

Using the Windows Audacity Sound Editor with the LAME MP3 Exporter Add-On

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The purposes of this note are:

1. Provide a download link for Audacity®, which is a free, open source software product that can run under Windows and is used to record and edit sounds.
2. Provide a link to the LAME MP3 Exporter, which is a free, open source MP3 encoder that Audacity can use to export files in MP3 format.
3. Show how to use Audacity to export 128 Kbps Constant Bit Rate (CBR) MP3 files that can be used by all Light O Rama products. This conversion fixes the timing problem with files ripped at 128 Kbps by Windows Media Player 10.
4. Show how to use Audacity to equalize the volume of your audio files.

Follow this link to download and install a copy of Audacity:

<http://audacity.sourceforge.net>

Follow this link to download a copy of the LAME MP3 encoder:

http://lame.buanzo.com.ar/lame_enc.dll

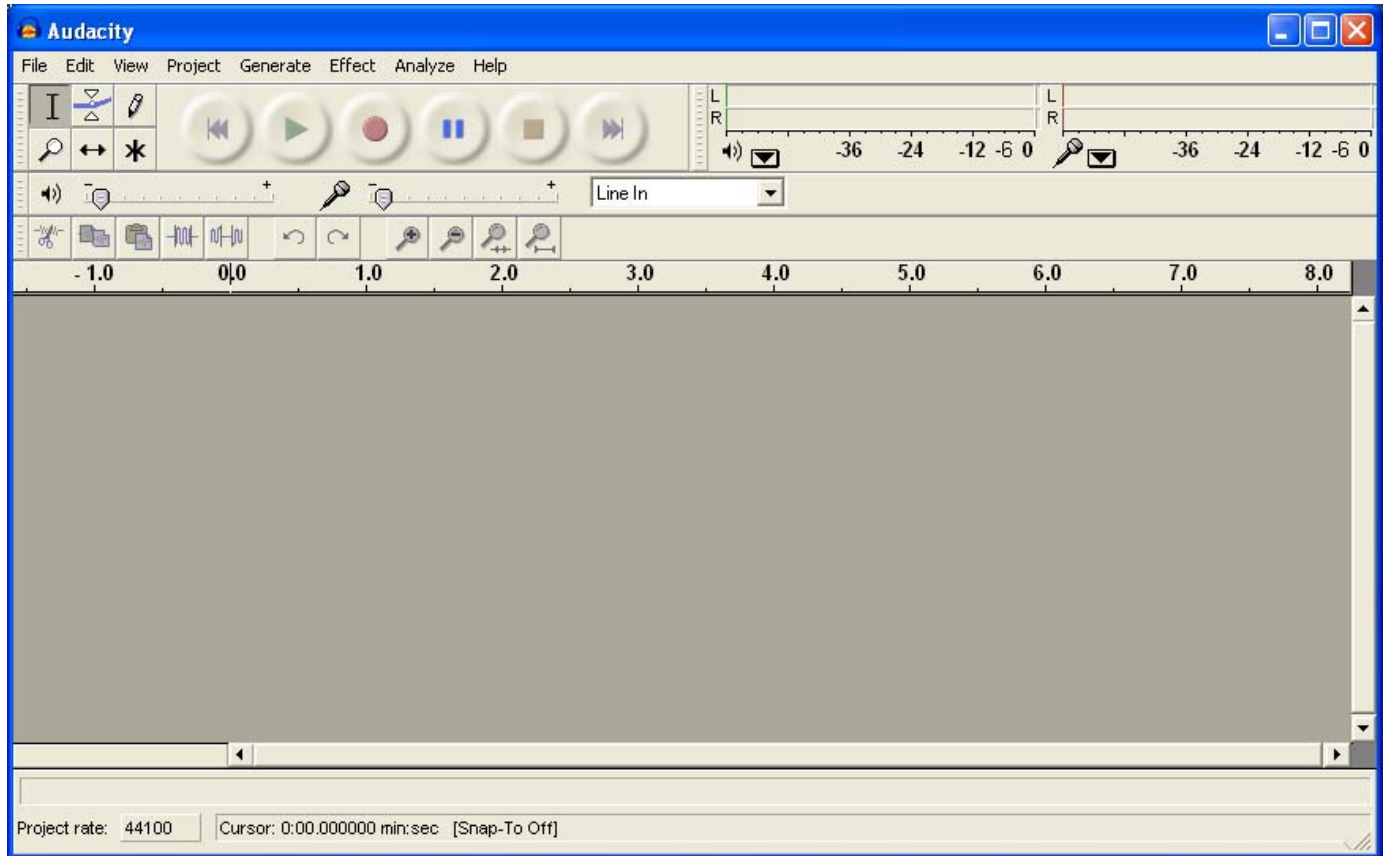
-or-

http://www.gaclrecords.org.uk/lame_enc.dll

Save this file in the same directory as Audacity, normally C:\Program Files\Audacity. If this does not take you to the lame encoder, go back to this link: <http://audacity.sourceforge.net> and follow the Wiki link. The Wiki will have instructions for installing the LAME encoder. (Audio to ... MP3) – Use the Windows instructions for All users.

