

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

May 18, 2012

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The purposes of this note are:

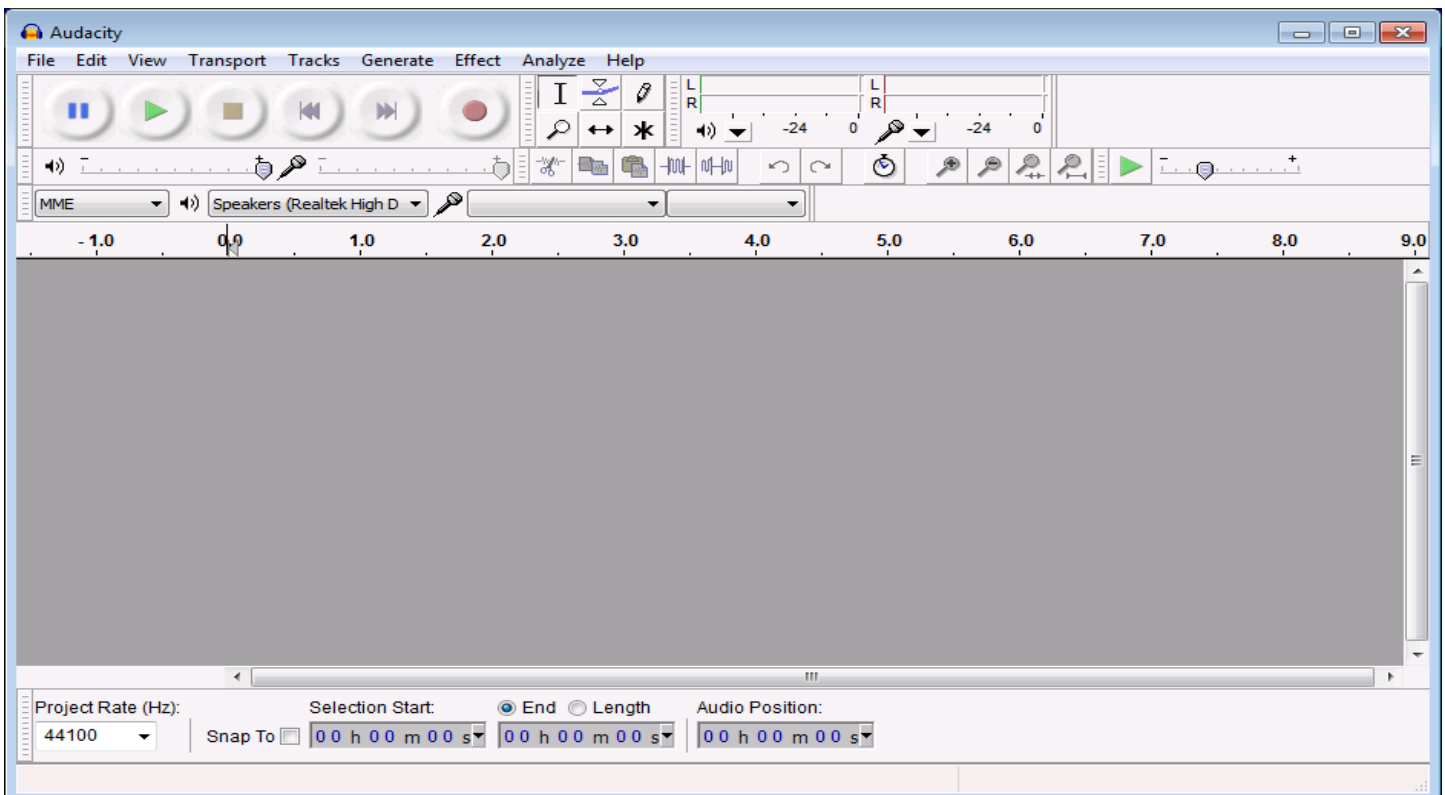
1. Provide a download link for Audacity®, which is a free, open source software product that can run under Windows and is used to record and edit sounds.
2. Provide a link to the LAME MP3 Exporter, which is a free, open source MP3 encoder that Audacity can use to export files in MP3 format.
3. Show how 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.
5. Show how to add/remove silence to the start and end of songs

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

<http://audacity.sourceforge.net>

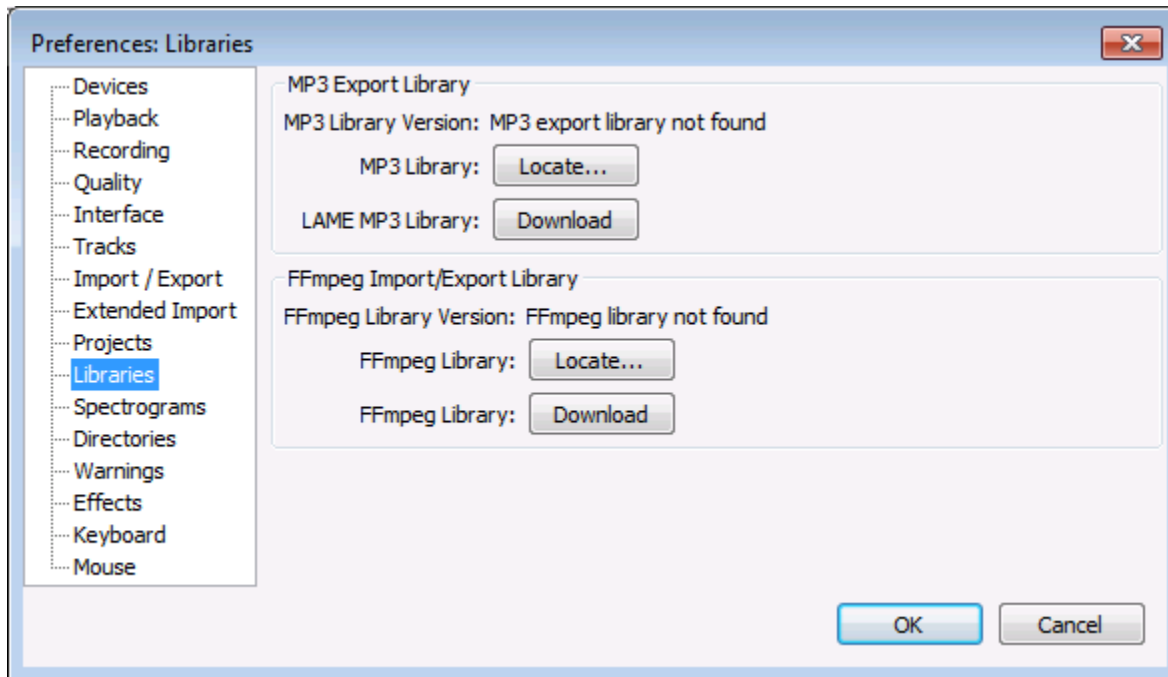
Running Audacity

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 “Libraries” option. You will see this window:

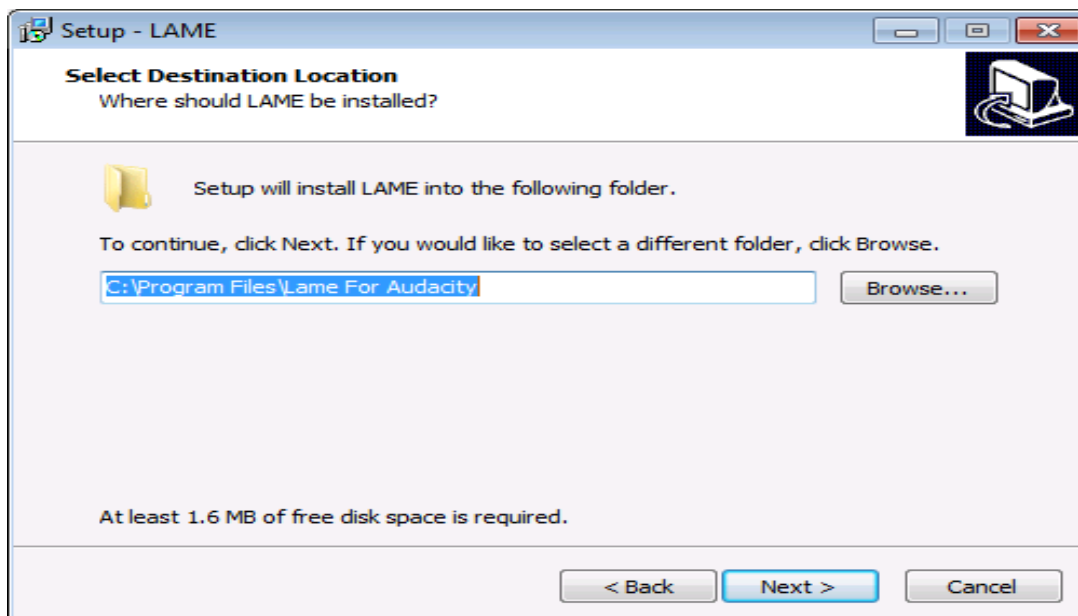


Under the “MP3 Export Library” click the “Download” Button. This will bring you to a web page with a lot of junk stuff. Locate the download link as shown below and download and install the Lame encoder for Windows:

For FFmpeg/LAME on Windows:

[Lame v3.99.3 for Windows.exe](#)

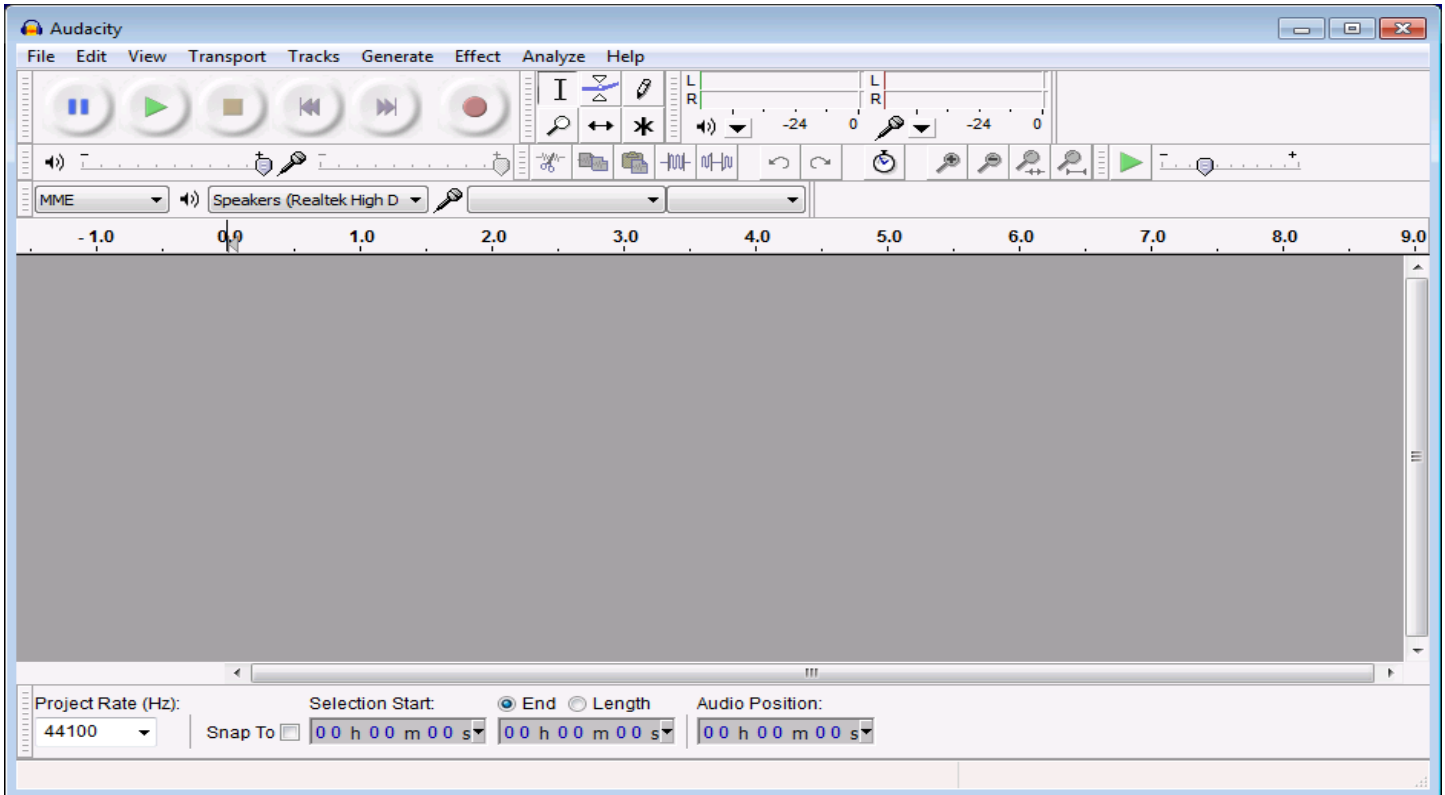
When the installer is running you will see this screen. It is best to use the default install location “C:\Program Files\Lame For Audacity”:



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.

