Gotharman's anAmoNo ><

Modular Synthesizer

User Manual V 4.74

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Introduction

The most flexible Gotharman synthesizer ever!

Thank you very much for purchasing/consider to purchase a Gotharman's anAmoNoX Modular Synthesizer.

I was really happy with the flexibility of my Eurorack system, but since I spend most of my time running Gotharman's, and do not have very much time for playing music, I was not really happy with the lack of preset storage on this. I always ended up spending a huge lot of time tweaking knobs and rearranging cables, and not really getting any tracks composed (inportant or not :-)). This actually became a bigger and bigger annoyance to me, and in my Christmas holidays 2015, I decided to do something about it.

At first I started to design a module with 32 audio inputs, 32 CV inputs, 32 audio outputs, 32 CV outputs, 64 knobs, a display and memory. The idea was to connect everything of all my eurorack modules to this (hmmm...actually I am not sure if this module would have had enough connections...), connect the modules via an internal cross-bay, and adjust all the CV and audio levels on the 64 knobs. It did though, pretty soon, become clear to me, that this module would be huge and really expensive to produce. On top of that, not all parameters are CV controllable on all modules, so it would require quite a bit of soldering to get this connected to everything.

So I took a few days of brainstorming with myself, and came up with a new idea: The most important sound shaping thing (to my opinion), is the filter. So if I just could scramble things a bit down, and make a box with oscillators, VCA's, modulation sources, and maybe some effect modules, and just made the analog filters replacable, it would theoretically give almost the same possibilities as my eurorack system, but with added patch storage. And if I one day got tired of its sound, I would just have to replace one or both of its filters, and then I would get new sounds, without having to design or purchase a completely new synth. The design of anAmoNo X began...

anAmoNo X has a number of built-in "modules", like oscillators, filters, LFO's and so on. Every module has a number of modulation input connectors, and most modules also has a number of audio input connectors. For the modulation input connectors any modulation output from any other module can be connected. For the audio input connectors, any audio output from any other module can be connected. The 2 analog filters also appears as modules.

To make everything work as fast and effective as possible, anAmoNo X is not programmed behind any "OS". Everything is performed directly by the processor, and everything is programmed in assembly language, which is up to 30 times more effective than the C++ language, that most people program in, and it is programmed specificly for the anAmoNo X hardware.

1024 preset slots and 1024 song slots are available, all user programmable.

Very special thanks to:

Florian Bielmann
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For supporting this project from the beginning. I really appreciate your trust. Without you, Anamono X might not have been…

Gotharman Oktober 2016

Getting Started

Connecting:

On the right end panel of your Anamono X, you will find the power switch, connections for power supply, 2 audio outputs, MIDI in and out, and USB.

Since on most of the presets, all audio are directed to output 1, you would probably want to connect this to a mixer or an amplifier, or anything else that ends out in a set of speakers, a single speaker, or even a pair of headphones, if you are in a neighbour friendly mood. Since Anamono X doesn't have build in speakers, it just needs to be connected to something, that can transfer its amazing sound to you.

Connect the other output to effects processors, filters, computers, eurorack modules, or anything else that can process sound. Connect the outputs of these back to Anamono X's input, for mixing to the main output or further processing inside Anamono X.

A set of stereo headphones can be connected to Out1. To make this work, so there are sound in both the left and the right channel, you will need to make sure, that something outputs to out 2 too. This can be done simply by switching an output VCA to stereo mode.

You will need to connect a MIDI keyboard to MIDI in, in order to take full advantage of Anamono X's fully chromatically playable sounds. It is also possible to connect anything that transmits a MIDI clock, if you would like the sequencer of Anamono X to sync to your setup.

On MIDI out, MIDI clock, MIDI CC's form the Anamono X edit knobs, and notes and CC's from its sequencer are transmitted. Connect any MIDI gear to this, that you would like to control from Anamono X.

To the USB connector, a USB drive can be connected.

This should be:
-Maximum 32 GB
-FAT formatted

With a USB drive connected, you can:
-Import, export and back up samples as .wav files
-Import, export and back up Anamono X presets and songs
-Update Anamono X

To import a .wav file from another device, it must be:
-Mono or stereo
-44.1 KHz sample rate –Anamono X will import other sample rates, but they will play back in a wrong speed
-16 bit native PCM

On the left end panel of your Anamono X, you will find the Audio In connector, and 4 CV inputs. The optional CV outputs are also found here, below the CV inputs, if installed.

Any line level audio gear can be connected to Anamono X's audio input. It is possible to sample and to process any audio presented on these, using Anamono X's filters and effects. It is also possible to use the audio input as a modulation source to any module.

Connect any CV voltage source to the 4 CV inputs. Each input can be set up to match voltage the range of any CV source, up to +/- 15 volts. The CV inputs can be used as modulation for any Anamono X module and as trigger sources.

Via the CV outputs it is possible to control analog gear. Each CV output outputs both an adjustable static voltage, plus an Anamono X modulation source, so it is possible to both adjust t.ex. the cutoff frequency of a connected analog filter, and to add modulation to this.

Connect the supplied power adaptor to the Power input, and to a 100V to 240V power source.

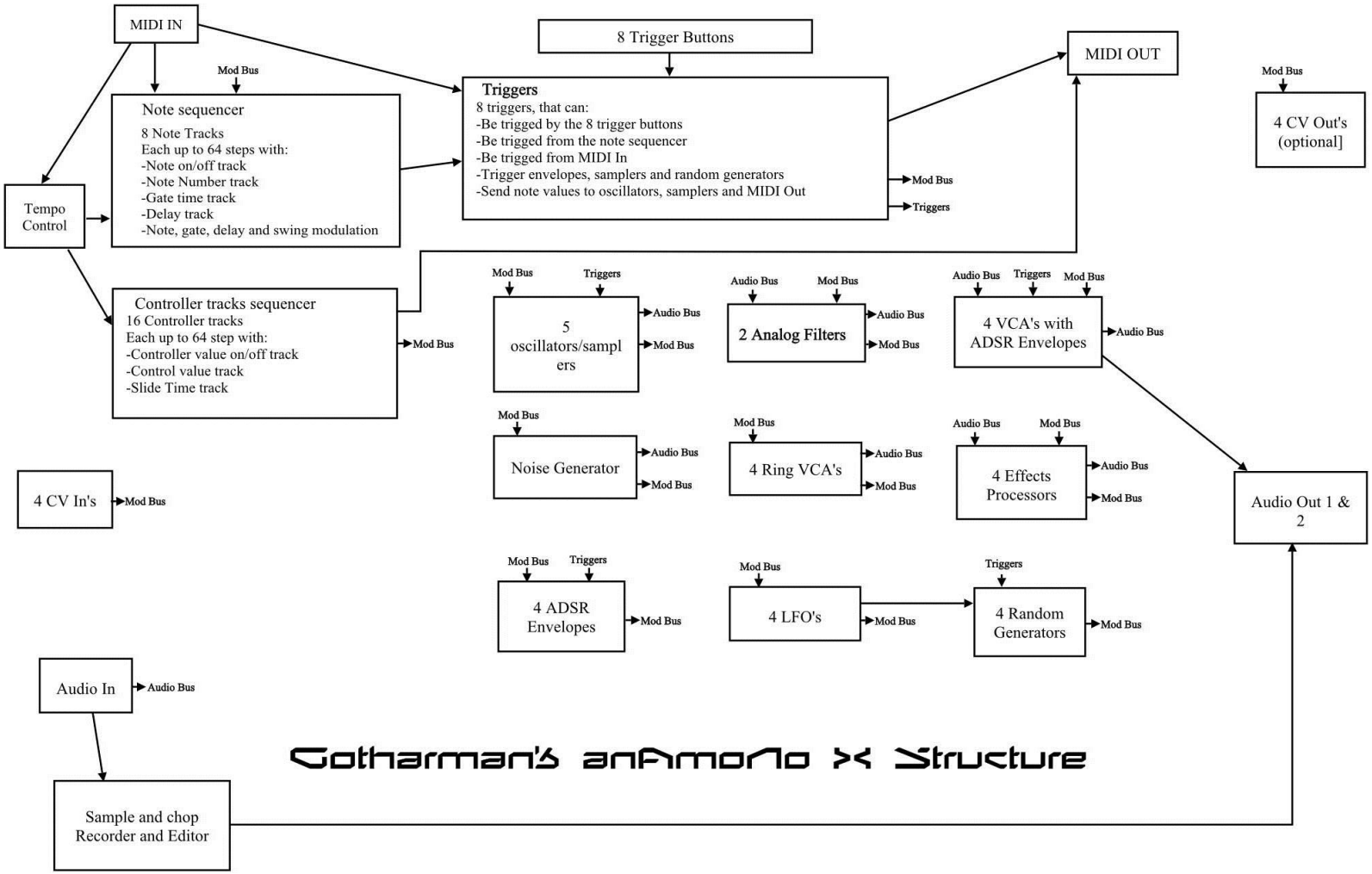
It’s a 9V, minimum 1.5A type with a 2.1 mm DC plug, with positive middle.

Some Anamono X’s might have been shipped out with a power adaptor, that has multiple tips. If you have received one of these, you should use the tip with the blue ring, and make sure that the 2 parts are alligned to the text “Tip”:

Please look at the picture, on the next page….

Turn it on

Push the “I” on the power switch. Your Anamono X should now turn on.


MIDI IN
8 Trigger Buttons
MIDI OUT
Mod Bus
4 CV Out's (optional]
Note sequencer
8 Note Tracks
Each up to 64 steps with:
-Note on/off track
-Note Number track
-Gate time track
-Delay track
-Note, gate, delay and swing modulation
Triggers
8 triggers, that can:
-Be trigged by the 8 trigger buttons
-Be trigged from the note sequencer
-Be trigged from MIDI In
-Trigger envelopes, samplers and random generators
-Send note values to oscillators, samplers and MIDI Out
Mod Bus
Triggers
Tempo Control
Controller tracks sequencer
16 Controller tracks
Each up to 64 step with:
-Controller value on/off track
-Control value track
-Slide Time track
Mod Bus
5 oscillators/samplers
Audio Bus
Mod Bus
Triggers
2 Analog Filters
Audio Bus
Mod Bus
4 VCA's with ADSR Envelopes
Audio Bus
Triggers
Mod Bus
Noise Generator
Audio Bus
Mod Bus
4 Ring VCA's
Audio Bus
Mod Bus
4 Effects Processors
Audio Bus
Mod Bus
4 CV In's
Mod Bus
Audio Out 1 & 2
4 ADSR Envelopes
Mod Bus
Triggers
4 LFO's
Mod Bus
4 Random Generators
Mod Bus
Triggers
Audio In
Audio Bus
Gotharman's anAmoNo >< Structure
Sample and chop Recorder and Editor

Anamono X has a modular structure. It has a number of internal “modules”, like oscillators, samplers, analog filters and effects processors, that all has a number of inputs and outputs.
These inputs and outputs are divided into 3 categories:
-Triggers
-Modulation (Mod Bus on the structure drawing)
-Audio (Audio Bus on the structure drawing)

Any trigger output can be connected to any trigger input, any modulation output can be connected to any modulation input and any audio output can be connected to any audio input.

Many of the audio outputs of the Anamono X modules are also connected to the modulation bus, to make audio frequency modulation (often referred to as “FM”) possible of any parameter.

The oscillators, samplers and the noise generator, all outputs their audio signal to both the modulation bus and the audio bus. They also outputs a low frequency version of themselves to the modulation bus, so these audio generators can be used as both audio generators/audio frequency modulators and as low frequency modulators at the same time.

In order to trigger anything on Anamono X, either via MIDI, the internal sequencer or the 8 trigger buttons, it has to be done through the “Triggers” section, so this must be set up properly for each preset, depending on what you want.

It is though also possible to get sound out of Anamono X, without any triggering if needed, simply by turning up the “Drone” parameter in any of the 4 VCA’s, and connect some sound generators to this.

Only the 4 VCA’s can be connected to audio outputs 1 and 2, so all sounds must output through a VCA.

The 8 track Note Sequencer always has track 1 connected to Trigger 1, track 2 connected to trigger 2 and so on…
Each trigger is then set up, to what each sequencer track should control, and it is possible to control both internal modulaes an external MIDI devices.

The 16 tracks of the Controller sequencer all appear as modulation sources, and for each track, it is possible to set a CC number and a MIDI transmit channel, to make it control external MIDI devices.

The User Interface

Anamono X has a row of 4 pushbuttons on the left side of its screen, and another row on the right. It has 8 Edit Knobs for controlling and editing parameters and sending MIDI CC's, an "X" knob a Morph knob, and a volume knob below the screen.

The pushbuttons along the display has different functions for each menu page. These functions are shown by 2 labels in each corner of the screen. On most pages, you will find **Exit** in the lower left corner. **Exit** will exit to the previous page, with the last possible page being the Preset or Song select screen.

The **Play** button will start and stop Sequencer playback. When the sequencer is playing back, the green LED above the Play button will light.

The **Morph Settings** button, will toggle the parameters on any Synth and Sequencer page, between 2 layers of parameters, A and B. The **Morph** knob will morph between the to layers of Synth parameters, and the **X** knob will morph between the 2 sets of sequencer parameters.

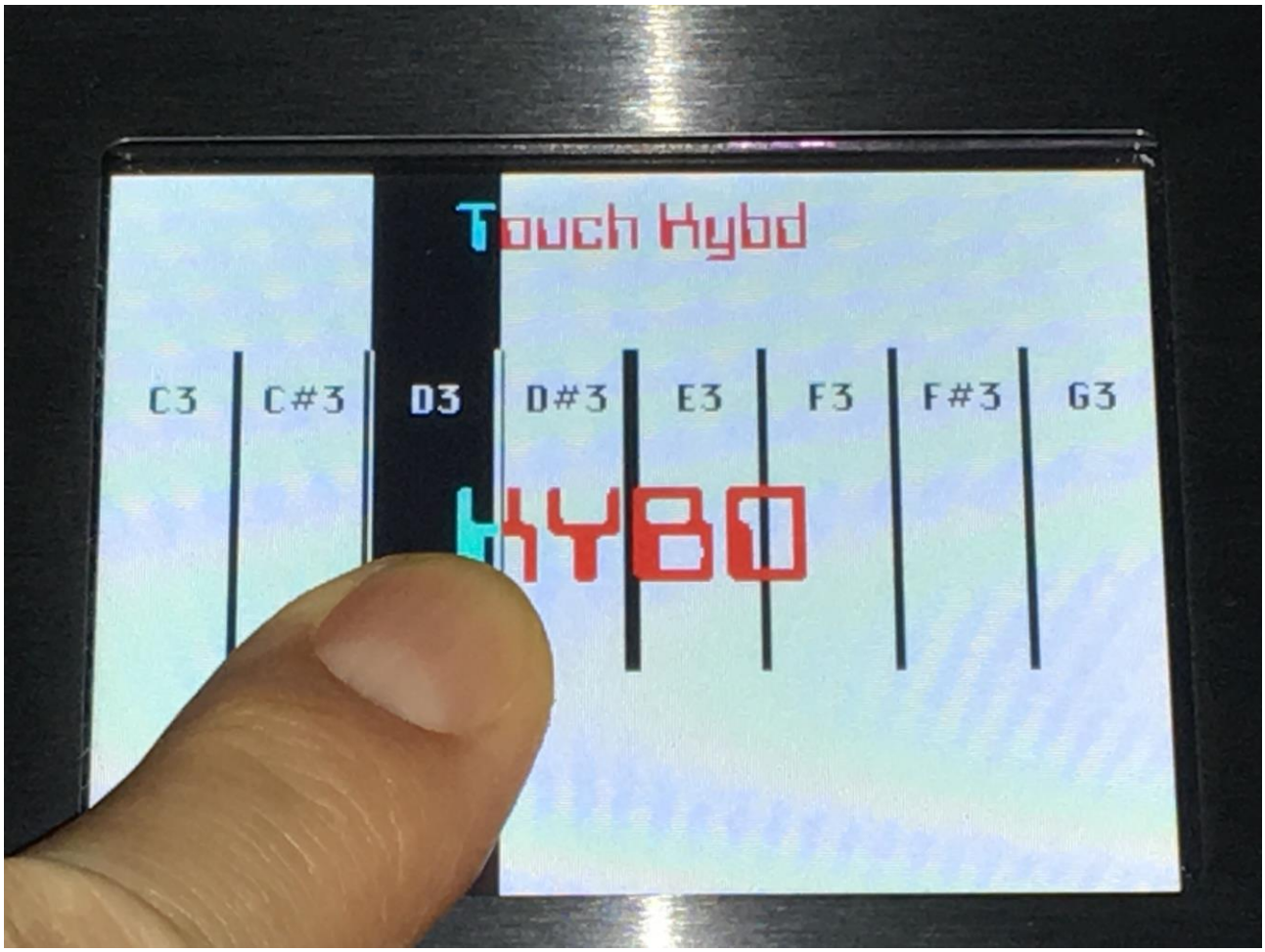
The **Volume** knob always adjusts the audio output 1 volume. If any of the 4 VCA's in a preset, are set in **Stereo Mode**, it will also adjust the audio output 2 volume.

