For years I’ve been producing music and making beats through FL studio. I frequently post my music on soundcloud under the name J.Tea. Over time I’ve learned a lot about mixing and mastering, and wanted to share some of my knowledge on the subject. I also thought a short tutorial on how to mix and master would be useful to beginning producers visiting my blog “The Beat Canvas”. I will begin this tutorial by introducing techniques of how to mix, followed by instruction on how to begin mastering tracks using “Maximus”.
Mixing Channels

Mixing tracks in FL studio can be confusing to beginners, which is why it is important to be organized while doing it. In order to organize your tracks you need to create separate channels within the mixer for each instrument, or vocal track that is used in your project.

Here are the steps that will get you organized and ready to mix.

1. First locate your instruments and/or vocals by selecting a pattern.
2. While in the pattern box make sure to locate the tab at the bottom of the box. Make sure the tab says “All” so that all of your instruments and vocals are visible.

   ![FL Studio Mixer](image)

3. Now it is time to add your instruments or vocals to their own individual channels.
4. Click directly on the box that displays the name of your instrument. For example, if you used a basic hi-hat, you should be able to see the word “hi-hat” within a small rectangle. Left click directly on the word of your instrument.
5. After clicking on your instrument the channel settings box will appear. In this box locate the fx square in the top right corner.
6. Click and hold in the fx box while move your mouse up or down, which scrolls through numbers. Whatever number you select will be the number of the channel that your instrument is connected to in the mixer.

7. Whatever channel that your mixer is connected to will be labeled “insert” then the number it is connected to. For example, if your instrument was connected to channel 3 it would be labeled “insert 3”. In order to name the channels according to the instrument that it is connected to, right click on where it says insert, then select rename to pick an appropriate label for it.

8. When all of your instruments are assigned a channel you will be ready to begin mixing.

**Volume and Panning**
When you are mixing your project in FL studio, the way you set the volume and pan each channel is crucial to how your finished project will sound. The way you mix will vary depending on the type of project you are working on. Here is how I usually structure my mixes from lowest volume to highest (pads to snares).

Pads- There are never ending possibilities when it comes to creating or picking from pads. Some have more bass and some are more treble oriented, but typically the pads will have the lowest volume in your mix.

Synths- When you use synths in your project it sounds better when they are able to blend nicely with your pads. The synths should usually have a slightly higher volume than the pads so that it isn’t overpowering with all the other instruments included.

Kick & Bass- I always mix the kick and bass around the same volume, which is noticeably higher then the synth and pads. Mixing the kick and the bass of course vary depending on what type of song you are working with. I usually make sure they are louder than the synths and pads because all of my music is hip hop.

Hihats- Hihats need to be mixed in at a medium volume just slightly in between the bass and the pads. You don’t want them to be too loud because the hihats volume drastically increases once you master a song.

Snare- In my mixes I always make the snare the loudest instrument to make the beat feel more alive and aggressive.

**Effects**
If you want to add effects to your instruments or vocals, the best time to do it is while you’re mixing. FL studio comes with a number of basic effects available to add to your projects already installed in the program. They include effects such as reverb, delay, and also EQs, which are very effective when mixing. Below I will describe how to access and apply several basic effects to your projects.

*All of the effects will be applied to your instrument channels in the mixer. Complete the following steps each time before adding a new effect:

1. Go to your mixer.

2. Select the channel of the instrument that you wish to apply the effect to by left clicking on it.

3. Once the channel is selected locate the tabs that are numbered 1-8 on the right side of the mixer.

4. On the left side of these tabs there is a small arrow that allows you to see all of the effects that are available. Click on the arrow and choose an effect to apply to your selected channel.
**Reverb:** Adding reverb to your instruments or vocals will give it an echo like effect as if the instrument were to be played in a cave. When you add reverb another box appears allowing you to distort and control the amount of reverb on your channel. Applying reverb in the right way gives your audio project more depth and fills out the track.

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**Delay:** The delay effect enables whatever sound that is played in the selected channel to be repeated. You can control the speed of the delay, the volume, and the panning allowing it to ping pong from one speaker to the other. This is effective when applied to vocals, but can also be used to fill out any track, in a similar way as the reverb.

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**EQ:** EQs are important when it comes to improve the overall quality of your mix. By adding Parametric EQ to your channel, you will be able to control the frequencies of anything that is played. This will allow you to shape the sound coming though your channel, which will help your mix flow smoothly.
Mastering

It is easy to get mixing and mastering mixed up, but they are to entirely different processes. Mastering is when you bring out the most sound possible from a finished project. The goal is to make it as loud as possible without causing your sound to clip. Clipping happens when the sound in the master is too loud which can distort your project. You should begin mastering when your project is already completely mixed.

There are a lot of different ways to master your projects, but I will be focusing on mastering projects through the FL studio feature called maximus.

Mastering in Maximus

1. There are two ways that you can choose to begin mastering in maximus. First, you can select the master in your mixing menu, or you can export your project as a wav file and drag it into an entirely new project. If you decide to export your
project and master it in a separate project file, you will have more flexibility when it comes to adding finishing touches to your project. For example fading a song out at the end, or changing the pitch in a certain area is easier when working with a separate sound file.

2. When you are ready to master your project select the master channel in the mixer. Once it’s highlighted, click on the drop down menu on the right of the mixer to access the effects.

3. When all of the effects are visible, select “Maximus” and then it will open up in a new menu.

4. Once you are in the Maximus menu, you will be able to see the sound waves of your project when it is played through the master channel. Maximus will give you the ability to adjust the volume, limiters and frequencies of your project, allowing you to effectively master it.
5. **Master High, Mid and Low Frequencies:**

- First click on the button labeled “Solo” at the bottom left of the Maximus menu. This will allow you to only hear the high, mid and low frequencies when they are selected.

- Begin mastering the low frequency by selecting “Low” on the left of the menu, then locate the low and high freq knobs on the right side of the menu. The low knob is pink and the high knob is yellow.

- For the low frequency you want to focus on the pink knob and adjust the red arch located in the square to the right of the menu. Use these tools to adjust the bass until it is not causing your overall mix to clip.
- When mastering the mid frequency adjust the high frequency knob until you are barely able to hear the hi-hats.

- Be careful when mastering the high frequency. If you adjust it too much your mix will sound watered down and compressed. Depending on the sound you are looking for, you rarely have to adjust the high frequency much.

6. When you finish mastering the frequencies you should be ready to export your project.

7. Click on the file tab then locate export. When the mouse if hovered over Export you will be able to choose whether you want your project to be exported as a WAV, Mp3, OGG, or MIDI file. I recommend a WAV file, but it is up to you.

8. Once your project is exported, it is finally complete.