

Recording with

<http://audacity.sourceforge.net/>



“Audacity is free, open source software for recording and editing sounds. It is available for Mac OS X, Microsoft Windows, GNU/Linux, and other operating systems.”

Download Audacity from Sourceforge:

<http://audacity.sourceforge.net/download/windows>

You will also need to install the following:

LAME (Lame Ain't an MP3 Encoder)

“LAME is an educational tool to be used for learning about MP3 encoding. The goal of the LAME project is to improve the psycho acoustics, quality and speed of MP3 encoding.”

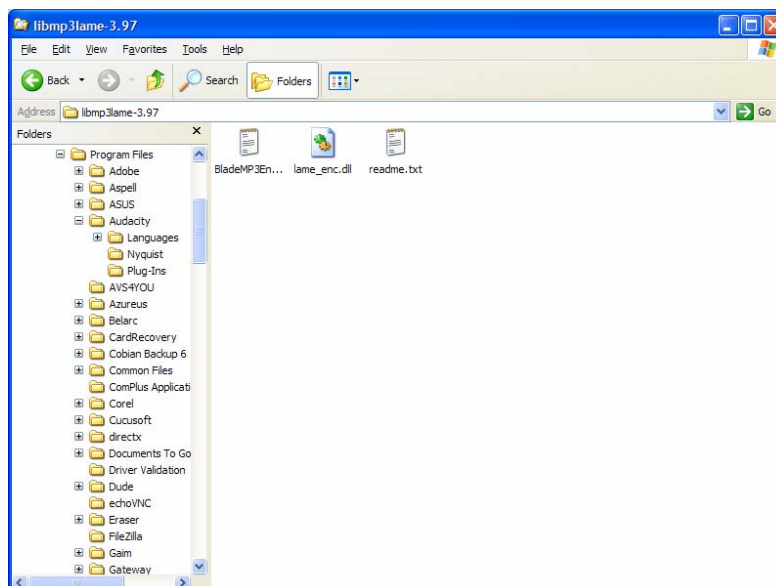
Download the LAME mp3 encoder from one of the mirror sites:

<http://lame.buanzo.com.ar/>

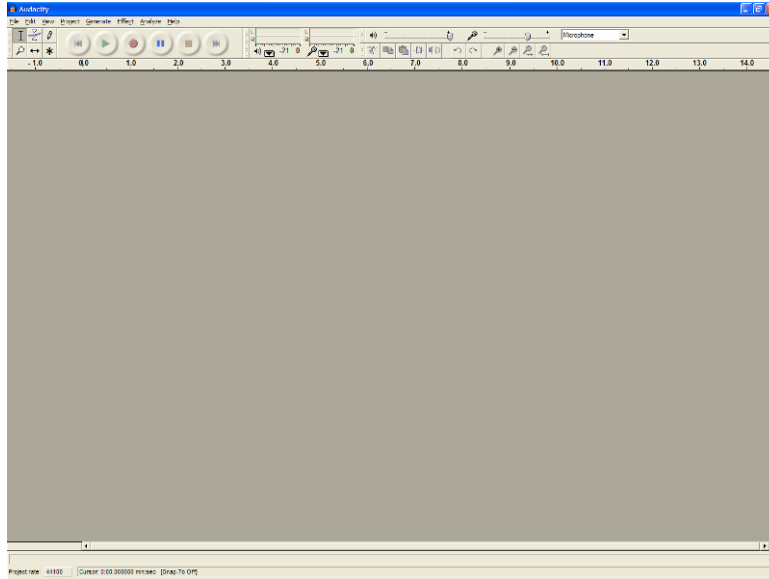
Installation:

Install Audacity by running *audacity-win-1.2.6.exe*. Accept the EULA and install to the default location.

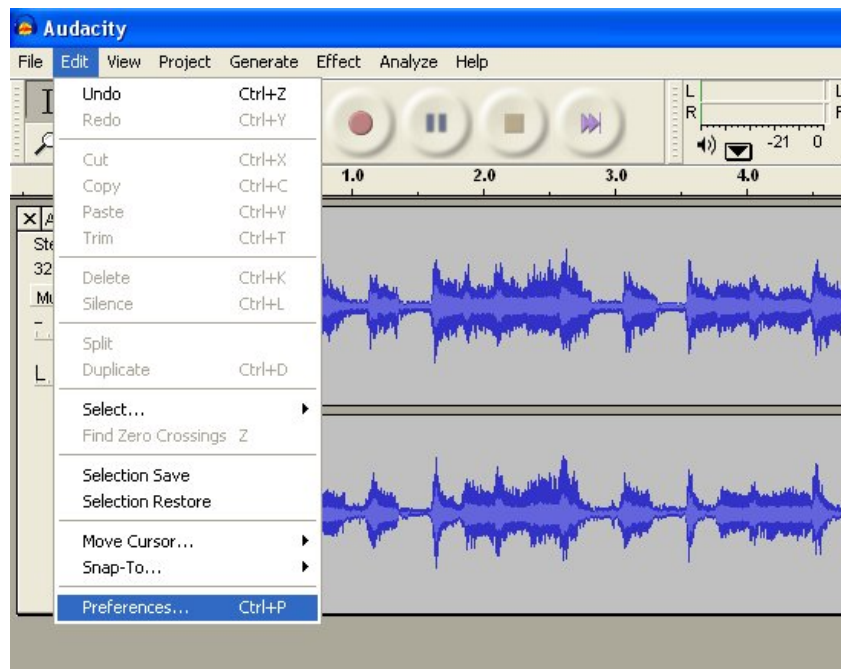
Install LAME by uncompressing just the *lame-enc.dll* from the *lame-3.97.zip* file and copy it to the C:\Program Files\Audacity\Plug-Ins folder.