The **8 Edit Knobs** below the display to the left, adjusts the parameters on each page. On the Preset Select screen, they transmits MIDI CC's.

When you hit the **Trigger** button, so the yellow LED above it lights up, on almost any page, the 8 buttons arouns the display will turn into trigger buttons:

It is possible to set up which modules, samples and so on, eack trigger button should trig, but this will be described a bit later in this manual.

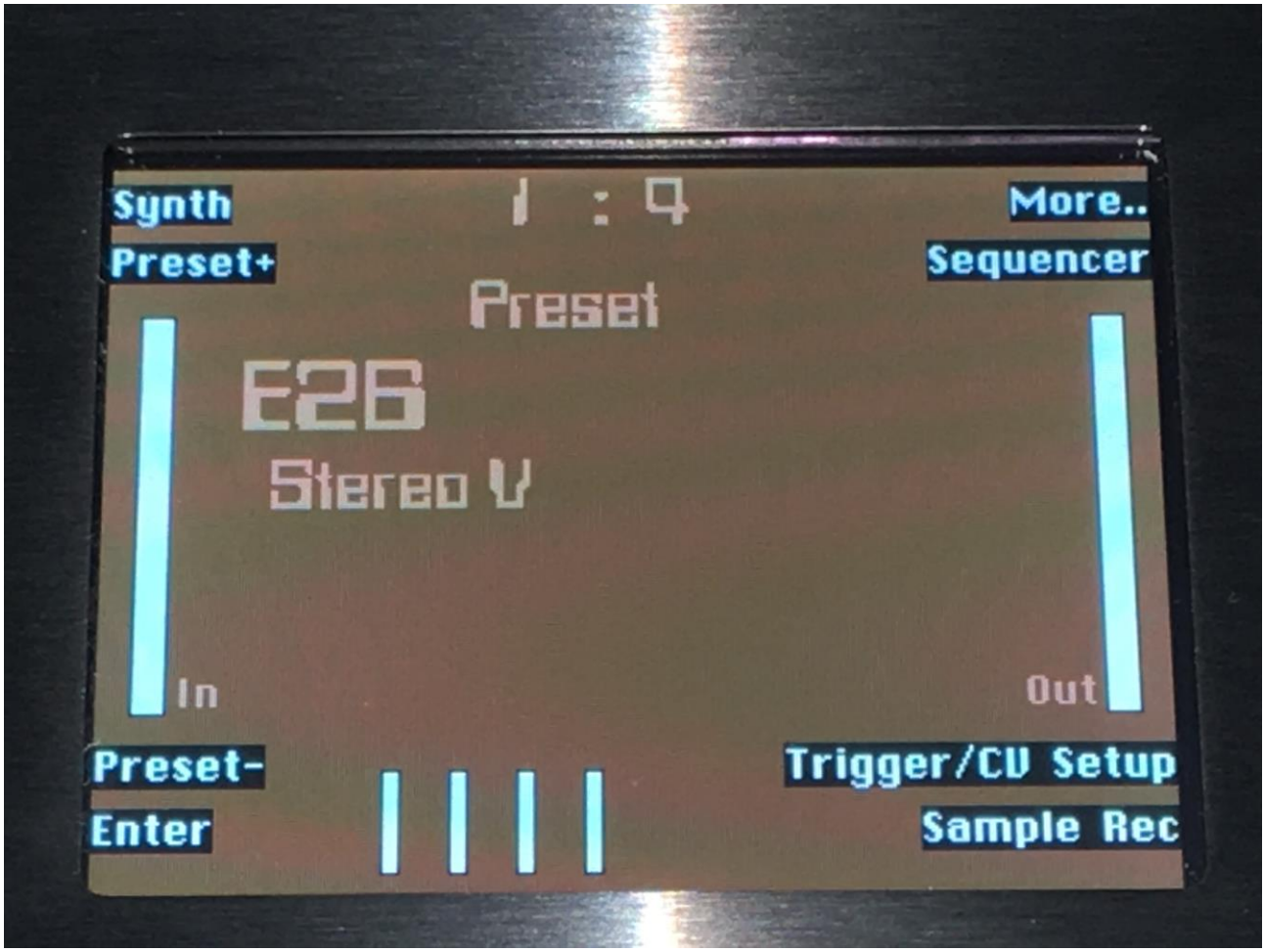
The Touch Keyboard
The Anamono X screen is touch sensitive. Unlike many other devices, it is though not possible to edit anything using the touch screen. All editing is done with knobs. It is though always, on any page, active as a touch keyboard.



The Anamono X touch keyboard has a range of 8 notes. It is possible to adjust what note each ”key” should play back, and the notes doesn’t have to be in any specific order.

The touch keyboard work in the same way as a connected MIDI keyboard. Each of Anamono X’s 8 triggers can be set up to work inside a specific note range. The keyboard will, when a note is played, activate the trigger that has been set up to be triggerered by this note.

The Preset Select Screen



This is the first screen you will see, right after Anamono X's start-up screen, unless you left your Anamono X in Song mode, the last time it was turned off. Here you can change preset and jump to Anamono X's edit and settings pages.

On the top of this screen, the Sequencer bar/beat, that is currently being played back, is shown. Right below this, it says "Preset", if Anamono X currently are in preset mode, or "Song" if Anamono X currently are in song mode.

Below this, the number and name of the currently selected preset/song is shown.

On the left and right sides of the screen, 2 VU-meters are shown. On the preset select page, these shows the activity of the audio input and audio output 1.

Right above and below the VU-meters are the labels/functions of the 8 display push buttons shown.

The 4 small VU-meters in the bottom of this screen, shows the activity of VCA 1 to 4.

Selecting a preset:
Push any of the two buttons marked ”Preset+” and “Preset-“. + will increment the preset number, - will decrement the preset number. Hold any of them down for fast scroll, and hold both down for really fast scroll. 1024 presets can be selected, from A01 to P64.

The red LED near the ”Enter” button will now start to flash.

Push ”Enter” to confirm that you want to switch to the new preset.

If the sequencer is playing back, the Enter LED will now start to flash faster, awaiting track 1 to reach its end. As soon as this happens, Anamono X will switch to the newly selected preset, and the Enter led will stop flashing.

If the sequencer is not playing back, Anamono X will immediately switch to the new preset, when ”Enter” is pushed.
When Anamono X is turned off, it will remember which preset was selected, and start up with this, when turned on again. It will also remember if it was in preset or song mode, and start up in the same mode, and if it was in song mode, it will also remember which song was selected.

On this page, the 8 Edit Knobs will transmit MIDI CC’s to Anamono X MIDI out, on the Anamono X MIDI channel.

Edit Knob 1 to 5 will transmit MIDI CC 1 to 5, and Edit Knob 6 to 8 will transmit MIDI CC 7 to 9.

The X knob will transmit and receive MIDI CC 10.

The Morph knob will transmit and receive MIDI CC 11.

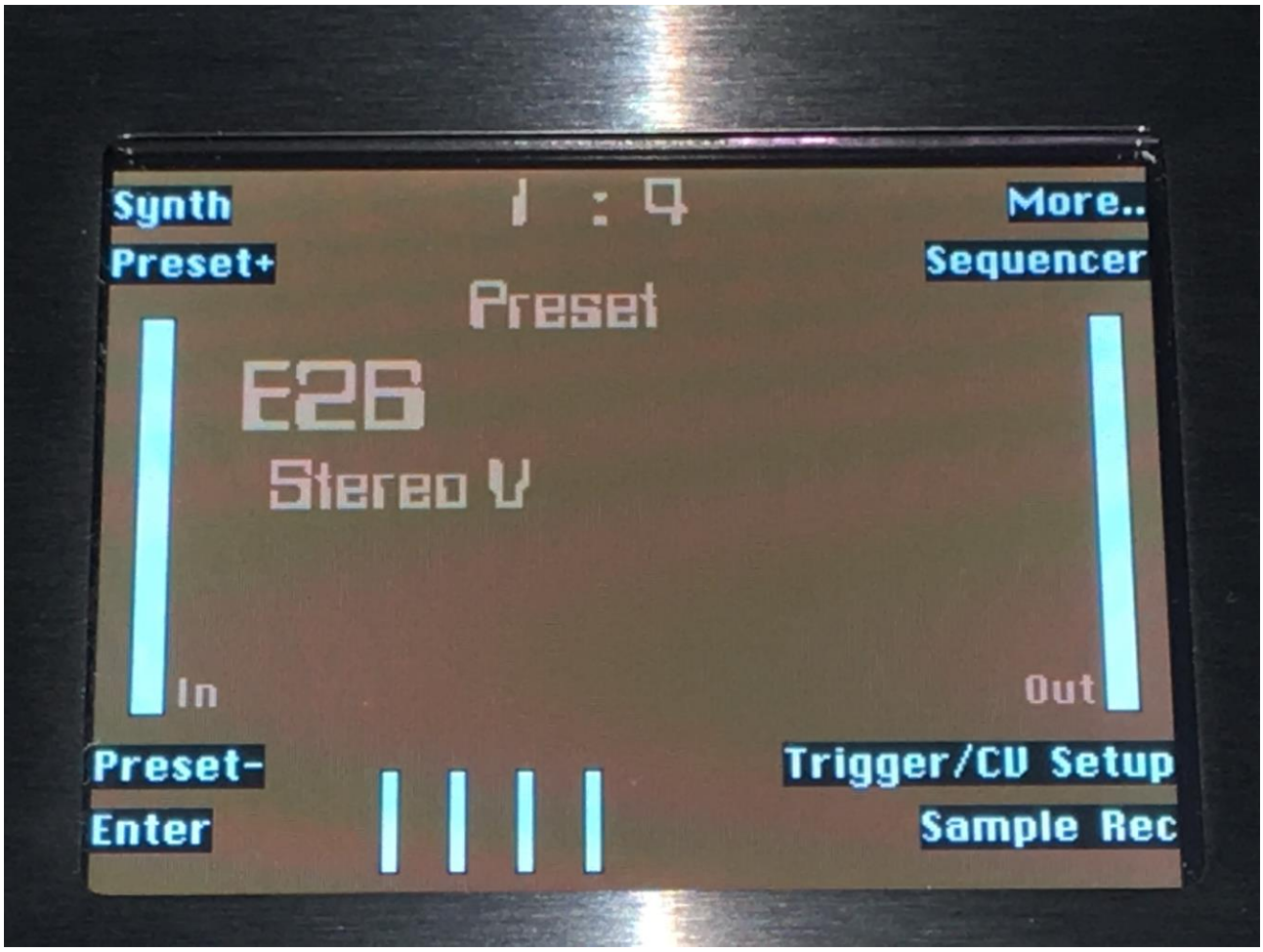
The Triggers

Every time you want to trigger something in Anamono X, either through the 8 trigger buttons, the touch screen keyboard or a connected MIDI keyboard or pad controller, it has to go through the trigger system, so this must be set up properly.

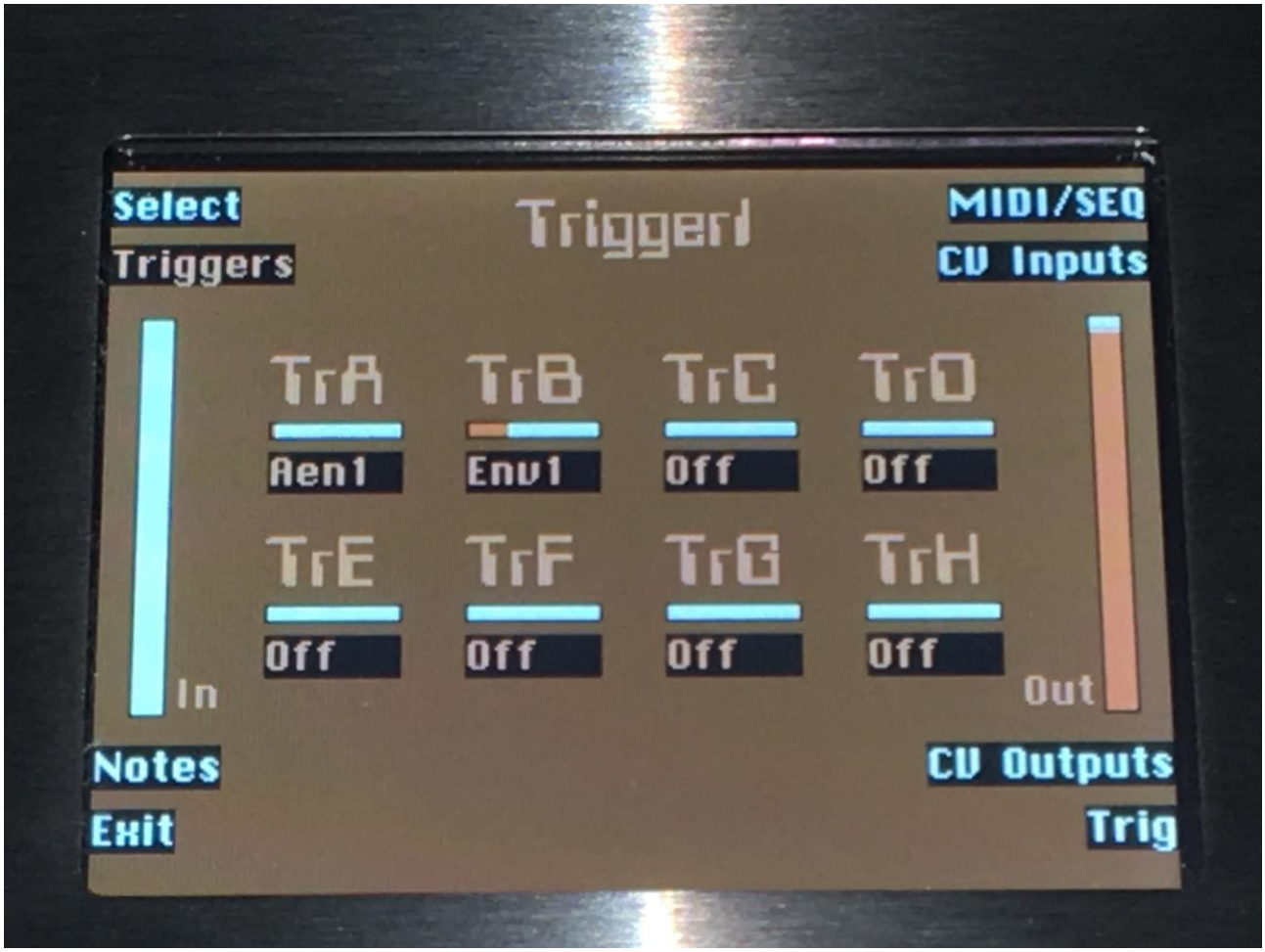
On any page, it is possible to trigger 8 internal events, like envelopes and samplings, and/or external MIDI devices, to make osillators play a specific note, and to make samplers play back a specific sample slot, using the pushbuttons. To do so, hit the ”Triggers” button.
Now the 8 pushbuttons will have their names changed to ”Trigger1” to ”Trigger8”.
Initially these are set up to trigger VCA envelope 1, Envelope 1, and to trigger different samplers, and to send different notes to the oscillators.
To play the triggers, simply hit the corresponsive buttons. A trigger buttons LED will light up, every time it is trigged.
It is possible to record the triggers actions into a sequencer track, and it is possible to control the triggers from MIDI gear connected to the Anamono X MIDI input.
To exit from Triggers mode, simply hit the ”Triggers” button again.

Remember to save all edits you do in the Triggers section. Else they will be lost when you change preset, or turn Anamono X off. See how to in the ”Save Preset” section.

