

Gotharman's Little deFormer 3



Granular Workstation

Update Manual 12.96

- Parametric EQ insert effects added [Page 3](#)
- All sequencer steps on a subtrack can now be offset adjusted with one knob movement [Page 6](#)
- Position Rotation Modulation added to the Sequencer note tracks [Page 7](#)
- It is now possible to output one Audio BUS to another Audio BUS. [Page 8](#)
- A BUS Follower/Envelope OFF position has been added. [Page 9](#)
- Insert effects input gain can now be adjusted [Page 10](#)
- When recording an audio track, the BPM of this is now included in the sample name [Page 11](#)
- Audio inputs can now be swapped [Page 12](#)
- Quick Edit Knobs can now be switched off [Page 13](#)
- Some page names on the BUS pages have been changed, to make it look less cryptic. [Page 14](#)

A few things, that were missing in the User Manual, has now been added:

- Chop Mode parameter description [Page 17](#)
- How to set up (stereo) samplings [Page 18](#)

Bug Fixes:

In my eager to make everything run as fast as possible, I unfortunately managed to create a bug, in an earlier update, which got the audio inputs sample frequency lowered. I sincerely apologize for this, but now it is back to 44.1 KHz. Thanks a ton to Joakim Gleisner for doing all the necessary measurements, to detect this.

The 2 Morph knobs would not work in their entire range, when controlled via MIDI. Now they will.

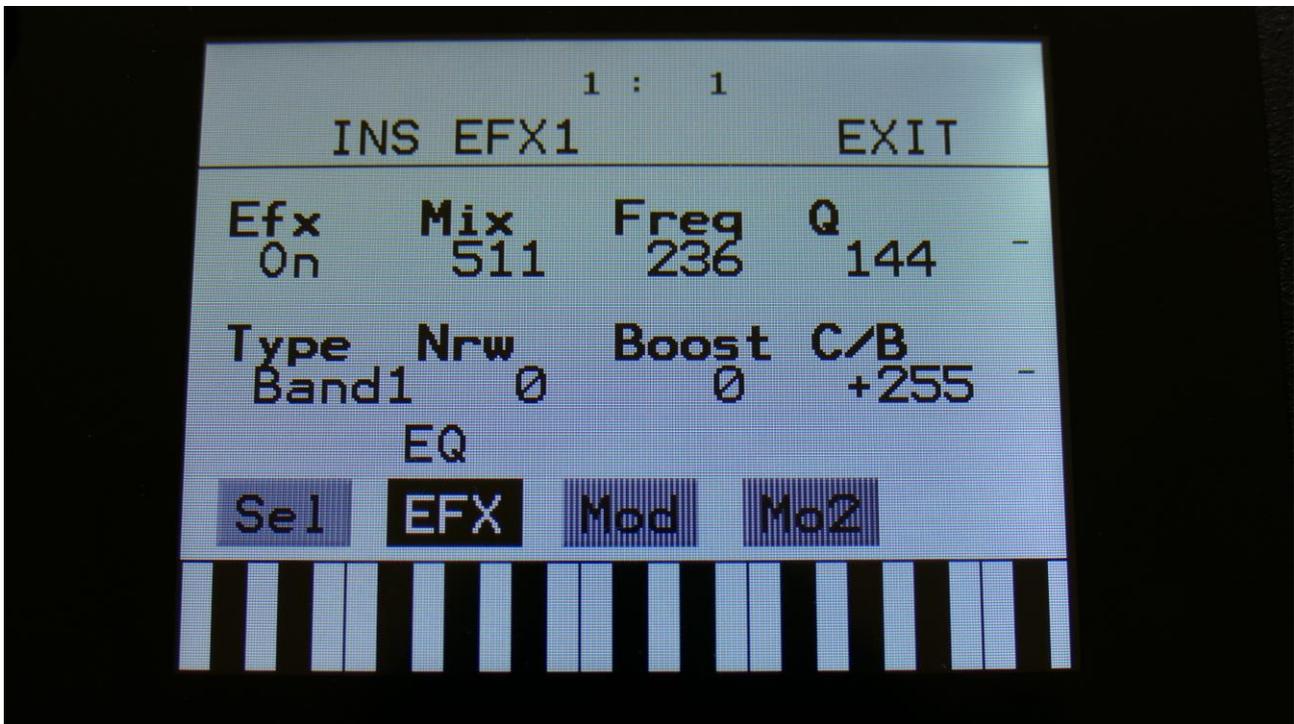
If a part that was set to external, was the selected part, the Morph knobs stopped working. This has now been fixed.

If a knob was set up to modulate the output effects Mix and Pan, the Quick Edit function would not be switched off. This has now been fixed.

Clear Controller Track were using the track number selected by the Note Tracks. Now it is using the Controller Track number.

Parametric EQ insert effect

A parametric EQ with different characteristics has been added to the insert effects.



The parameters:

Mix: The output of the EQ is inverted. This means, that when the Mix parameter is set to 256, the EQ is actually subbed from the audio input. Set the Mix parameter to different values, to obtain different EQ effects, or just turn it fully up to 511, to get a normal parametric EQ.

Freq: Sets the frequency, at which the EQ will cut or boost.

Q: Sets the width of the frequency band, that will be cutted/boosted.

Type: Sets the EQ characteristics. The types available are:

Band1: Cut/boost the frequency/range, selected by Freq/Q.

Band2: Like Band1, but with a slightly sharper sound.

Band3: Like Band2, but with an even sharper sound.

Low: Cut/boost the frequencies below the frequency selected by Freq.

High1: Cut/boost the frequencies above the frequency selected by Freq.

High2: Like High1, but with a sharper sound.

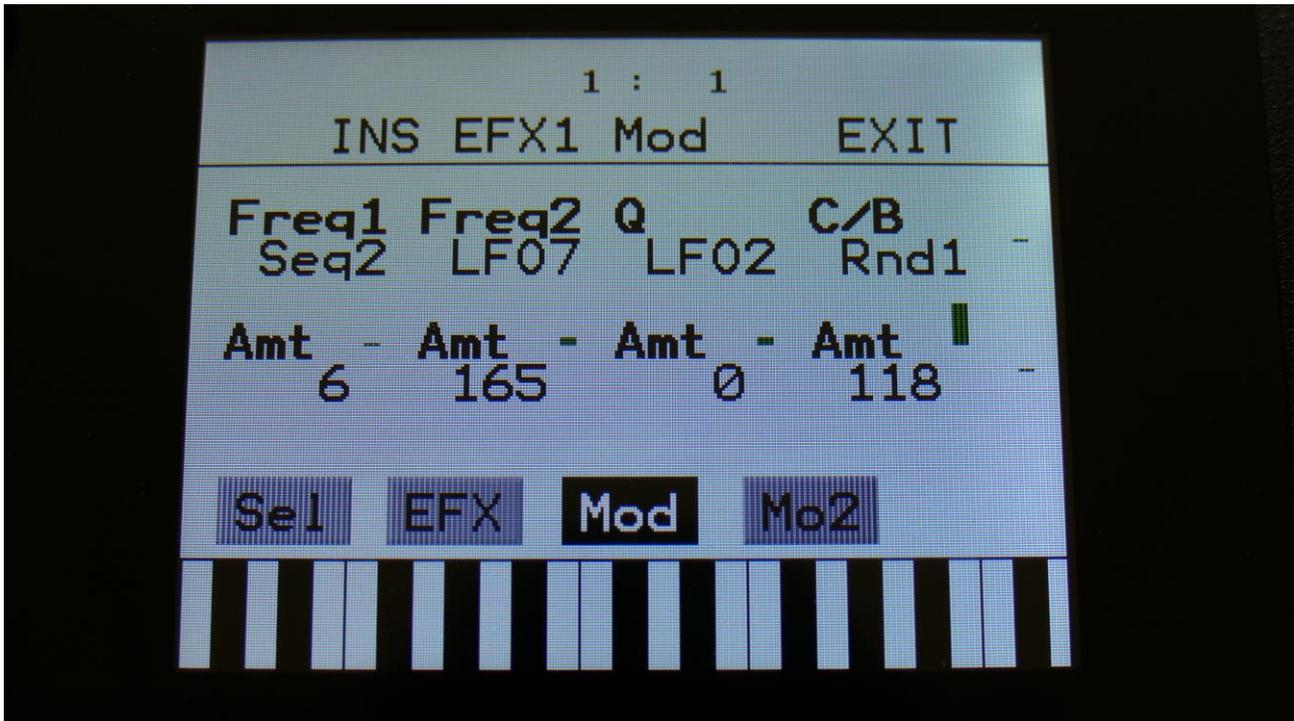
FAT: Like Band3, but it fattens the sound a bit.

Nrw: Turning this up, will narrow the frequency band affected by the EQ.

Boost: Turning this up, will boost the output gain of the EQ.

C/B: Cut/Boost. Setting this to a negative value, will damp frequencies on the input signal. Setting it to a positive value, will boost frequencies on the input signal.

EQ Modulation



Freq1/Freq2: Will modulate the EQ frequency.

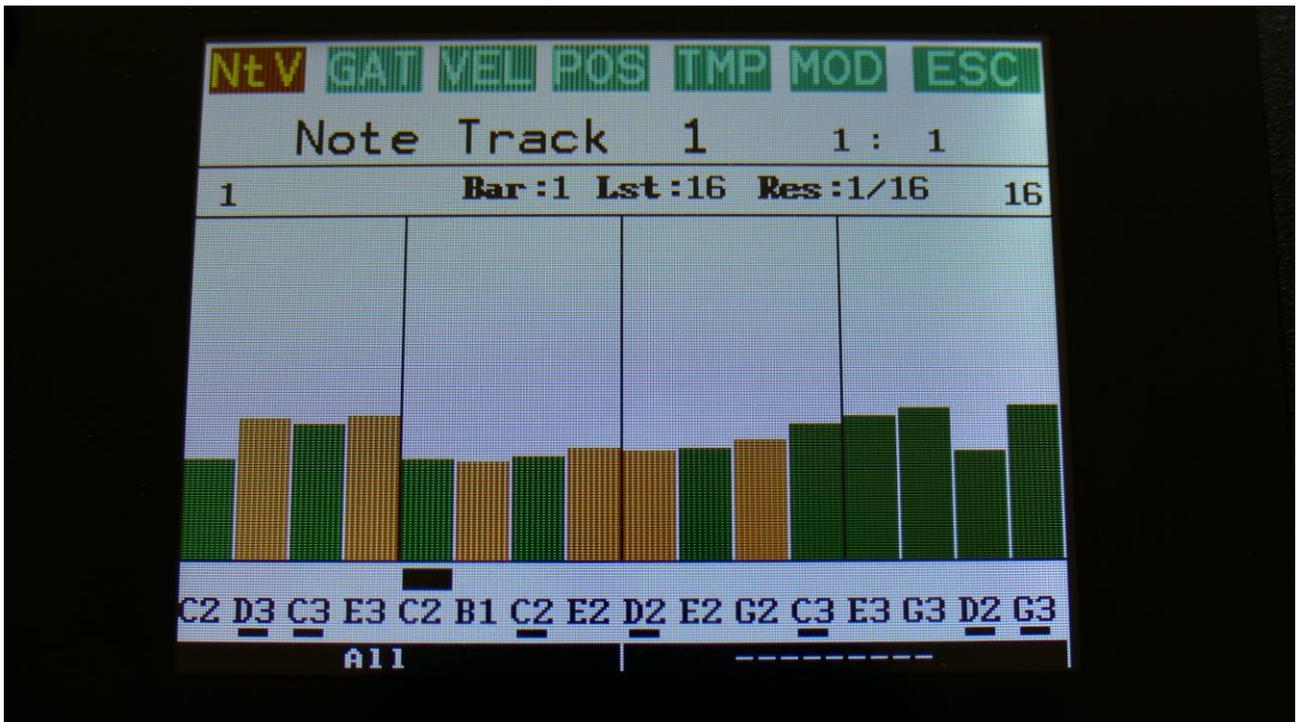
Q: Will modulate the EQ frequency width.