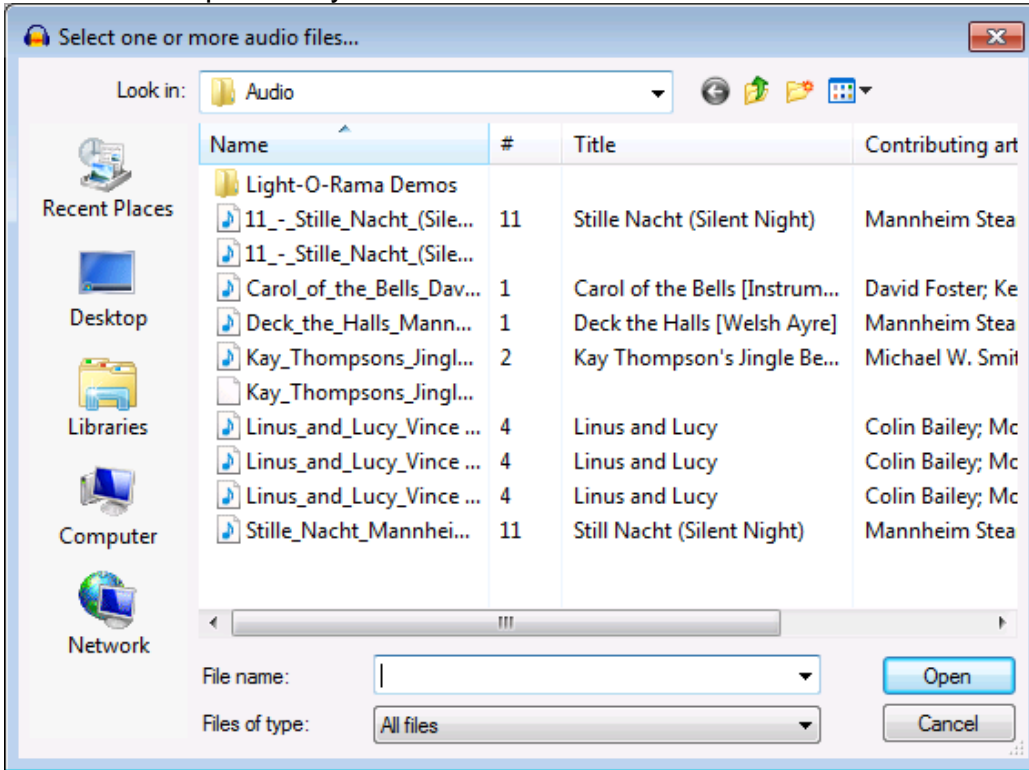
Start Audacity and you will see this window:



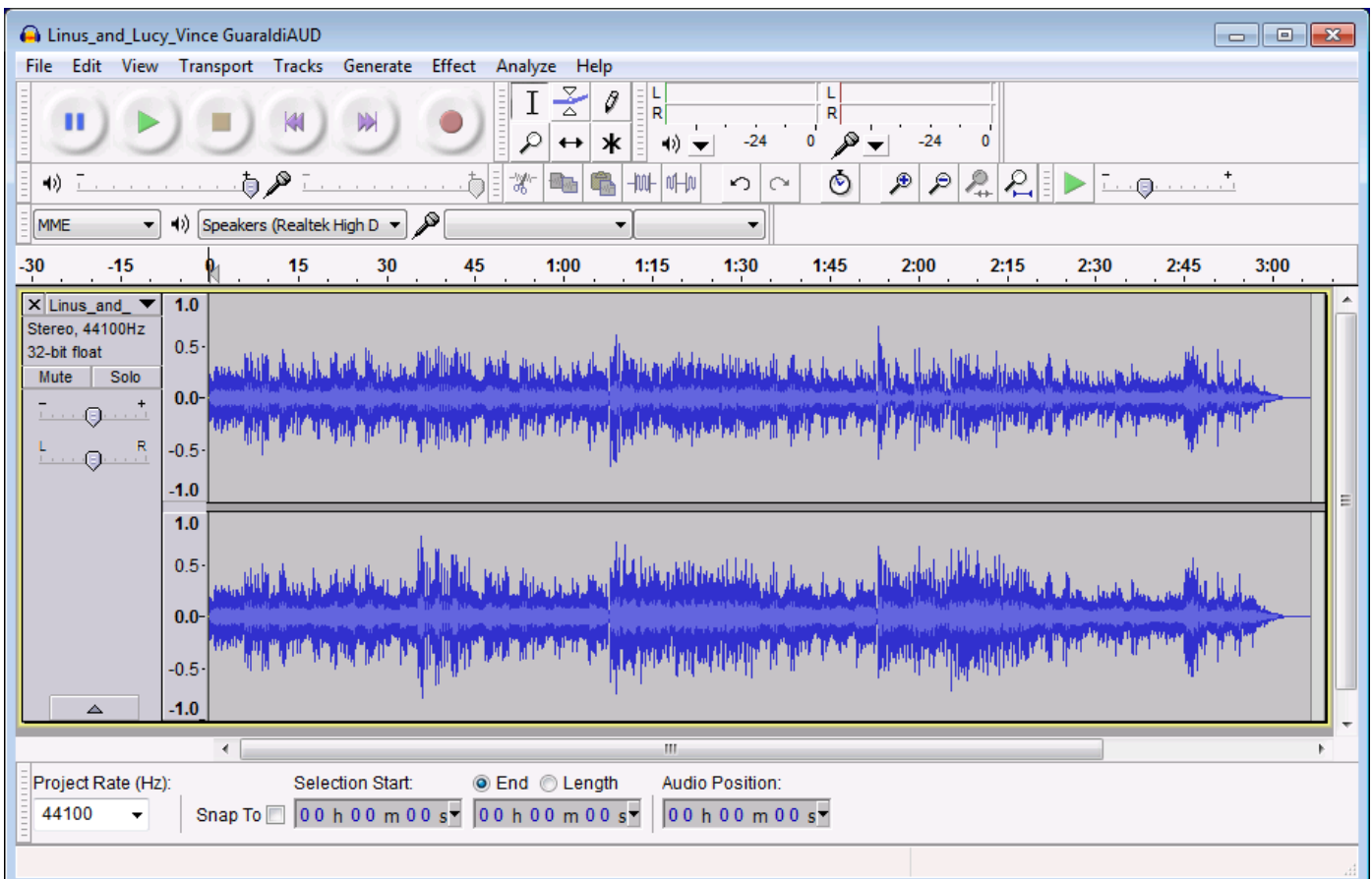
Normally, Light O Rama stores the audio file for sequences in `\My Documents\Light-ORama\Audio`. If you are going to associate the file you are working on with a musical sequence, it is best to save the MP3 file in this folder.