To set up what the 8 triggers should trig, from the Preset or Song Select page, push the ”Triggers/CV Setup” button:



The first page you will enter here, should look like this:



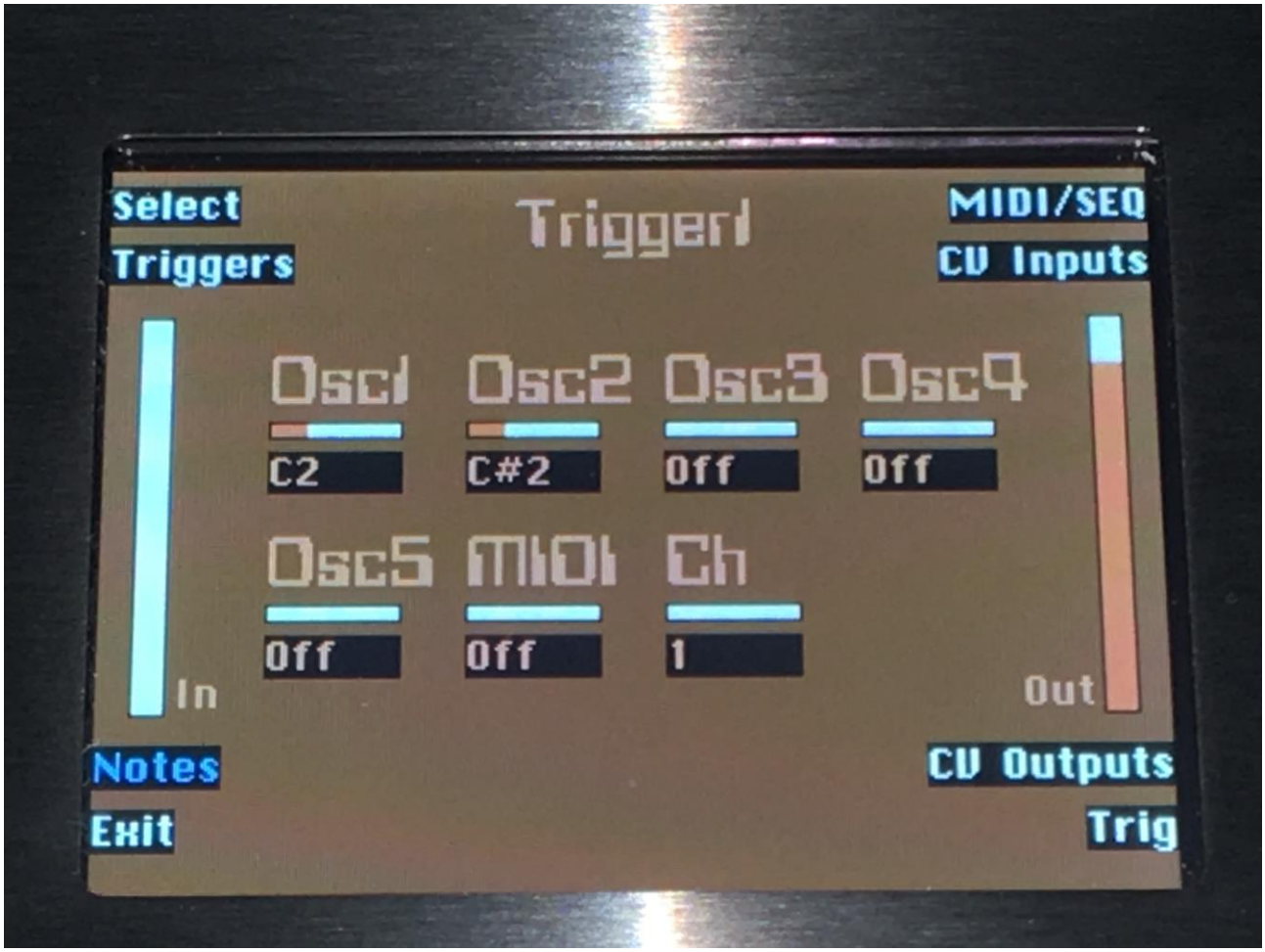
On this page, you can set up Trigger 1, to send up to 8 triggers, A to H, to various modules, using the 8 edit knobs.

What is currently possible to trigger:
Off: Nothing will be triggered.
Aen1: VCA envelope 1
Aen2: VCA envelope 2
Aen3: VCA envelope 3
Aen4: VCA envelope 4
Smp1: Sampler 1, currently selected sample slot
Smp2: Sampler 2, currently selected sample slot
Smp3: Sampler 3, currently selected sample slot
Smp4: Sampler 4, currently selected sample slot
Smp5: Sampler 5, currently selected sample slot
Env1: Envelope 1
Env2: Envelope 2
Env3: Envelope 3
Env4: Envelope 4
1SL1: Sampler 1, sample slot 1

1SL2: Sampler 1, sample slot 2
1SL3: Sampler 1, sample slot 3
1SL4: Sampler 1, sample slot 4
2SL1: Sampler 2, sample slot 1
2SL2: Sampler 2, sample slot 2
2SL3: Sampler 2, sample slot 3
2SL4: Sampler 2, sample slot 4
3SL1: Sampler 3, sample slot 1
3SL2: Sampler 3, sample slot 2
3SL3: Sampler 3, sample slot 3
3SL4: Sampler 3, sample slot 4
4SL1: Sampler 4, sample slot 1
4SL2: Sampler 4, sample slot 2
4SL3: Sampler 4, sample slot 3
4SL4: Sampler 4, sample slot 4

It is also possible to trigger the 4 Random Generators, but this is set up on the Random Generators page.

When you have this set up, you can push the “Notes” button, to go to this page:



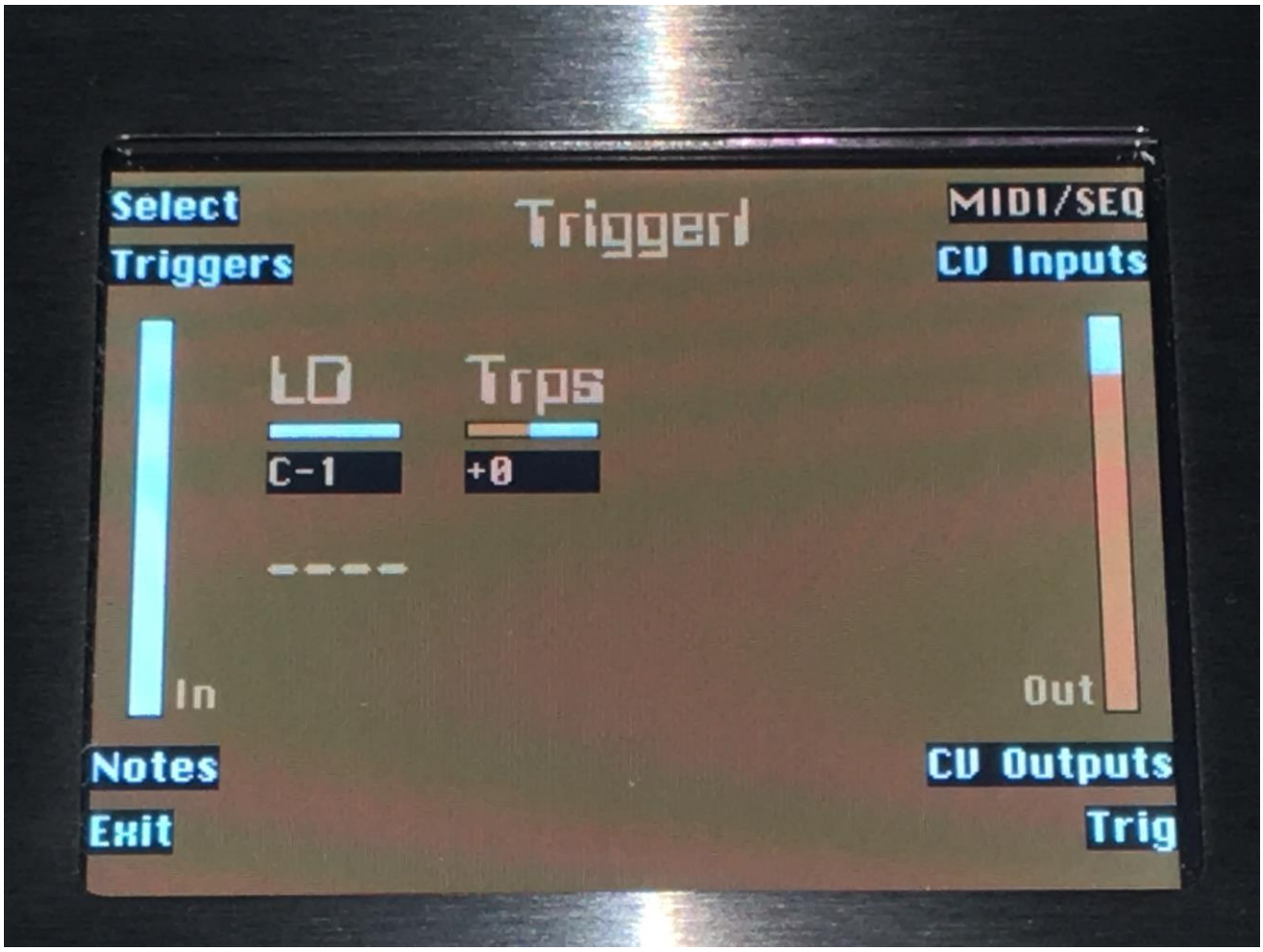
From here, you can always push the “Triggers” button, to go back to the previous page.

On this page, you can set up the selected trigger to send a note number to eack of the 5 oscillators/samplers, and to MIDI out.

Possible note numbers are: **Off (note note number is sent), C-1 to G9.**

For the MIDI output, it is furthermore possible to set the MIDI channel of the transmitted note.

When this is set up, you could process to the next triggers setup page, by pushing the “MIDI/SEQ” button, to enter this page:

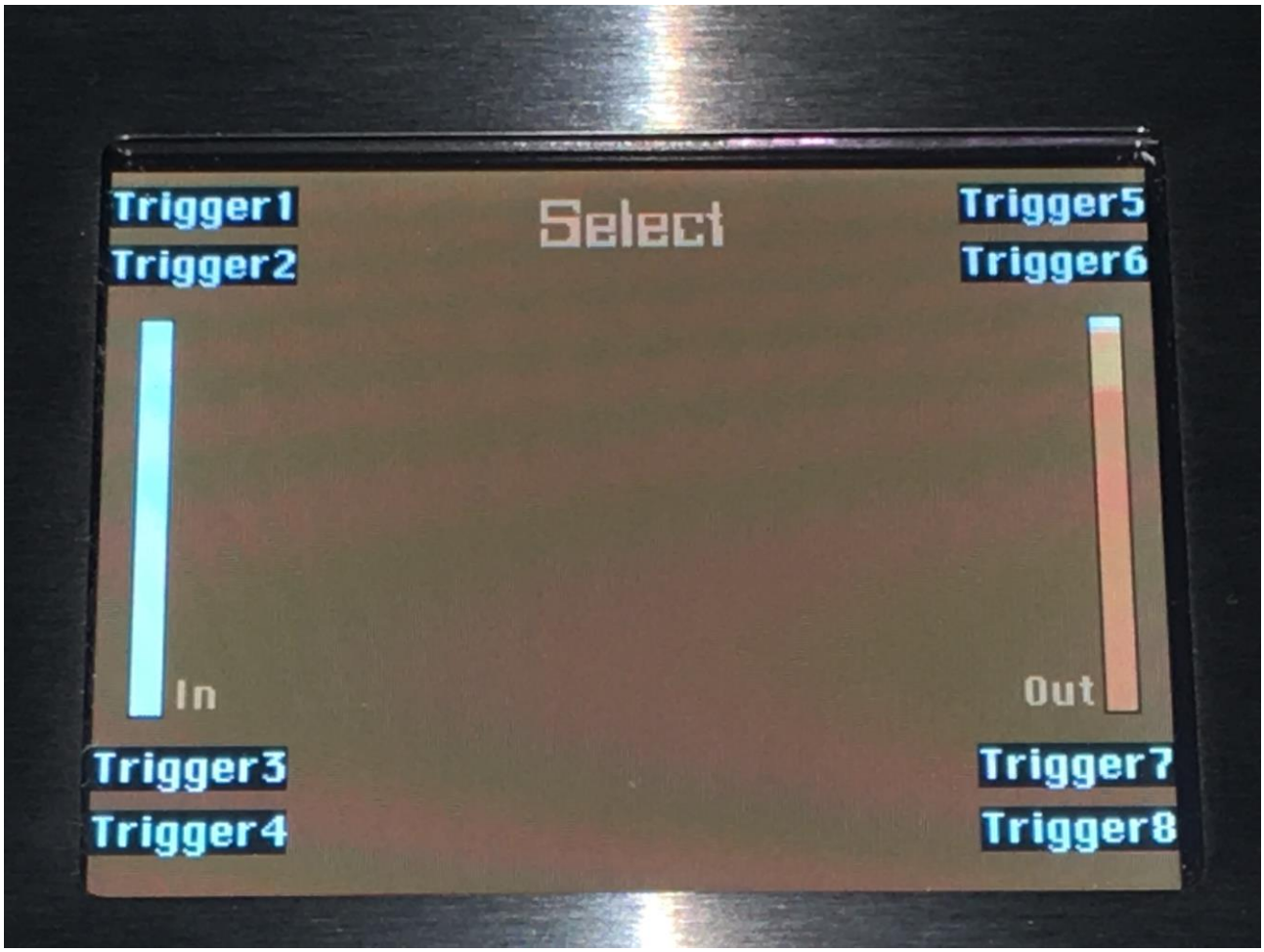


The settings on this page is for when Anamono X is controlled by an external MIDI device, or the internal sequencer.

The “LO” parameter sets the lowest note of the selected trigger MIDI note range. The note range of trigger 1, will be from trigger 1 LO to trigger 2 LO. The note range of trigger 2, will be from trigger 2 LO to trigger 3 LO… and so on. The note range of trigger 8 will be from trigger 8 LO to G9.

This setting is only effective when controlling Anamono X from an external MIDI device. When using the internal sequencer, note track 1 will always drive Trigger 1 in the full note range, note track 2 will always drive Trigger 2 in the full note range and so on…

Now you would probably like to set up triggers 2 to 8. To select these, push the “Select” button, and this screen will appear:



Now hit the button for the trigger you would like to set up, and follow the same procedure, as for setting up the first trigger.

If you only wish to set up a single synth, it is not nescessary to set up triggers 2 to 8. You should only spend time setting up the triggers you need, and you can, of course, at any time, go back to these pages to set up more triggers, if needed.

The Synth

This is where all the exciting stuff happens ☺
Here Anamono X has a number of “modules” like oscillators, samplers, analog filters, modulators and even effects processors, that can be connected to each other in absolutely any way you like. Just like you can do with cables on a modular system.
The big ups are though: Anamono X can memorize anything and you won’t get a huge bunch of cables on your desk!

Remember to save all edits you do in the synth section. Else they will be lost when you change preset, or turn Anamono X off. See how to in the ”Save Preset” section.

Available Modules in the Synth Section:

-5 Oscillators/Samplers
-1 Noise Generator
-Up to 2 Analog Filters
-4 Ring VCA's
-4 VCA's
-8 Envelopes
-4 LFO's
-4 Random Generators
-4 Effects Processors

Please find each module described later in this section.

List of Synth Modulation Sources:

Osc1: The audio range output of Oscillator/Sampler 1
Osc1-: The inverted audio range output of Oscillator/Sampler 1
Osc2: The audio range output of Oscillator/Sampler 2
Osc2-: The inverted audio range output of Oscillator/Sampler 2
Osc3: The audio range output of Oscillator/Sampler 3
Osc3-: The inverted audio range output of Oscillator/Sampler 3
Osc4: The audio range output of Oscillator/Sampler 4
Osc4-: The inverted audio range output of Oscillator/Sampler 4
Osc5: The audio range output of Oscillator/Sampler 5
Osc5-: The inverted audio range output of Oscillator/Sampler 5
Nois: The audio range output of the Noise Generator
Nois-: The inverted audio range output of the Noise Generator
SLN: Slow Noise. The low frequency output of the Noise Generator
SLN-: Inverted Slow Noise. The Inverted low frequency output of the Noise Generator
Slo1: Slow Oscillator 1. The low frequency output of Oscillator 1
Slo1-: Inverted Slow Oscillator 1. The Inverted low frequency output of Oscillator 1
Slo2: Slow Oscillator 2. The low frequency output of Oscillator 2
Slo2-: Inverted Slow Oscillator 2. The Inverted low frequency output of Oscillator 2
Slo3: Slow Oscillator 3. The low frequency output of Oscillator 3
Slo3-: Inverted Slow Oscillator 3. The Inverted low frequency output of Oscillator 3
Slo4: Slow Oscillator 4. The low frequency output of Oscillator 4
Slo4-: Inverted Slow Oscillator 4. The Inverted low frequency output of Oscillator 4
Slo5: Slow Oscillator 5. The low frequency output of Oscillator 5
Slo5-: Inverted Slow Oscillator 5. The Inverted low frequency output of Oscillator 5
AuIn: Any signal applied to the Audio Input
AuIn-: Any signal applied to the Audio Input Inverted
Aen1: The output of VCA Envelope 1
Aen1-: The output of VCA Envelope 1 Inverted
Aen2: The output of VCA Envelope 2
Aen2-: The output of VCA Envelope 2 Inverted
Aen3: The output of VCA Envelope 3
Aen3-: The output of VCA Envelope 3 Inverted
Aen4: The output of VCA Envelope 4
Aen4-: The output of VCA Envelope 5 Inverted
Vcf1: The audio range output of Analog Filter 1
Vcf1-: The audio range output of Analog Filter 1 Inverted
Vcf2: The audio range output of Analog Filter 2
Vcf2-: The audio range output of Analog Filter 2 Inverted
Efx1: The audio range output of Effects Processor 1
Efx1-: The audio range output of Effects Processor 1 Inverted
Efx2: The audio range output of Effects Processor 2
Efx2-: The audio range output of Effects Processor 2 Inverted
Efx3: The audio range output of Effects Processor 3
Efx3-: The audio range output of Effects Processor 3 Inverted
Efx4: The audio range output of Effects Processor 4
Efx4-: The audio range output of Effects Processor 4 Inverted