C/B: Will modulate the cut/boost parameter.

Sequencer Steps Offset Adjust

It is now possible to adjust the offset of all steps in a sequencer sub track, from step 1 to the selected last step, by turning one knob.

To do this, touch the knob select bars in the bottom of any steps page, to select step editing with knobs. Now touch the active knob select bar one more time, and it will switch to "All".



You can now, by turning Edit Knob 1, adjust the offset of all steps at the same time. Middle position of Edit Knob 1 is zero, above middle will turn the offset up, below middle will turn the offset down.

SPECIAL NOTE FOR THE POSITION SUB TRACK:

When adjusting the offset of the step positions on the position sub track, the positions will "roll over" around the selected last step. This means, that if you are turning the offset up, the last steps before the last step, will now be placed on the first steps of the track. Likewise, if you turn the offset down, the first steps of the track, will now be placed on the last steps of the track.

SPECIAL NOTE FOR THE SUB-POSITION SUB TRACK:

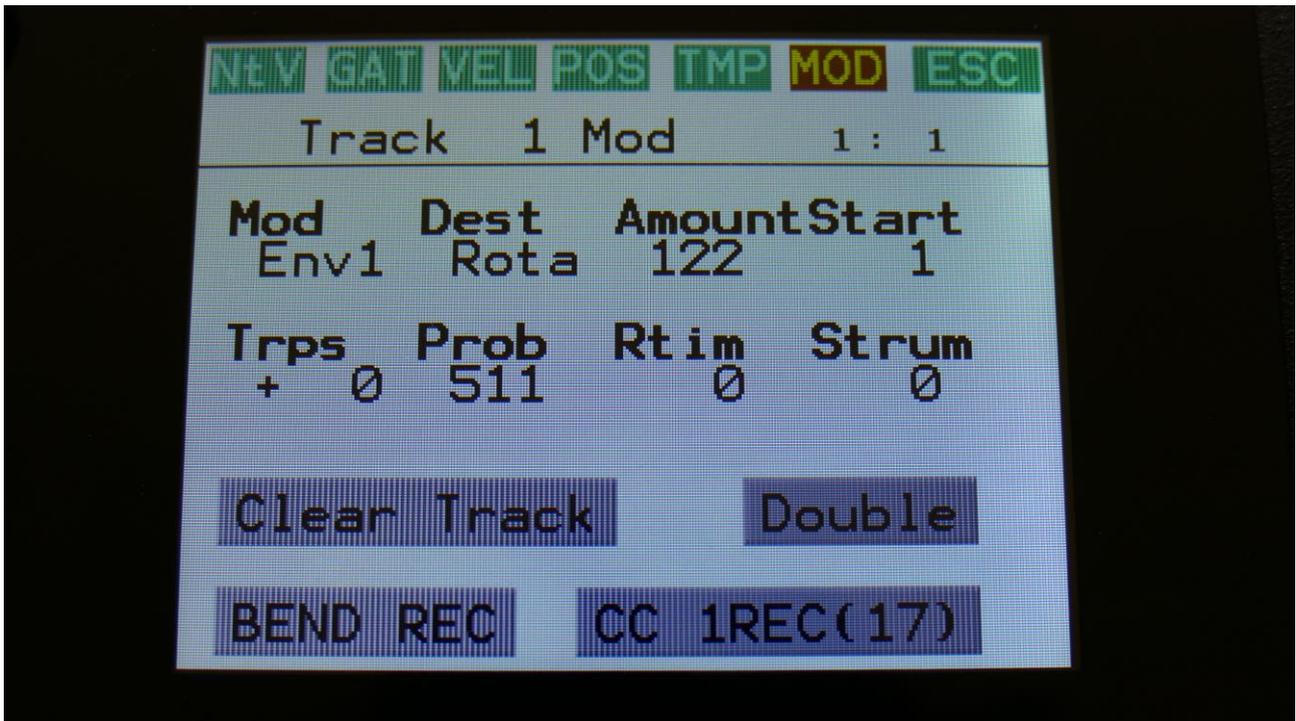
Offsets can't be adjusted on this. If "All" is selected on the sub-position track, the offset of the position track will be adjusted, without any visualizing.

Position Rotation Modulation

Position Track Rotation has now been added as a modulation destination on the sequencer note tracks.

This will do exactly the same, as when adjusting the offset of all steps of the position track, but it is done by a modulation source.

On the Note Track Mod page, simply select "Rota" as the modulation destination, select the modulation source, and turn up the modulation amount.

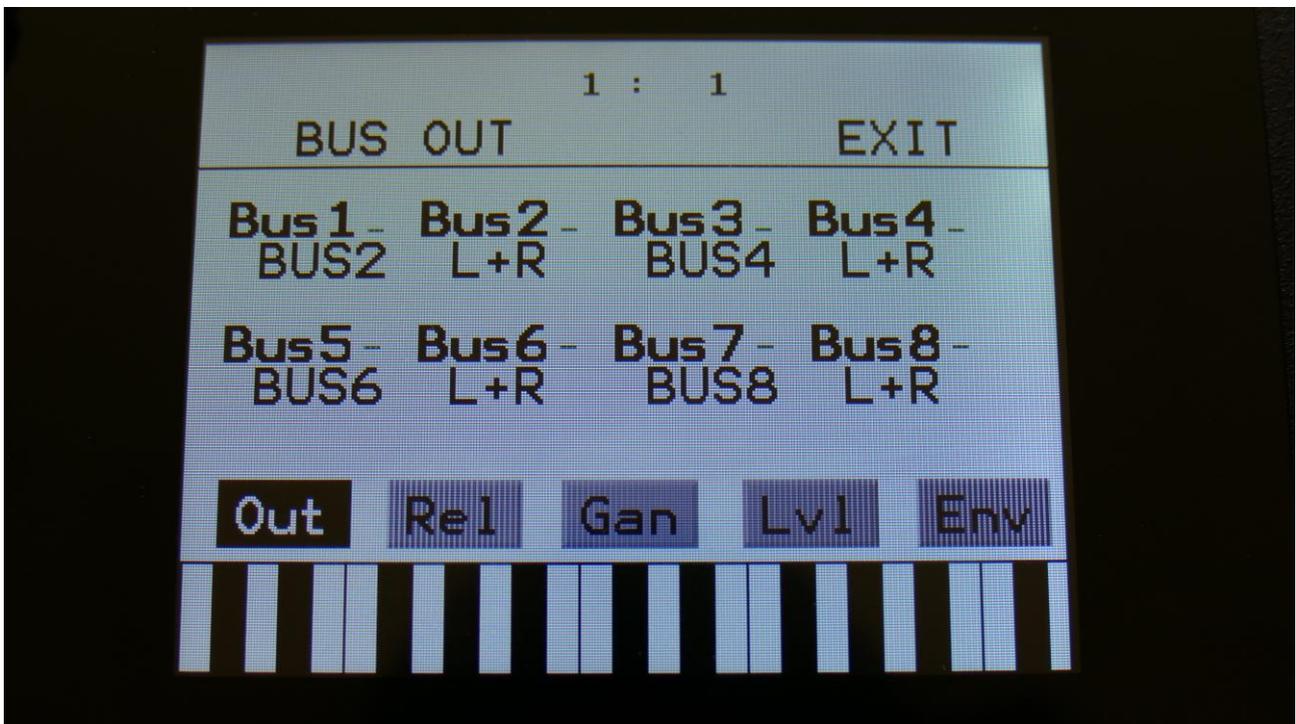


Output An Audio BUS to another Audio BUS

Many LD3 users has let me know, that they often needs to connect the output of an audio bus, to another audio bus, in order to place effects before/after the audio bus follower VCA. This could be done by adding a jack cable from an audio output to an input.

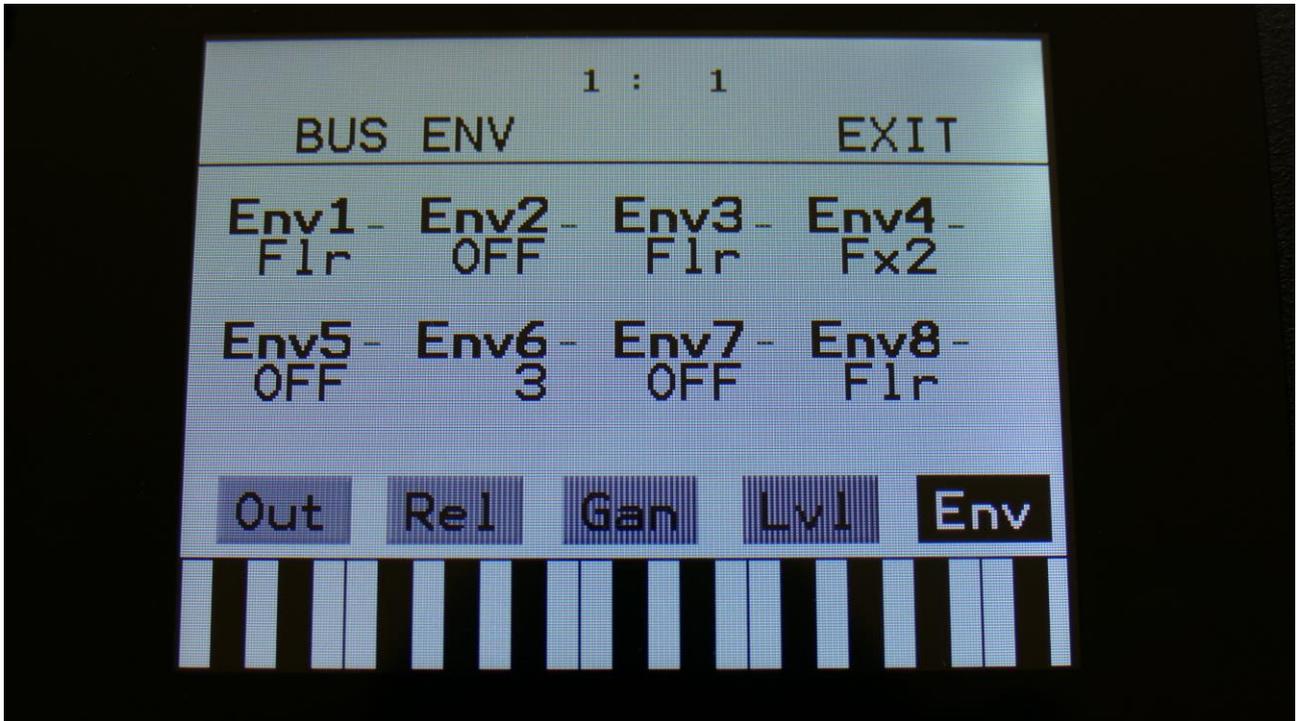
But now you can save the cable! Now you can simply output a bus to another bus internally in LD3! Bus1 can output to Bus2, Bus3 can output to Bus4, Bus5 can output to Bus6, Bus7 can output to Bus8.

