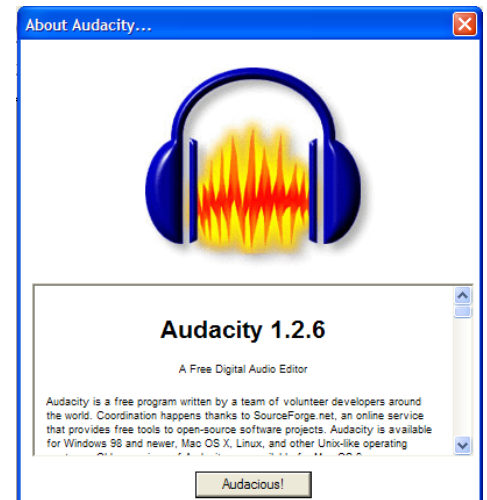


Audacity Music Editor (Overview)

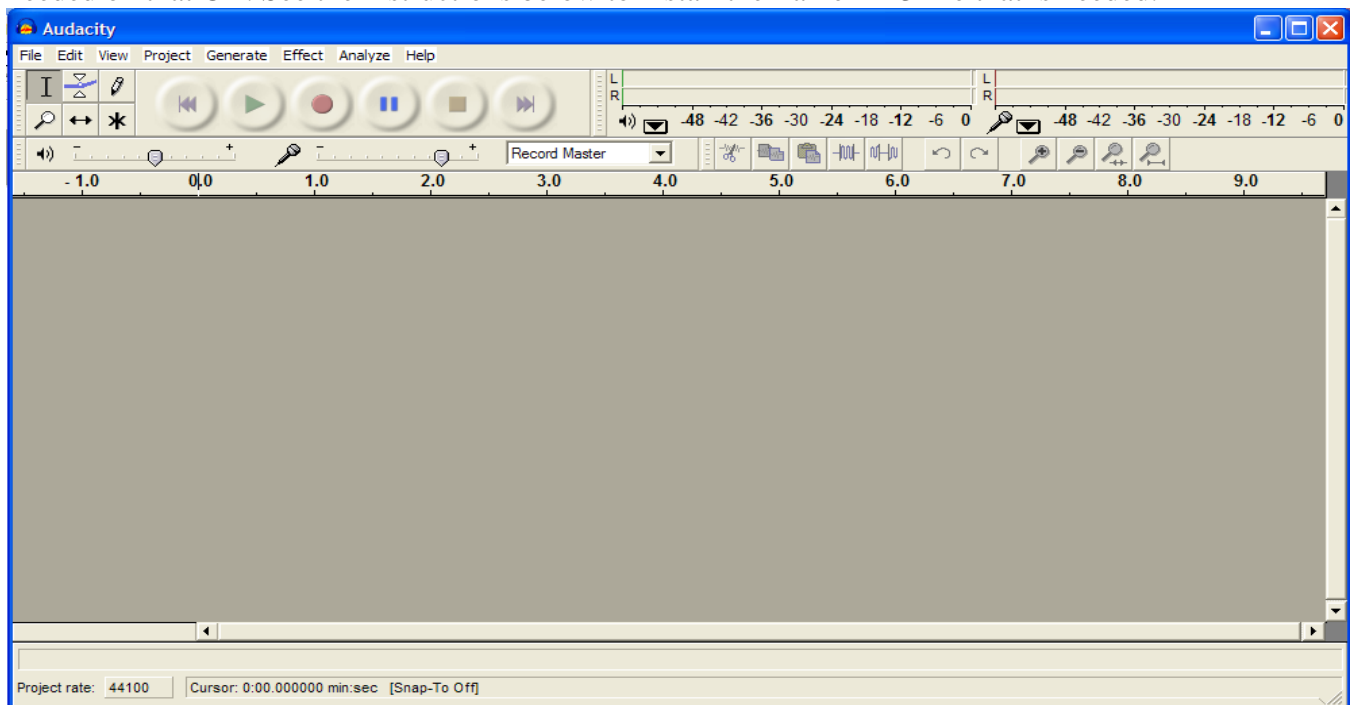
This is an overview of the free Music Editor called Audacity. Newer versions may be available but will probably not change very much. There may have added some features and enhancements but the basic editing tools will still be the same.

This program is free and offers many of the features of programs that cost hundreds of dollars. It does all the functions of CoolEdit 96 but it is not as friendly in that you cannot see, in a graphic window, the noise sample, for example. It does have a Pop and Click Filter, that is really a good thing and does not exist in CoolEdit 96. Audacity will run in Windows Vista and Windows 7 where CoolEdit 96 will not.



Another features is that you can edit both WAV and MP3 files, removing Pops and Clicks, Hiss, Changing the Tempo and Preserve the Pitch/Key of the Music, change the Pitch/Key and preserve the Tempo or Re-sample the Music and Change the Tempo which is exactly what you do when you change the speed of a record on your record player.