Audacity Sound Editor with Lame MP3 Exporter Add-On

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

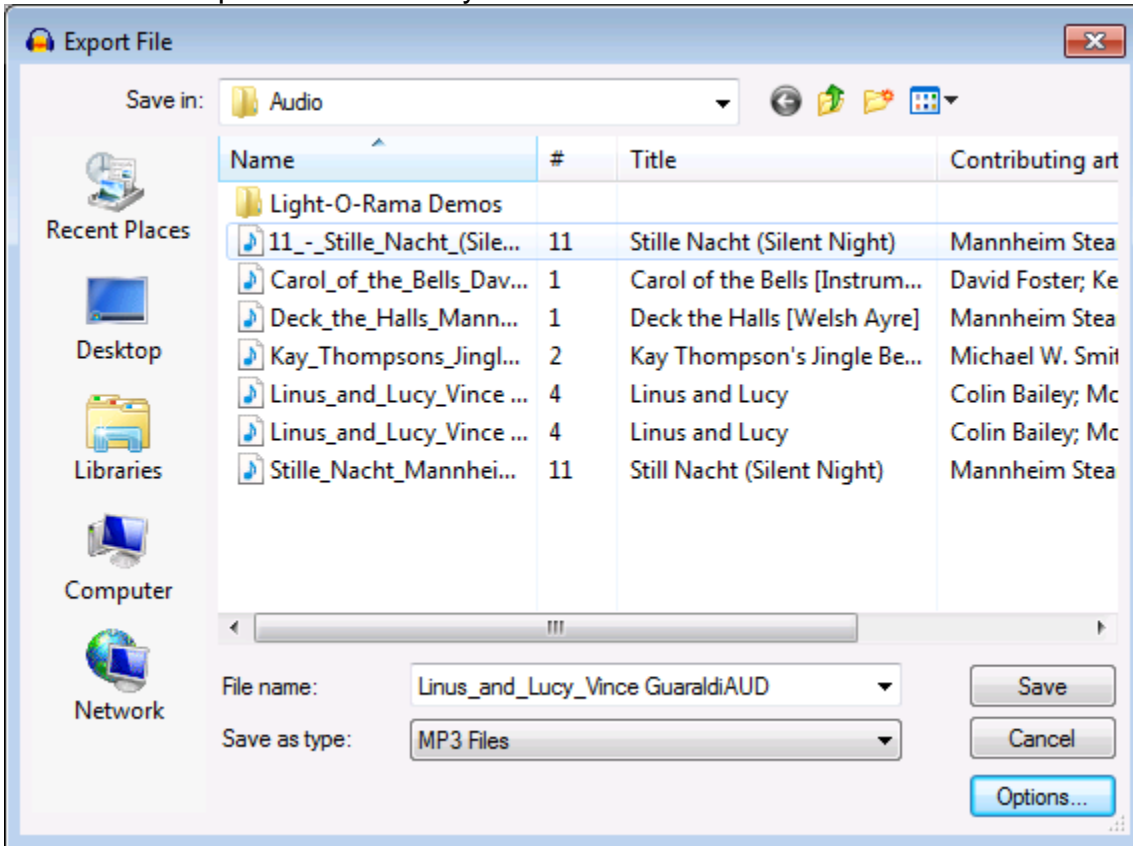


Use this window to browse to and select the song you want to normalize. Click that song and click the Open button. Audacity will import that audio file and the window will look like this:

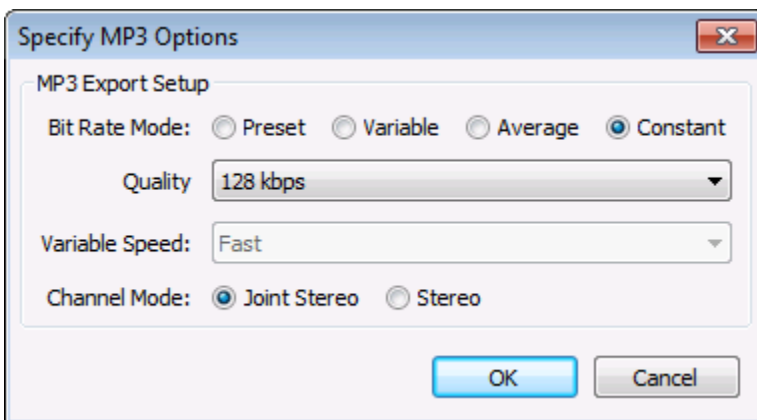


Audacity Sound Editor with Lame MP3 Exporter Add-On

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



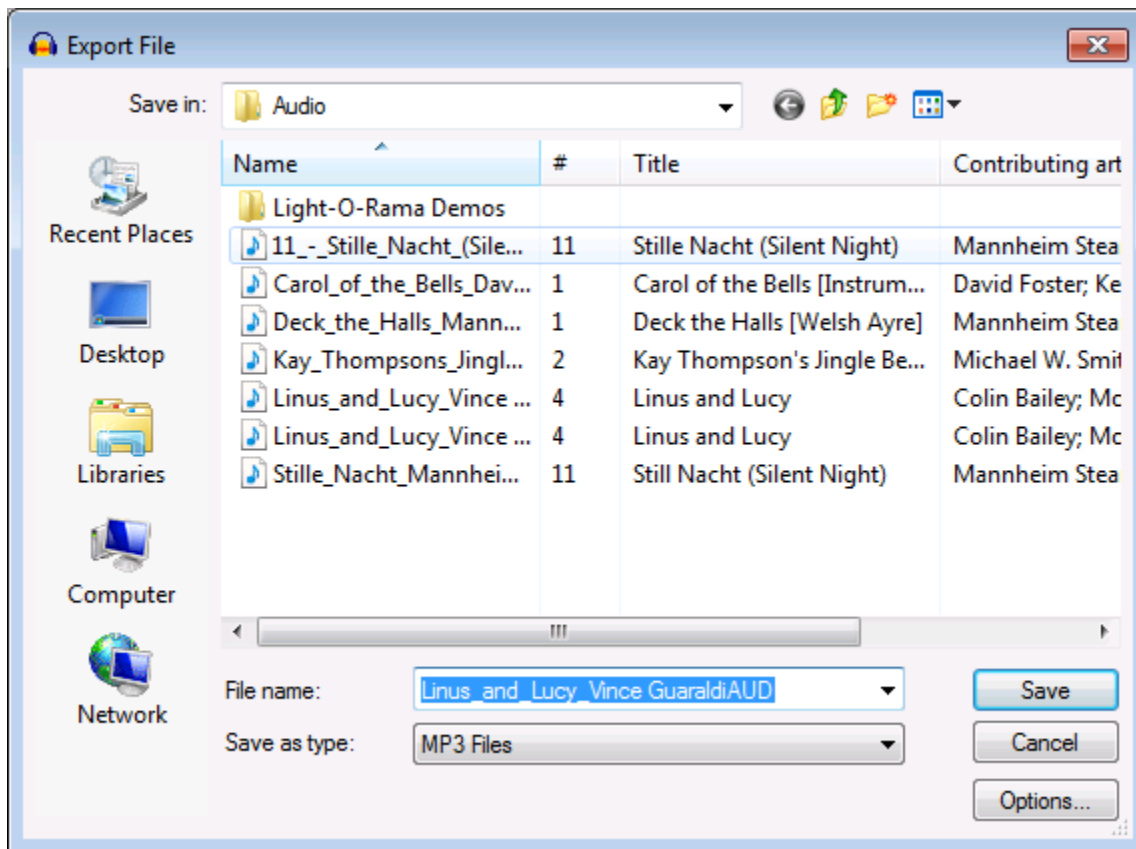
Click on the Options button and you will see this window:



Choose "Constant" for the Bit Rate Mode. If you are going to use one of the Light-O-Rama MP3 director cards then select 128kbps as the Quality.