To do this, simply go to the BUS OUT page, and select the Bus output to be another Bus, instead of an audio output or output effect.



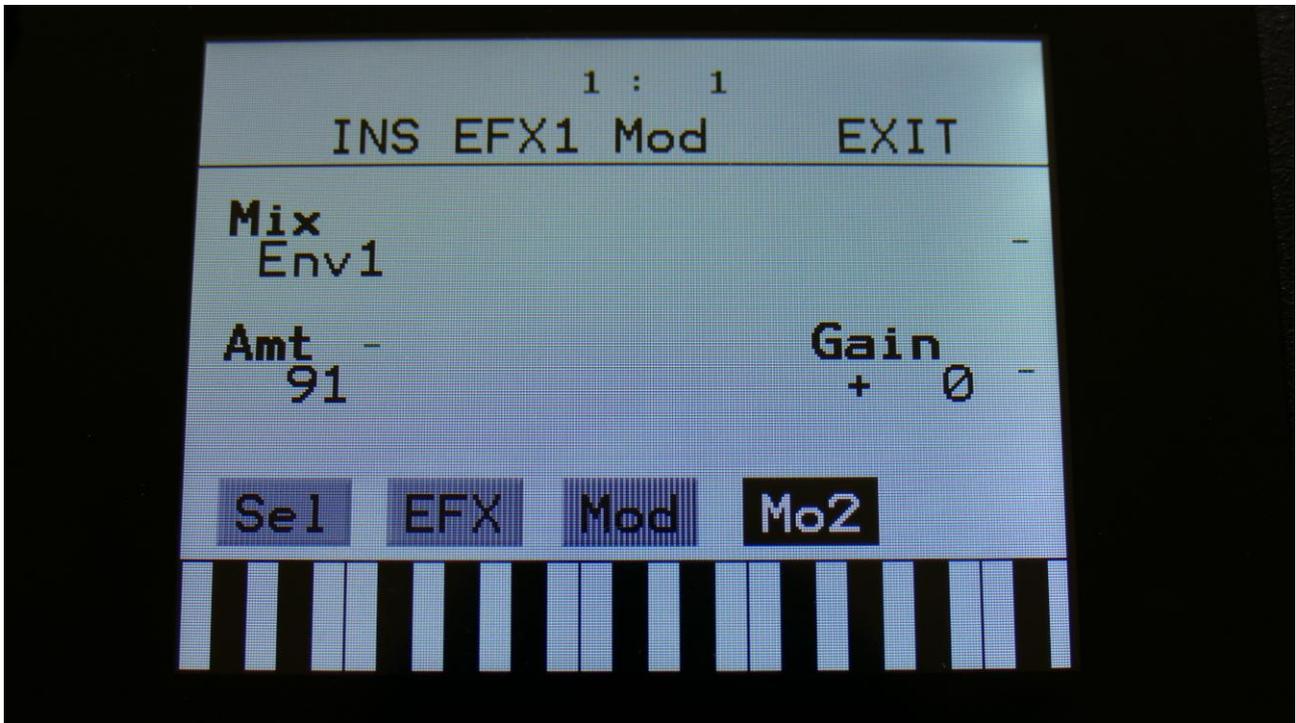
BUS Follower/Envelope OFF position

If you would like to just use the Audio Bus Follower as a modulation source, without it affecting the output level of the Bus itself, this is now possible, by setting the Env to OFF, on the BUS ENV page.



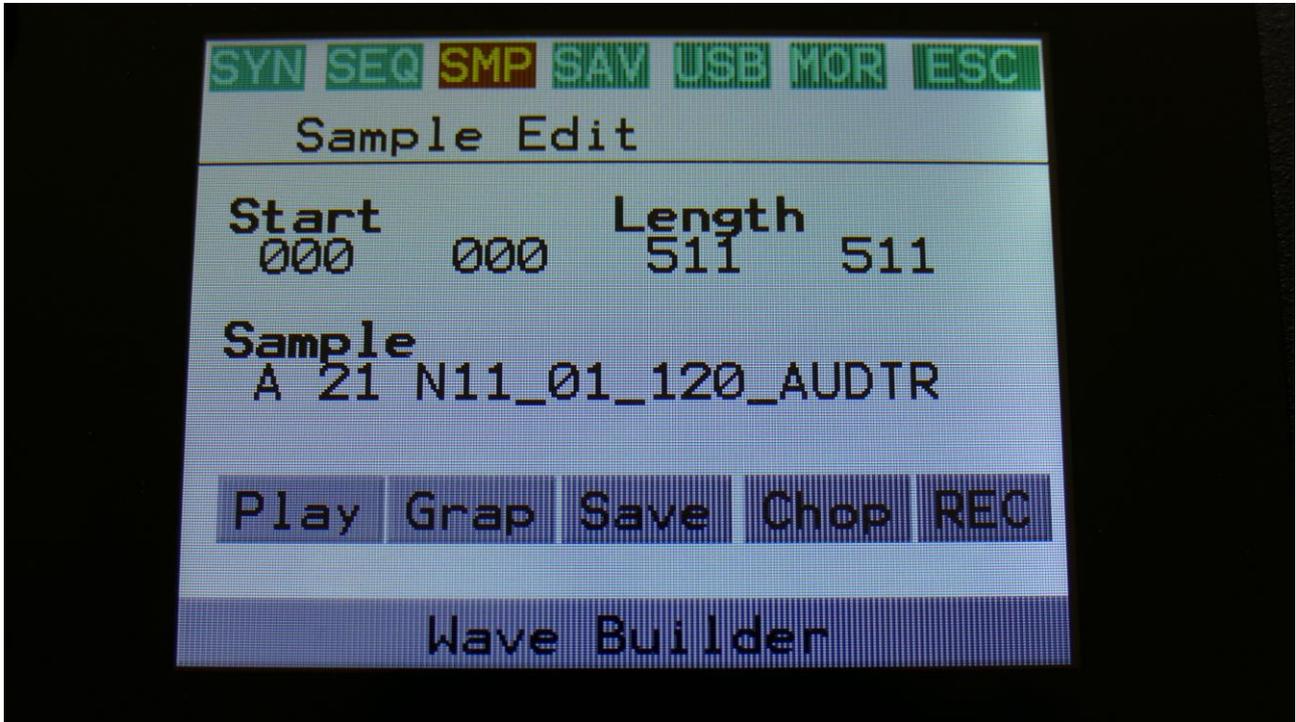
Insert Effects Input Gain

On the Insert Effects Mo2 page, it is now possible to adjust the Insert Effect input gain, using the new Gain parameter:



Audio Track BPM

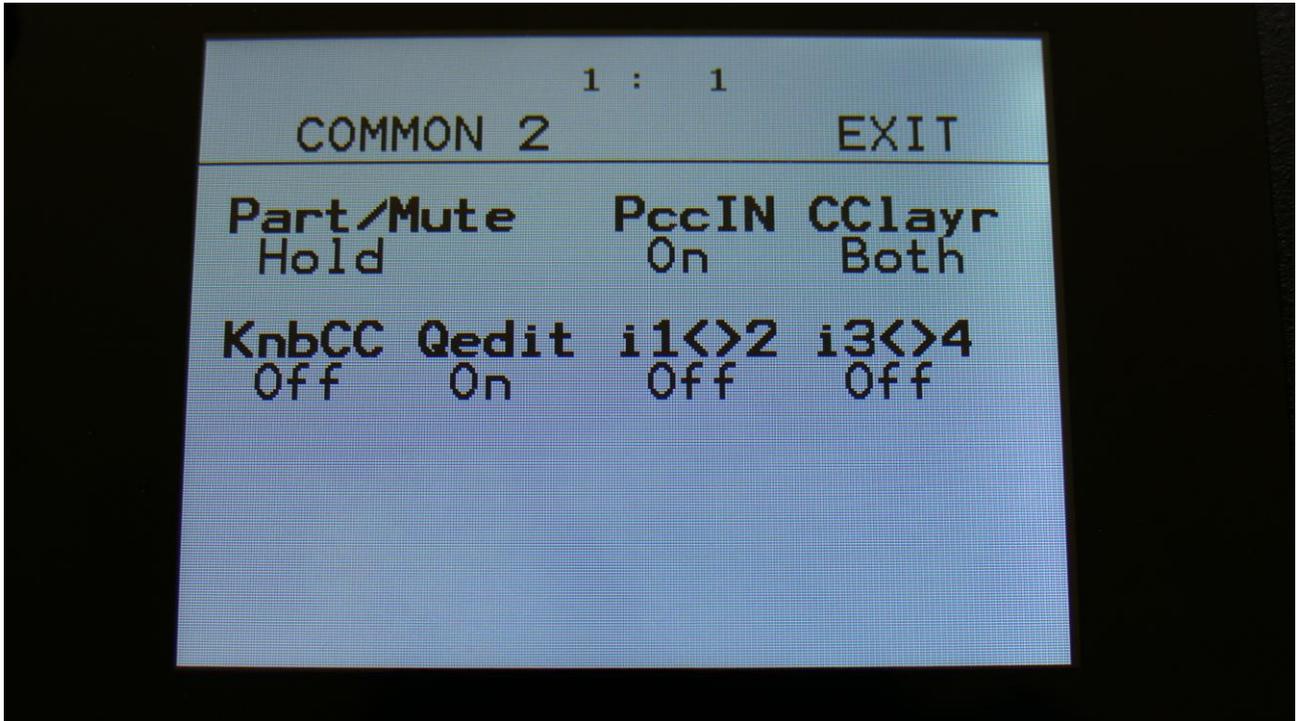
When recording an audio track, the BPM of this is now included in the sample name – A058_05_120_AUDTR -Preset number_Track Number_BPM.