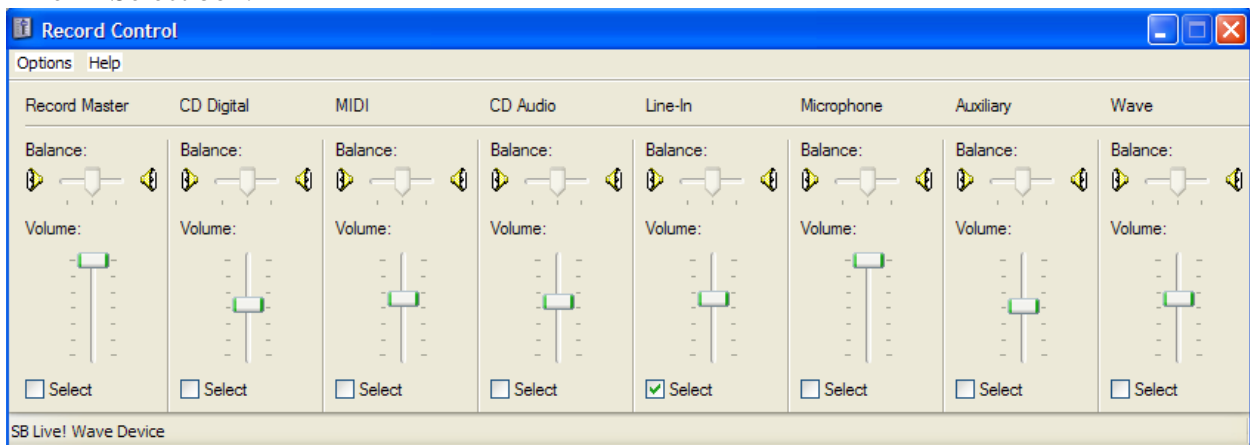
You can do a search on the internet for “Audacity Music editor” and find a location that will let you download it for FREE. Just install the program and when you double click on the Icon you will see the screen below. If you received this file on CD there may be a copy of the program and the MP3 file needed on that CD. See the instructions below to install the Lame MP3 file that is needed.



If you have reviewed the digital sound manual and become familiar with the process of connecting a record player or other device to your Sound Card and the settings on your computer to record music or audio into your computer the process here is very similar.

You will have to connect your record player or even a tape player to your computer through the line in stereo jack (usually 1/8 inch). Even if you are recording in mono you should use a stereo jack so you do not damage the female stereo jack in your computer. You may have to have someone that understands this process to help you to buy the appropriate patch cord and connectors.

You will have to set the Windows recording levels with the Volume Control/Record Control panel shown below. The control screen may not have as many selections as this one but be sure to check the Line-In Select box.



In the Audacity product simply clicking on the Red Record Button at the top of the screen will begin the recording process

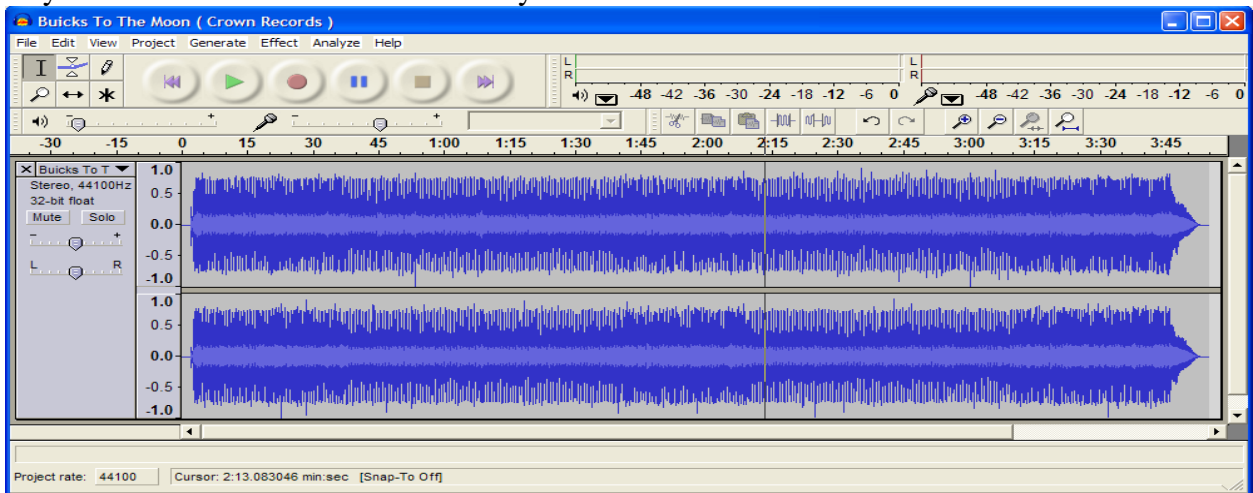
There are a few considerations when using the Audacity product. This product does not seem to allow you to convert a mono file to stereo. When You create an Audacity project file there is a folder created for each project with a large number of supporting files that can cause considerable clutter in your music-editing folder. These files do not seem to be of any advantage to you in the editing process. To me it seems that when using Audacity it is best to record your music in stereo and then export it into single WAVE (wav) file. A (wav) file contains all of the components in the original recording unlike an MP3 file that has many of the musical components ripped away. This (wav) file can be copied and edited or played on any computer whereas the Audacity file can only be read by Audacity.

