

Audio & DAW Usage

Creating charts involves having to use an audio file. You should always try and get official audio files from the band when possible.

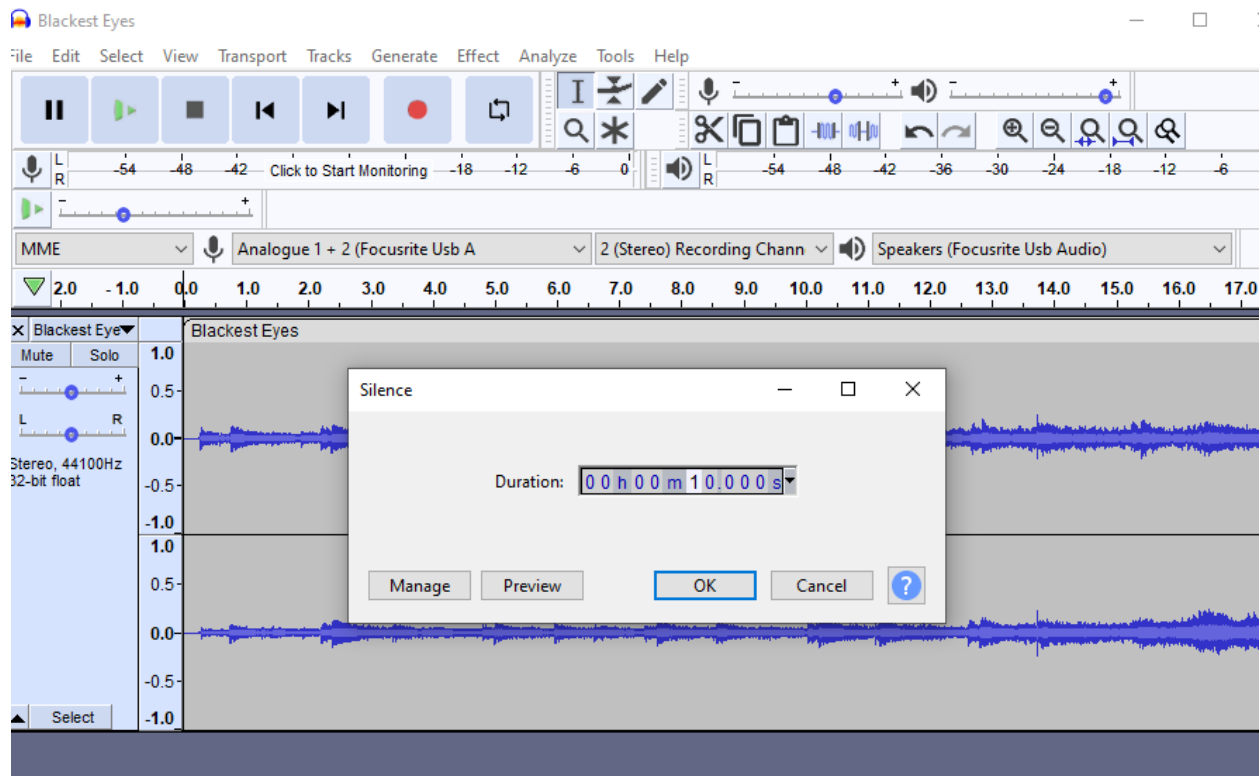
Bandcamp and the band's official website are usually a good starting point for sourcing high quality audio files to use.

If you do have to resort to using other means to get your audio files, it's usually good to get into the habit of editing your audio tracks BEFORE you touch EOF.

Prep:

Using a DAW, such as Audacity, is a great way to add/ remove excess noise, as well as pitch shift the audio or adding some filters to help hear certain frequencies.

Something I always do is add leading silence here to save time, and potential corruption, in EOF. The usual standard is to have at least 10 seconds leading silence before the first note is played. Just generating 10 seconds isn't the perfect way to do things, however it is still good practice. In Audacity, you would press Home to go to the start of the audio file > click Generate > Silence and add 10 seconds.



Trimming the outro is also a good habit to get into. I personally like to have ~2 seconds of silence after the song audio finishes. Nobody likes sitting around after the song has finished,

trimming the audio here will prevent this from happening.