Audio Inputs Swap

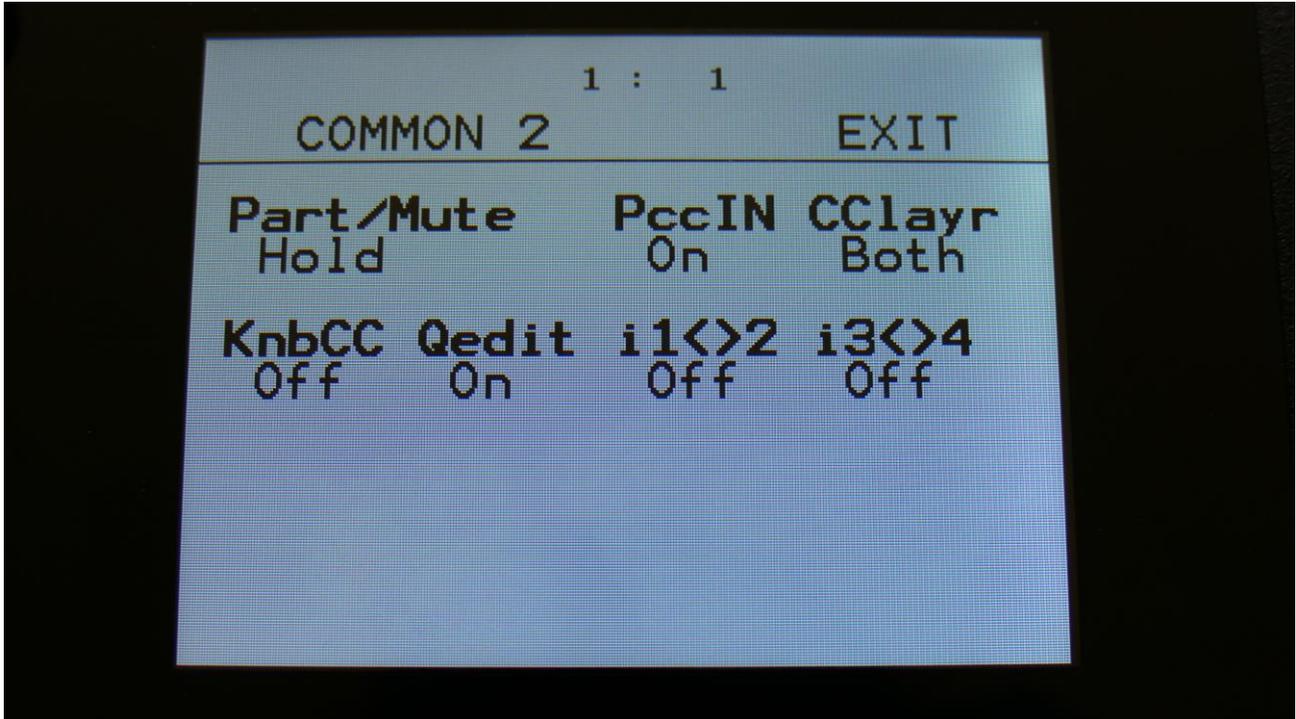
If you, for some reason, would like to swap the audio inputs, this is now possible.

Input 1 and 2 can be swapped, and input 3 and 4 can be swapped, using the "i1<>2" and "i3<>4" parameters on the MOR>COMMON2 page:



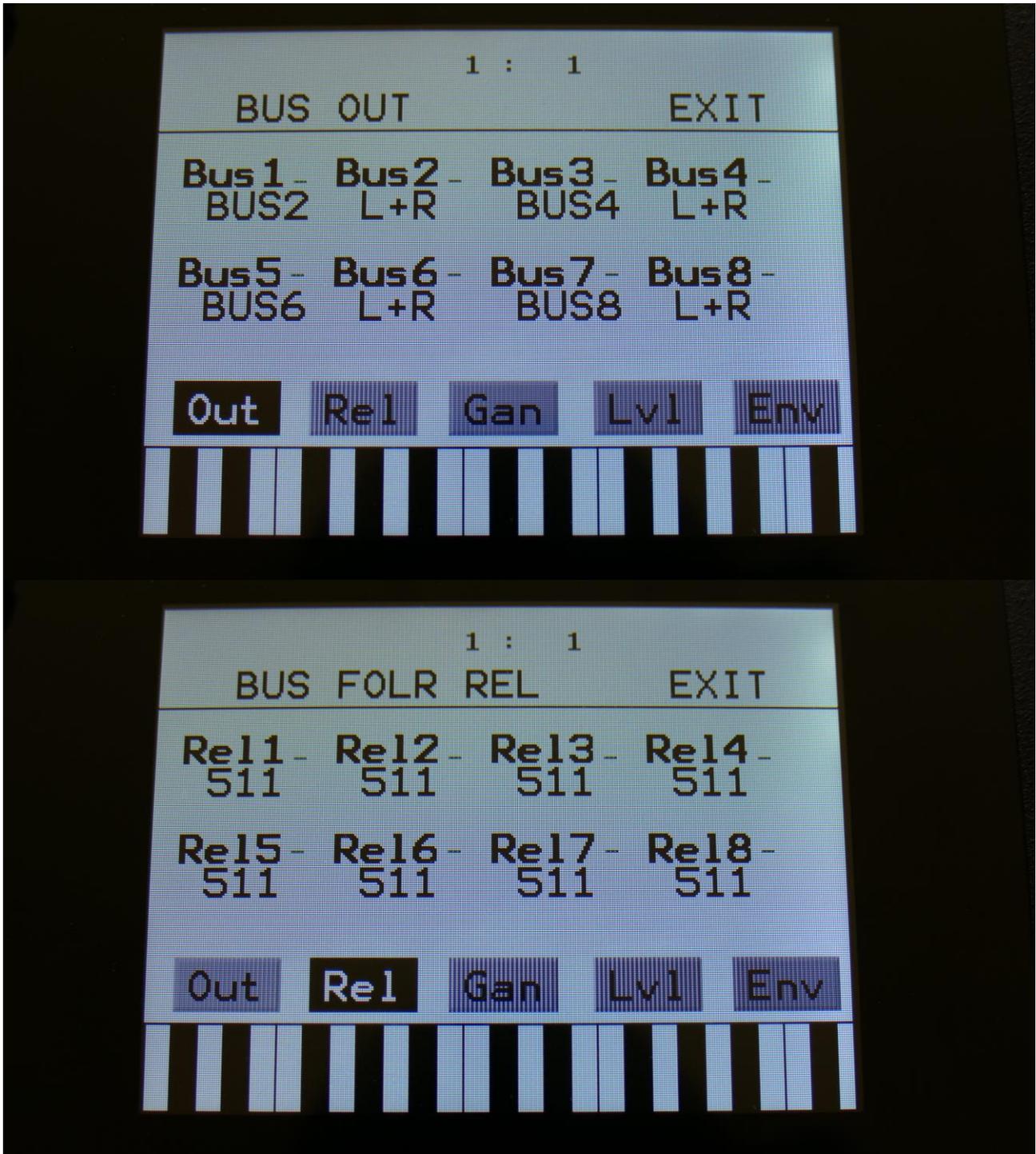
Quick Edit Knobs Off

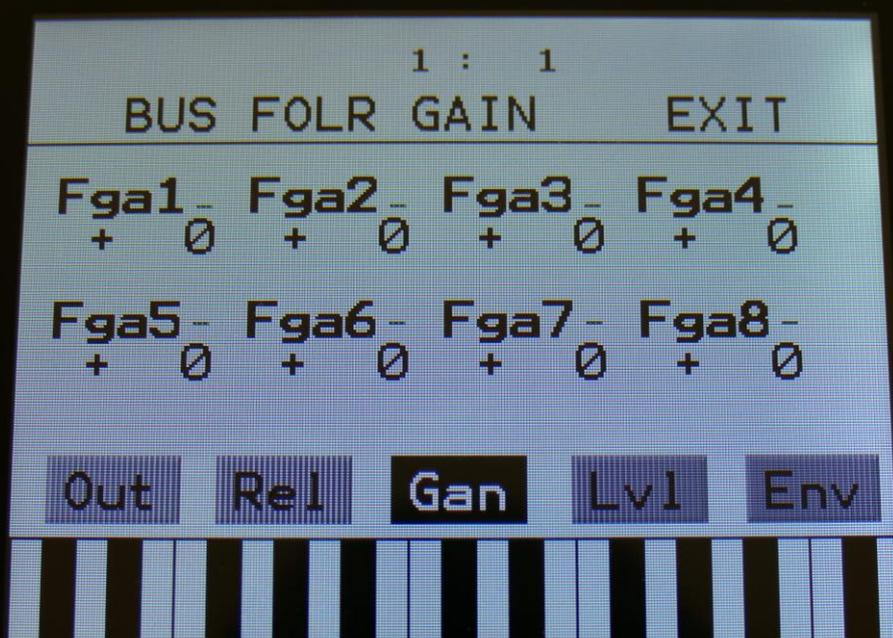
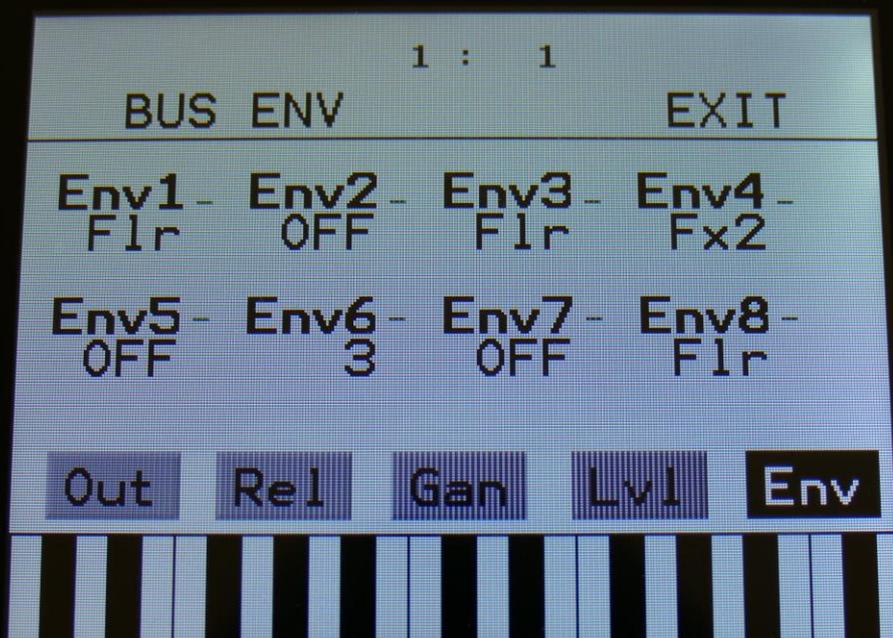
If you don't need the default functionality of the Edit Knobs (the parameters, that they are assigned to, when they are not used as modulation sources), it is now possible to switch them off, by using the "Qedit" parameter, on the MOR>COMMON2 page:

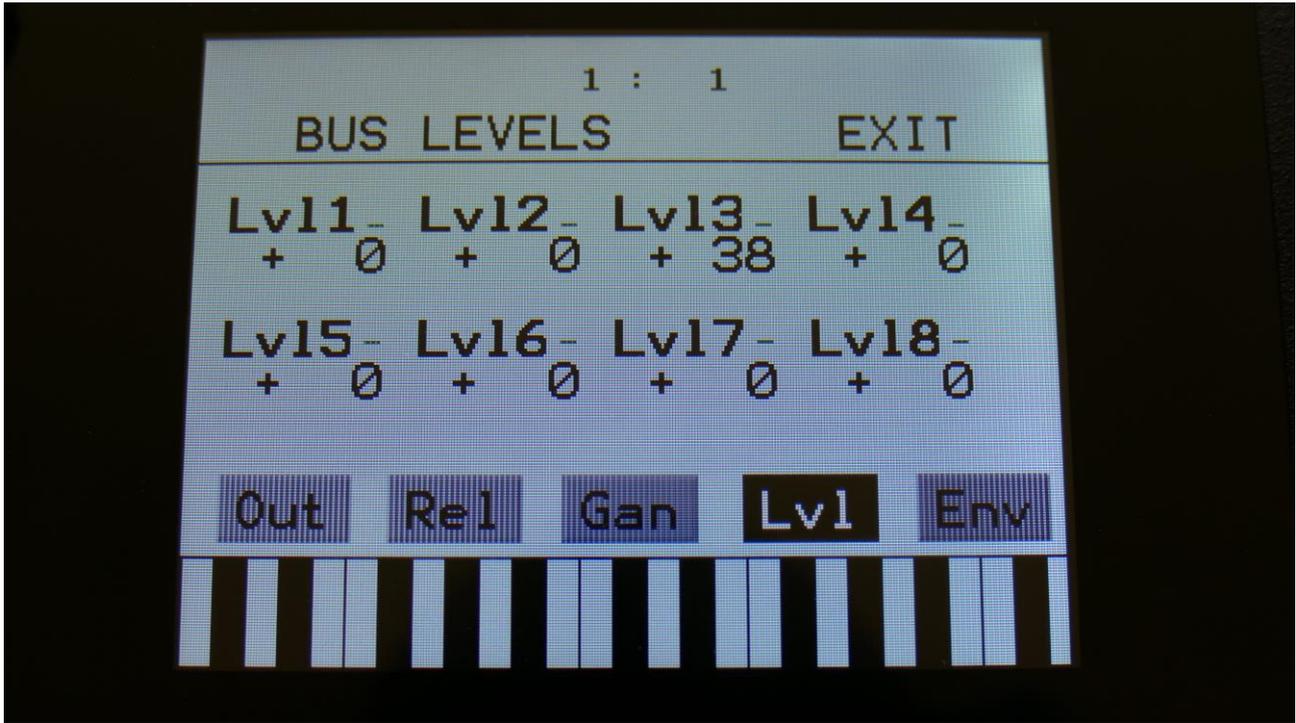


Bus Sub Pages Naming

Some page names on the BUS pages has been changed, to make it look less cryptic (I think).

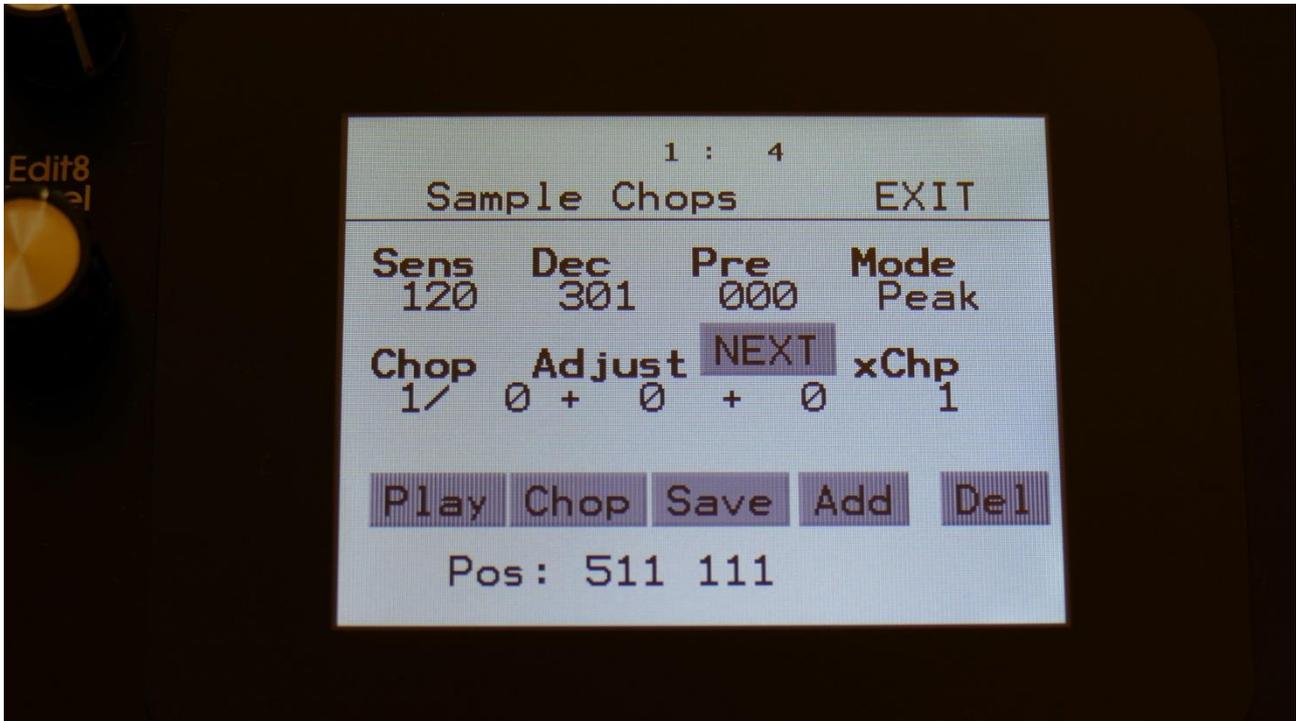






Chop Mode parameter

LD3 has different modes, for automatically generate non-destructive chop points on a sampling. It can create chop points by peaks, wave cycles or by dividing the sampling into a fixed number of equally sized chops.



The parameter on the Sample Chops page, that was named Wave in previous OS versions, was renamed to Mode in V 8.15, but somehow this change didn't make it to the user manual.

The following chop modes, that determines how LD3 will chop a sampling, can be selected:

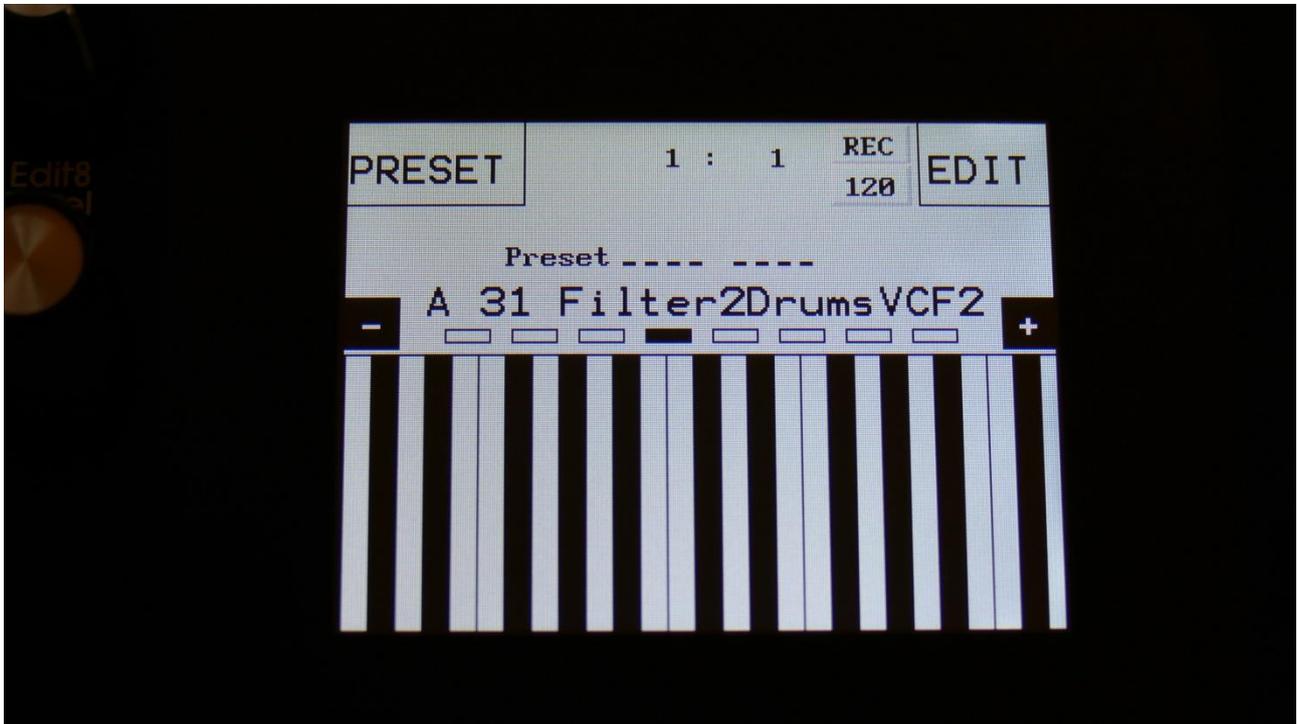
Peak: It will generate the chop points from peak detection, according to the settings of the Sens and Dec parameters.

Wave: It will generate the chop points from zero point detection, according to the settings of the Sens and Dec parameters. When auditioning chops in this mode, the playback will be looped.

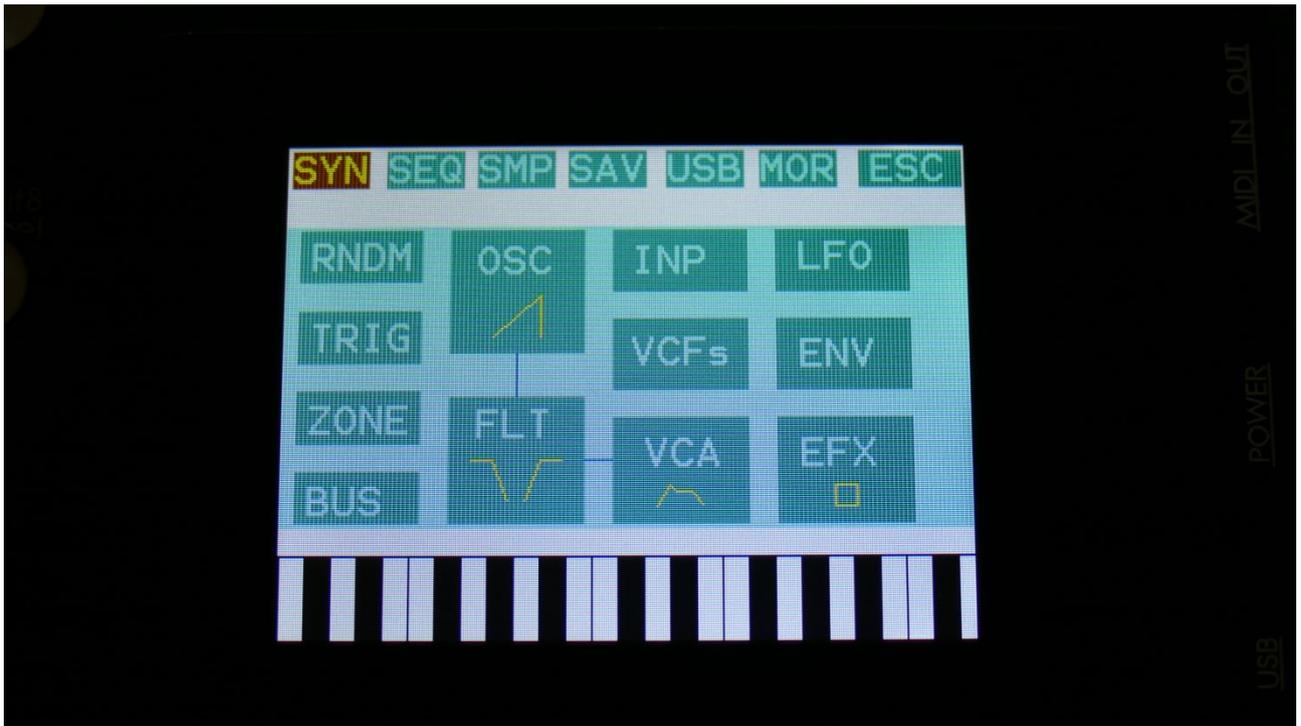
A number between 2 and 64: It will divide the sample length by the selected number, and generate equally sized chop points from that, regardless of the settings of the Sens and Dec parameters.