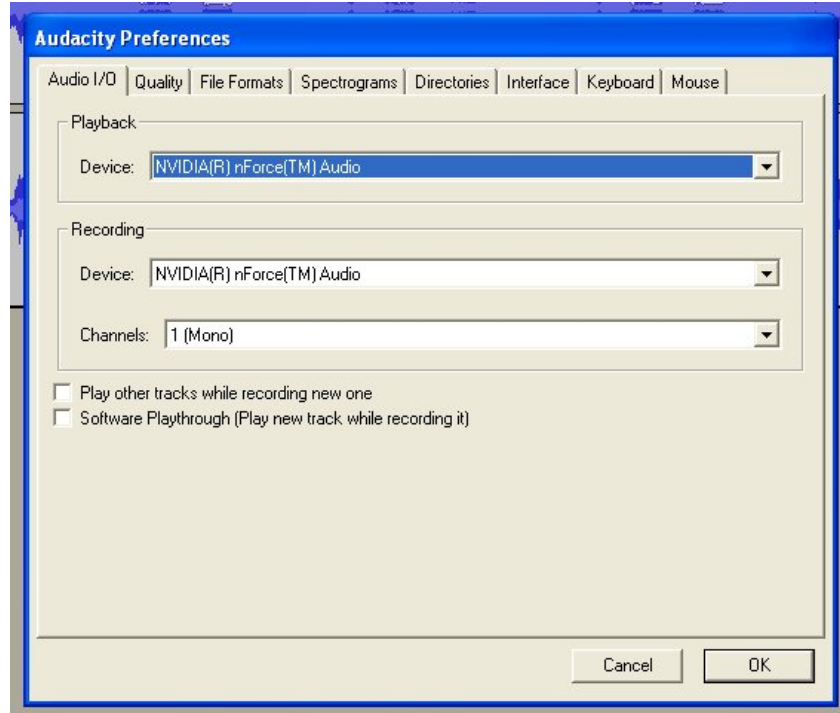
After installation, launch Audacity.



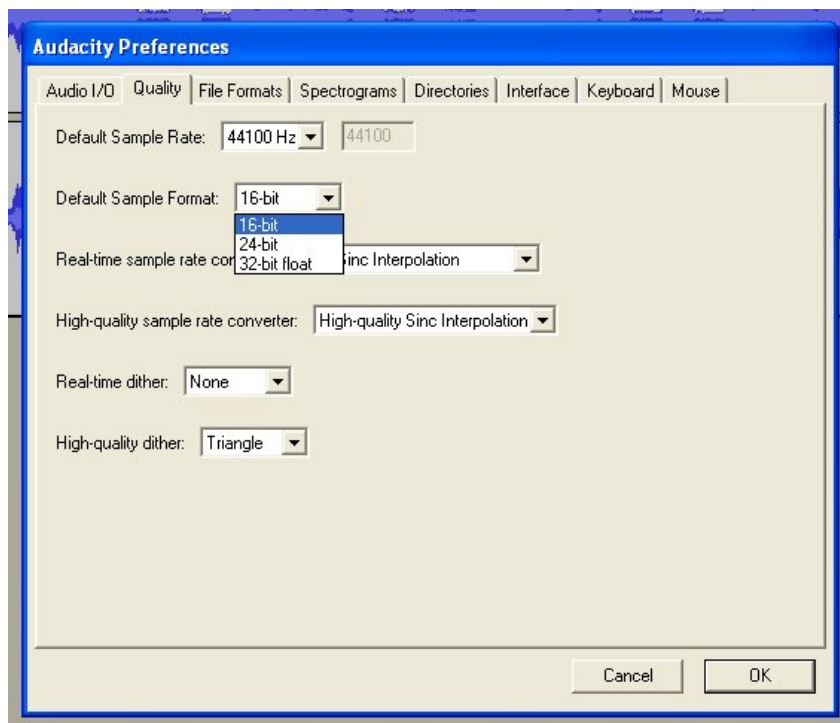
Click Edit, Preferences . . . Then edit the following settings:



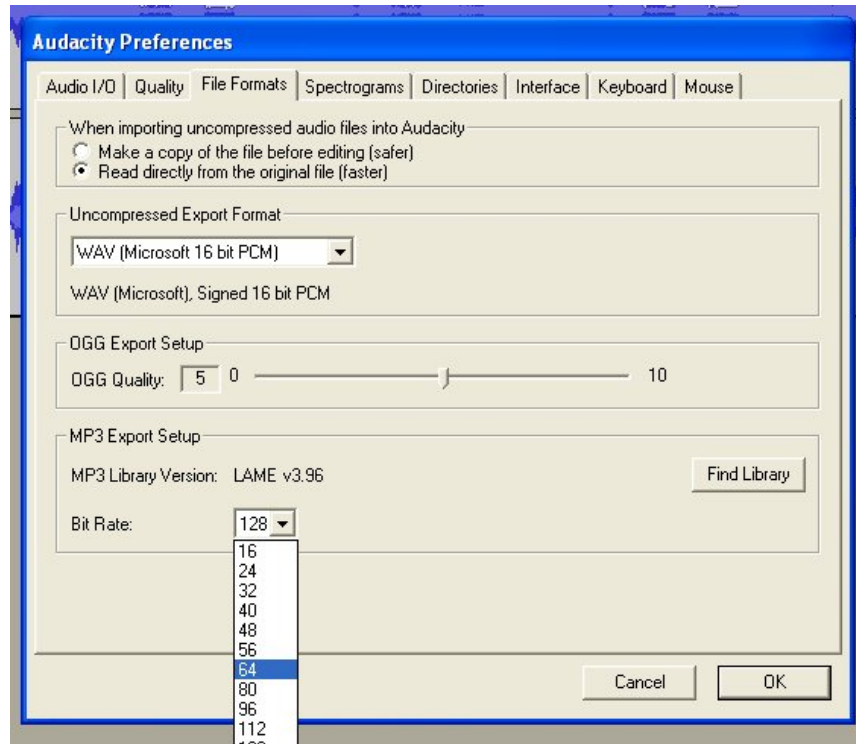
Under Audio I/O, change Channels: from the default 2 (Stereo) to 1 (Mono).



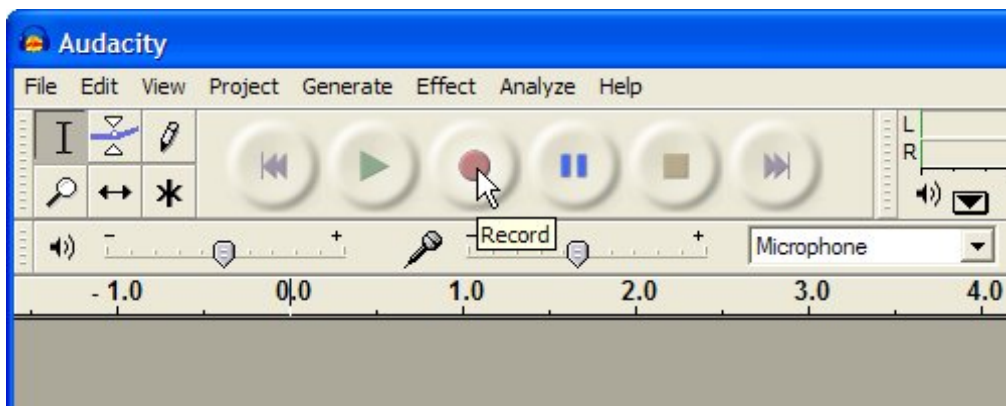
Under Quality, make sure the Default Sample Rate is 44100Hz (Industry Standard) and change the Default Sample rate to 16-bit.



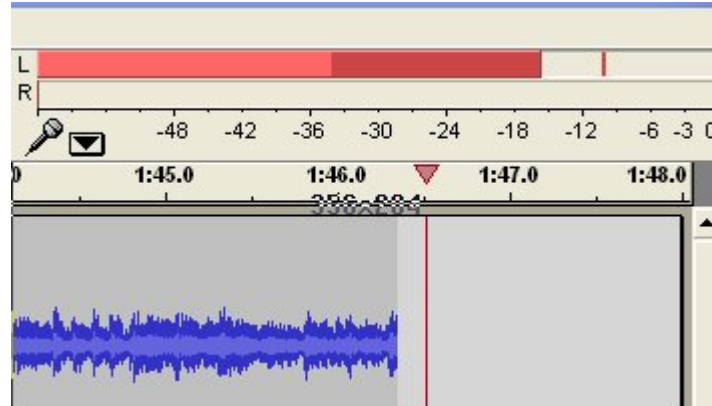
Under File Formats, change the Uncompressed Export Format to WAV (Microsoft 16 bit PCM). In the MP3 Export Setup section, click Find Library; click Yes to find the lame_enc.dll you copied earlier. Browse to the C:\Program Files\Audacity\Plug-Ins folder and select *lame_enc.dll*. Next, change the Bit Rate to 64 (this may be bumped up depending on level of quality needed).