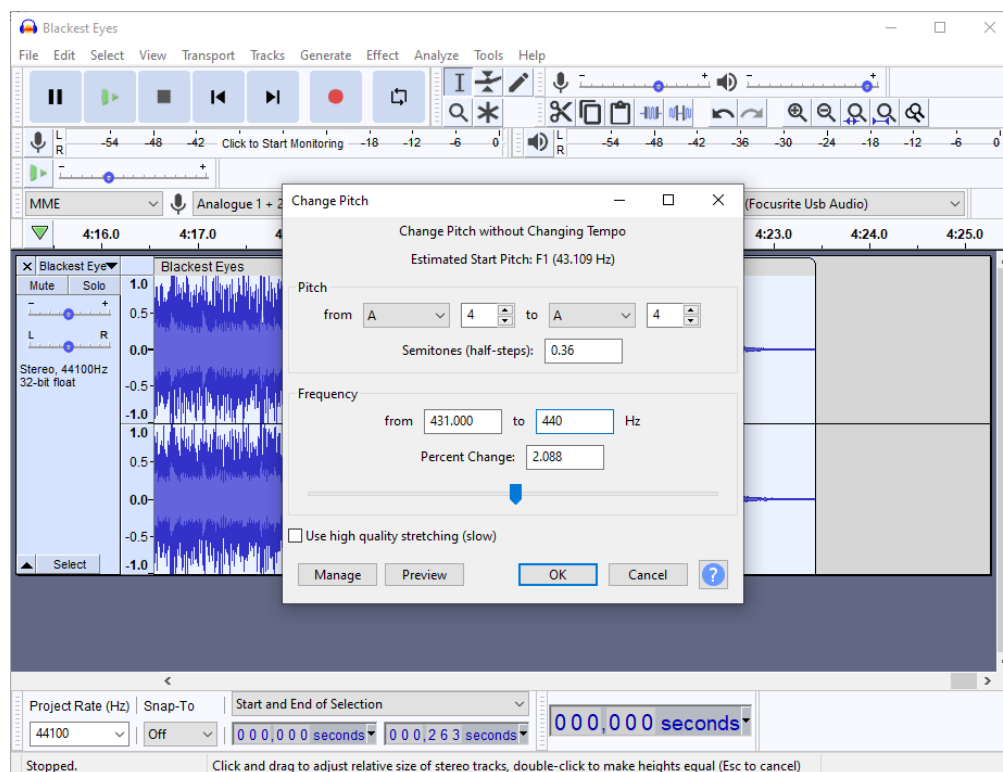
It's a similar process to add trailing silence, press End to go to the end of the audio > Generate > Silence and add 2 seconds if the audio abruptly ends.

Something else you can do is add a little fade out if the song audio has an abrupt ending.

