

# Audacity

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## Installation

I will concentrate on the Windows version and mention issues with the Linux versions.

### Source

The Windows version can be downloaded from <http://audacity.sourceforge.net/>. 1.2.6 is the “main release, complete and fully documented, but no longer under development”. All the versions for Ubuntu have been betas.

### Windows 7

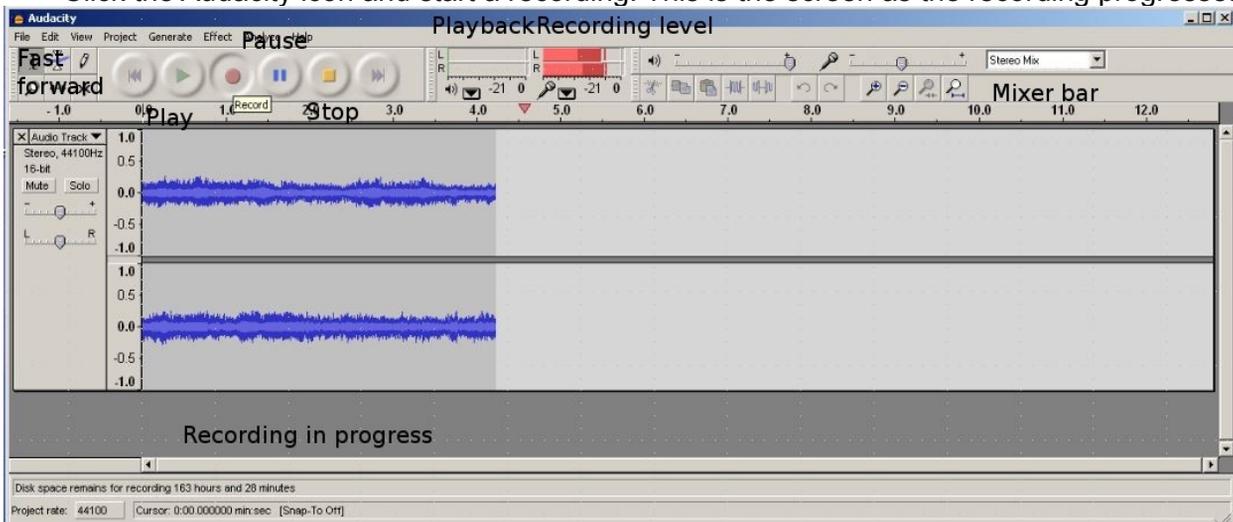
Download and follow the wizard. In the Select additional tasks I remove the tick from Associate Audacity project files as I prefer to save as wav as it is fast then convert to mp3 later.

As I want to save as mp3 I need to find the lame encoder. In Edit then File then Preferences select the File format tab. In the mp3 section there will be a statement about Exporting plugin not found. Clicking Find gives information on the need for the lame plugin. For guidance on downloading and installing lame go to <http://audacity.sourceforge.net/help/faq?s=install&i=lame-mp3> Note the need to record where the encoder was placed. Go back to File format tab, select Find and browse to the encoder location and select it. The mp3 section no longer states the plugin is needed.

Still within Preferences select the Audio tab. I have had to change the Playback device by selecting the arrow and clicking the entry that matches my audio card. Likewise for Recording device. You may need to change the Channel entry.

Finally delete the downloaded lame exe as it is no longer required.

Click the Audacity icon and start a recording. This is the screen as the recording progresses.



### Windows XP

Initially I had a problem making a recording. The mixer bar was greyed out and there was no sound. I found a solution at [http://wiki.audacityteam.org/index.php?title=Mixer\\_Toolbar\\_Issues](http://wiki.audacityteam.org/index.php?title=Mixer_Toolbar_Issues) and I activated the mixer bar and selected Stereo mix.

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## Ubuntu

Only in Jaunty have I been able to make a recording but any attempt to edit fails. With Lucid and Maverick any attempt to record is met by a waveform that is flat, so not recording. But in both it is possible to open and play an Audacity file and edit it then save it.

Install audacity in the usual way with Synaptic. Go to this site for guidance on installing lame [http://wiki.audacityteam.org/index.php?title=Lame\\_Installation#GNU.2FLinux.2FUnix\\_instructions](http://wiki.audacityteam.org/index.php?title=Lame_Installation#GNU.2FLinux.2FUnix_instructions) Note the need to record where lame is installed.

In the Preferences window select Libraries (this is the 10.10 way, it is a different in other versions) and in the mp3 section click Locate and browse to the location of lame. In my case it was automatically detected.

