Introduction to Music Production

Week5: Demonstrate two of the three types of modulated short delay effects (flanger, phaser, chorus). Describe how they function and what they are best used for. Be sure to describe the Delay Time, LFO, Feedback and Dry/Wet sectioans.

Introduction

Hi, I'm Takahiro Kubo from Chiba in Japan. I'll demonstrate two of the three types of modulated short delay effects (flanger, phaser, chorus) by using drums sound.

Lesson

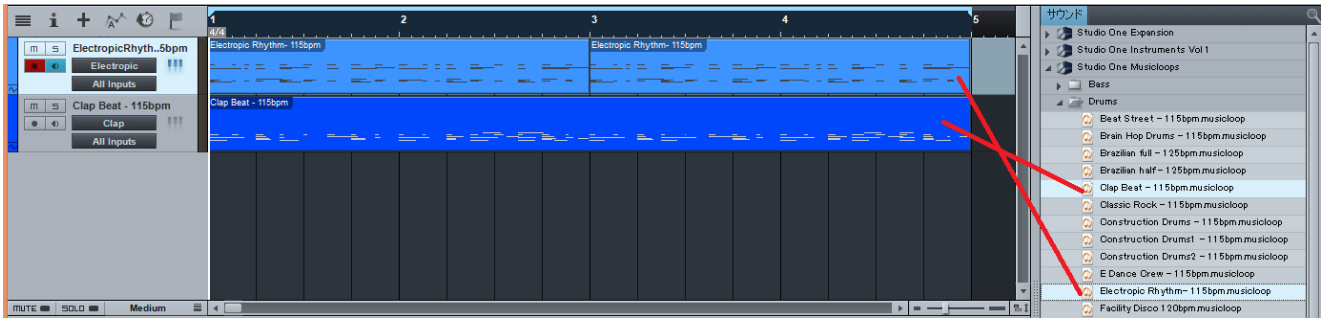
First of all, let's confirm the types of modulated short delay effects.

- Flanger: It is just the short delay that's been put in the motion by a low frequency oscillator.
    - It is sweeping comb filter.
    - It is useful to get the back and forth kind of swirly wide stereo presence.
- Phaser: It is much like flanger, but you have more control over the position and range of notches.
    - It can make sound like changing the vowel sounds of a mouth.
    - Because of the control over the notches, it is useful to make the room for the other instruments when your are using the things that are kinds of overwhelming in the mix (ex. guitar, thick pad, and so on).
- Chorus: It is multiple detuned copy (you can feel it when the ambulance car is passing by).
    - The role of the chorus effect is to make it seems like there's multiple performers are performing that same part. It cause the thick a little bit out of tune sound.
    - It's very useful to make sound wide (quite stereo), and out to the sides.
    - It is effective to distinguish the instruments in the same part.

Today, I prepared 2 drum sounds that their frequency ranges are similar. And let's try to distinguish 2 sounds by using phaser and chorus.

<u>1.Prepare the drum sound</u>

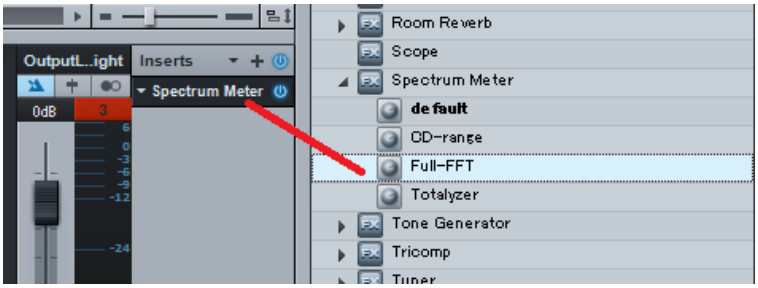
I prepared same tempo sounds from the Sounds section. One is Electropic Rhythm, and the other is Clap beat. And then I arranged the length of each sounds by copying the shorter one (Electropic Rhythm).