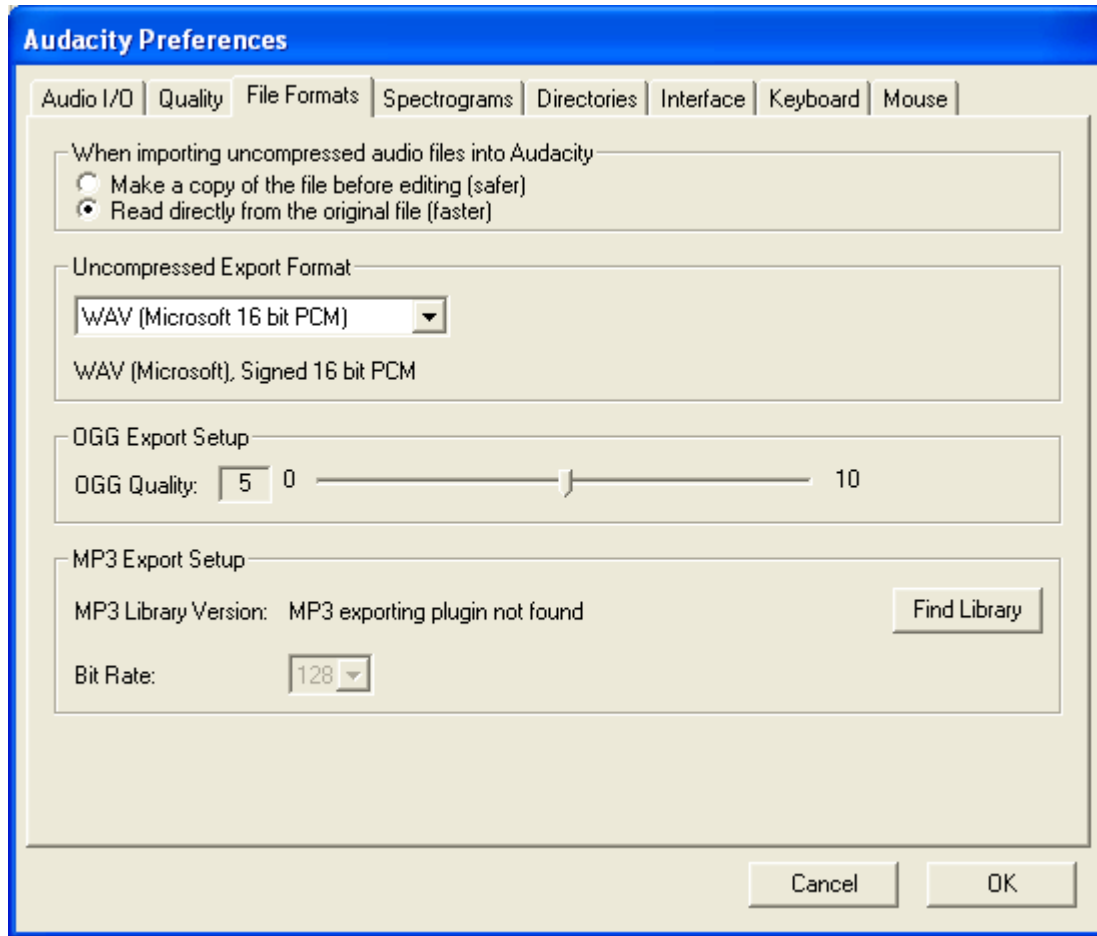
Running Audacity

Double-click the Audacity desktop icon or use Start -> All Programs -> Audacity and you will see this window:



Installing the LAME MP3 Exporter

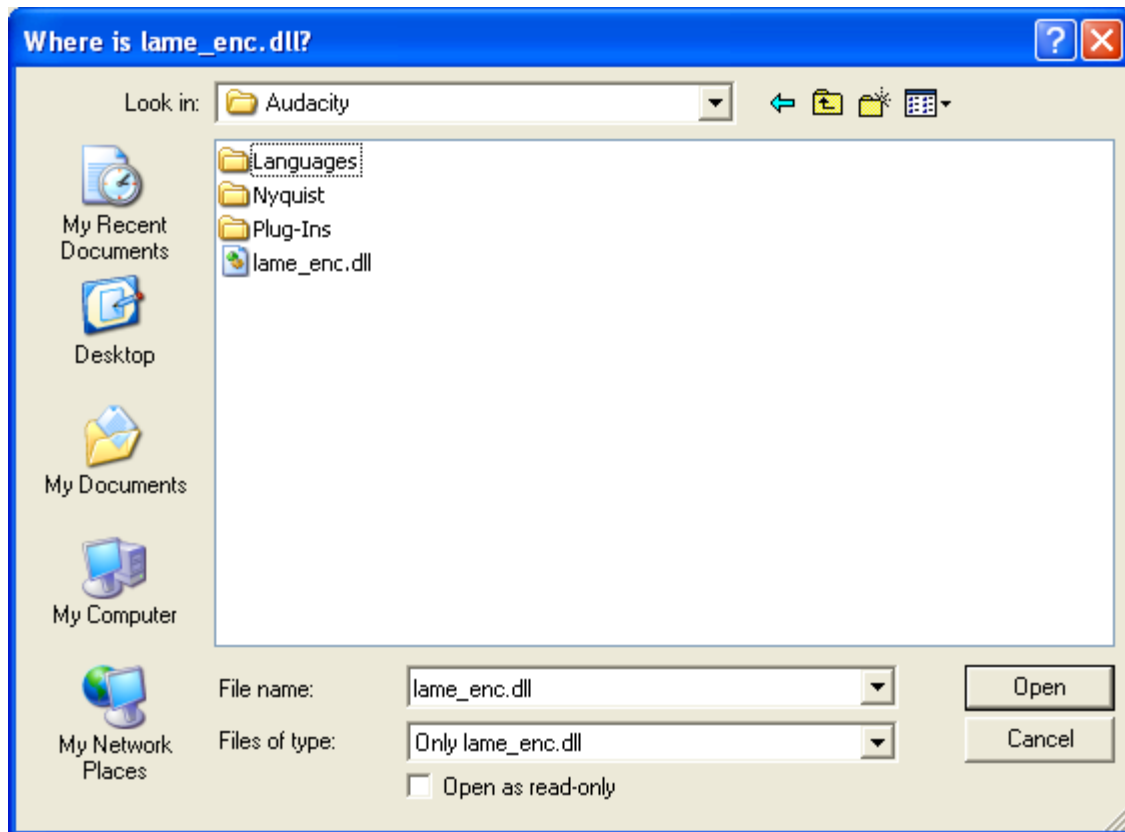
Click *EDIT ► Preferences...* and then click the “File Formats” tab. You will see this window:



In the “MP3 Export Setup” section, click the “Find Library” button. You will see this window:

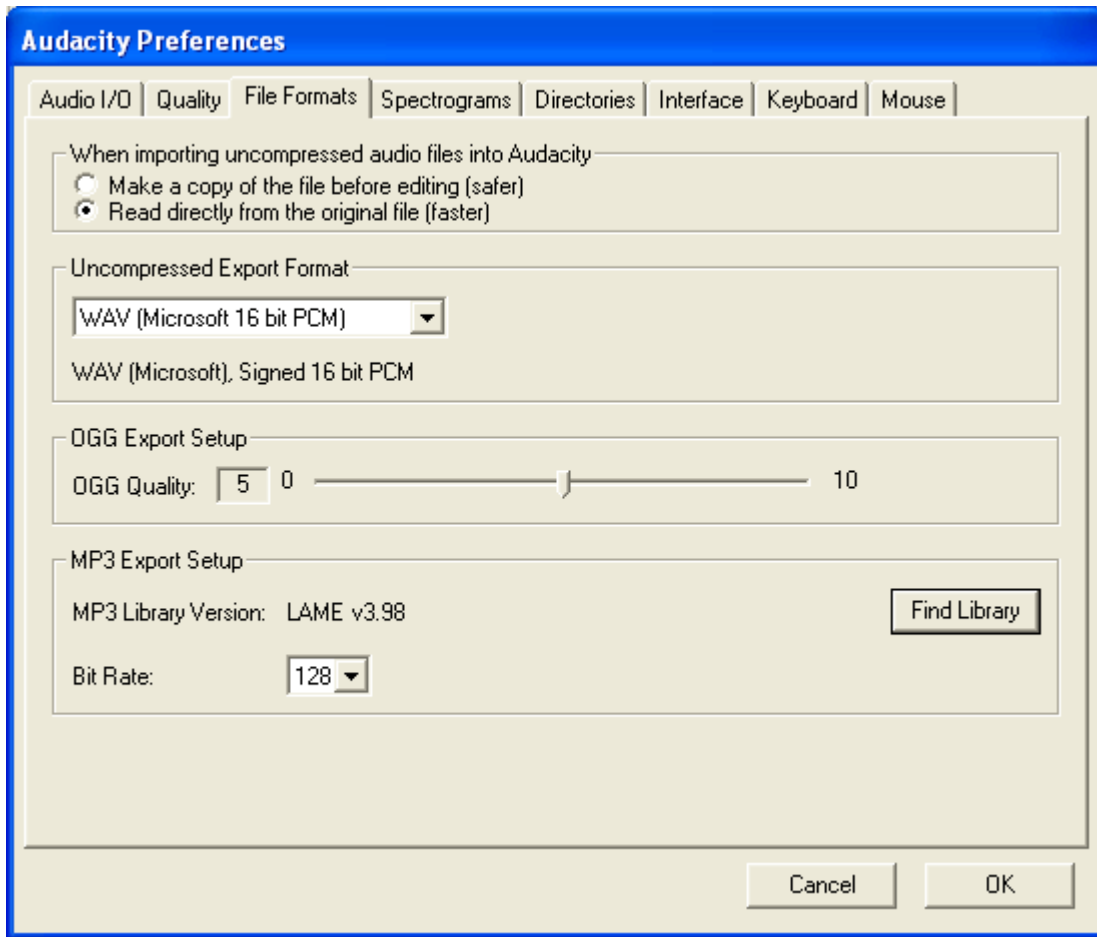


Click the “Yes” button. Use the “Where is lame_enc.dll” window to browse to where you saved the LAME encoder.



Select “lame_enc.dll” and click the “Open” button.

