Using Virtual instruments in Sonar X2

DIFFICULTY ★ ☆ ☆

What is a virtual instrument anyway?

Virtual instrumentation uses software on the computer to make all kinds of neat and interesting sounds. You don't need to know how to play the violin or the bass to make music with those instruments. All you need is some special software!

Step 1: Set up

1. Plug in the MIDI keyboard to the computer (if it's not already plugged in).

MIDI stands for Musical Instrument Digital Interface (oooh, fancy!). **MIDI** allows us to use one controller (our keyboard) to play all kinds of different virtual instruments. **MIDI** keeps track of three things:

Velocity—how hard the key is pressed

Note—the value of the note (C versus D#)
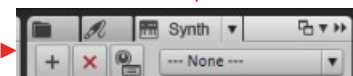
Duration—how long the key was held for

> **TIP:** You don't need a keyboard to use MIDI, it just makes it easier! You can also use the **piano roll** (check out the project sheet for more info).

2. Open up Sonar X2.

3. Create a new project and title it something you'll remember! If you don't, you'll regret it.

Step 2: Setting up a virtual instrument

1. **On the right hand side of the screen click on the Synth tab.**
2. **Click on the + symbol.**
3. **Scroll down the list of synths and click on Z3ta+.**
4. **Click "Okay" on the confusing dialogue box that comes up.**
5. **Double click on the icon that appears:**

> **TIP:** Z3ta+ is a type of virtual instrument called a synth. Synths use filters and tone generators to make all kinds of sounds.

> Here's a picture of a rocking kitten to tide you over until page number 2.

Step 3: Using Z3ta + to make amazing sounds.

1. **Press a key on the keyboard. It should make an arpeggiatted sound.**

    An Arpeggio are notes from a chord played in sequence rather than simultaneously.

2. **Change the type of sound produced by Z3ta+:**

> You can click on the A, B, C, D, E, or F to change the sound in a bank of sounds.

> Or you can click here, to change the bank. There are six unique sounds per bank. There are about 100 banks. You do the math.

rgc:audio z3ta+   A B C D E F   066: Freedom Arp

3. **Continue rocking.**

Step 4: Recording a virtual instrument

Check out the **Recording your voice with Sonar X2** Project sheet to get additional information.

1. **Press the record icon on the track labeled Z3ta+.**
2. **Press the master record button in the console.**
3. **Play the best song in the world.**
4. **Press the Stop button on the console.**

> **Prepare to have your mind blown:** If you change the sound on Z3ta + even after recording the initial track, it will play the track you recorded with the new selected sound!

> **Hotkey Time!** Once you've armed the track (by selecting the record icon on the track you wish to record on), you can press **R** to record, and spacebar to **stop**. Holding down **Ctrl+Z** will undo your recording, so if you mess up you can get right back to recording!

CONGRATULATIONS! YOU'VE TAKEN THE FIRST STEPS TO LEARNING SONAR X2!

KEEP IT UP AND YOU'LL GET A BADGE BEFORE YOU KNOW IT!

YOU'RE DONE! HERE'S SOME NEXT STEPS YOU COULD TAKE:

Record a virtual instrument in conjunction with your voice: Use this project card and the "Recording your Voice" project card to make a song!

Add more than one virtual instrument: Play around with the other Synth's. the SI-strings and electric piano are a lot of fun! Keep in mind, every synth is going to look different.

Watch a tutorial: A nice gentleman explains using MIDI to record some drums: http://www.youtube.com/watch?v=k83UVo1OiKA