Audacity Sound Editor with Lame MP3 Exporter Add-On

Click OK on the “Specify MP3 options” Window and it will bring you back to the Export File Window:

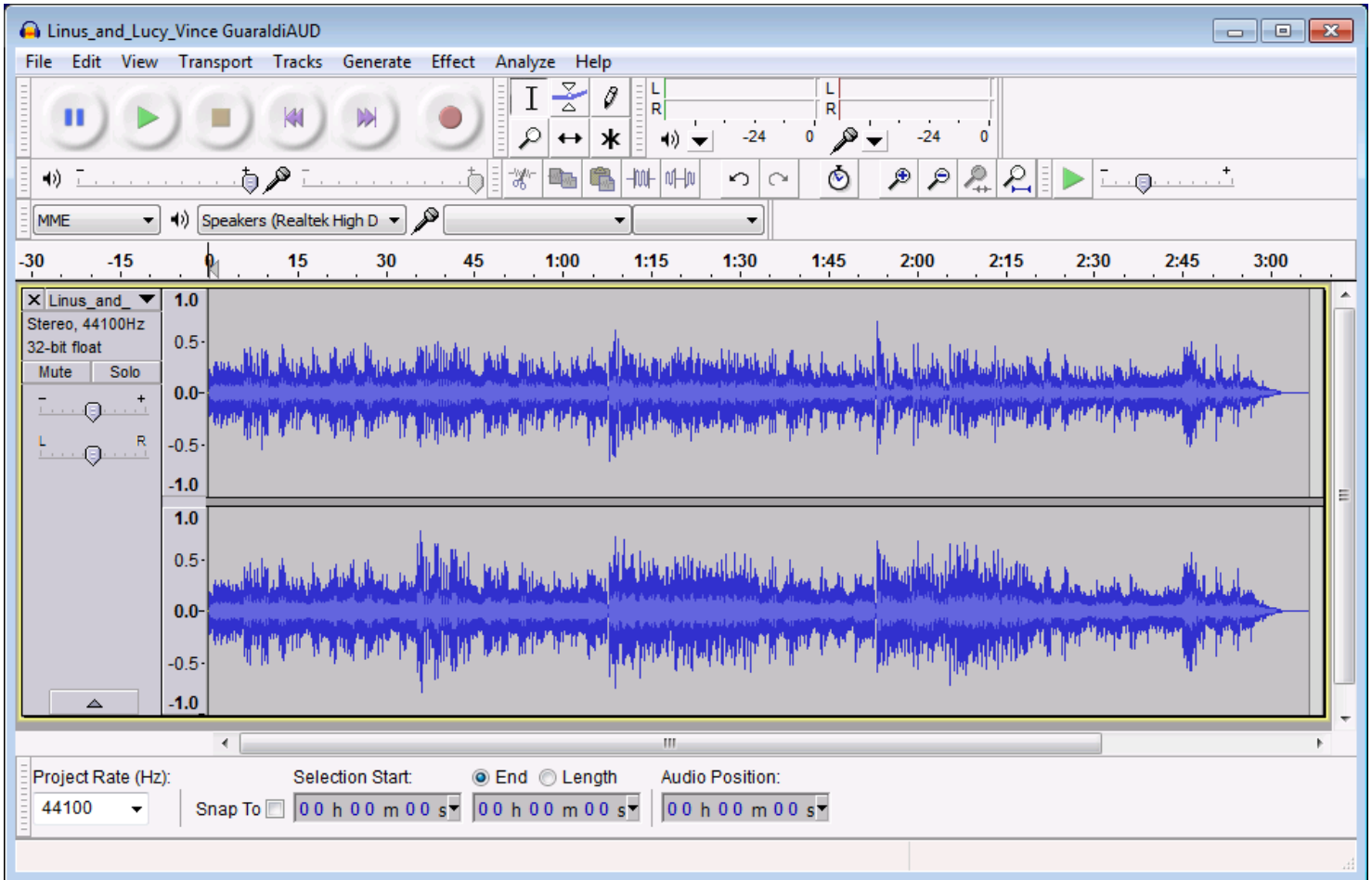


Choose a name for the audio file in the “File name:” box, browse to where you want to save it and click the Save button. Audacity will export your audio file in a format that Light O Rama Products can use.

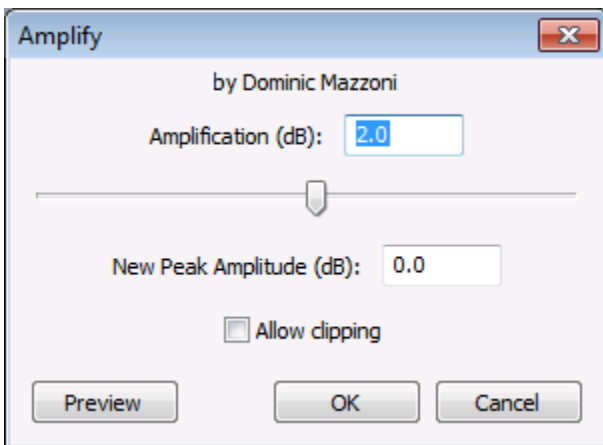
If this file is going to be associated with a musical sequence, it should have been saved in the Light O Rama audio folder. This is normally \My Documents\Light-O-Rama\Audio. After the file has been saved, you will have to associate the audio file with the musical sequence. To do this, open the Sequence 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:

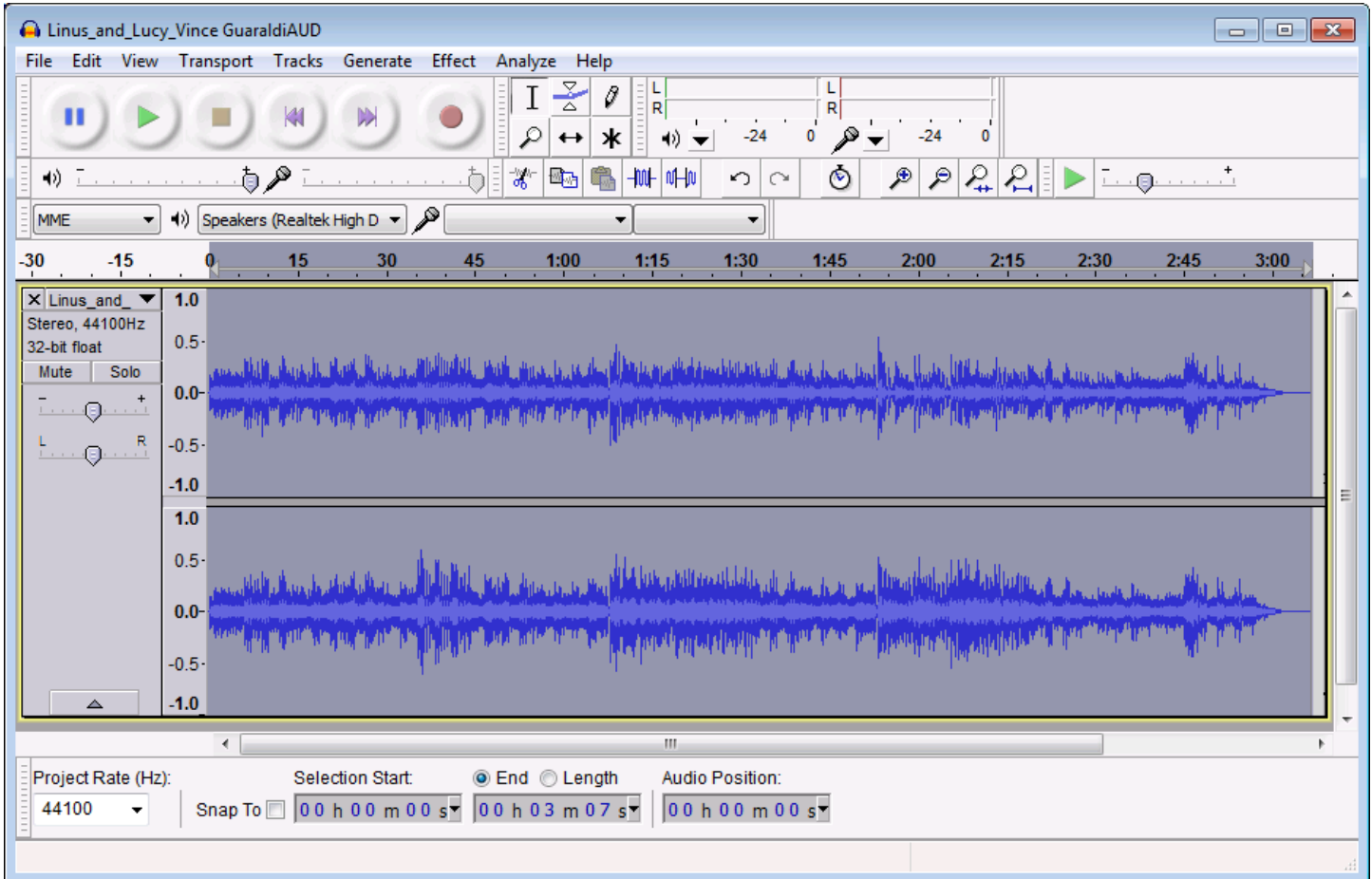


Click *Edit* ► *Select...* ► *All* (or type control-A) to select the entire wave form. Click *Effect* ► *Amplify...* and you will see the following window:



Audacity Sound Editor with Lame MP3 Exporter Add-On

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:



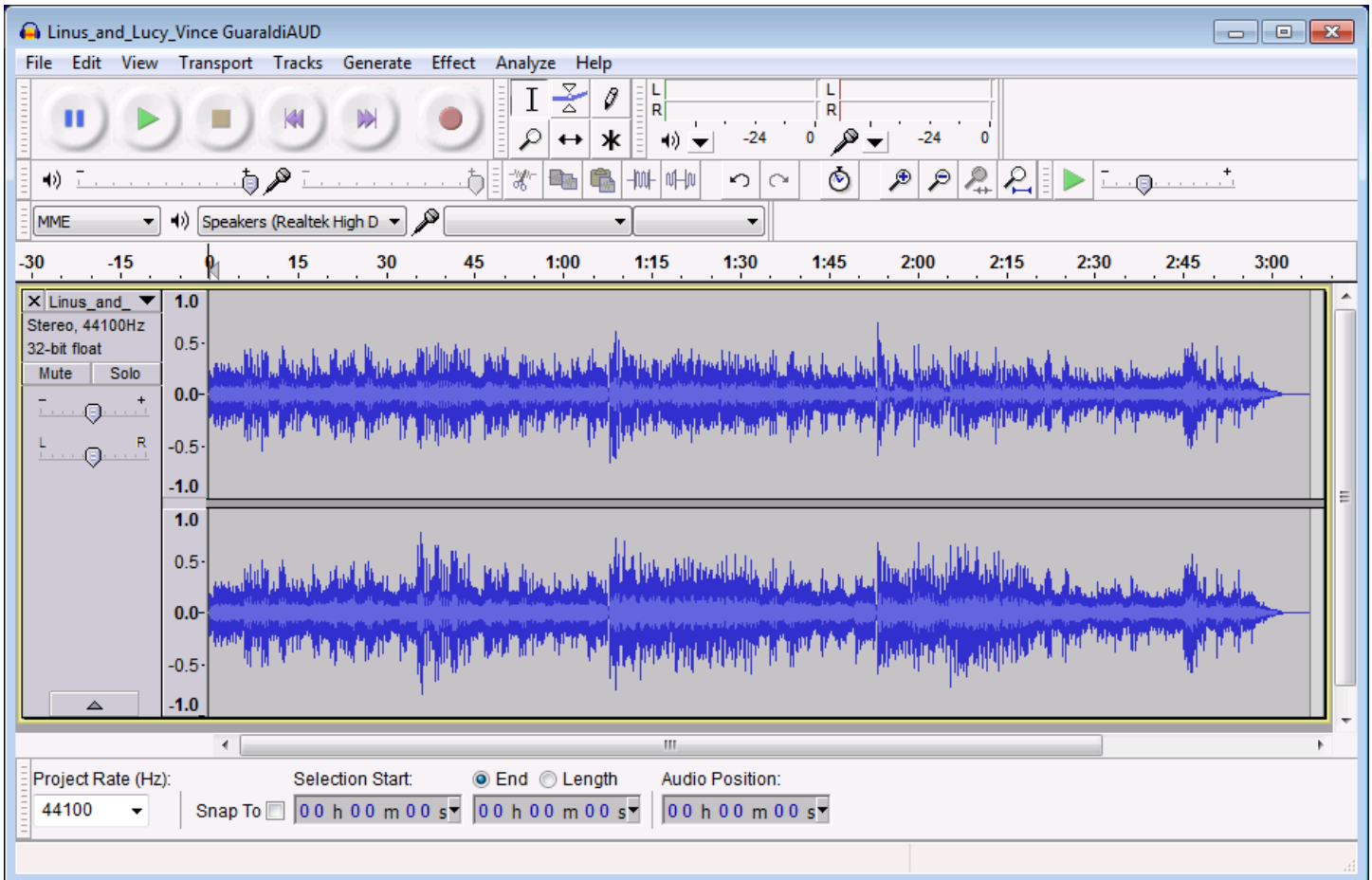
You can see that it has shrunk the waveform a little. You can click *Edit* ► *Undo Amplify* or type control-Z to undo the amplify. To equalize a group of songs, read them into Audacity and look at the average size of their respective waveforms and attempt to get them roughly equal. You can use the play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

When you are happy with the result, click File -> Export as MP3 and export as described earlier.

Using Audacity to Add/Remove silence at the start/end of the song

Click *File* ► *Open* and use the file browsing window that comes up to open your audio file.

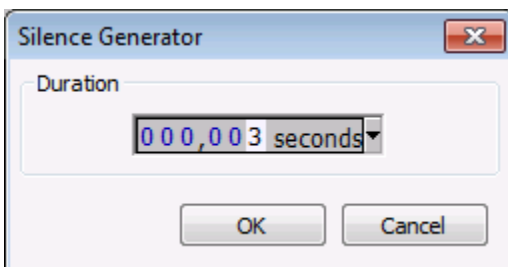
Audacity reads a variety of file formats. After Audacity has read your file you will see a window like this:



To Add silence to a start of the song.