You will be back at this window:

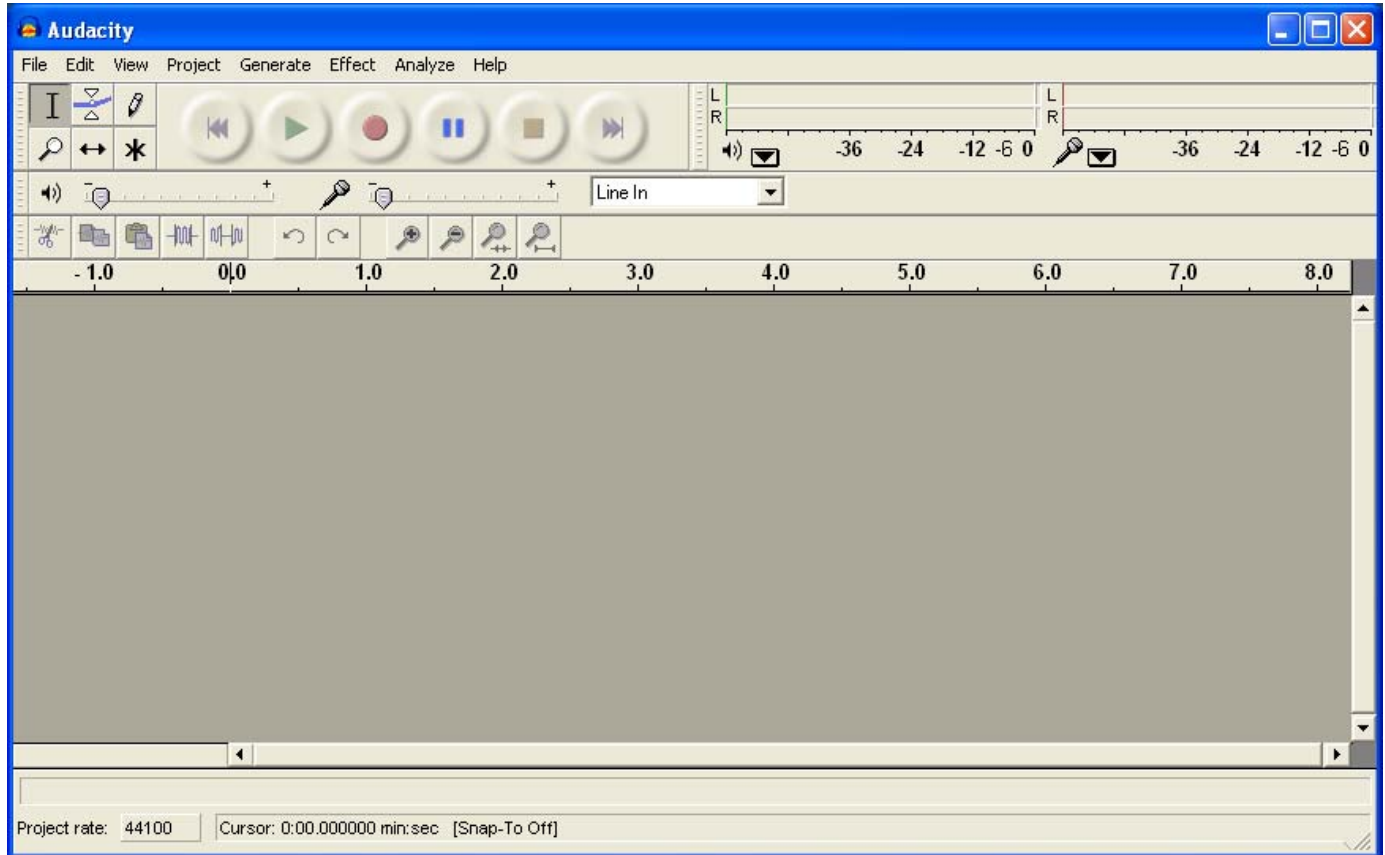


In the “MP3 Export Setup” section use the “Bit Rate:” drop down menu to select 128 and click “OK.” Audacity is now capable of exporting Constant Bit Rate, 128 Kbps MP3 files. This file format can be used by both the Light-O-Rama Windows ShowTime Software and Light-O-Rama Show directors (DC-MP3 & mDM-MP3.)

Normalizing Audio File for Use with Light-O-Rama Products

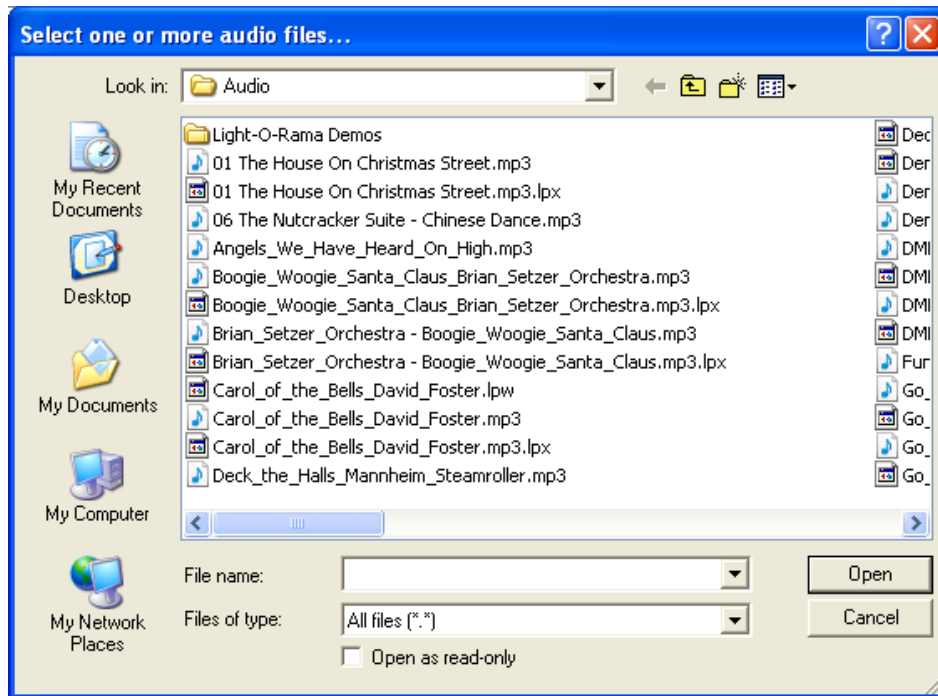
Some audio file formats can cause problems with the Sequence Editor and/or Show Directors. This is usually caused by the encoding of the audio file. Audacity can export any file it can read as a Constant Bit Rate (CBR) MP3 file at 128Kbps. This format can be used by all Light O Rama products and will not have play or timing problems.