How to set up (stereo) samplings

In this chapter it will be explained, how to set up a sampling for a part, and some extra steps, that is required for setting the filters and VCA/BUS in stereo mode, when setting up a stereo sampling.



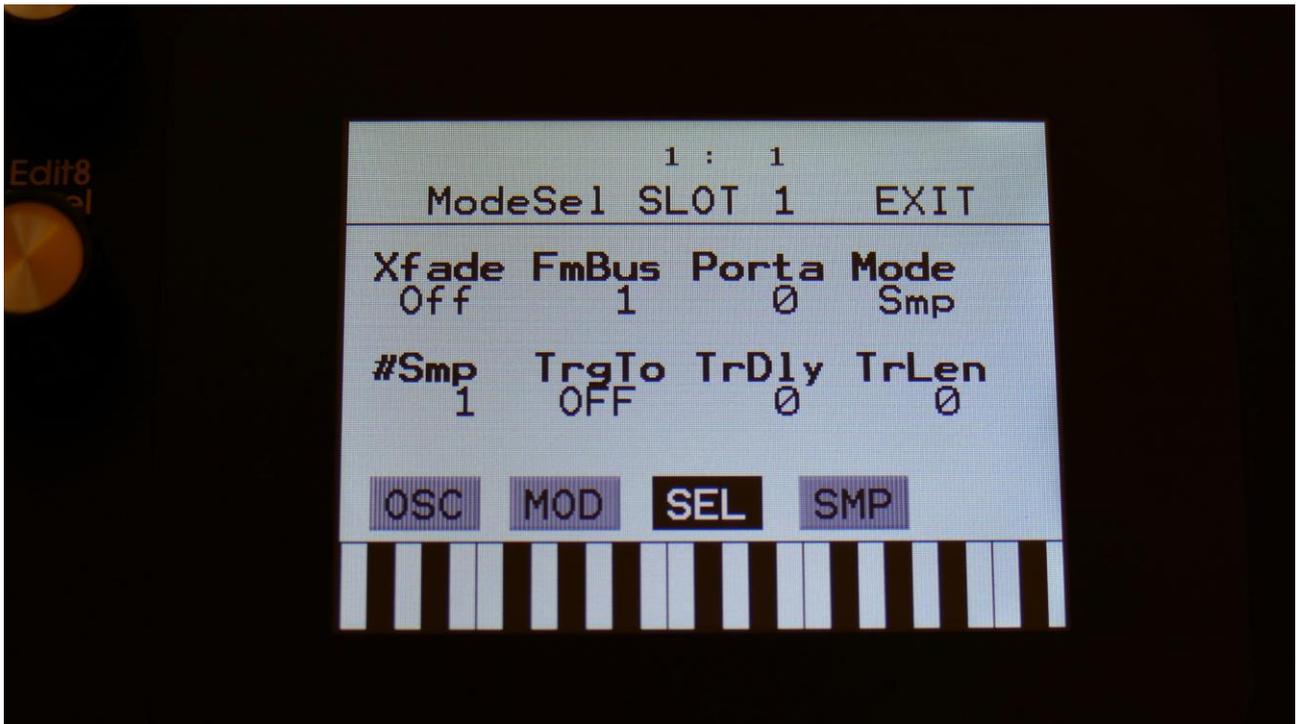
From the Preset Select page, touch “EDIT” to enter the Synth main page.



From the Synth main page, touch the box named “OSC”, to enter the oscillator pages.

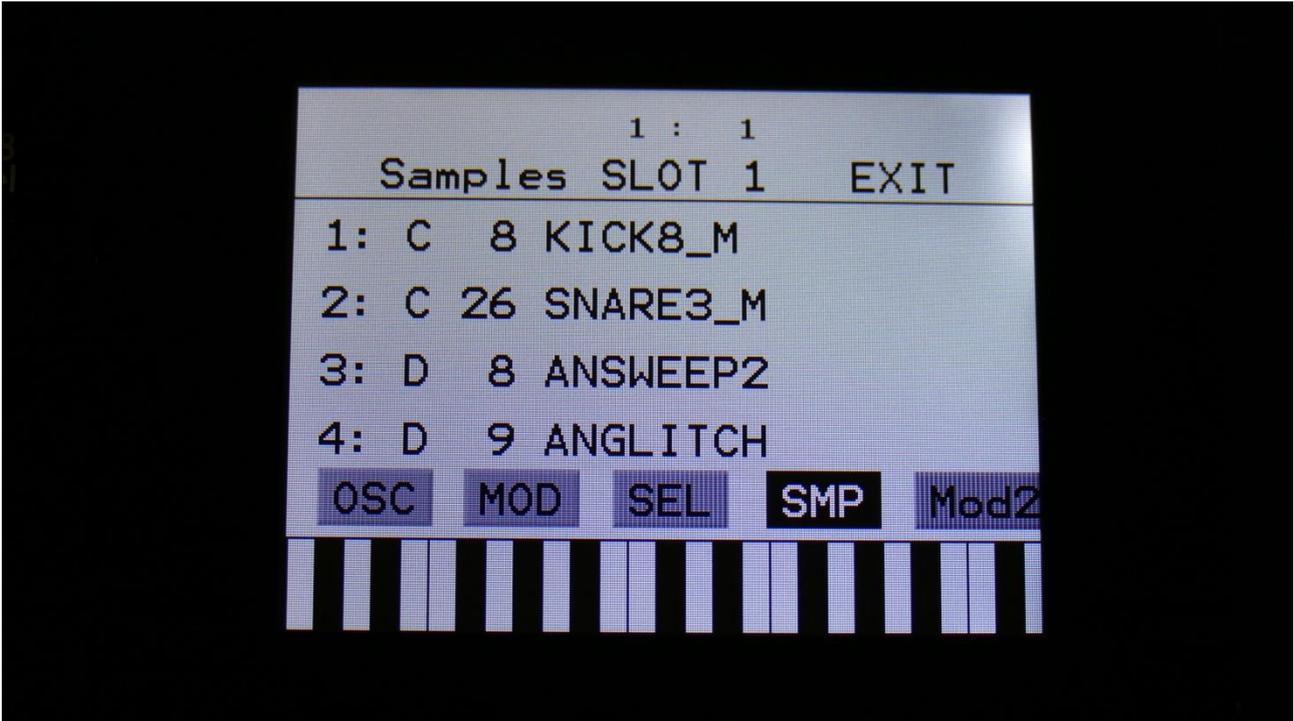


Touch the "SEL" touch button, to enter the oscillator mode selection page.



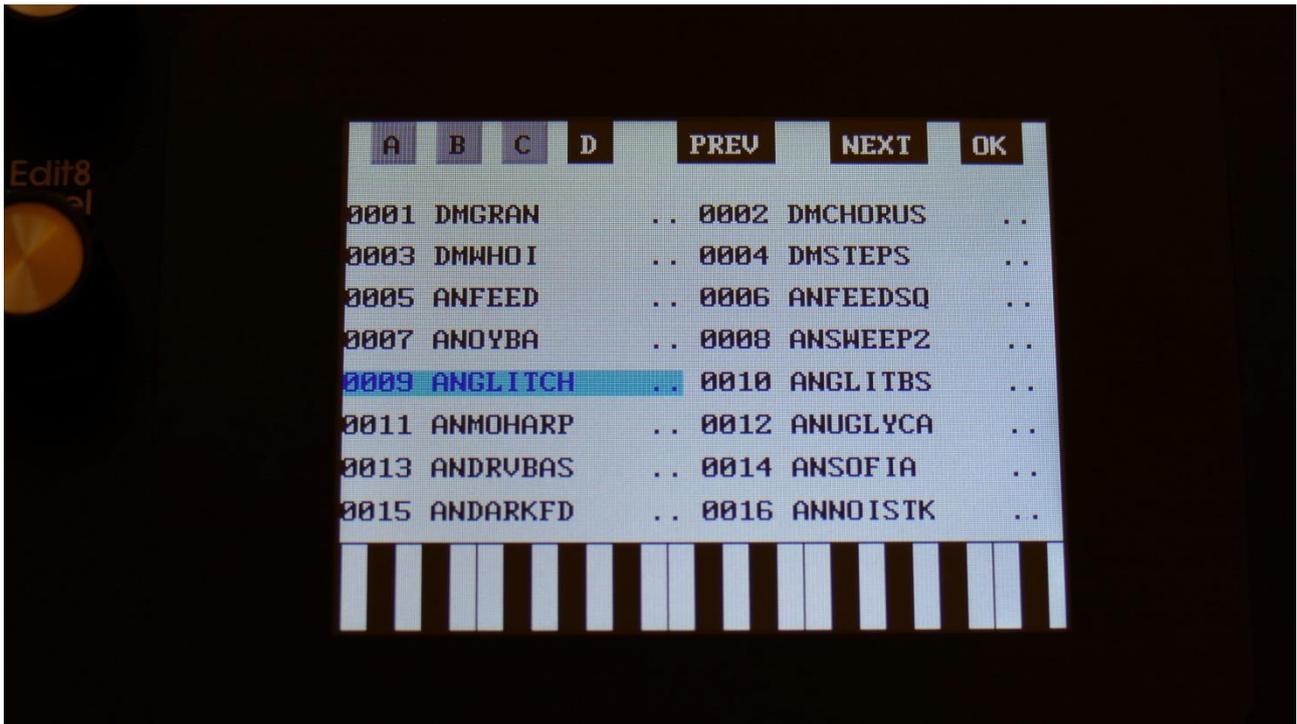
Set the “Mode” parameter to “Smp”.

Now touch the “SMP” touch button, to enter the sample selection page.



Here you can select up to 4 samplings for the part. The number of these samplings, that are used, is set by the #Smp parameter on the SEL page. The 4 samples can be selected to play back, setting the Chop parameter, and by chop select modulation.

For now, just touch the sample name, that starts with "1:", to open the sample select page for the first sampling.



On each page you will view 16 of the samplings, that are held in the LD3 FLASH memory, Bank A, B, C or D.

Touch A, B, C and D to select the sample bank, touch PREV and NEXT to view the previous or next 16 samplings.

To select a sampling, touch the sample name.

A small red square is shown near the sample name of the sampling, that are the last one, that was added to the bank.

When you have found the right sampling, touch OK to return to the Synth Part Sample Select page.

Now you have assigned a sampling to the currently selected part. You can now play it back, by triggering the part from its trigger button, a connected MIDI device, and from the sequencer.

If a stereo sampling is selected, a few extra steps are required, to get LD3 to output both audio channels from this. These steps will be explained on the following pages.