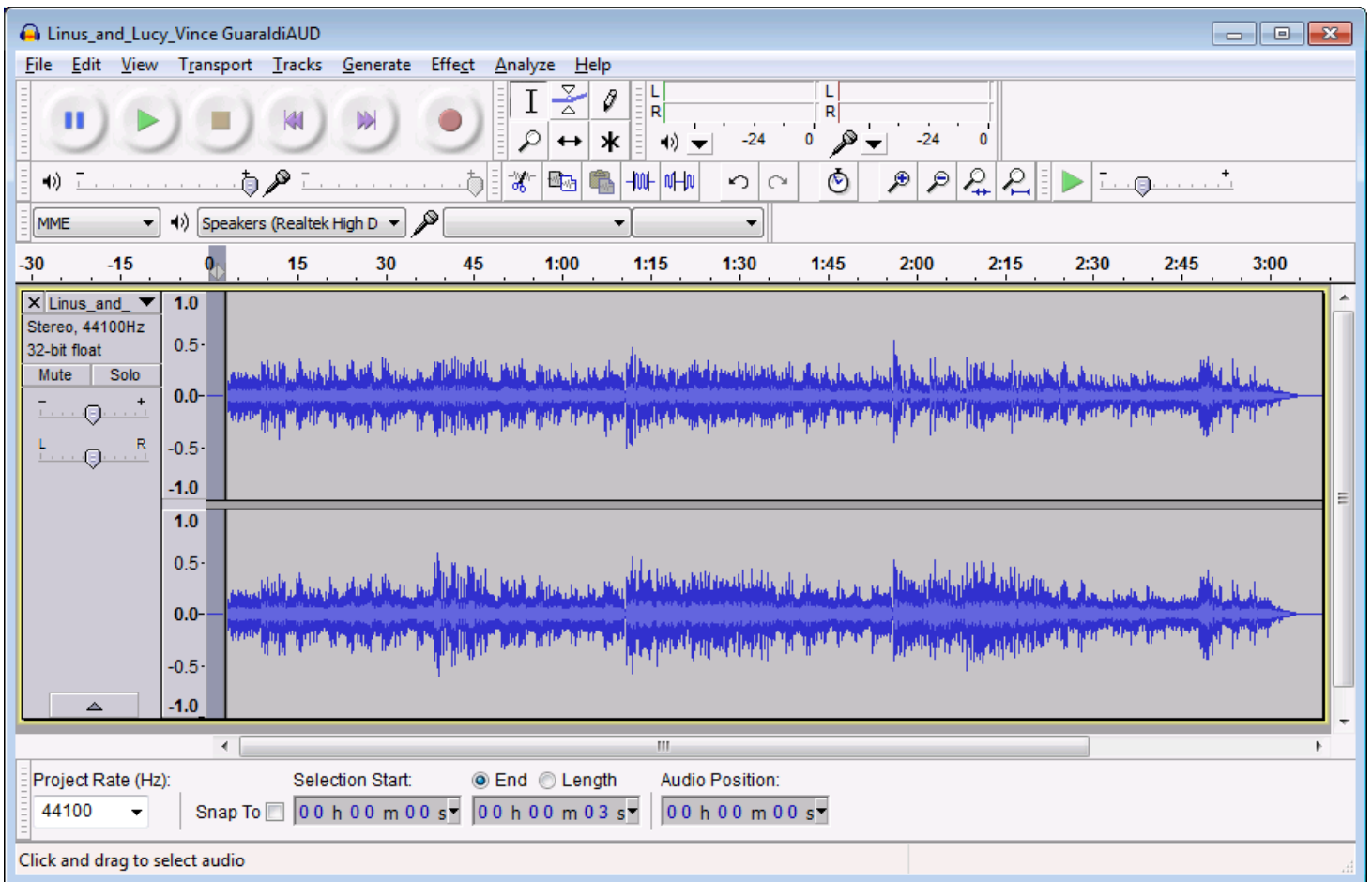
Click your mouse anywhere on waveform then click the HOME key. This will place your position at the start of the song.

Click *Generate* ► *Silence* and you will see this window:



Select the number of seconds (3 seconds is selected above) and click OK. Your screen will now look like this:

Audacity Sound Editor with Lame MP3 Exporter Add-On



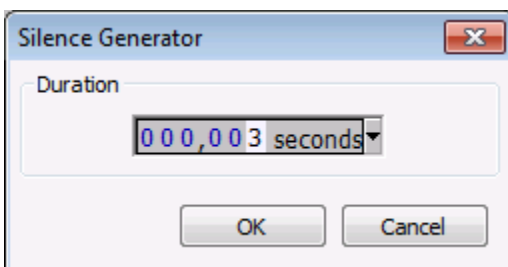
You can see that 3 sec of silence as been added to the beginning. You can click *Edit* ► *Undo Silence* or type control-Z to undo the amplify. You can use the play button ► to listen to the song.

When you are happy with the result, click File -> Export as MP3 and export as described earlier.

To Add silence to the end song.

Click your mouse anywhere on waveform then click the END key. This will place your position at the end of the song.

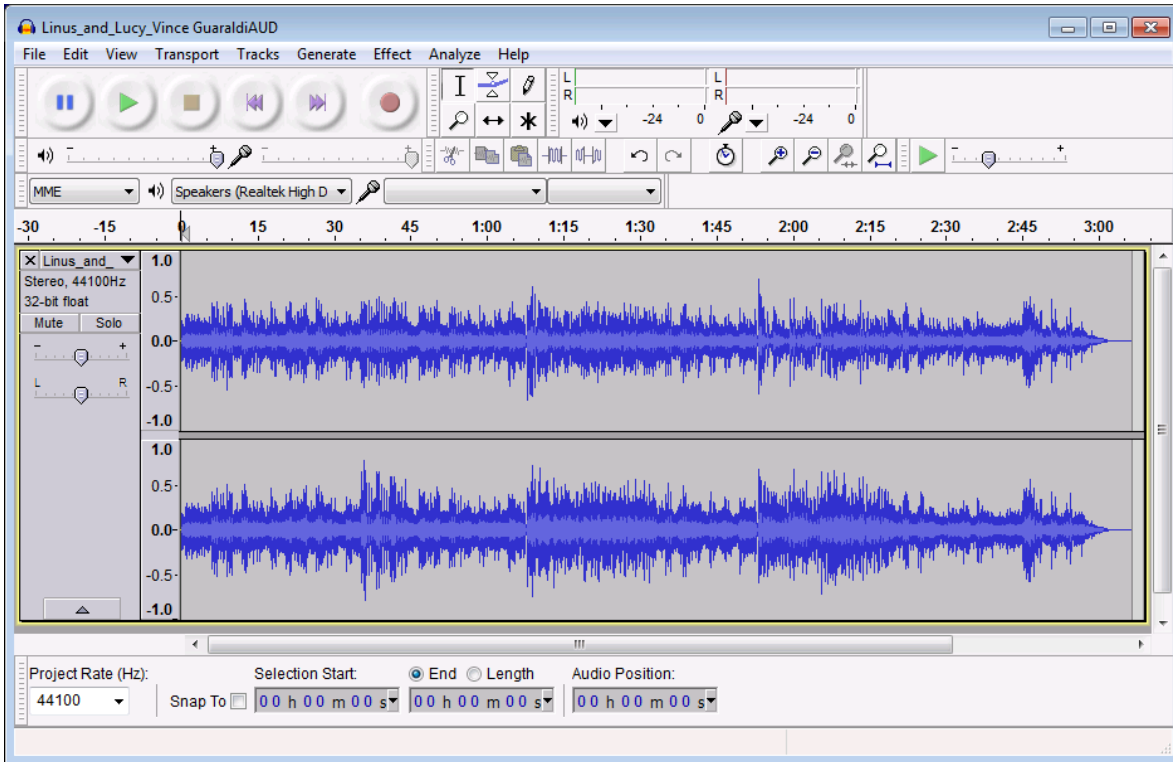
Click *Generate* ► *Silence* and you will see this window:



Select the number of seconds (3 seconds is selected above) and click OK.

