version 1.2.0 for Windows:

**<http://audacity.sourceforge.net/beta.php?lang=en>**

You can download either the \*.zip or \*.exe (if you download the zip file you will need to 'unzip' it and extract the installer file \*.exe). Double-click the installer (\*.exe) to start installation. Accept the licence agreement, the default installation location and all the other defaults and it will be ready for you to use.

### 3.2 LAME to create MP3s

Should you want to create MP3s from the sound files you create you will need to download the LAME add-on for Audacity: **<http://mitiok.free.fr/>**

This is only downloadable as a zip file so you will need to extract this once you have downloaded it. Create a folder on your hard disk **C:\Program Files\Lame** and save the file in it. Then double click the zip file and it all the files it contains will be installed in your C:\Program Files\Lame folder.

The first time you try to export an MP3 file, Audacity will ask you to locate your MP3 encoder. Locate the file **lame\_enc.dll**, which will be in C:\Program Files\Lame\ - Audacity will remember this so you won't have to do it again.

Further details (and info about other platforms) are available on the Audacity website at <http://audacity.sourceforge.net/manual-1.2/exportmp3.html>