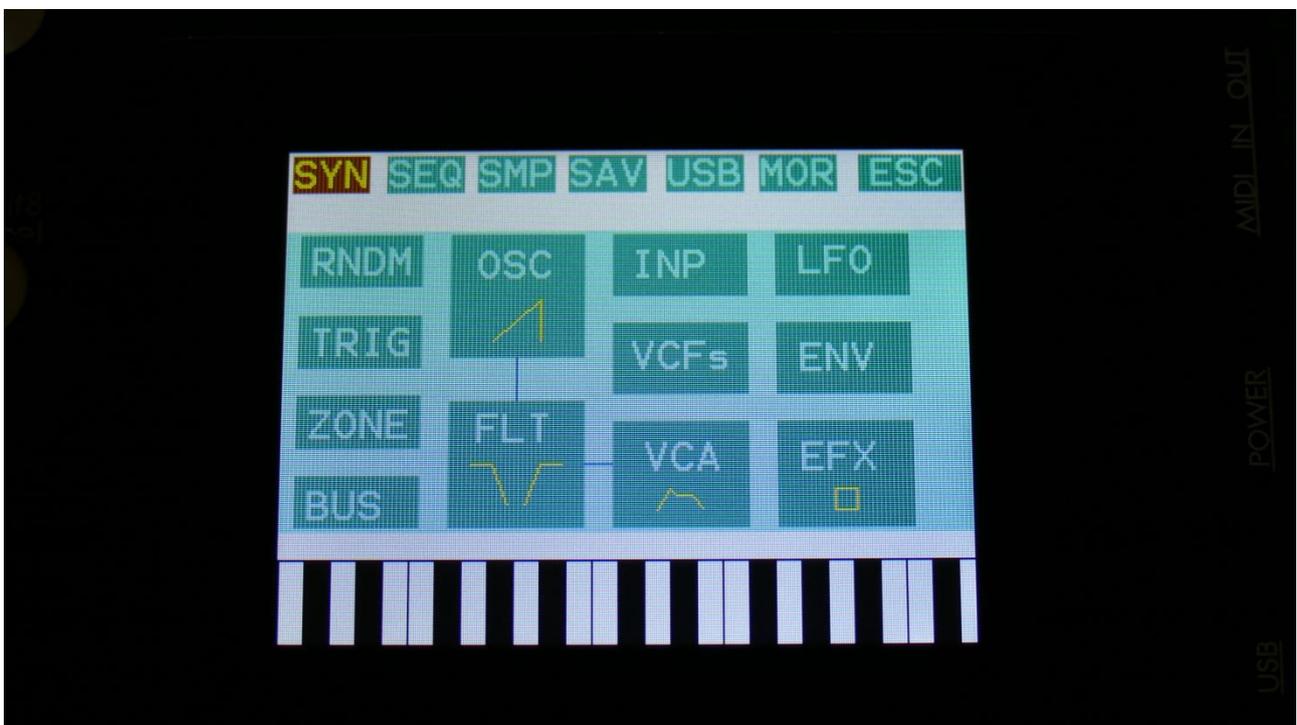
Extra steps required, for setting up a stereo sampling

The extra steps required for setting up a stereo sampling are:

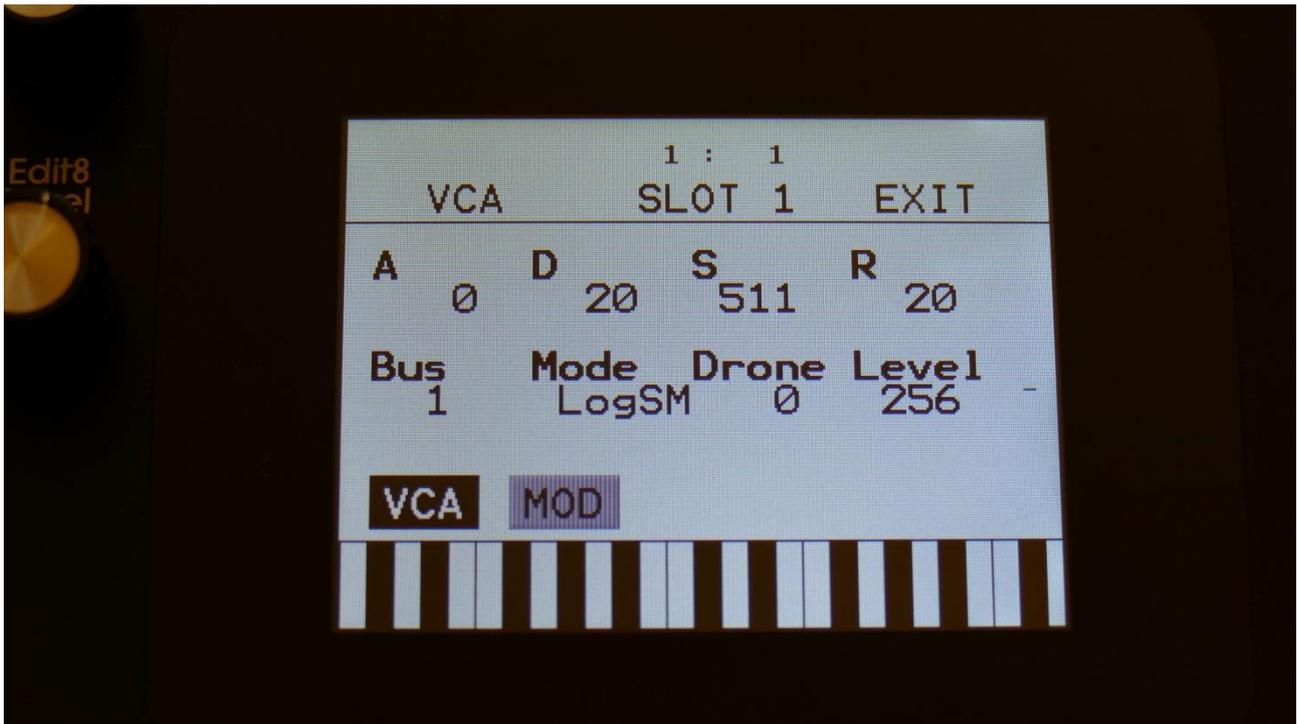
- Set up the VCA to output to 2 audio busses.
- Set up these audio busses to output to left and right.
- Set the filters in stereo mode.

This will now be explained in detail.

Exit the oscillator pages, to go back to the Synth main page.

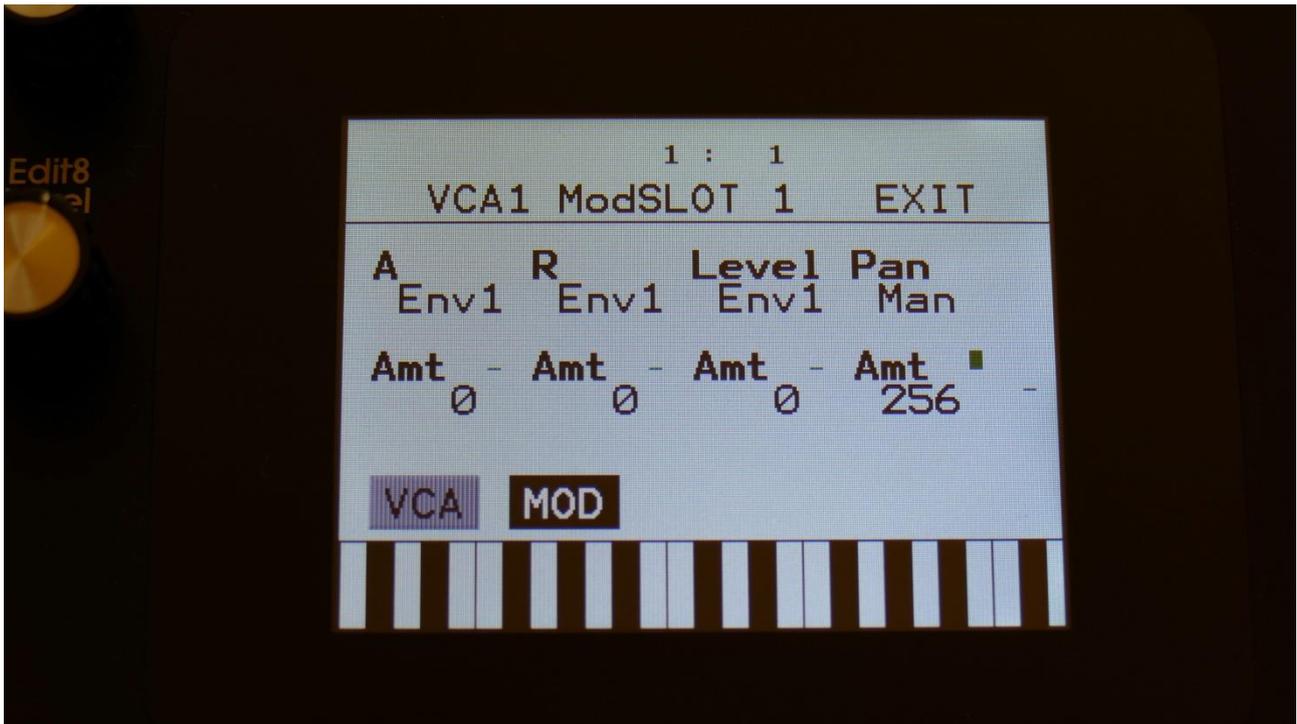


Touch the box named "VCA", to enter the VCA pages for the part.



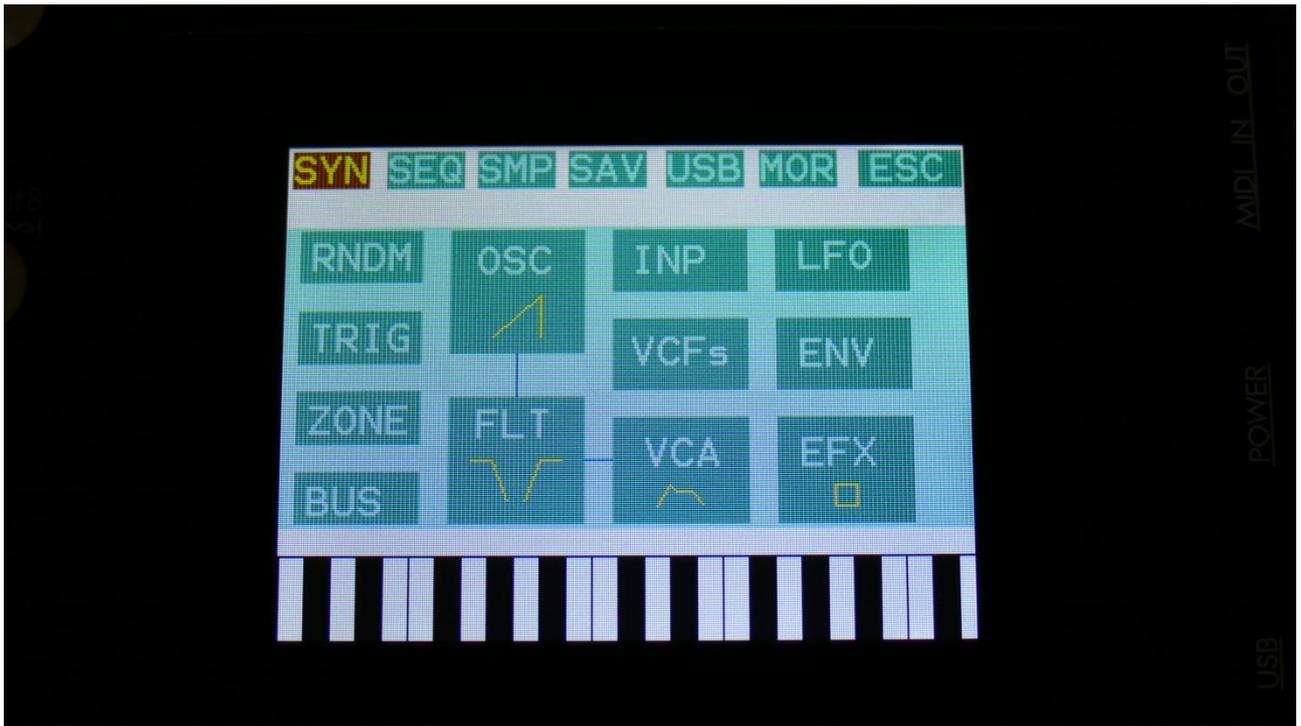
Set the “Bus” parameter, so that the VCA will output to 2 busses – “1+2”, “3+4”, “5+6” or “7+8”.