To remove silence (or any part of a song)

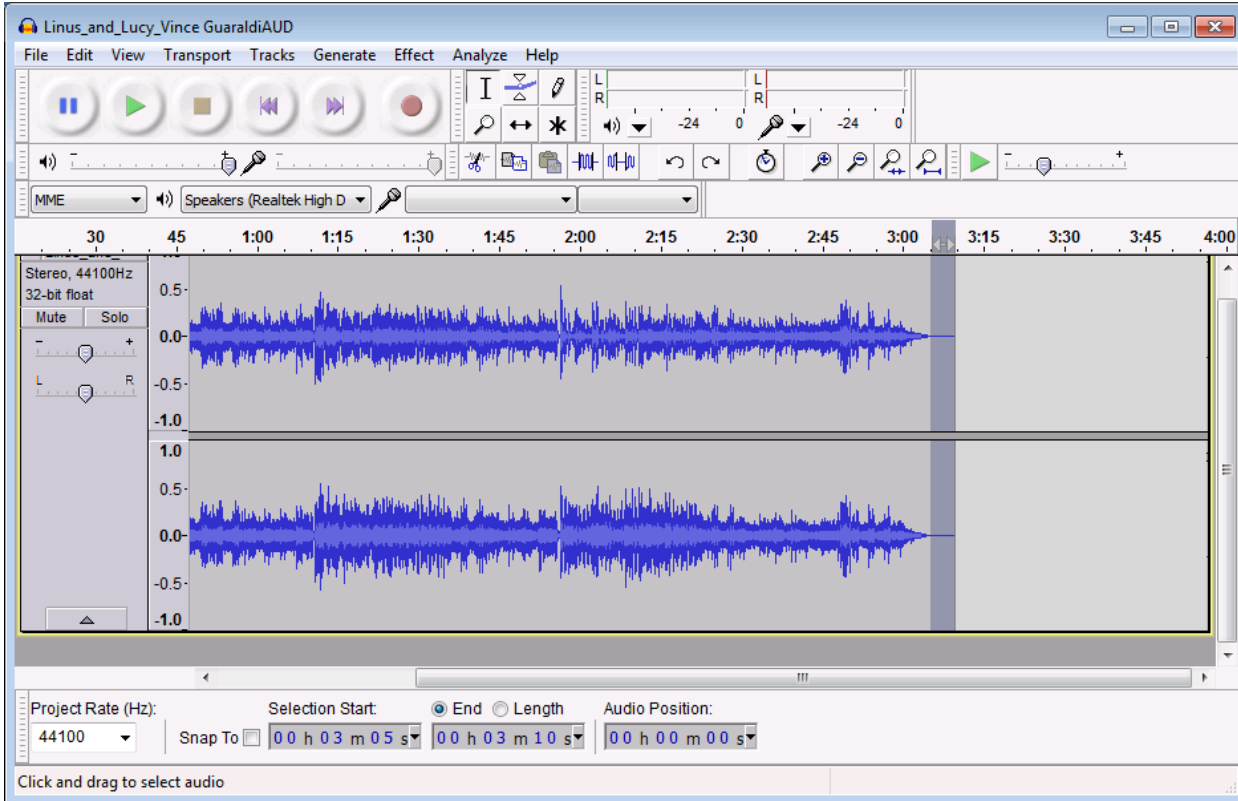
Click *File* ► *Open* and use the file browsing window that comes up to open your audio file. Audacity reads a variety of file formats. After Audacity has read your file you will see a window like this:



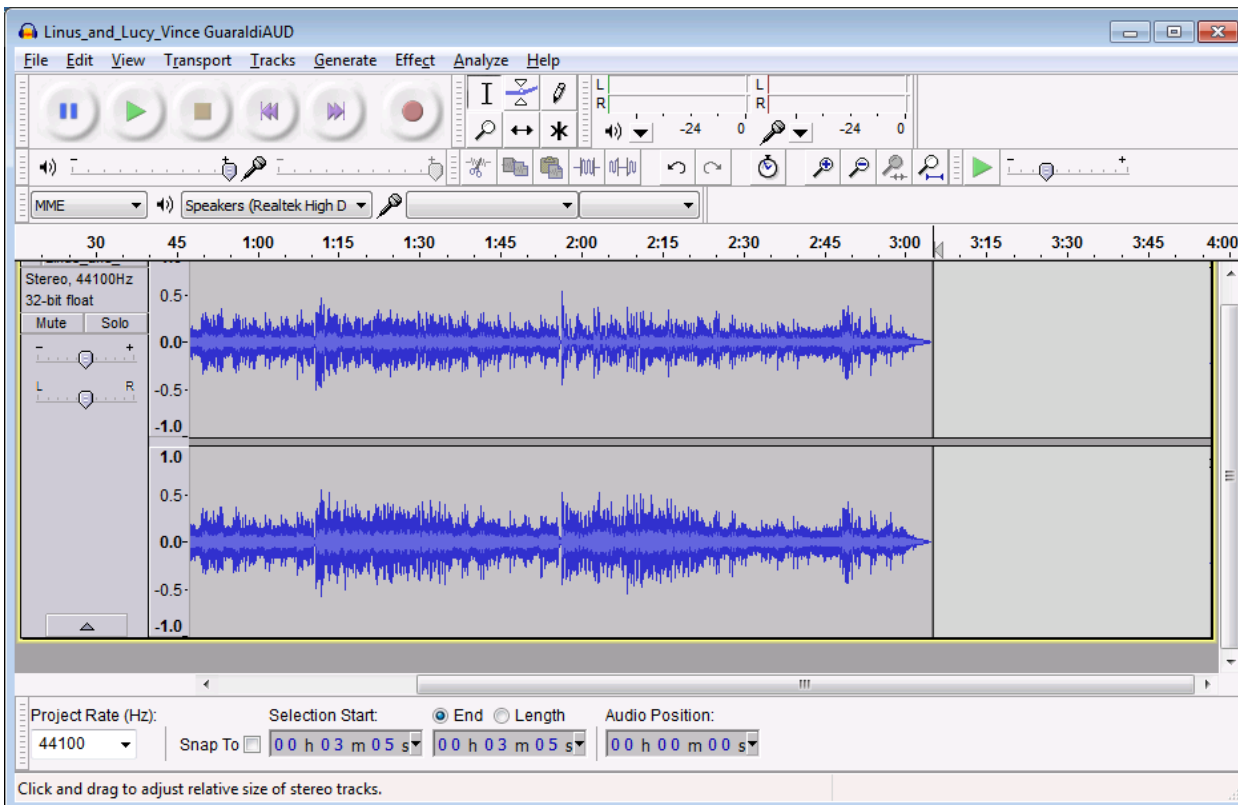
Left Click on the wave form at the start of the area you want to remove, holding the left button down drag the mouse to the end of the area you want to remove. The selected area will be highlighted

Audacity Sound Editor with Lame MP3 Exporter Add-On

Show in this screen is where we plan to remove some silence at the end of the song:



Click Edit ► *Remove Audio* ► *Delete* or *Ctrl K* to remove the area and your screen will look like this:



Export as MP3 as described earlier.