## Saving recording

In my experience it is faster to save as a wav and, when happy, export as an mp3 or ogg. There are three benefits

- a. wav is lossless
- b. it is very easy to record mp3 at the wrong compression and
- c. when the wav is converted to mp3 it is, again, easy to save at the wrong compression. Delete the erroneous version and convert again.

## Closing Audacity

When closing there is a prompt to save the file. As I always save to wav, never to the Audacity project files, I select No as I have saved the file.

## Editing

Any edit can be undone using Ctrl + z.

To select a recording place the cursor at the start and drag as far as is required. Note it may be necessary to click the Zoom out icon, looks like a magnifying glass with a hyphen within.

### Add a section

Highlight a piece, copy it and drop in anywhere.

### Deleting a section

Place cursor at the start point and drag to the cut off point, release the mouse and hit Delete.

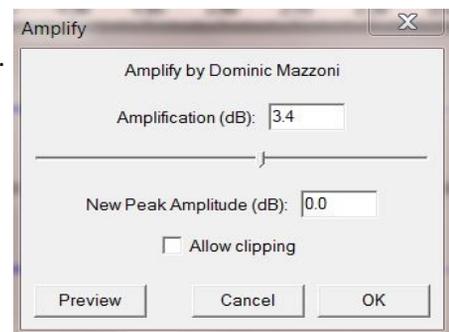
### Raise the volume

This is useful if the recording level is fairly uniform. Select the whole recording then select Effect then Amplify producing this window.

The Amplification figure is, effectively, the advised maximum. Click OK to see the impact. The waveform fills the space in the graph.

Remove that change and select Effect and Amplify again. Now move the slider top the right to increase the amplification, and the OK is greyed out. OK can only be activated by selecting Allow clipping. See the effect on the waveform where clipping appears.

From experience try a number of values.



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## Level out the volume

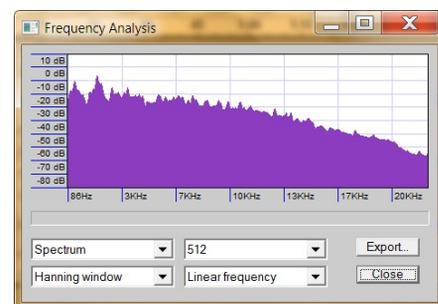
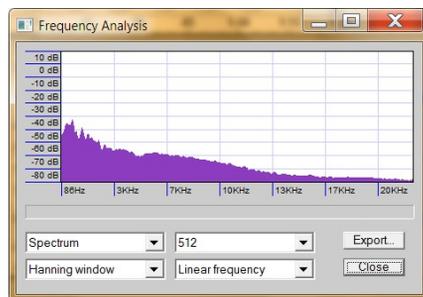
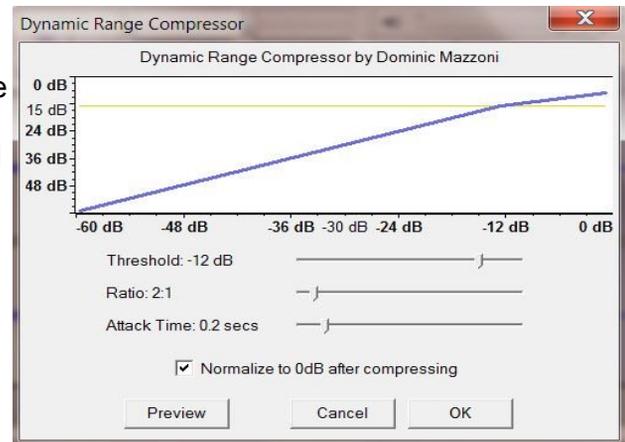
Where a recording has a huge dynamic range it is necessary to raise the level of the quiet parts and reduce the level of the loud parts. Bolero is a good example where there are extremes of volumes, from hardly heard to very loud.

The tool to be used is Compressor which reduces volume differences across an entire recording.

To see the effect select a recording then select Effect then Compressor giving a window like this. Vary the Threshold to see the effect.

Anything above the Threshold value is compressed. Ratio defines how compressor handles the area above the threshold – 2:1, the default. Attack is the how quickly compressor makes the changes above the threshold.

To do this type of change properly select a small quiet section of the recording and select Analyse then Plot spectrum and note the peak value about -40db, left example below. Repeat for a loudest part and this gives -10db, right example below.



Try using a Threshold halfway between the two values from the spectrum, select ok and listen. Trial and error is required for a difficult example like Bolero.