Sq1: The output of Sequencer Controller Track 1
Sq1-: The output of Sequencer Controller Track 1 Inverted
Sq2: The output of Sequencer Controller Track 2
Sq2-: The output of Sequencer Controller Track 2 Inverted
Sq3: The output of Sequencer Controller Track 3
Sq3-: The output of Sequencer Controller Track 3 Inverted
Sq4: The output of Sequencer Controller Track 4
Sq4-: The output of Sequencer Controller Track 4 Inverted
Sq5: The output of Sequencer Controller Track 5
Sq5-: The output of Sequencer Controller Track 5 Inverted
Sq6: The output of Sequencer Controller Track 6
Sq6-: The output of Sequencer Controller Track 6 Inverted
Sq7: The output of Sequencer Controller Track 7
Sq7-: The output of Sequencer Controller Track 7 Inverted
Sq8: The output of Sequencer Controller Track 8
Sq8-: The output of Sequencer Controller Track 8 Inverted
Sq9: The output of Sequencer Controller Track 9
Sq9-: The output of Sequencer Controller Track 9 Inverted
Sq10: The output of Sequencer Controller Track 10
Sq10-: The output of Sequencer Controller Track 10 Inverted
Sq11: The output of Sequencer Controller Track 11
Sq11-: The output of Sequencer Controller Track 11 Inverted
Sq12: The output of Sequencer Controller Track 12
Sq12-: The output of Sequencer Controller Track 12 Inverted
Sq13: The output of Sequencer Controller Track 13
Sq13-: The output of Sequencer Controller Track 13 Inverted
Sq14: The output of Sequencer Controller Track 14
Sq14-: The output of Sequencer Controller Track 14 Inverted
Sq15: The output of Sequencer Controller Track 15
Sq15-: The output of Sequencer Controller Track 15 Inverted
Sq16: The output of Sequencer Controller Track 16
Sq16-: The output of Sequencer Controller Track 16 Inverted
Ring1: The output of Ring VCA 1
Ring1-: The output of Ring VCA 1 Inverted
Ring2: The output of Ring VCA 2
Ring2-: The output of Ring VCA 2 Inverted
Ring3: The output of Ring VCA 3
Ring3-: The output of Ring VCA 3 Inverted
Ring4: The output of Ring VCA 4
Ring4-: The output of Ring VCA 4 Inverted
Env1: The output of Envelope 1
Env1-: The output of Envelope 1 Inverted
Env2: The output of Envelope 2
Env2-: The output of Envelope 2 Inverted
Env3: The output of Envelope 3
Env3-: The output of Envelope 3 Inverted
Env4: The output of Envelope 4
Env4-: The output of Envelope 4 Inverted

LFO1: The output of LFO1
LFO1-: The output of LFO1 Inverted
LFO2: The output of LFO2
LFO2-: The output of LFO2 Inverted
LFO3: The output of LFO3
LFO3-: The output of LFO3 Inverted
LFO4: The output of LFO4
LFO4-: The output of LFO4 Inverted
Rnd1: The output of Random Generator 1
Rnd1-: The output of Random Generator 1 Inverted
Rnd2: The output of Random Generator 2
Rnd2-: The output of Random Generator 2 Inverted
Rnd3: The output of Random Generator 3
Rnd3-: The output of Random Generator 3 Inverted
Rnd4: The output of Random Generator 4
Rnd4-: The output of Random Generator 4 Inverted
CV1: The voltage apllied to CV Input 1
CV1-: The voltage apllied to CV Input 1 Inverted
CV2: The voltage apllied to CV Input 2
CV2-: The voltage apllied to CV Input 2 Inverted
CV3: The voltage apllied to CV Input 3
CV3-: The voltage apllied to CV Input 3 Inverted
CV4: The voltage apllied to CV Input 4
CV4-: The voltage apllied to CV Input 4 Inverted
Kybd: The last note number value received on MIDI in, on the Anamono X MIDI channel
Kybd-: The last note number value received on MIDI in, on the Anamono X MIDI channel Inverted
Velo: The last note velocity value received on MIDI in, on the Anamono X MIDI channel
Velo-: The last note velocity value received on MIDI in, on the Anamono X MIDI channel Inverted
Aft: The last mono aftertouch value received on MIDI in, on the Anamono X MIDI channel
Aft-: The last mono aftertouch value received on MIDI in, on the Anamono X MIDI channel Inverted
Knb1: Edit knob 1 value and the last MIDI CC 1 value received on MIDI in, on the Anamono X MIDI channel
Knb1-: Edit knob 1 value and the last MIDI CC 1 value received on MIDI in, on the Anamono X MIDI channel Inverted
Knb2: Edit knob 2 value and the last MIDI CC 2 value received on MIDI in, on the Anamono X MIDI channel
Knb2-: Edit knob 2 value and the last MIDI CC 2 value received on MIDI in, on the Anamono X MIDI channel Inverted
Knb3: Edit knob 3 value and the last MIDI CC 3 value received on MIDI in, on the Anamono X MIDI channel
Knb3-: Edit knob 3 value and the last MIDI CC 3 value received on MIDI in, on the Anamono X MIDI channel Inverted
Knb4: Edit knob 4 value and the last MIDI CC 4 value received on MIDI in, on the Anamono X MIDI channel
Knb4-: Edit knob 4 value and the last MIDI CC 4 value received on MIDI in, on the Anamono X MIDI channel Inverted

Knb5: Edit knob 5 value and the last MIDI CC 5 value received on MIDI in, on the Anamono X MIDI channel
Knb5-: Edit knob 5 value and the last MIDI CC 5 value received on MIDI in, on the Anamono X MIDI channel Inverted
Knb6: Edit knob 6 value and the last MIDI CC 7 value received on MIDI in, on the Anamono X MIDI channel
Knb6-: Edit knob 6 value and the last MIDI CC 7 value received on MIDI in, on the Anamono X MIDI channel Inverted
Knb7: Edit knob 7 value and the last MIDI CC 8 value received on MIDI in, on the Anamono X MIDI channel
Knb7-: Edit knob 7 value and the last MIDI CC 8 value received on MIDI in, on the Anamono X MIDI channel Inverted
Knb8: Edit knob 8 value and the last MIDI CC 9 value received on MIDI in, on the Anamono X MIDI channel
Knb8-: Edit knob 8 value and the last MIDI CC 9 value received on MIDI in, on the Anamono X MIDI channel Inverted

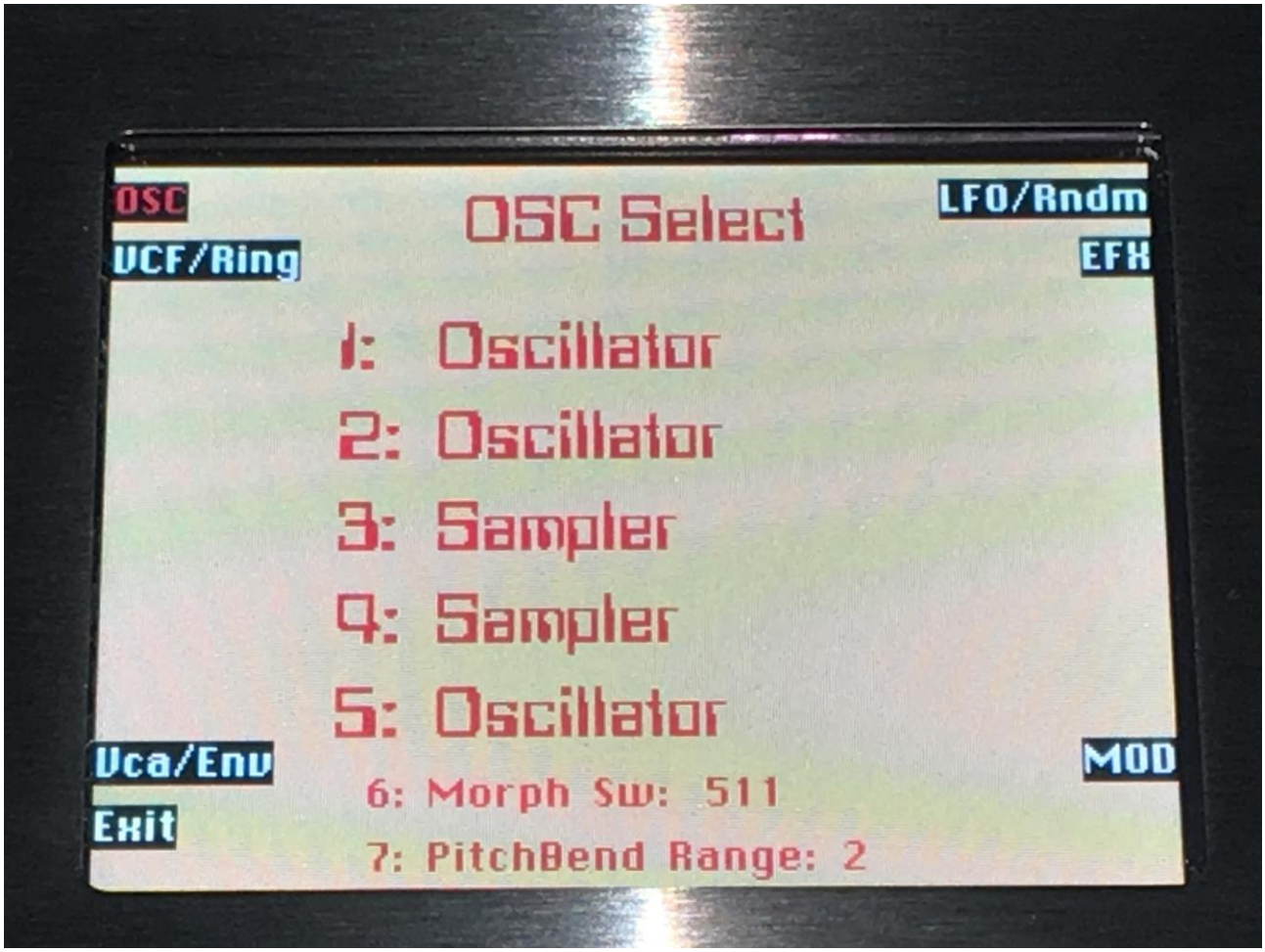
List of Synth Audio Bus Sources:

Osc1: Oscillator/Sampler 1
Osc2: Oscillator/Sampler 2
Osc3: Oscillator/Sampler 3
Osc4: Oscillator/Sampler 4
Osc5: Oscillator/Sampler 5
Noise: Noise Generator
Ring1: Ring VCA 1
Ring2: Ring VCA 2
VCF1: Analog Filter Slot 1
VCF2: Analog Filter Slot 2
VCA1: VCA1
VCA2: VCA2
VCA3: VCA3
VCA4: VCA4
EFX1: Effects Processor 1
EFX2: Effects Processor 2
EFX3: Effects Processor 3
EFX4: Effects Processor 4
AuIn: Audio Input
Ring3: Ring VCA 3
Ring4: Ring VCA 4

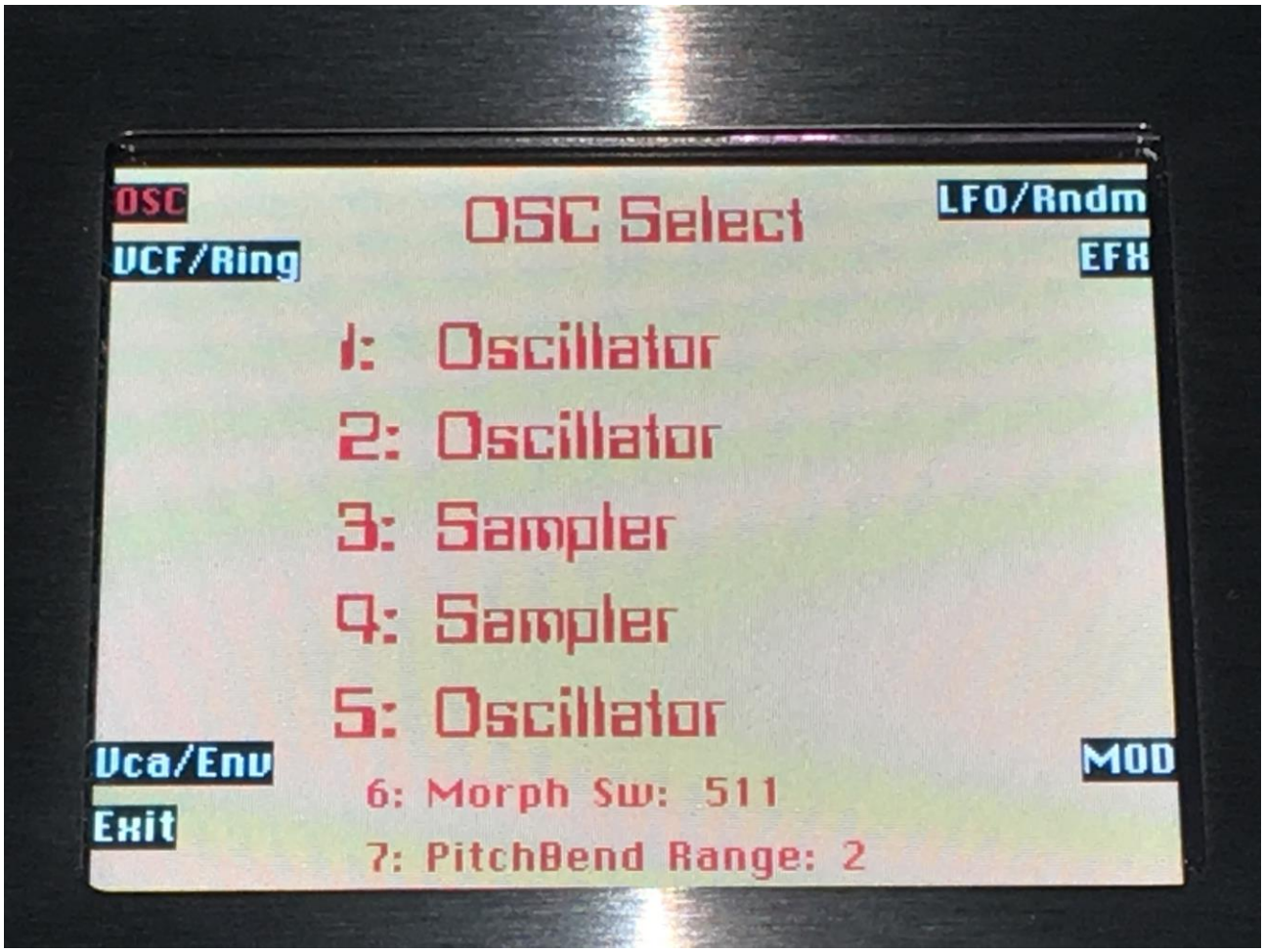
Accessing The Synth Pages

From the Preset/Song Select screen, hit the button labelled “Synth”.