Start Audacity and you will see this window:

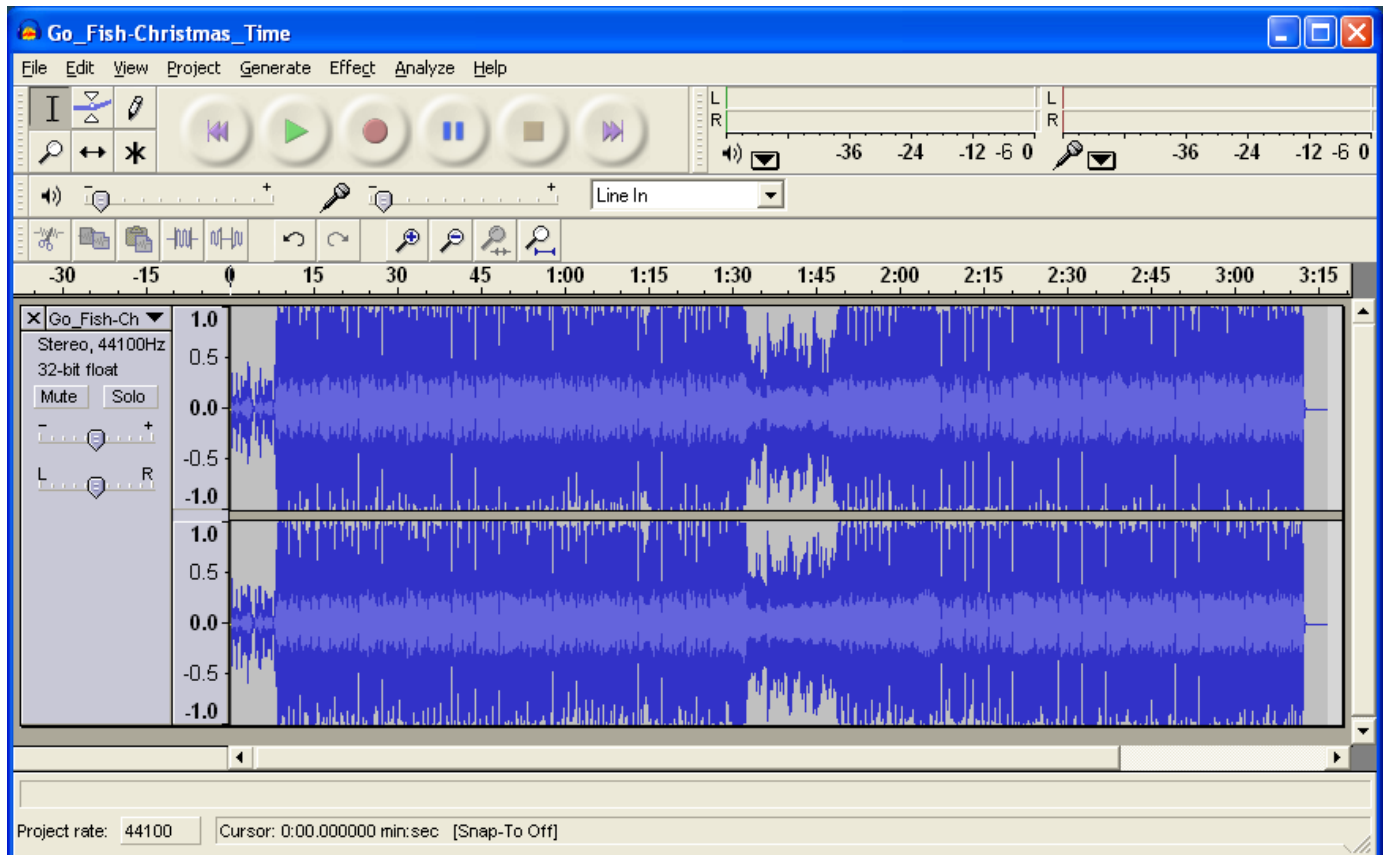


Normally, Light O Rama stores the audio file for sequences in \My Documents\Light-O-Rama\Audio. If you are going to associate the file you are working on with a musical sequence, it is best to save the MP3 file in this folder.