Untick the Normalise box to show the effect.

## Fade out/Fade in

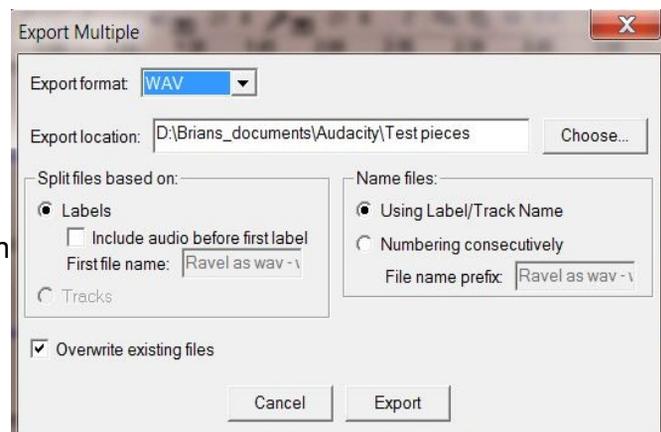
Fade out is useful to modify a recording with audience applause. Highlight that part then select Effect and Fade out and OK. See the effect and listen. Fade in is similar.

## Split a recording

This is how to split a recording has multiple tracks/parts.

Position cursor at the start of the first track and select Project and Add label at selection. A red box appears at the bottom. Point cursor at the box and type the track name – the name will appear in red as you type and will be used as the track name. Position cursor at the start of the next piece and repeat.

To split the recording select File then Export multiple. This produces the window right. In Export type select wav, in Export location browse to the required folder, in Name files leave it as Using track etc as labels have been provided. Click Export.



There is a message the number of tracks being exported.

## Pops/clicks

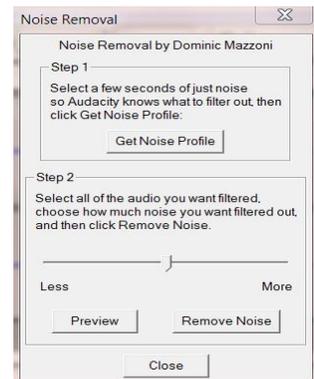
I never had much success with the Click remover and so removed them manually.

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Listen to the recording and when a click is heard press the space bar to stop playback. Use the Zoom in icon to see more detail and highlight the section. Play several times using more Zoom in. Highlight the pop/click then select Generate then Silence and click ok. I found the silences were so short they were not noticed by me.

## Noise removal

This proved useful with recordings from LPs and cassette tapes where there is noise. Firstly highlight a small part of the recording, usually the end. Select Effect then Noise removal then Get Noise Profile. Then highlight the whole recording and then Effect then Noise removal and select Remove noise and wait. Experiment until happy with it.



There are many other effects which may be worth a trial in a quiet moment.

## Exporting/saving

There are no options on quality etc at this point. To change the mp3 compression, ogg quality, etc then must select File then Preferences then File format tab. NB. To see the tab you may need to press the left pointing arrow at top right of the window.

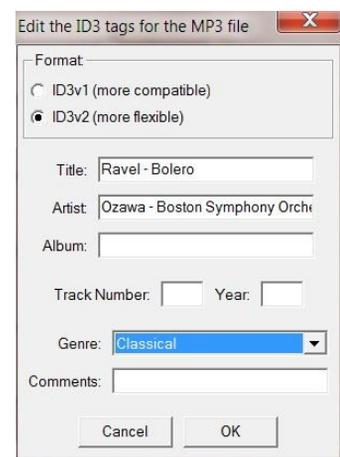
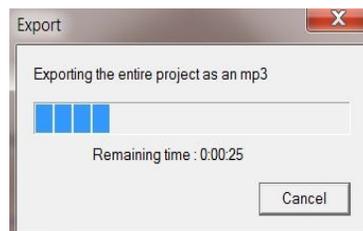
In 1.2.6 there are the formats are wav, mp3 and ogg.

### As wav

File then Export as wav and save.

### As mp3

File then Export as mp3, then browse to the required folder and give the file a name, then Save and get a window to add/edit ID3 tags. Complete it as below then press OK to save.



### As ogg vorbis

File then Export as ogg vorbis and save.

## Ubuntu version

Because of the limited success with the Linux version I can say very little. There are more effects and more file formats. Selecting the mp3 quality is better.

## ID3 tags

There is an example just above. Those are easily changed by selecting Project then Edit ID3 tags.