Now touch the “MOD” touch button.

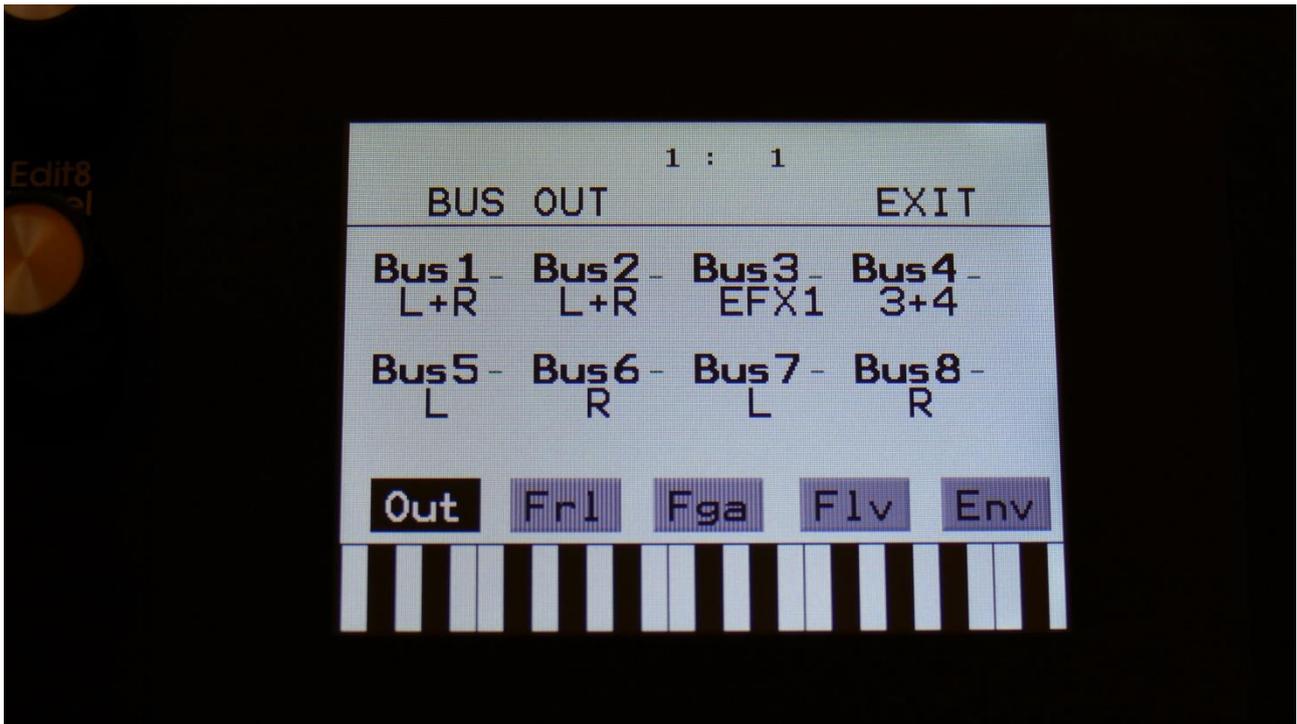


Make sure that “Pan” is set to “Man”, and pan “Amt” to “256”.

Exit the VCA pages, to go back to the Synth main page.

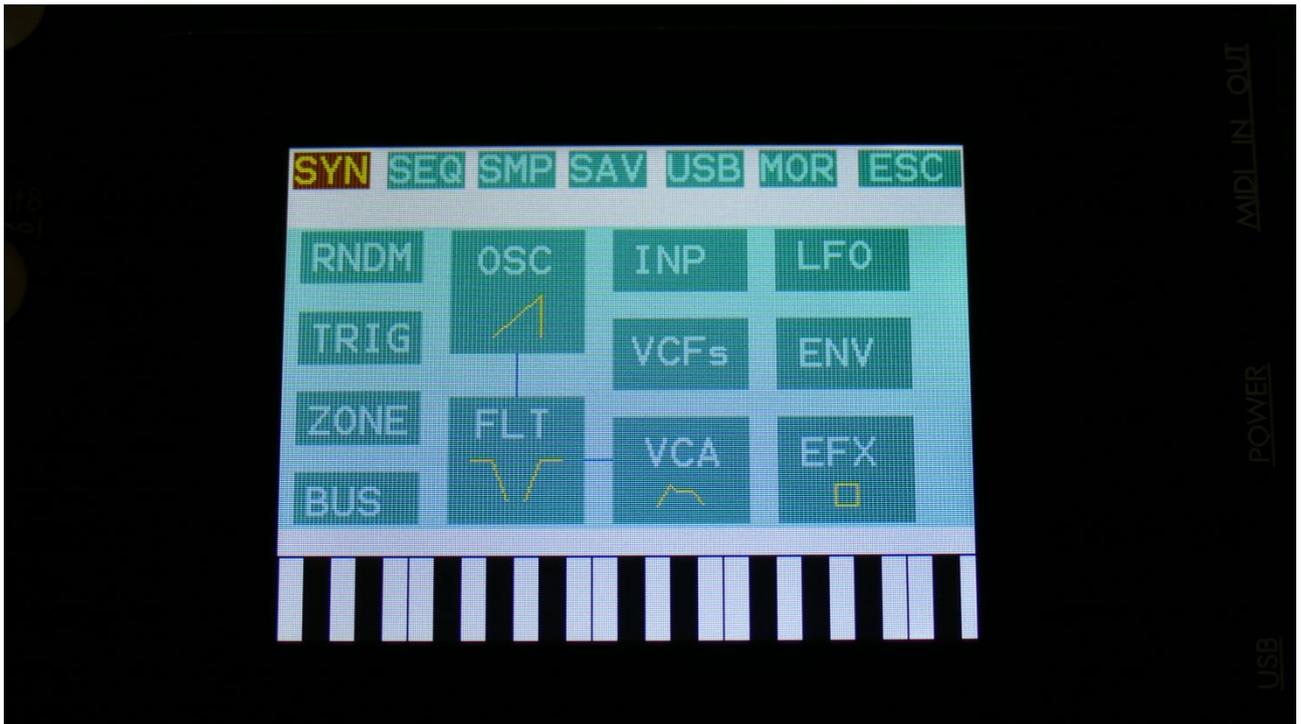


Touch the box named “BUS”, to enter the audio bus pages.

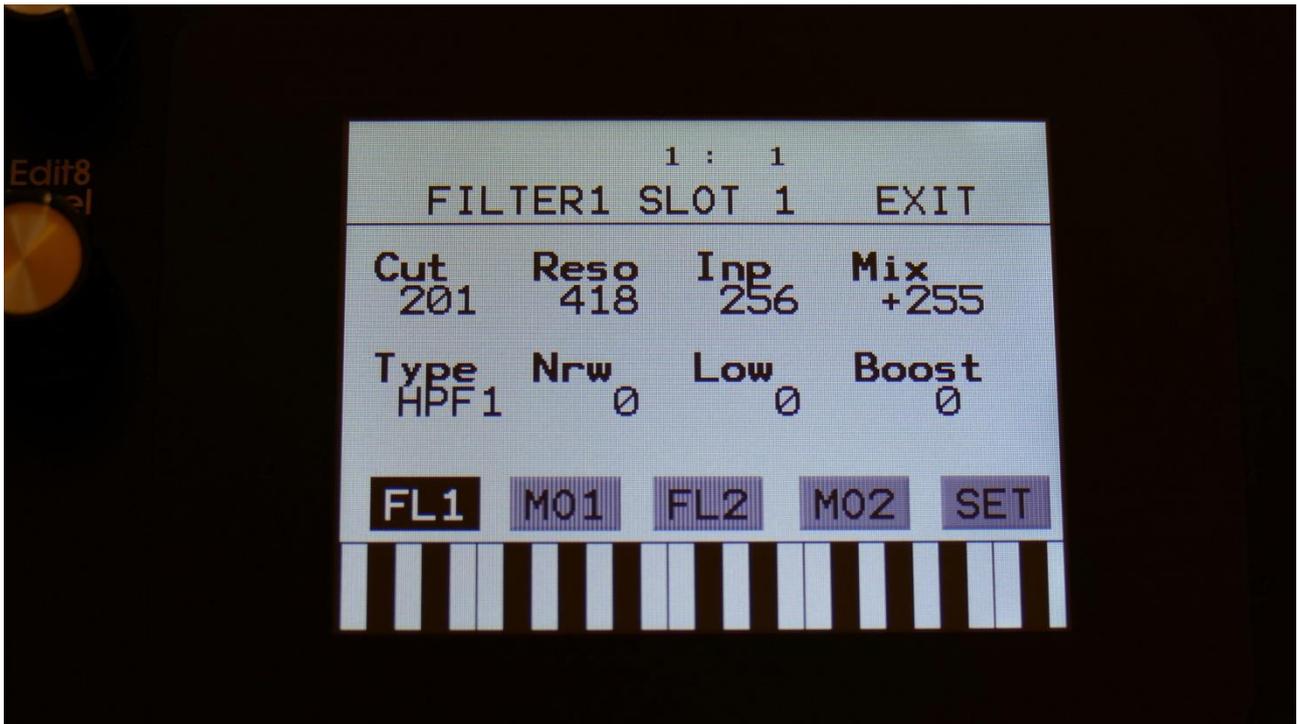


On this first Bus page, set the audio busses, that the VCA is outputting to, to respectively L and R, like Bus 5 and 6 on the picture.

Exit from this page, to the Synth main page.



Touch the box named “FLT”, to enter the digital filter pages.



Touch the "SET" touch button.



On this page, set the “Stereo” parameter to “On”.

It does not matter, if the digital filters are used or not, this routing has to be set to stereo, in order to get both audio channels of a stereo sampling through.

Now when you trigger the selected stereo sampling, it should play back in stereo!

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2020

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