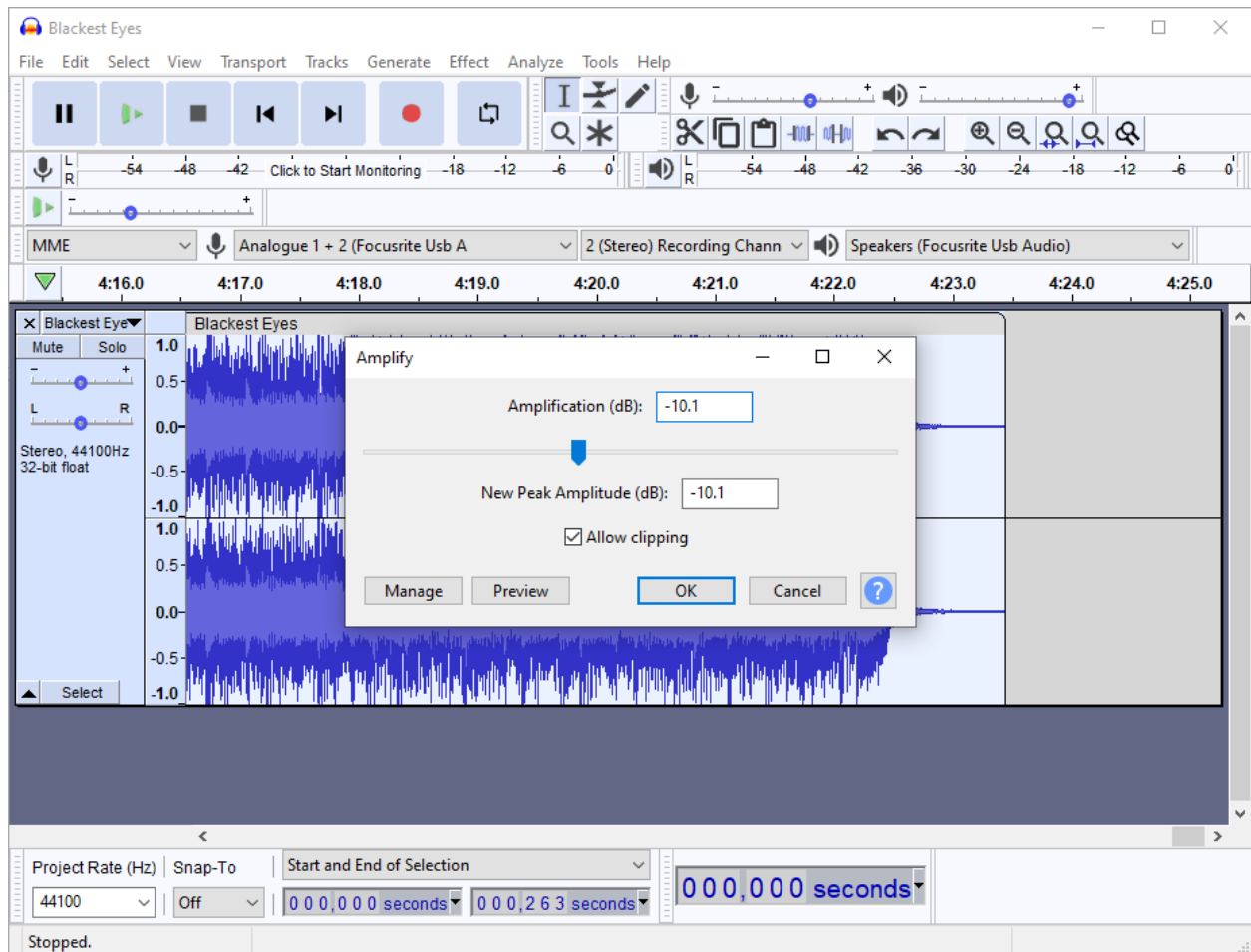
Audacity also has a pitch shift effect which comes in handy. Some songs, usually older rock from the 60s-90s, weren't tuned to a standard pitch. Using tools such as Tonart can help detect what frequencies songs are in.

I give myself a little leeway on either side of 440 because the intonation on other peoples instruments may not be properly set, as well as players using different scale length instruments. Most people also wouldn't be able to tell the difference between a couple cents. If the Tonart tool suggests values either above 441, or below 439, that's where I decide to use Audacity to change the pitch.

Once you've ran the audio through Tonart and noted down the frequency it thinks the song is in, you can select the audio in Audacity > Effect > Change Pitch > then in the Frequency box, set the from box to be whatever number Tonart gave you, and set the To box to equal 440 (standard pitch). If the number Tonart gave is something like 427.5, sometimes it's better to pitch shift the audio down, in which case you would set the To box to equal 415 for Eb Standard. Similarly, if Tonart suggests something like 454, it may be better to pitch shift up to 466 for high F Standard.



One final thing you can do here before saving, is making sure the audio of the file matches the oDLC standard of -16lufs. Tools like Orban Loudness Meter can analyze audio files for you and give you a number to subtract from -16 and give you a new number you can use in Audacity. When you go back into Audacity, click Effect > Amplify and then you will want to put in the difference the Orban value from -16. So if Orban says a song is -5.9, the value you'd put into the amplification box in Audacity would be -10.1. Doing this just makes sure your chart will match the oDLC standard and actually be audible.



If you're happy that you have added sufficient leading silence, trimmed any excess outro of your audio file, fixed any hard cuts at the end of the audio, pitch corrected it to a 'Standard' pitch and adjusted the volume of the file, you can save your file as a .wav with the file name to also include the phrase 'Pitched' to then use as your new base audio in EOF.

Pitch shifting and filters:

One other very handy feature with a daw is being able to add filters to audio to aid you make out some different frequencies. Bass is notoriously harder to make out listening to audio in the standard mix.

You can go back to the Effects > Change Pitch and then either add 12 semitones to the audio, or manually set the From and To boxes 440 to 880 respectively. This will pitch shift the audio up an entire octave. From here, I then also add a Low Pass Filter set at 1500hz and Roll-off at 12db.

This will help accentuate the lower end and bring out the bass a lot more in comparison to just listening to the raw mix. One downside of this though is the bass drum also gets brought up so you sometimes have to take that into account and not accidentally chart the drums.