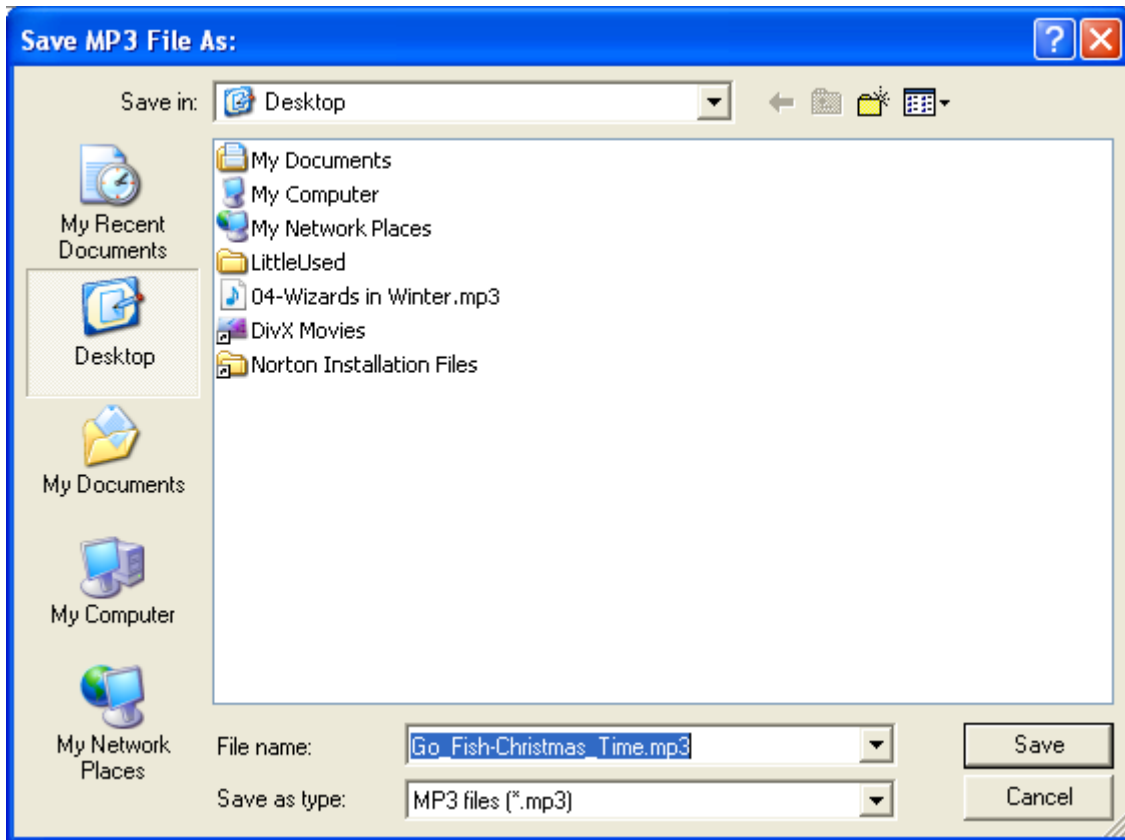
Click File -> Open and you will see this window:



Use this window to browse to and select the song you want to normalize. Click that song and click the Open button. Audacity will import that audio file and the window will look like this:



Click File -> Export as MP3 and you will see this window:

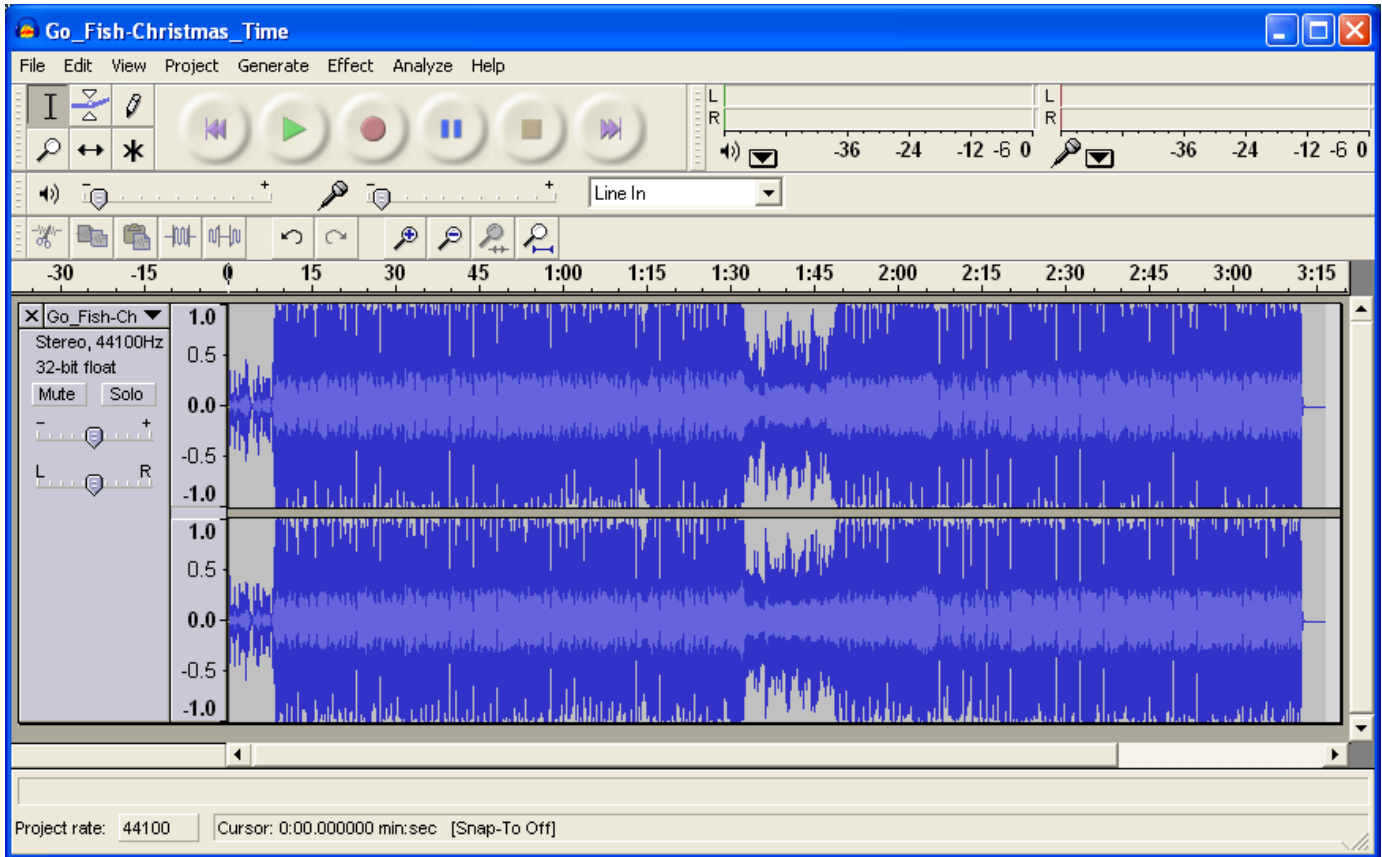


Choose a name for the audio file in the “File name:” box, browse to where you want to save it and click the Save button. Audacity will export your audio file in a format that Light O Rama Products can use.

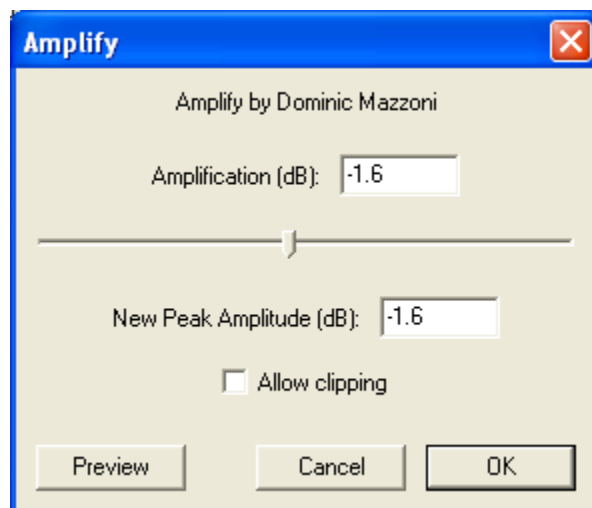
If this file is going to be associated with a musical sequence, it should have been saved in the Light O Rama audio folder. This is normally \My Documents\Light-O-Rama\Audio. After the file has been saved, you will have to associate the audio file with the musical sequence. To do this, open the Sequence Editor, and select the musical sequence (not the audio file). The Sequence Editor may complain that there is no media file associated with this sequence – this is OK, we will fix it momentarily. Click Edit -> Media File and use the “Select Media File” window to browse to and select the mp3 file and click the Open button. Remember to save the sequence (File -> Save) otherwise the association with the audio file will be lost when you exit the Sequence Editor.

Using Audacity to Change the Volume Level of a File

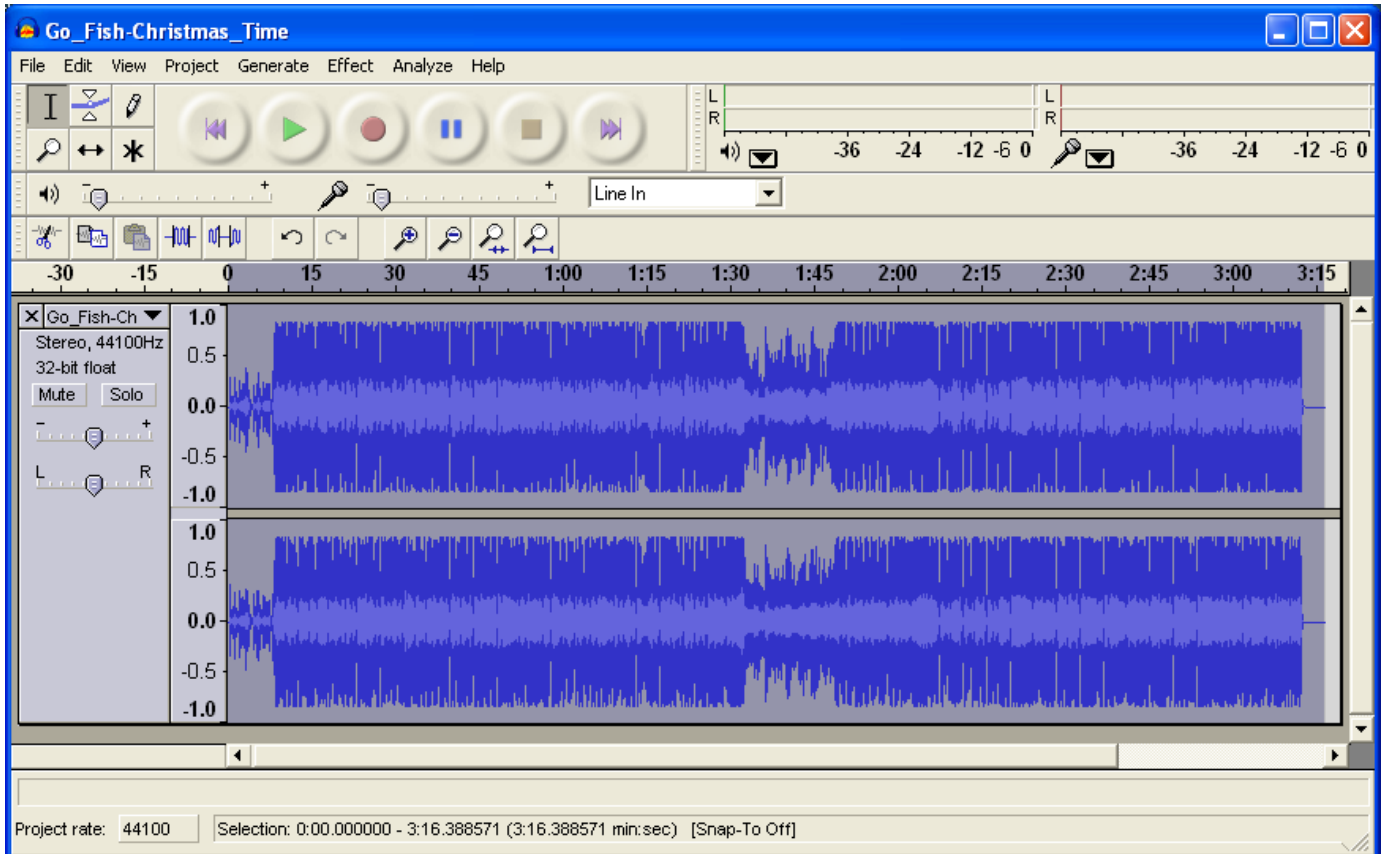
Click *File* ► *Open* and use the file browsing window that comes up to open your audio file. Audacity reads a variety of file formats. After Audacity has read your file you will see a window like this:



Click *Edit* ► *Select...* ► *All* (or type control-A) to select the entire wave form. Click *Effect* ► *Amplify...* and you will see the following window:

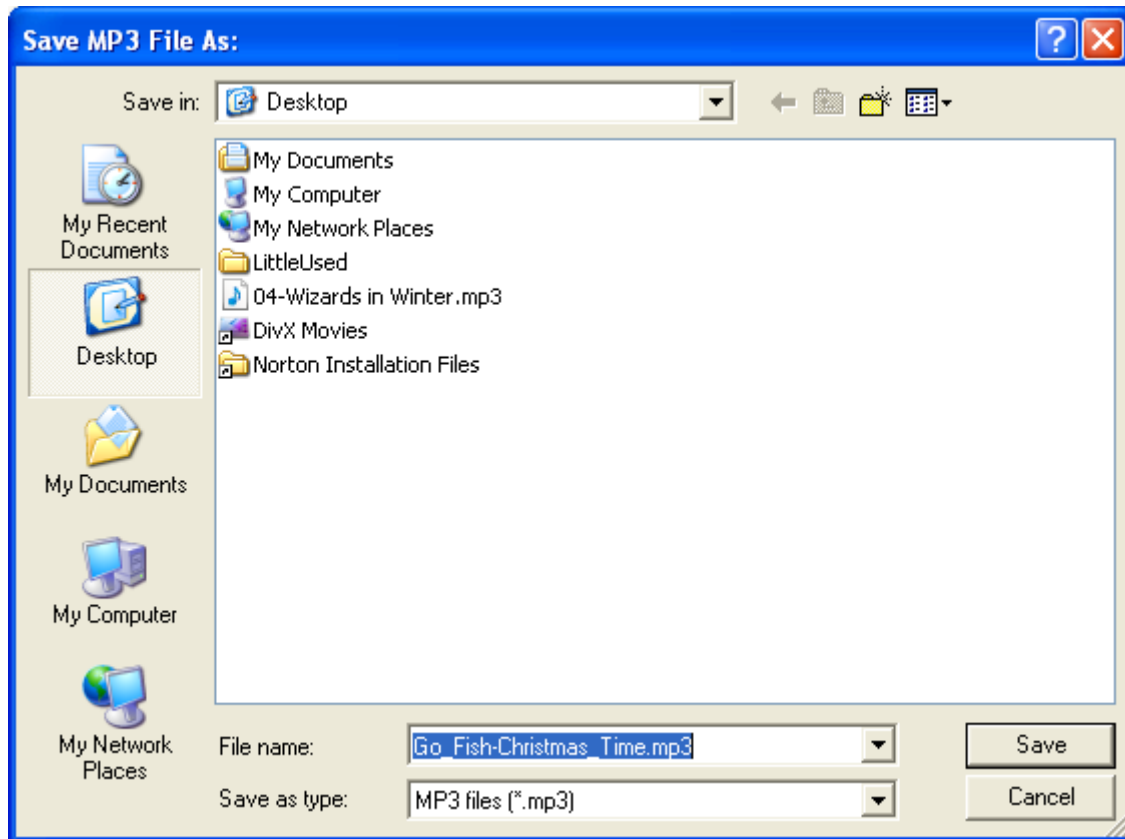


Adjust the amplification (0.0dB is no change, move the slider left to lower volume level) and click “OK.” In this example the volume level is being lowered by 1.6 dB. When you click “OK” Audacity will recompute the waveform volumes and the waveform will look like this:



You can see that it has shrunk the waveform a little. You can click *Edit ► Undo Amplify* or type control-Z to undo the amplify. To equalize a group of songs, read them into Audacity and look at the average size of their respective waveforms and attempt to get them roughly equal. You can use the play button ► to listen to the various songs.

When you are happy with the result, click File -> Export as MP3 and you will see this window:



Choose a name for your file in the “File name:” box, browse to where you want to save it and click the Save button.