If your Anamono X was just turned on, the first page that will show, should look like this:



Selecting Module Groups



From the page you have just entered, it is possible to select 5 different groups of modules. This is done by hitting the buttons labelled:

OSC: Oscillators, Samplers and Noise Generator
VCF/Ring: Analog Filters and Ring VCA's
Vca/Env: VCA's and Envelopes
LFO/Rndm: LFO's and Random Generators
EFX: Effects Processors (includes digital filters)

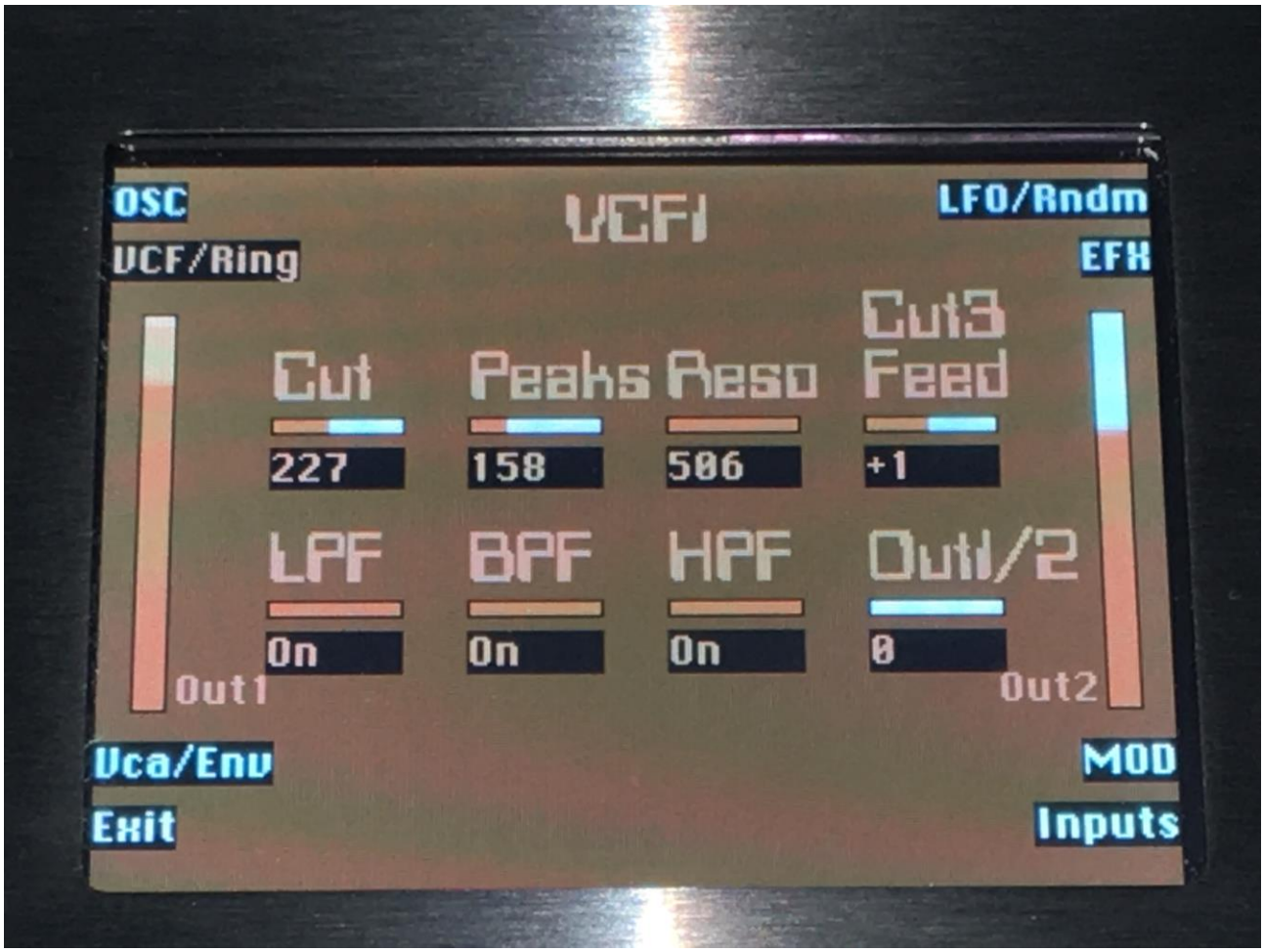
Selecting Single Modules

When you have entered a Module Group, there are 2 ways of accessing the single modules inside this group:

-By repeadetly pushing the group select button, it will toggle between the various modules inside the selected group.

-When pushing and holding the “Triggers” button (as showed on the picture), the button labels will show the names of the modules in the selected group. By pushing any of the display push buttons, it will jump directly to the module, that the push button was labelled with.

Editing The Parameters Of The Modules



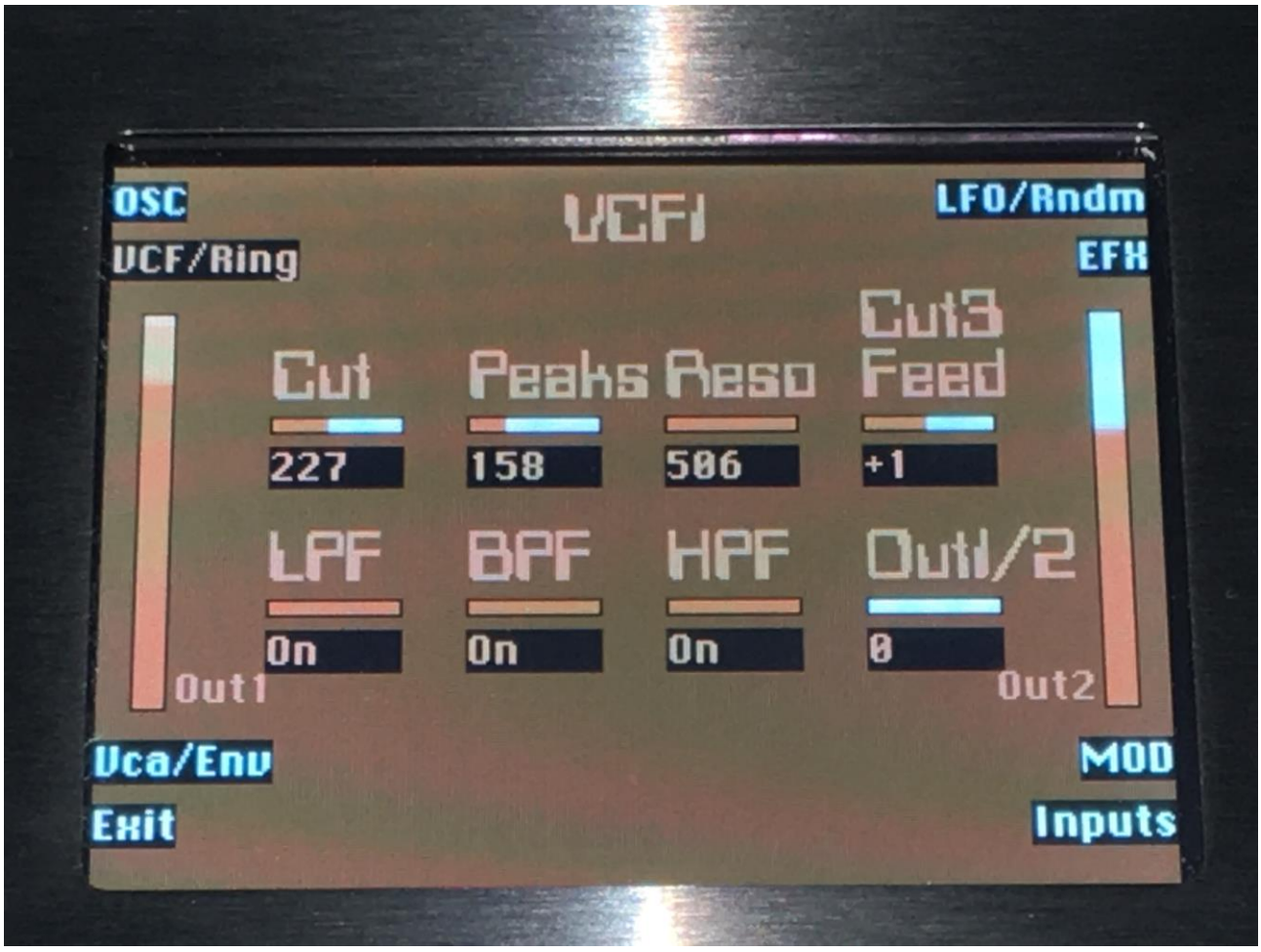
Each module has up to 8 parameters, that can be edited (the analog filters has 2 pages each). The parameters are shown on the display as 8 parameter names, each with a bar and an alphanumeric value below them, that shows the current value of the parameter.

When turning any of the 8 Edit Knobs, the corresponding parameter will be adjusted, the value will change on both the bar and the alphanumeric value, and you will hear a change in the sound, if the module is connected.

Connecting Modules

On Anamono X you do not need minijack cables or a computer to connect its modules, unless you are connecting external analog devices via the CV inputs and outputs. You just need to select a module, hit a button and turn a knob, and the module is connected! I will now explain how:

Nearly all modules has a ”mod” button, and all modules that has audio inputs has an “Inputs” button:



When pushing the “Mod” button, so the yellow LED near it lights up, Anamono X jumps to the Modulation page of the module:

On this page, you can by turning Edit Knob 1 to 4, select the sources, that should be connected to the modulation inputs of the module. The parameter names shows what parameter is being modulated by the selected source.

By turning Edit Knob 5 to 8, you can adjust the modulation amount.

When pushing the “Inputs” button, so the blue LED near it lights up, Anamono X jumps to the inputs page of the module:

On this page, you can by turning Edit Knob 1 to 4, select the sources, that should be connected to the audio inputs of the module. Each module that has audio inputs, usually has 4 of these.

By turning Edit Knob 5 to 8, you can adjust the input level of each source.

The Synth Modules

In this section all the modules of the Synth (synthesizer) section are explained. The modules of the sequencer is not explained here, but in the Sequencer section later in this manual.

OSC (Oscillator) Group

In the oscillator group of modules, you will find an Oscillator select page (sets eack oscillator in oscillator or sampler mode), 5 oscillators and a noise generator.

For each of the 5 oscillators, it is possible to select if it should act as an oscillator or a sampler.

In oscillator mode it generates a waveform that is morphable between sine, triangle, saw, pulse and feedback waves. Pulse width are adjustable for all waveform types. Each oscillator also has a suboscillator attached to them, that outputs a squarewave, one octave below the original pitch. The oscillators outputs both an audio range signal and a low frequency version of this at the same time, so the oscillators can function as both audio range sound/modulation and low frequency modulation, at the same time. Pitch, PW, wave and suboscillator level can be modulated. The oscillators can act as both audio and modulation sources. The pitch range of the oscillators are chromatically over the entire 10 octave MIDI keyboard range.

In sampler mode it plays back any of the 476 storable samplings, that can either be recorded on Anamono X itself in the Sample Rec section, or be imported in the USB section. Each sampler has 4 sample slots, that each can contain one sampling, and a set of parameters for Pitch, start, length and chop point. Pitch, chop, start point and length can be adjusted and modulated. Samples are

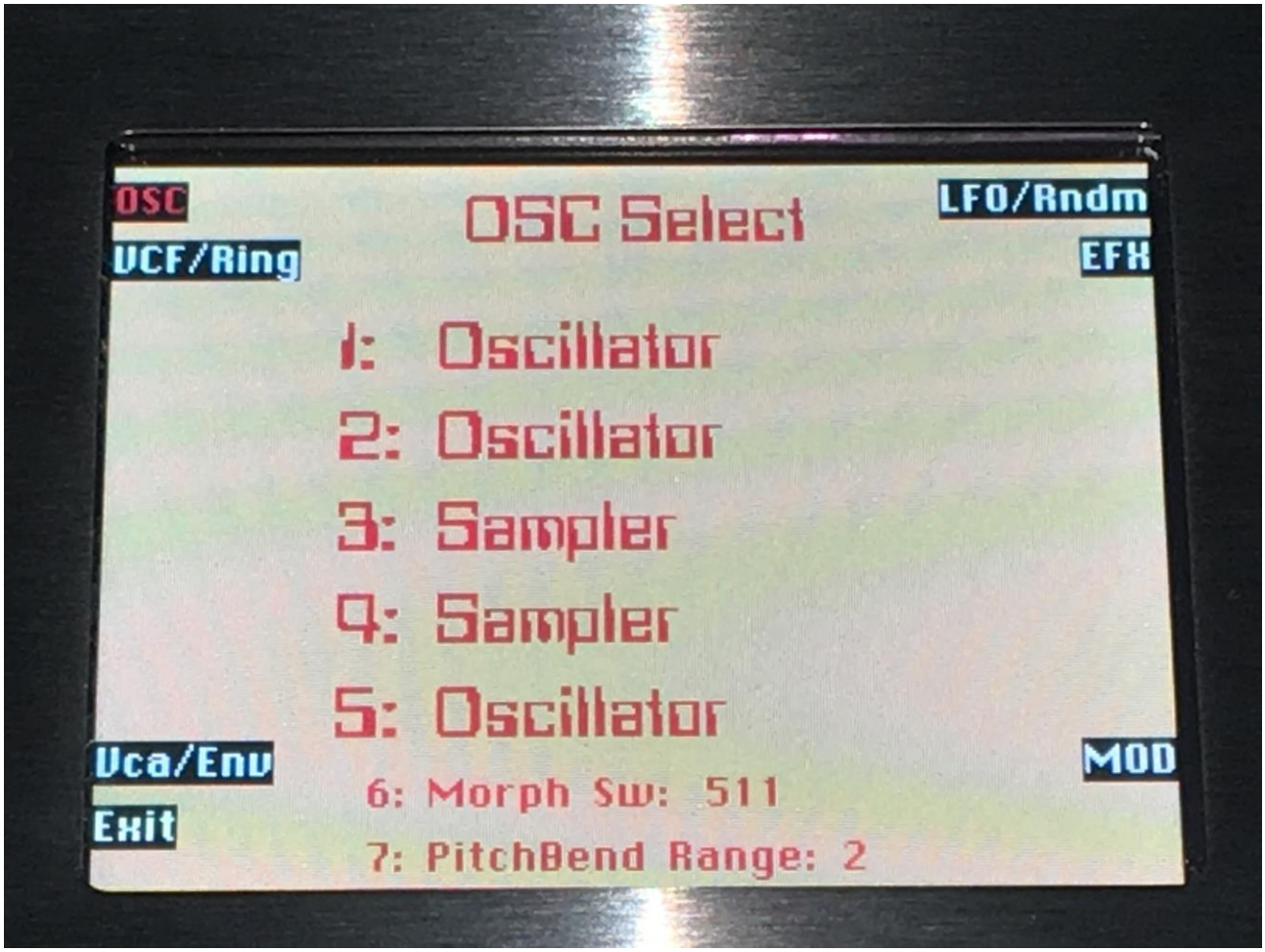
chromatically tuned, and has a pitch range of 4 octaves above and 5 octaves below the original sample pitch. Loop mode can be set to Off, On or Free. In Free mode the sampling is constantly playing back, and is never re-trigged. So if you set it up to go through a VCA, and set this up to be opened by a trigger, a different portion of the sampling will be played back every time the VCA is opened. Samplings can act as both audio and modulation sources. Like the oscillators, the samples also outputs a low frequency version of itself, so samples can be used as low frequency modulation too.

Sampler modules can load and playback Little deFormer samples and use the chop points. It is also possible to create chop points in the anAmoNo X sample editor, and use these. Chops can be detected by level peaks or by single wavecycles. Single wavecycle chops are an easy way to make loops.

Both oscillators and samplers has a portamento control.

On the noise generator, the parameters shape, pulse width and mix (between pulse and voltage noise) can be adjusted and modulated. It outputs to both the audio and the modulation bus, and like the oscillators and samplers, this also outputs a slow version of itself. The rate of the slow wave can be adjusted.

Osc Select



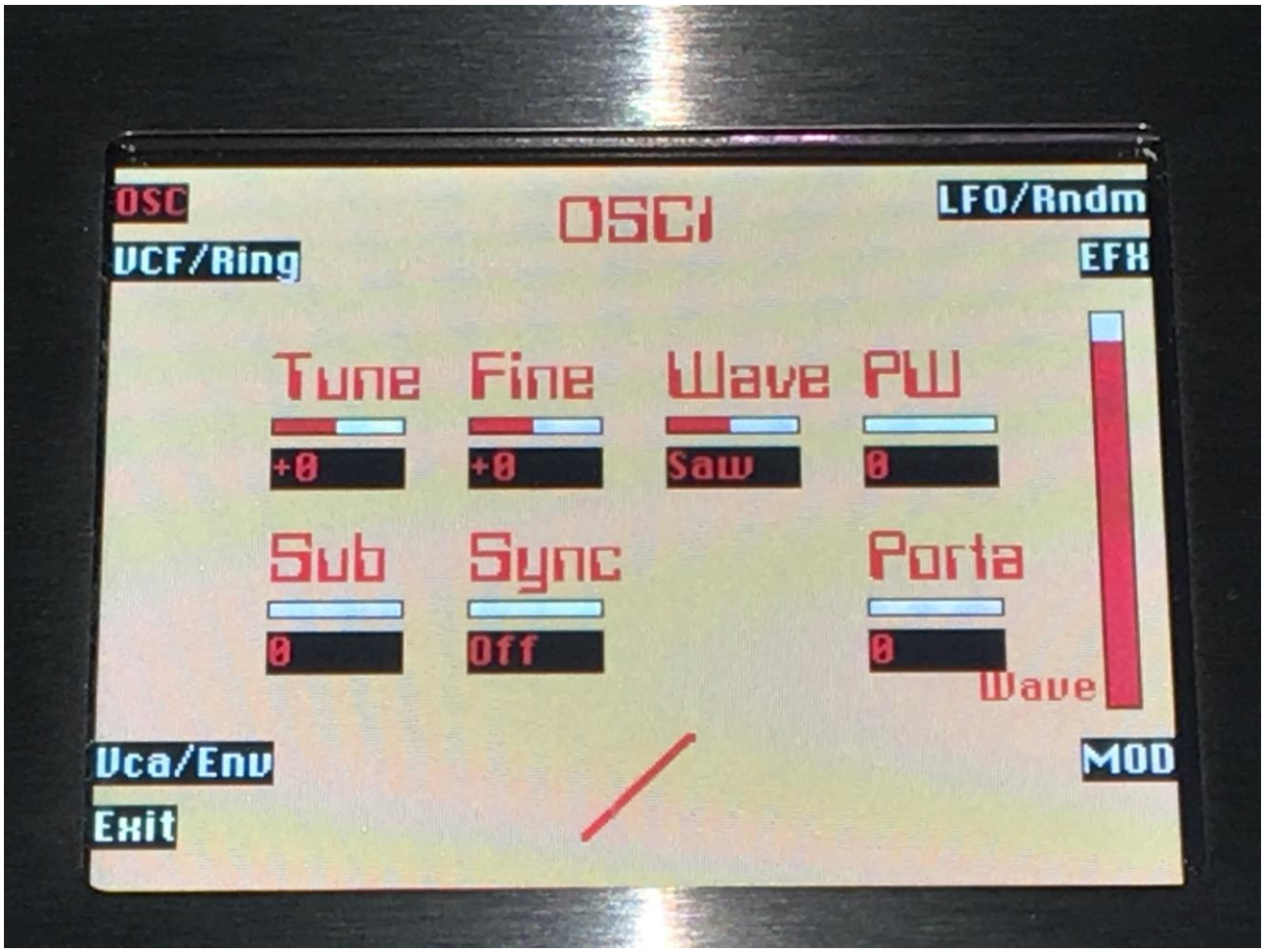
On this page you can, by **Edit Knob 1 to 5**, select whether oscillator 1 to 5 should be in oscillator or sampler mode.