Just note to do this AFTER you have already exported the audio file otherwise you may save and use a pitch shifted audio file for your EOF project.

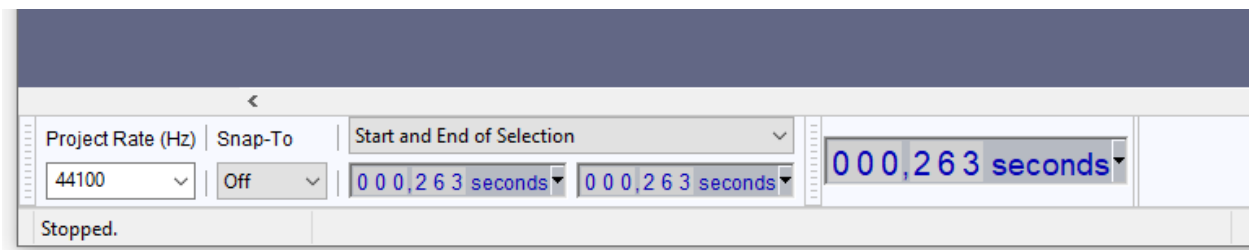
Post chart tweaking:

If for some reason you hadn't done any prep and realize after the fact that you have some extra noise trailing the end of your chart, or you feel like you need to add a couple extra seconds to stop an abrupt end, there is a way to fix this.

The best thing to do on such occasions is to save what you have done in EOF and then load the guitar.ogg file into Audacity.

Then, you'd go to the end of the audio file and trim away all the excess outro you don't want, or generate a couple extra seconds at the end of the file.

At the bottom of Audacity, there is a timer display. You'll want to change that to display the song length in seconds.

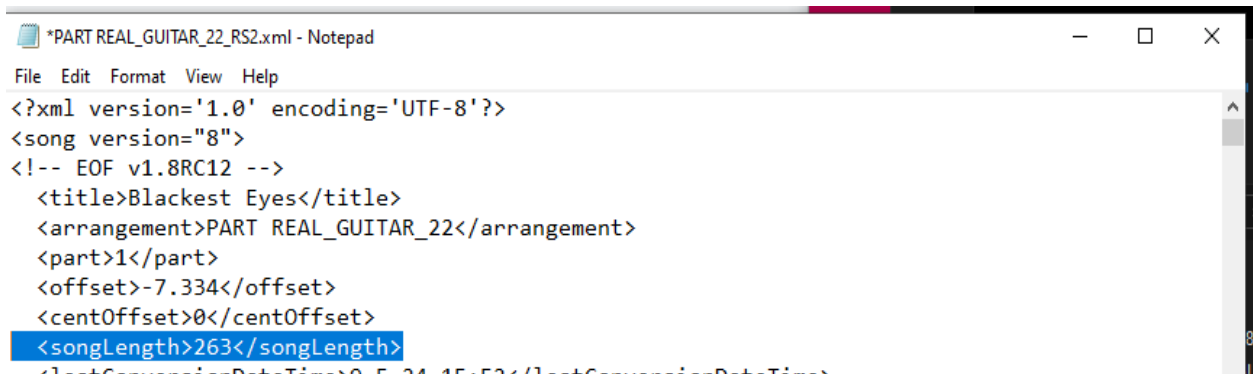


Once you have set it to seconds, click back onto the audio track and press the End key to take you to the end of the audio file. Make note of what the length of the song is.

Save the newly adjusted audio file and include 'Adjusted' in the file name. This will be the new audio file you will want to use in the DLC Builder.

You will also then need to open up the XML file for each instrument path and edit the part that says `<songLength>268.385</songLength>`.

You will need to replace that number with whatever number Audacity says the song length is.



```
*PART_REAL_GUITAR_22_RS2.xml - Notepad
File Edit Format View Help
<?xml version='1.0' encoding='UTF-8'?>
<song version="8">
<!-- EOF v1.8RC12 -->
  <title>Blackest Eyes</title>
  <arrangement>PART_REAL_GUITAR_22</arrangement>
  <part>1</part>
  <offset>-7.334</offset>
  <centOffset>0</centOffset>
  <songLength>263</songLength>
  <testComment--Data-Time>0.5.34.15.53</testComment--Data-Time>
```

Once you've saved each XML file with the correct song length, you will want to re-add them and the new adjusted audio file into the DLC Builder and you should be good to go.

When you create a new version of the PSARC, assuming you have followed the above steps correctly, the new file should be and display a new length than the previous file.