Recording:



Do a sound check to set recording levels. Aim for -12 to -6 dB (decibel).



Create a 10-15 second “silent” sample at the beginning of the recording for use in post processing.

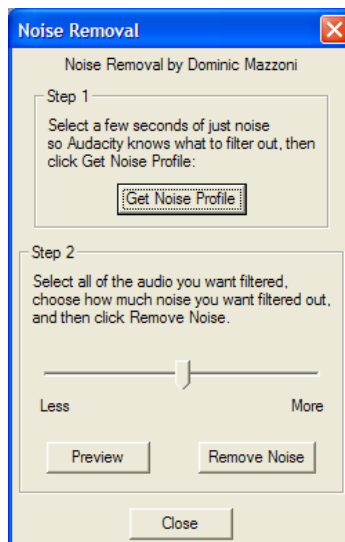
Note: The 10-15 second sample isn't really silent, you are recording background noise (fans, AC/heating, etc.) that Audacity will be able to remove from the recording.

It's a good idea to have a back-up recorder such as an mp3 player with recording function.

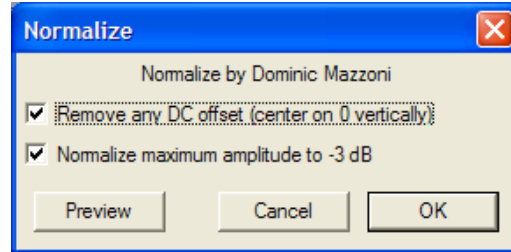
Post Production:

Reduce background noise – use initial 10-15 sec. silence. Highlight the 10-15 sec. clip of “silence.” Then click Effect, Noise Removal, Get Noise Profile.

Next, go back to the track, select the entire track by pressing Ctrl-A. Click Effect, Noise Removal, again and this time click Remove Noise.



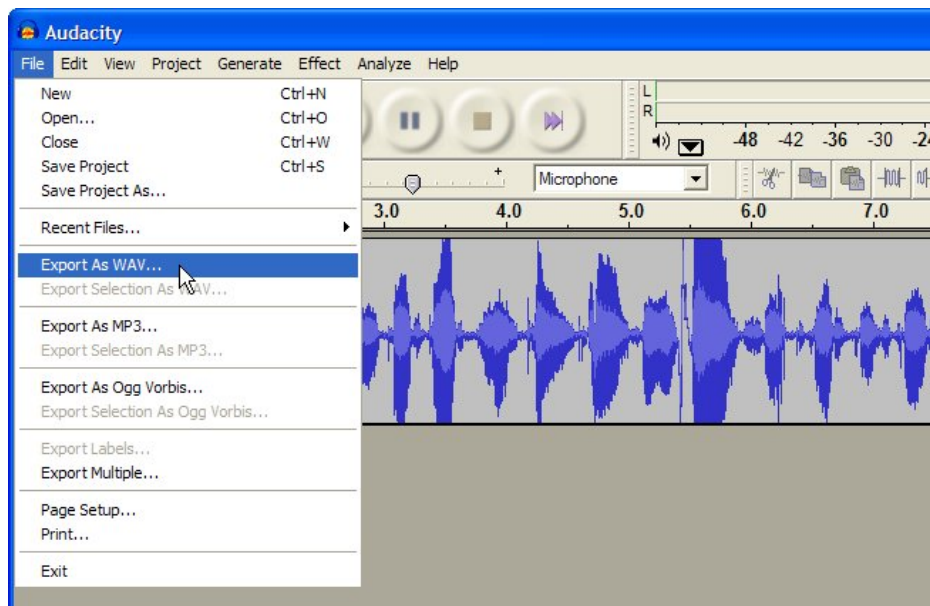
Normalizing - Select the entire clip (Ctrl-A), click Effect, and normalize.



Note: Post production is where the power of Audacity really comes into play. Good quality headphones will be necessary to listen to the recording while editing. You will be able to remove most of the annoying aspects of your recordings such as coughs, ums and ahs, and other unwanted noises.

Encoding the mp3 file

Using the LAME encoder, create the final mp3 file. Click File, and then Export As MP3. Give the file a name; it may be helpful to establish a naming convention (podcast001.mp3, podcast002.mp3, etc.)



If the mp3 will be used for a Podcast, editing the id tags will be helpful for those listening with an mp3 player. That's the information that typically scrolls along the mp3 player screen.