Edit Knob 6 sets a value between 0 and 511. Anamono X does not morph switches (like modulation selects and audio input selects), instead it toggles all the switches at a certain point on the Morph knob. This value sets this point. If you do not want the Morph knob to do any switching, set this to 511.

Edit Knob 7 sets the pitch bend range for all 5 oscillators. This can be any value between o and 12 semi tones.

Edit Knob 8 does not have any function on this page.

Oscillator 1 to 5



In the bottom of the oscillator page, the currently adjusted waveform is shown. The VU-meter at the right of the screen, shows the low frequency output.

Tune: Adjust the basic pitch in semitones. Range: -64 to + 63.

Fine: Fine tuning of the pitch. Range: -256 to +255.

Wave: This parameter lets you morph between sine, triange, saw, pulse and feedback waves.

PW: Adjusts the pulse width of the waveform. Unlike many other oscillator designs, the pulse width can be adjusted on all of Anamono X's waveforms, not just the pulse wave.

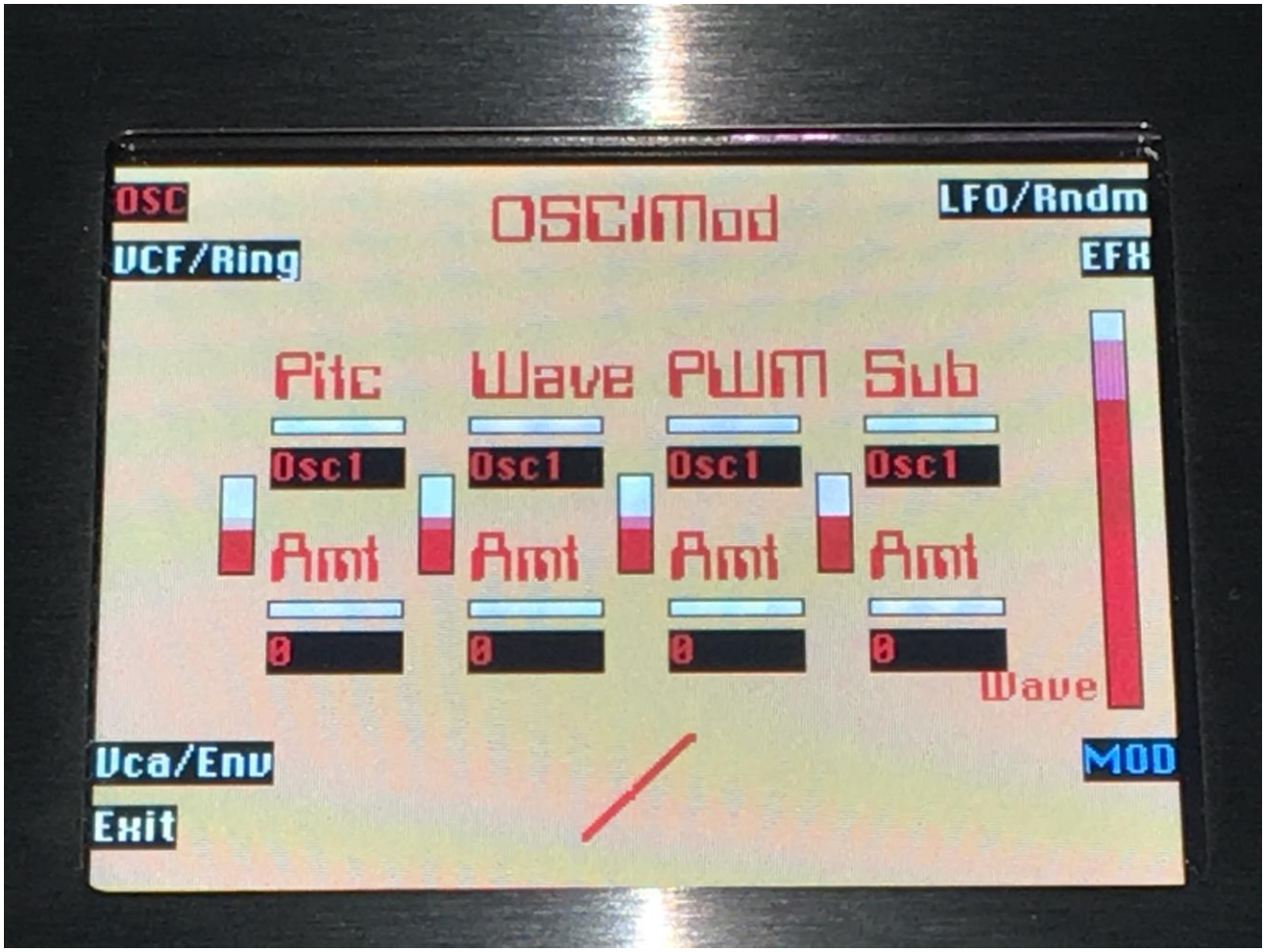
Sub: Sub Oscillator Level. When turned up, a square wave, one octave below the oscillator frequency, is added to the oscillator signal. Range: 0 to 511.

Sync: Oscillator Sync. When this is in any other position than Off, the selected oscillator will sync to one of the other oscillators. Range: Off, 1 to 5.

Porta: Portamento. The more this is turned up, the slower the oscillator pitch will slide from one note to another. Range: 0 to 511.

Oscillator 1 to 5 modulation

At any of the 5 Oscillator pages, push the ”Mod” button, to enter the modulation page:



The VU-meter at the right of the screen, shows the low frequency output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

The parameters on this page:

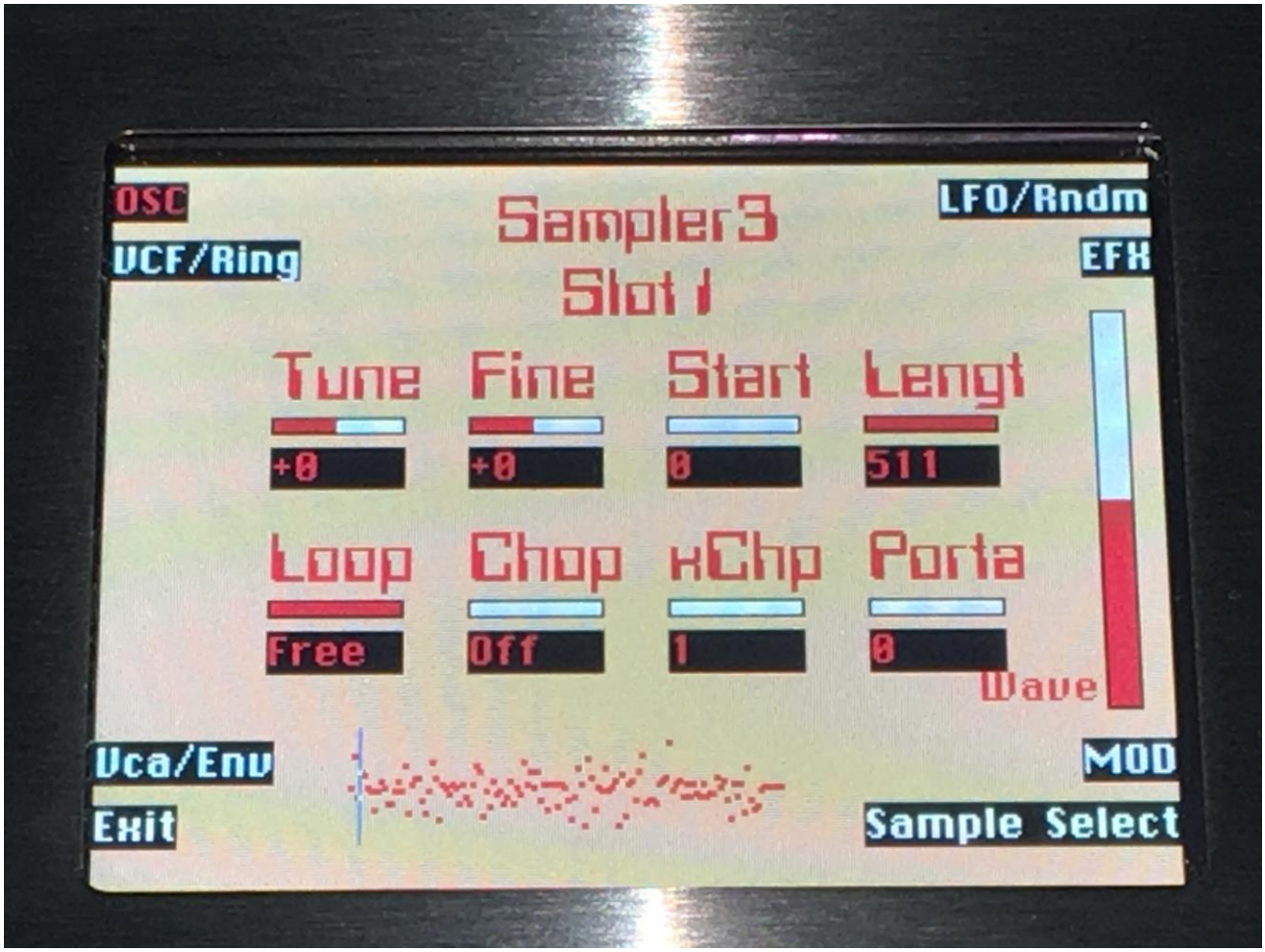
Pitc: Modulates the oscillator pitch.

Wave: Modulates the wave select morphing.

PWM: Modulates the pulse width of the waveform

Sub: Modulates the level of the sub-oscillator square wave.

Sampler 1 to 5



In the bottom of the sampler page, the selected sample waveform is shown in rough graphics. When the sample, or part of it, is played back, a blue line will show the current playback point. The VU-meter at the right of the screen, shows the low frequency output.

Tune: Adjust the basic pitch in semitones. Range: -64 to + 63.

Fine: Fine tuning of the pitch. Range: -256 to +255.

Start: The sample start point. Selects at what point the sample will start to play back, when it is triggered. Range: 0 to 511, stretching over the whole sampling.

Length: Adjusts how much of the sampling should be played back. Range: 0 to 511, stretching over the whole sampling.

Loop: Sets the sampling loop mode.
Off: The sample will not loop, just play back one time from the adjusted, or chop selected, start to end, and then stop.
On: The sample will play back from the adjusted start point, when triggered. When it reaches the adjusted end point, it will loop back to the start point, and play back the sample over and over again.

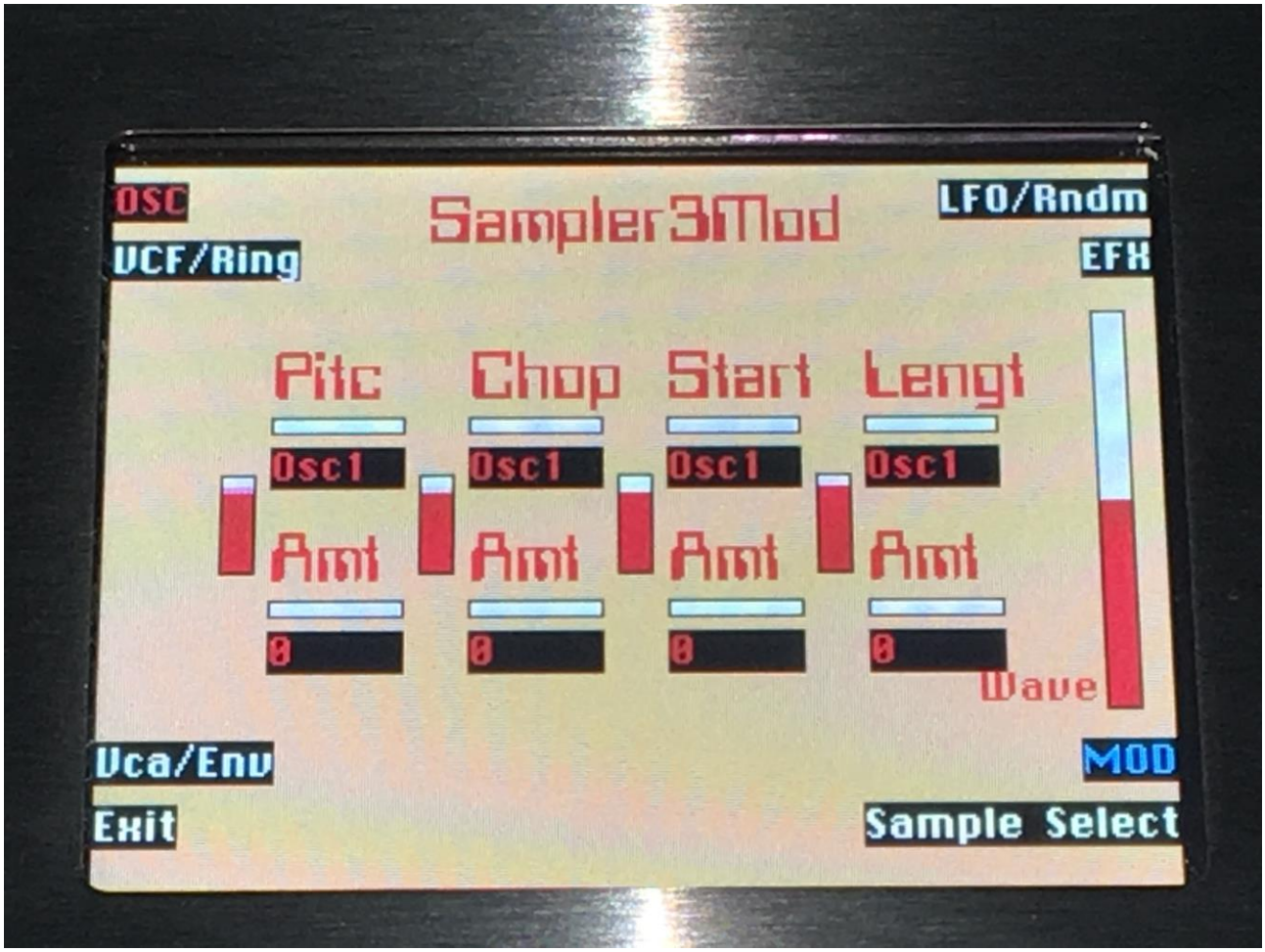
When Chop is not off: The sample will play back from its start point, until it reaches the selected chops end point. Then it will loop back to the Chop startpoint.
Free: The sample will constantly be looping between the adjusted, or chop selected, start and endpoints, regardless of if it is triggered or not.

Chop: If chop points has been generated for the selected sampling, a chop can be selected by setting this parameter. Range: Off, 0 to 63.

xChp: Number of Chops to be played back in a row. Range: 1 to 64.

Porta: Portamento. The more this is turned up, the slower the sampler pitch will slide from one note to another. Range: 0 to 511.

Sampler 1 to 5 modulation



The VU-meter at the right of the screen, shows the low frequency output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

The parameters on this page:

Pitc: Modulates the sampler pitch.

