

### EXS24 vocal instrument creation.

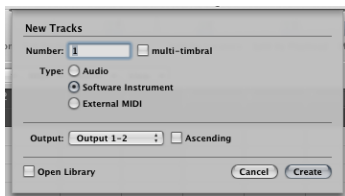
These instructions assume that you're inside an existing Logic project and have recorded a nice ooh or aah vocal sample at a pitch that is comfortable for you. This can be done using the built in microphone on top of the imacs in iN95. Ask if you need assistance with this.

#### Step 1

Create a new software instrument track. Under the "Track" menu, select "New..." to bring up a New Track dialogue box.



Create 1 software instrument and double check that the output is set to your main output (this should be default). Once everything is set, click "Create".



#### Step 2

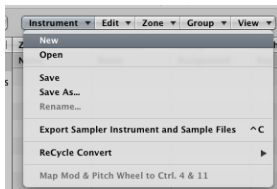
place an instance of the EXS24 on this new software instrument by clicking and holding on the track's input. Scroll down until you get to EXS24 and choose stereo. Stereo should always be your default choice; even though your initial instrument will be mono, choosing stereo opens you up to a wider possibility of effects that you can add later.



Click on the "Edit" button, which is in the upper right corner of the main EXS window, to enter the EXS Instrument Editor window. This is where the basics of the instrument are found, including which samples should be played by which keys and how they should be individually treated.

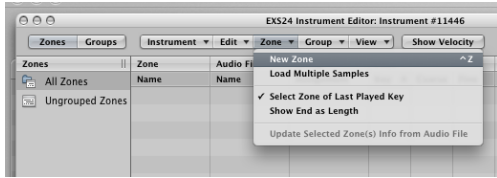


Under the "Instrument" menu select "New". This will be our new instrument.



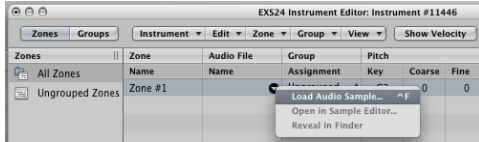
#### Step 4

Under the "Zone" menu create a new zone. A zone contains all of the information about a single sample, including which audio file to reference, the key range, default pitch, and loop parameters. For this pad we will only be using one zone, which by default Logic will stretch across the entire width of the keyboard (When you want to limit the playable range of a zone, you can adjust the "Key Range" settings).



### Step 5

Load your vocal sample into the zone by clicking on the small triangle under the Audio File parameter and choosing "Load audio sample...". Navigate to your "Audio Files" folder and choose the vocal sound file you previously recorded



### Step 6

At this point you should be able to play your keyboard and hear the file play back. You might have to hold down the key for a long time, as there will probably be a short silence between when you started recording and then started singing. At this point in time the sampler is simply playing the whole audio file from the start, we will look at adjusting the start and end points of the sample in the next step.

You may also notice that when you play a C key you don't actually hear a C, which means we need to adjust the Key Note. The vocal sample you created was at a pitch that was comfortable for you to sing. Find out what that pitch was. (I'd suggest you load a simple piano instrument on another audio track to pitch from) and adjust the "Key" parameter under "Pitch" by clicking on C3 and dragging it to whatever your original vocal pitch was. Trigger the instrument again and you will now hear it at the proper pitch.

Zone	Audio File	Group	Pitch			Key Range			Ve
			Assignment	Key	Coarse	Fine	Lo	Hi	
Zone #1	AudioTut...	Ungrouped...	D3	0	0	C-2	G8		

### Step 7

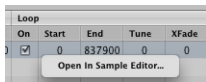
As previously mentioned, you will probably want to make the instrument start instantly and loop naturally.

For this you need to adjust the "loop" settings of the zone's sample. At the right end of the zone's parameters are the Loop settings. (you may have to scroll to the right in your edit window to view these settings, as they are not immediately visible)

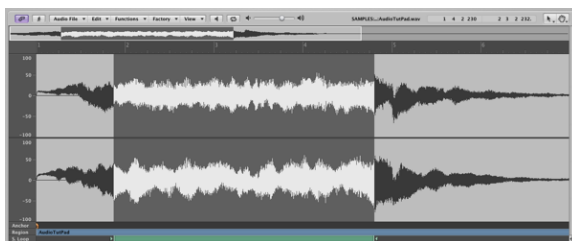
First click the checkbox to turn Loop "on", then ctrl-click on the Start or End number to choose "Open In Sample Editor..." Here we will choose where we want the loop to begin and end.

NB. If this step doesn't open the sample editor as a floating window, you may have to open the sample editor window manually via Logic's "Window" Menu first. Then repeat the step, to force it to appear with the loop bar visible.

\* Things may become a window juggling act at this point as the EXS24 has an annoying habit of floating above everything when it's in Edit mode!

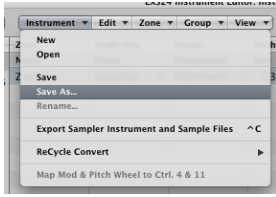


Notice at the bottom of the sample editor is a green bar marked "S. Loop". Adjust the beginning and ending of the loop by clicking and dragging the small green triangles. Then adjust the crossfade length for when the sample loops. Start with a long XFade setting, for example around 250, and adjust from there. Play the instrument as you adjust these settings to find a loop that feels natural and unnoticeable.



### Step 8

Now you have finished everything that needs to be done for your first zone in the EXS Instrument Editor window. Before we close it we need to save our instrument. Under the "Instrument" menu choose "Save As...". Logic will automatically default to your personal (i.e. network user account's...) Sample Instruments directory, where EXS always knows to look for instruments.



### Step 9

We now have an instrument that plays at proper pitch across the entire keyboard and loops nicely, but you can tweak further if you wish.

The main EXS window is where the global settings (which apply to the entire instrument and not just individual samples) are adjusted.

In the bottom right of the main EXS window are the envelope settings (ENV 2). Click on the round faders and drag up and down to adjust the attack & release parameters to taste.



### Step 10

Adjustments to the main EXS window can be saved on an individual basis for each Logic session, but you will want the default attack and release settings to be a permanent part of the instrument. To do this, click on the "Options" menu and choose "Save settings to instrument". Click yes when asked if you want to overwrite existing settings.

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You've now created a basic, single zone instrument in the EXS 24 sampler. The next step is to experiment with different pitched samples for different parts of the keyboard because you will find that when you stretch more than a few semitones, your vocal sample starts to sound unnatural.

To do this you will need to create multiple additional zones limited to defined parts of the keyboard. To do this, repeat these instructions, starting at step 4.

Happy Sampling!