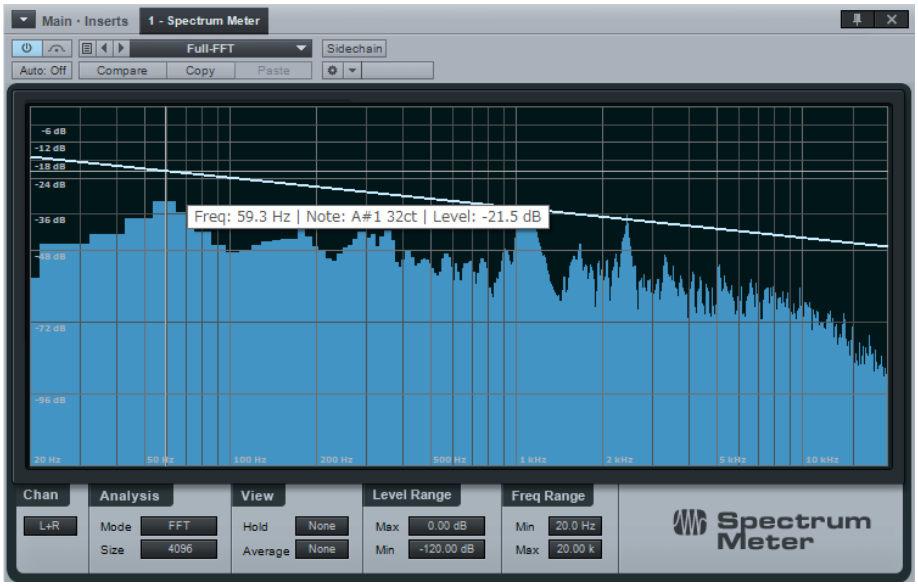
<u>2.Analyze</u>

Then,I analyzed each of the sound by using Spectrum Meter.

You can use it by adding Spectrum Meter from the Effect section (I thought it is kinds of View, but in the Studio One, you have to choose it from Effect section. It is very difficult to understand..)

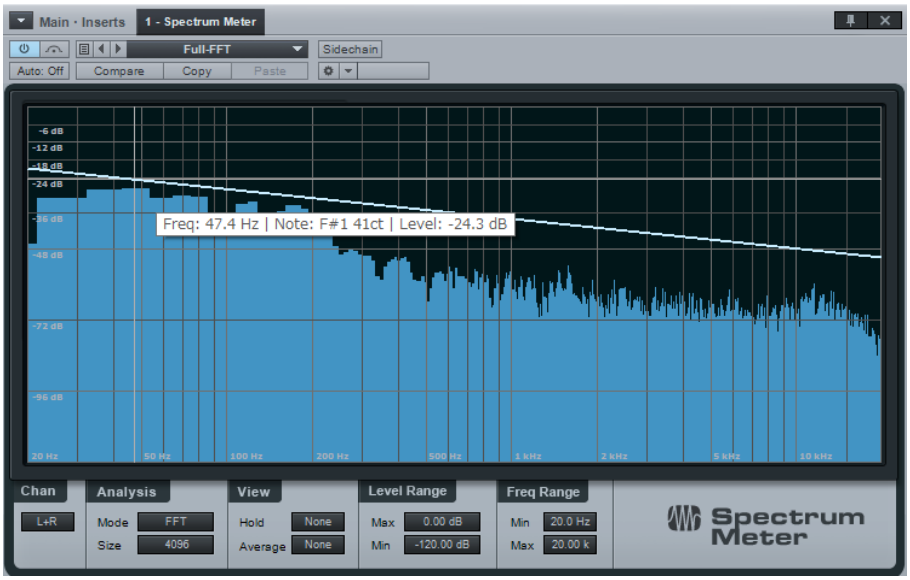


Electropic Rhythm



- The peak is around 59Hz,
- And also the sound have little peak around 169, 313, 492, 1111, 2433Hz.

Clap beat



- The peak is around 45Hz.
- And the range of clap sound is about 400Hz ~ 6800Hz

3.Make Effect

Phaser

First, I use phaser.

The base strategy is using the phaser to the Clap beat and make room for Electropic Rhythm at around 60Hz (the peak of Electropic Rhythm).

If it has done, we could get good mix of the Electropic Rhythm's peak (around 60Hz) and Clap beat (400Hz~).

- Range is 40Hz ~ 80Hz (+- 20Hx around 60).

I think the Electropic Rhythm became more obvious (the result is attached in the end of report).

Chorus

Then, I use chorus.

The base strategy is using the chorus to the Electropic Rhythm to distinguish from Clap beat.

- Range is 40Hz~2500Hz, it covers all the peak of the Electropic Rhythm.
- I added strong chorus (stereo width and delay/depth) to distinguish from the Clap beat.

I think you can feel the difference between Electropic Rhythm and the Clap beat more obvious.

4. Result of the Effects

- original
- phaser effect
- chorus effect
- both effect

Reflection

I felt the power of delay and filter effects in using these. Because effected sound was obviously different from original one,

It was a little difficult to understand the meaning of the parameters. But I convinced that it is quite useful to mix the sounds.

Thank you for reading, and if there are anything I missed, please notify me.