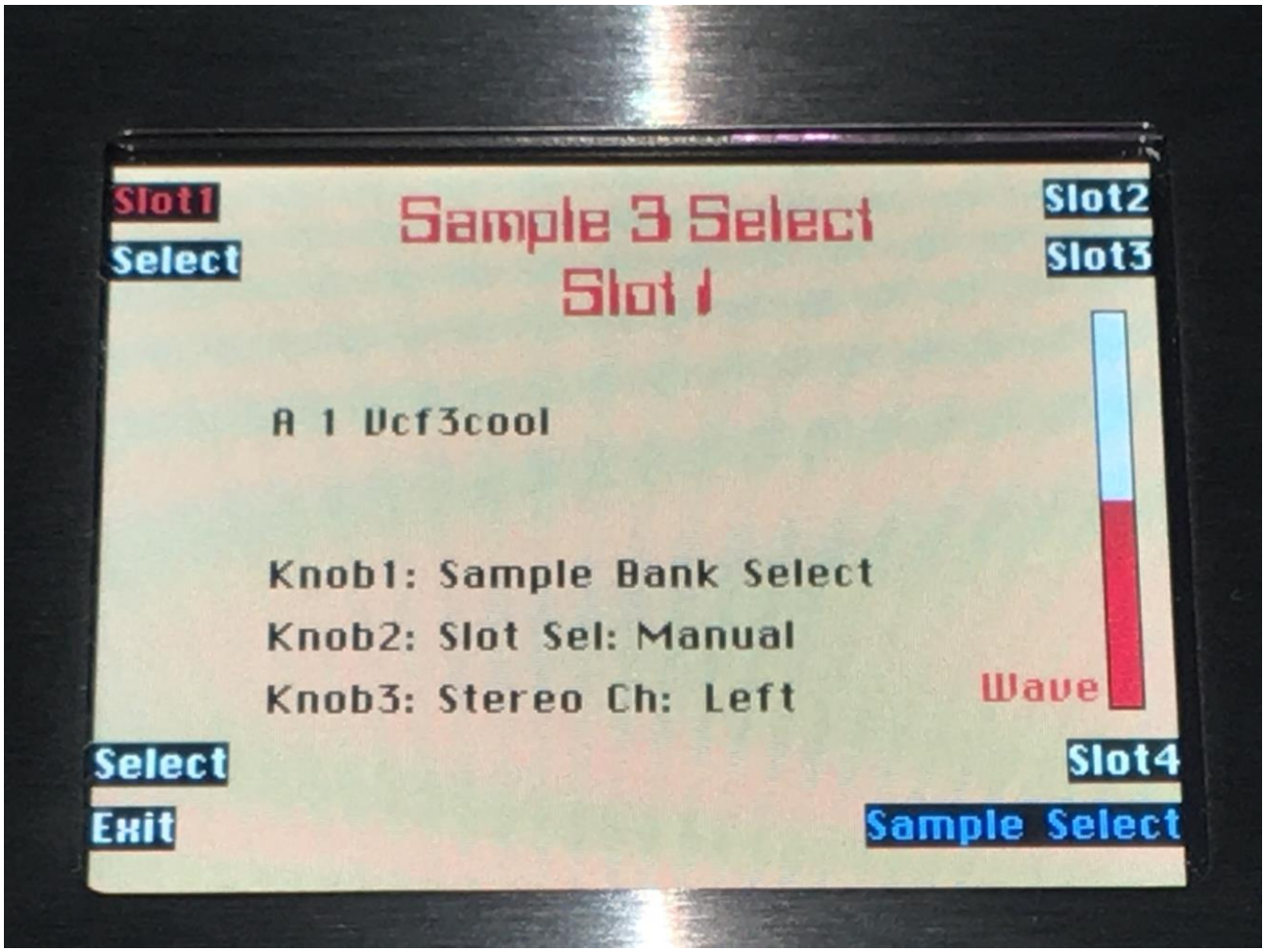
Chop: Modulates the Chop number select.

Start: Modulates the sample start point.

Lengt: Modulates the sample length.

Selecting a sample for sampler 1 to 5

If oscillator type is set to ”Sample”, you might want to select which sample, it should play back. To do this, push the ”Sample Select” button on the samplers page:



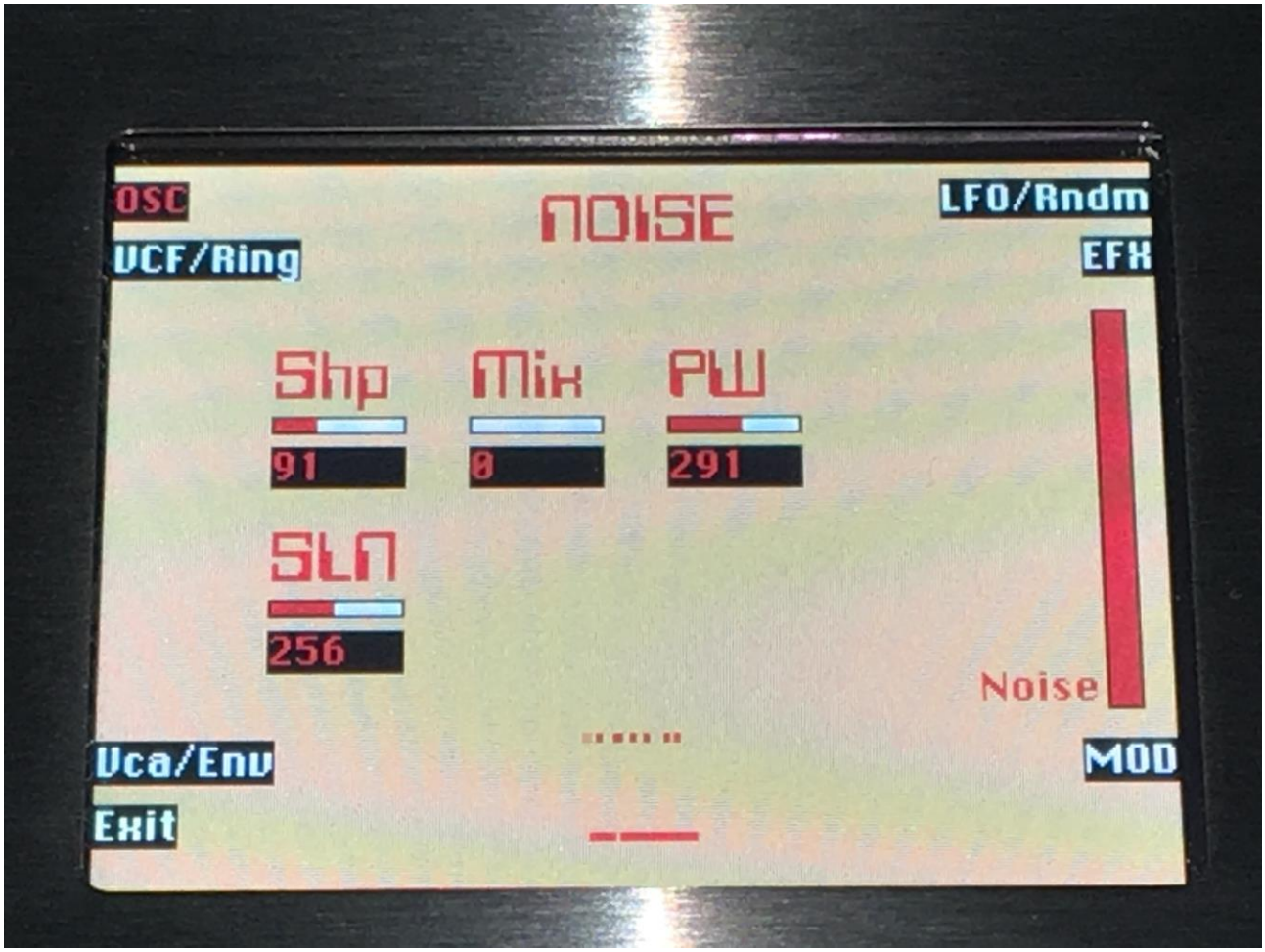
Use the 2 ”Select” buttons to select a sampling. Hold any of them down for fast scroll, and hold both down for really fast scroll. Use **Edit Knob 1** to switch between sample bank A and B.

For each sampler, it is possible to set up 4 sample slots, that can be either manually selected, by pushing the buttons labelled “Slot1” to “Slot4”, selected by the Trigger buttons, by setting these to select a specific sample slot, or by any modulation source. To select sample slots manually, set the “Slot Sel” parameter, edited by **Edit Knob 2**, to “Manual”. To select specific sample slots, using the Triggers, you must also set this parameter to Manual. If you want any modulation source to select sample slots, select the modulation source, using **Edit Knob 2**. For a complete list of modulation sources, see the list in the start of this section. Each sample slot has its own Tune, Start, Length and Chop settings.

If a stereo sampling has been selected, **Edit Knob 3** can select if the right or the left channel should play back.

When you have found the right sampling and sample slot, push ”Exit” to return to the sampler page.

Noise Generator



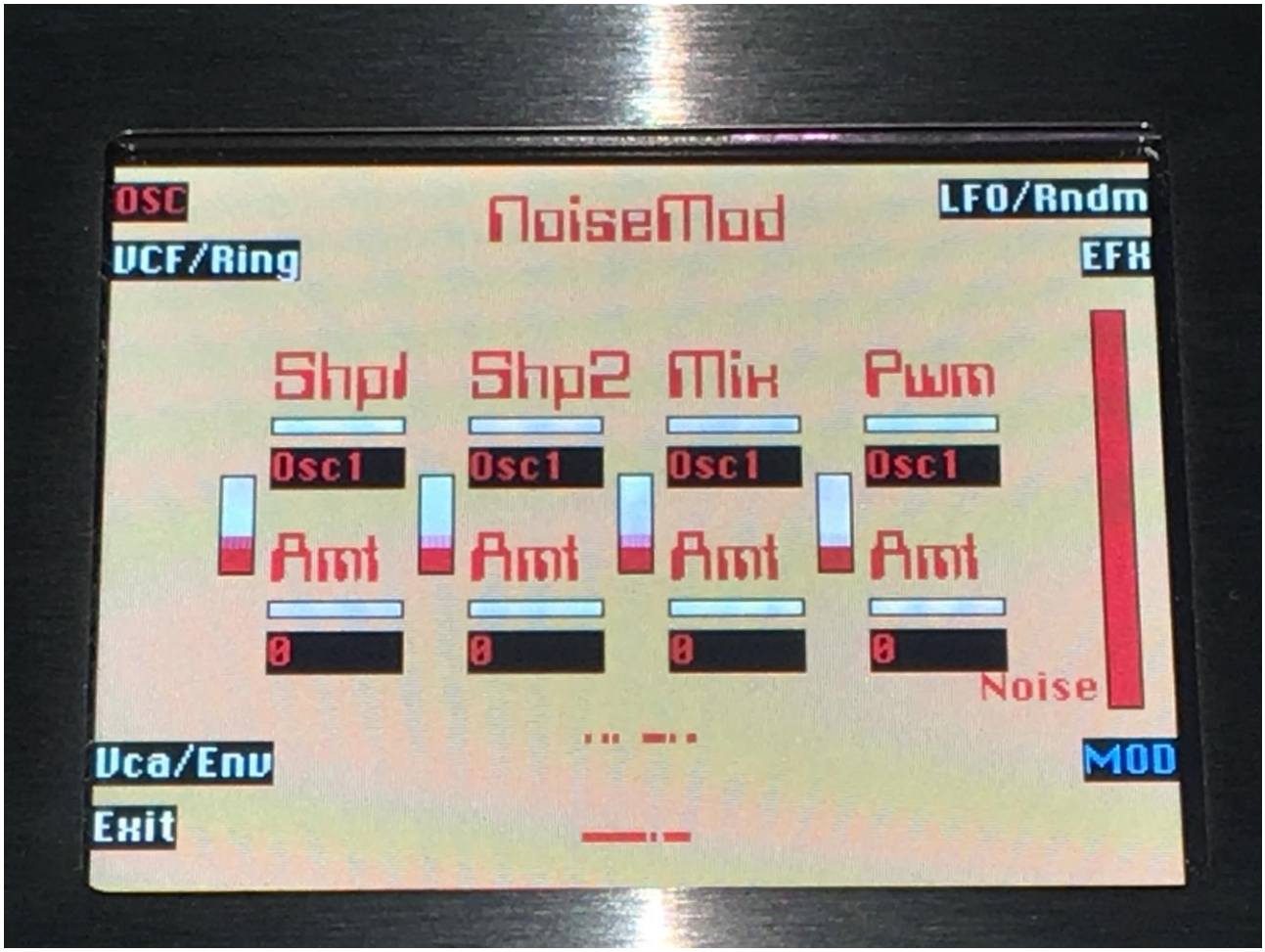
In the bottom of the noise generator page, the currently adjusted waveform is shown. The VU-meter at the right of the screen, shows the low frequency output.

Shp: Noise Shape. The Noise Generator can make a lot of different noise shapes. Range: 0 to 511.

Mix: Mix between squared noise (at setting 0) and voltage noise (at setting 511). Range: 0 to 511.

PW: Adjusts the pulse width of the squared noise. Range: 0 to 511.

Noise Generator Modulation



The VU-meter at the right of the screen, shows the low frequency output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

The parameters on this page:

Shp1 and Shp2: Modulates the noise shape.

Mix: Modulates the mix between squared and voltage noise.

Pwm: Modulates the pulse width of the squared noise.

VCF/Ring Group

In the VCF/Ring group of modules, you will find 2 analog filters and 4 Ring VCA's.

2 analog filters can be installed in Anamono X. These are located in 2 slots, that becomes visible, when removing the left side panel. anAmoNo X will also work, without any analog filters installed.

Different types of analog filters will be available, to mount in the 2 slots. See "Replacing/Mounting the analog filters" later in this manual, for details on this.

The analog filters are used just like any other anAmoNo X module. It is possible to route any modulation sources and audio signals to them, and they outputs on both the audio bus and the modulation bus. Cutoff frequency, peaks (space between 2 cutoff frequencies), and resonance can be adjusted and modulated. If the mounted filter has analog feedback, this can also be adjusted and modulated. LPF, BPF and HPF filter modes can be switched on and off. Most filters has 2 audio outputs. The mix between these can be adjusted and modulated. On the first filters, an analog overdrive circuit is placed on output 2, so turning up the Out1/2 knob, will add analog overdrive to the filter sound. The analog filters also has a G-Ray digital/analog feedback circuit attached to them. This creates a kind of intermodulated feedback signal, and makes it possible to create sounds similar to FM plus new and never heard before sounds.

The 4 Ring VCA's has 3 functions. They can act as:

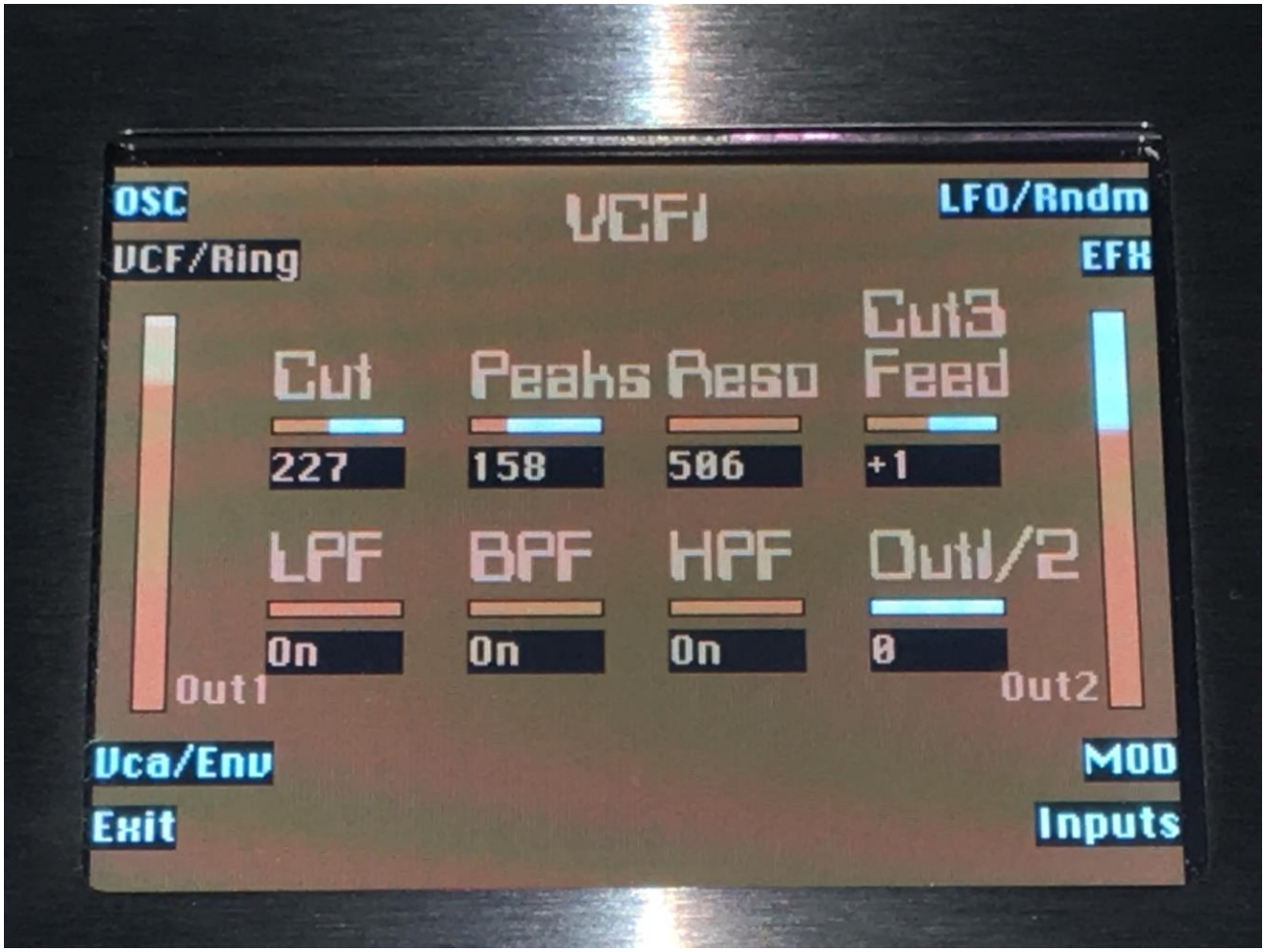
-Ring Modulator -Connect 2 audio sources, and it will output a ring modulated signal.