After you have done all of your editing you can save/export the file as an MP3. But, you will have to go to the Audacity web page and download a specific file to allow it to export MP3 files. I personally use a separate MP3 Converter program called dBpower Amp it allows me to convert multiple files at one time and I can set the conversion or ripping process to produce a CD quality or Studio quality file. This program will cost about \$15 after a 30-day trial and is an easy download on the Web. You may be satisfied with the Audacity MP3 file export and it is probably quite sufficient unless you are anal about the music you play at a dance. Your cleaned music will definitely sound better that what you would hear from that your worn record.

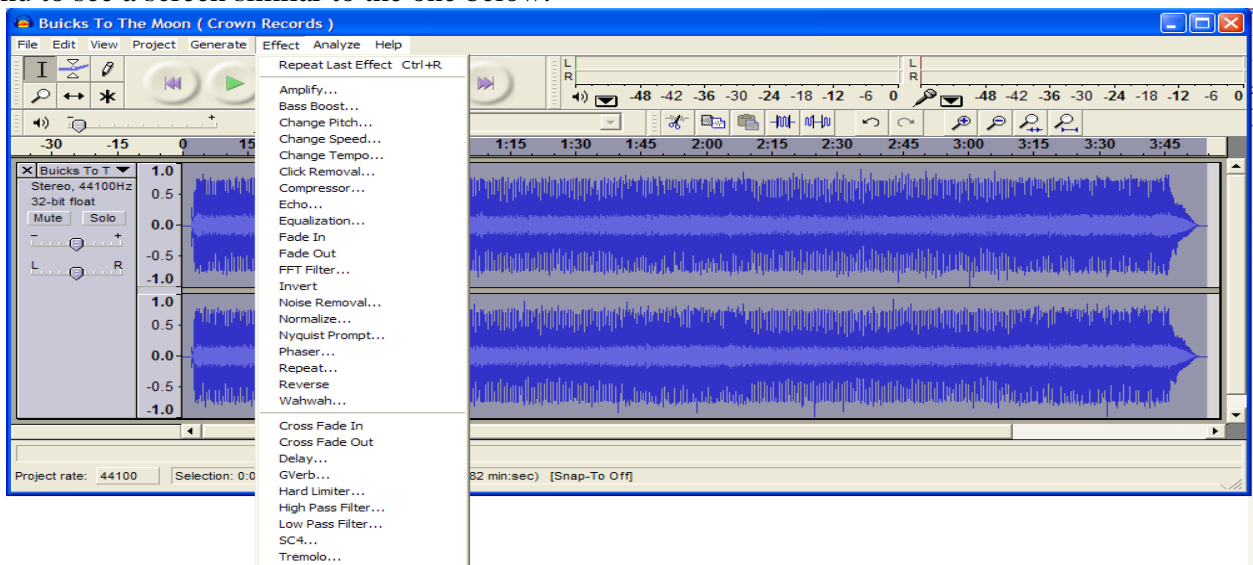
Information 4U: A recorded stereo (wav) file of 4 minutes will take up about 40 Meg of disk space on your computer. This is the same amount of space that is used on a Music CD that you would purchase at a store. This means that there is about 10 Meg per minute used in the recording process. An MP3 file with CD quality will be about 1 Meg per minute. A big difference. If you Studio Quality Rip the file is about 20% larger, which means that the file is not ripped as hard or more of the fundamental music quality is still present. MP3 files are created by using two factors. One is compressing or compacting the data and the other is removing (Ripping) certain musical frequencies from the file. These two factors allow a file to be reduced in size by 80 to 90%.

Creating Stereo MP3 files may be important because some devices and players prefer the file be in stereo format and interestingly enough the MP3 file size is the same whether it is mono or stereo.

When you load or record a file into Audacity it will look like this.



To edit any portion or the entire file you must highlight that portion of the file and then click on the Effects Menu to see a screen similar to the one below.



Everything you should need to do is found under the “Effect” menu with the exception of generating the recommended 2 seconds of silence at the beginning and end of your music file.

Audacity has a pop and click filter built in that is not part of the some product. This function is particularly good to remove the pops and clicks that will be recorded from a record. I suggest that you physically clean your records before attempting to record them and be sure your record player has a new needle.

Many people are using a high-end record player to record their music. I have found that the newer Hilton systems provide a better recording than the Model 75 units and their predecessors. But, having said that many of us used those players to do our recordings and had very good results. Again, I guess it depends on how anal you are with regard to your finished product. Many callers and cuers feel that the better the music quality the better the dancer reaction even though it may not be a conscious reaction.

My suggestion is to record your music at 45 RPMS and then use the “Change Tempo function to adjust your music to the speed you prefer. Many player programs that cuers and callers are using have the ability to adjust the tempo while it is playing and save the setting but if you would happen to make a CD, to carry in the car, or have an MP3 player as backup to your computer you will not have that ability. A change of 2% in the speed of a piece of music is close to 1 RPM on record player. You can also find free Beats Per Minute counters on the web that allow you to tap your mouse button on the beat while the music plays and it will calculate the current Tempo, Beats Per Minute or the number of steps a dancer has to take in their dancing action.

NOTE: Be sure to use the “Click removal” option before you attempt to remove any background hiss with the “Noise removal” function.

The second process is to remove any needle or tape hiss. You will have to get a sample of the noise, I recommend no less than 2 seconds worth and paste into the “Get Noise Profile” under “Noise Removal” on the “Effects” menu. You will have to zoom in on the beginning of the file to expand the noise area so you can highlight the noise area being careful not to get any music in the sample. You will highlight the noise only to get this Profile. Then close the window, zoom out to see the entire file and highlight the entire file and go back into “Noise Removal” and click on “Remove Noise.”

At this point I insert 2 seconds of silence at the beginning and end of all my music files. This will be an advantage to you later in ways I am not going into here but please just take my word for it. Zoom in on the front end of the file where you found your Hiss sample. Highlight, with your mouse, just slightly to the left of where the music starts all the way to the beginning of the recording. This may be several seconds. Now go to the “Generate” menu and it will actually show you the amount of time you have highlighted. Just type a 2 in this area and it will replace the highlighted area with 2 seconds of complete silence. Even though it looks like the area is silent when you look at it before the paste there is ambient noise there that should be removed. Do the same process at the end of the file.


The next step would be to check and set the tempo with the “Change Tempo” option under the “Effects” menu. Refer to my comments above regarding setting the Tempo above in the Recording recommendations paragraph.

You may want to actually change the Key of your music and using the “Chance Pitch” menu item under the “Effects” menu can do this. The Key can be adjusted up or down in ½ Key steps. I have had occasions where I had to raise the Key slightly so I could come in on the octave below. I run into this with some of Tim Marriner’s Tenor music and I am a Baritone.

After you have your piece of music is exactly like you want it, that is the time to export it to an MP3 file or export it to a (wav) file and use, for example, dBpower Amp to convert the (wav) file to a higher quality MP3.

NOTE: To export to an MP3 file you will have to follow these instructions **the first time**.

You will need to go back to the CD if you got this file on a CD and go to the “Audacity” folder and then to the “Lame for Audacity” folder and follow these steps.

Copy the  **Lame for Audacity** folder into the programs folder of your “C” drive. This would be the “C:\Program Files\Audacity” folder.

The first time you use the "Export as MP3" command, Audacity will ask you where lame_enc.dll is saved. In this case it would be “C:\Program Files\Audacity.” This would make the file’s location “C:\Program Files\Audacity\Lame for Audacity.” After the first time you export an MP3 file you will not be prompted again.

Also note that you can open WAVE (wav) and MP3 files with Audacity and edit them. So if you get a file from another source use Audacity to do your edits. Also, it is okay to edit MP3 files with Audacity particularly if you do not have access to an original (wav) file.

NOTE: I do not ever recommend converting MP3 files to WAVE files and then back to MP3s. If you only have an MP3 file just do your edits with that file and save it as an MP3.

Another suggestion is to always preserve your original files weather (wav) or MP3 and always save your edited copies with the original file name and the addition, for example, of (edit 2) included in the name. Sometimes I may have three or four edits of a piece of music until I am finished. These instances occur most often when I am trying to insert the choirs or special effect on the flip side of a record into the music I am going to use.

Always make backup copies of your music on another hard drive, jump drive, external Hard Drive, CD or DVD. You cannot have too many copies because you have put a lot of work into cleaning and editing your music and it will be a disaster if your one copy is lost. With computers you cannot have too much redundancy and copies are so easy to make.

There are really some remarkable things that you can do with Music Editing Programs so just experiment and enjoy the adventure.