-Modulation/audio source VCA -Connect an audio or a modulation source to input 1, and a modulation source to input 2, and the modulator on input 2 will adjust the level of the source on input 1.

-Modulation to audio convertor -If you would like, for instance, to route and envelope, LFO or even a sequencer track through effects or filters, you can do this through a Ring VCA.

Ring VCA's outputs to both the audio and the modulation bus.

Analog Filter 1 and 2
Page 1/2



The VU-meters at the left and the right of the screen, shows the filter outputs 1 and 2.

NOTE: 1 or 2 analog filters must be mounted in Anamono X for the parameters in this section to have any effect.

Cut: Adjust the filter cutoff frequency. Range: 0 to 511.

Peaks:
On single filters: If the filter has more than one filter block, this will adjust the cutoff frequency offset of block 2 or block 3+4. If the filter has only one block (see the documentation for the filter), this will have no function.
On dual filters: This will adjust the cutoff frequency offset of filter 2.
On tripple filters: This will adjust the cutoff frequency offset of the middle filter, which is usually a bandpass filter. See filter documentation for details.

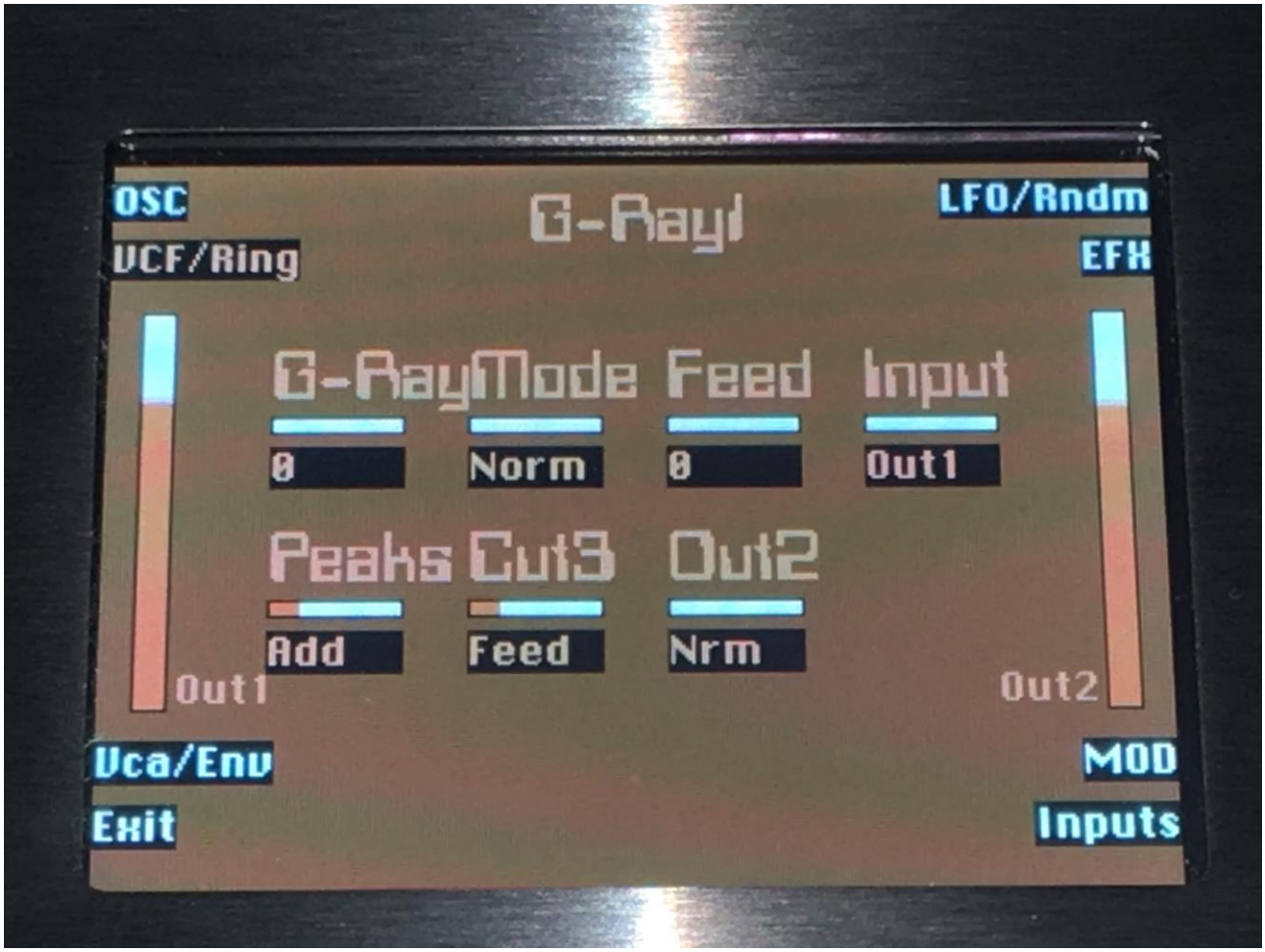
Reso: Adjusts the resonance of the filter. On dual and tripple filters, this adjusts the resonance on all filters.

Cut3/Feed:
On single filters: This will adjust the feedback of the filter. – means negative feedback, + means positive feedback, 0 means no feedback.
On dual filters: This will adjust the negative feedback of the filter. -256 means no feedback, +255 means full negative feedback.
On tripple filters: This will adjust the cutoff frequency of the third filter.

LPF, BPF, HPF:
On single filters: Switches on and off the low pass, band pass and high pass outputs on the filter. At least one of these must be on, to get a sound out of the filter.
On dual filters: Switches on and off the low pass, band pass and high pass outputs of filter 2. Filter 1, which is a band pass filter on VCF2, is always on.
On tripple filters: Switches on and off the low pass, band pass and high pass outputs of filter 1, 2 and 3. The tripple filter has 3 separate filters, to generate each of these outputs, and their cutoff frequency can be separately adjusted.

Out1/2:
On single and dual filters: Mix between the clean filter sound, and the filter sound with added analog distortion.
On tripple filters: Mix between LPF + BPF + HPF and 3x BPF.

Analog Filter 1 and 2
Page 2/2



The VU-meters at the left and the right of the screen, shows the filter outputs 1 and 2.

NOTE: 1 or 2 analog filters must be mounted in Anamono X for the parameters in this section to have any effect.

G-Ray: Adjusts the amount of g-RAY intermodulation. 0: no g-RAY, 3: max g-RAY. Range: 0 to 3.

Mode: G-Ray mode.
-Norm: Normal 1:1 feedback.

-Neg: 1:1 feedback with the signal inverted (a 180 degree phase shift)

-Ultr: Boosted feedback.

-Uneg: Boosted feedback with the signal inverted (a 180 degree phase shift)

Feed: G-Ray feedback level. Range: 0 to 511.

Input: Selects the input to the G-Ray feedback circuit. Can be either analog filter output 1 or 2, or the mix adjusted with the Out1/2 parameter.

Peaks: Selects how the Peaks parameter should interact with the Cutoff frequency parameter:

-Add: The value of the Peaks parameter is added to the Cutoff value.

-Sub: The value of the Peaks parameter is subbed from the Cutoff value.

-Alig: The value of the Peaks parameter are alligned around the Cutoff value.

-Sepa: The value of the Peaks parameter are a totally separate value, and are not affected by the Cutoff value.

Cut3: Selects the function of the Feed/Cut3 parameter:

-Feed: The value of the Feed/Cut3 parameter are a totally separate value, and are not affected by the Cutoff value. This setting is the recommended one, when a single or a dual filter are installed, and the Feed/Cut3 should work as Feed.

The next possible modes, are mostly usable, when a tripple analog filter are installed:

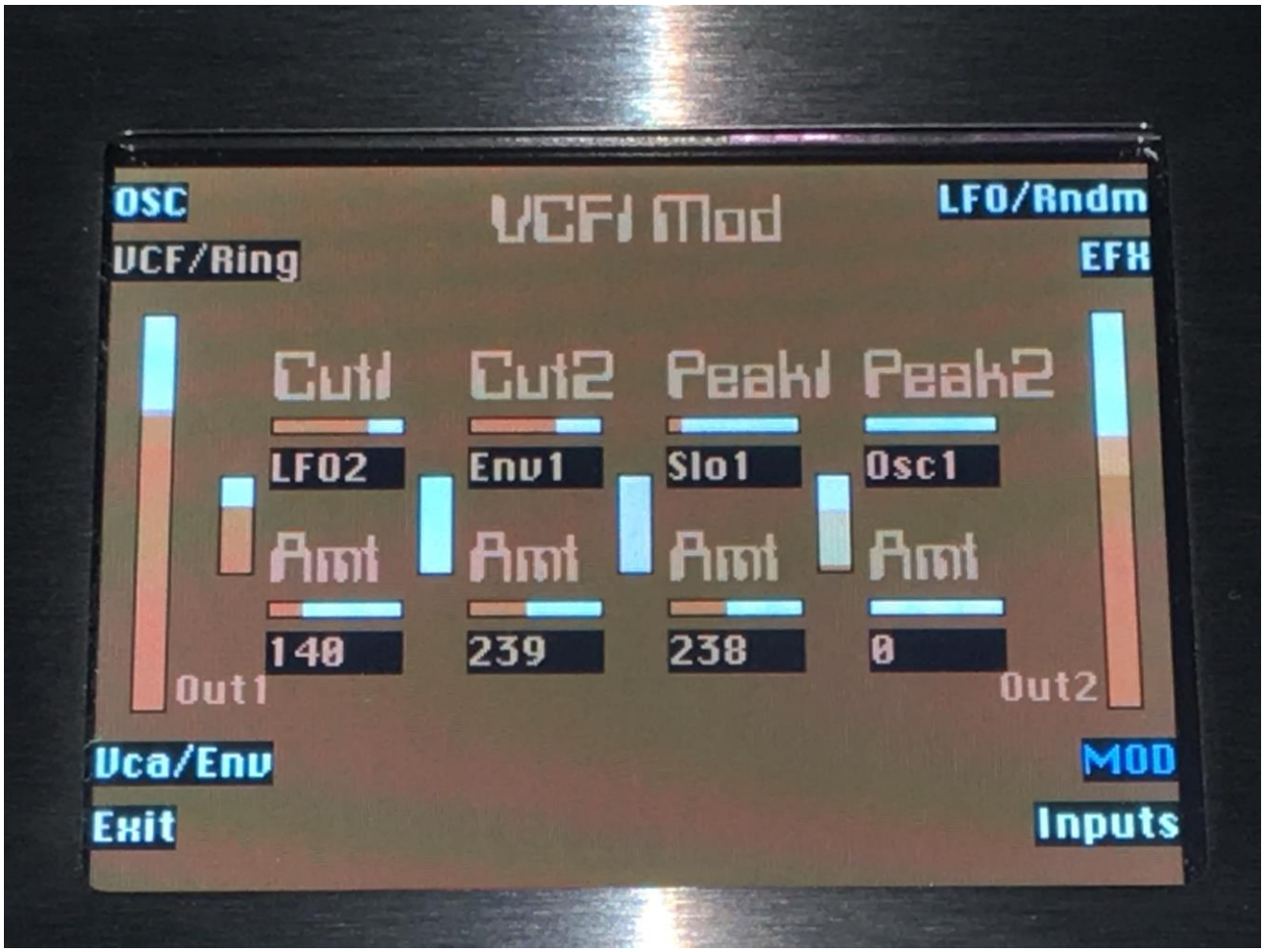
-Add: The value of the Feed/Cut3 parameter is added to the Cutoff value.

-Sub: The value of the Feed/Cut3 parameter is subbed from the Cutoff value.

-Alig: The value of the Feed/Cut3 parameter are alligned around the Cutoff value.

Out2: Selects whether output 2 of the analog filter should be normal **(Nrm)** or inverted **(Inv).** Sometimes it can get some great effects, when inverting output 2 of the filter, and adjust the Out1/2 mix.

Analog Filter 1 and 2 Modulation
Page 1/2



The VU-meters at the left and the right of the screen, shows the filter outputs 1 and 2. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

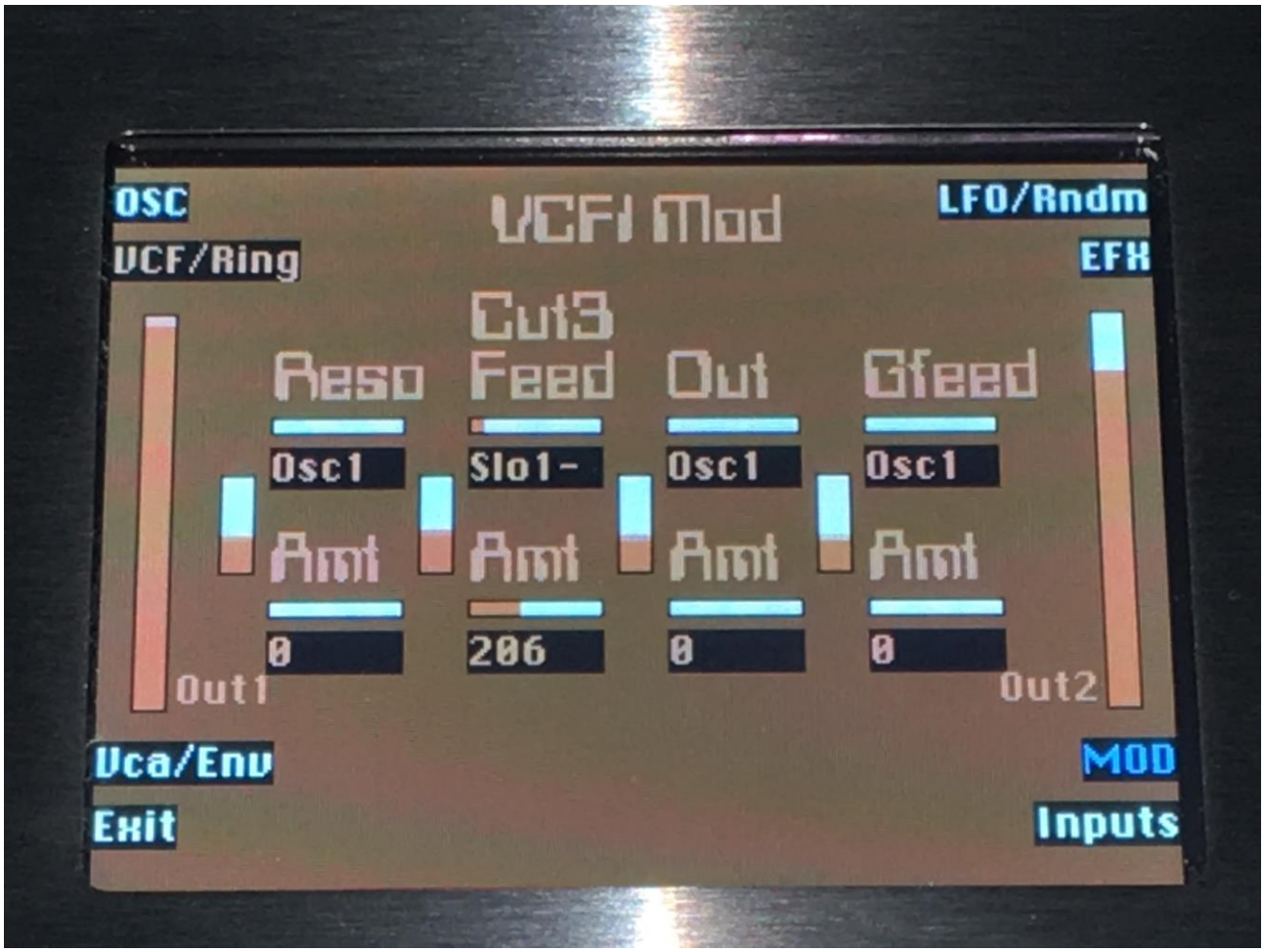
Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

The parameters on this page:

Cut1 and Cut2: Modulates the Cutoff Frequency.

Peak1 and Peak2: Modulates the Peaks parameter.

Analog Filter 1 and 2 Modulation
Page 2/2



The VU-meters at the left and the right of the screen, shows the filter outputs 1 and 2. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

The parameters on this page:

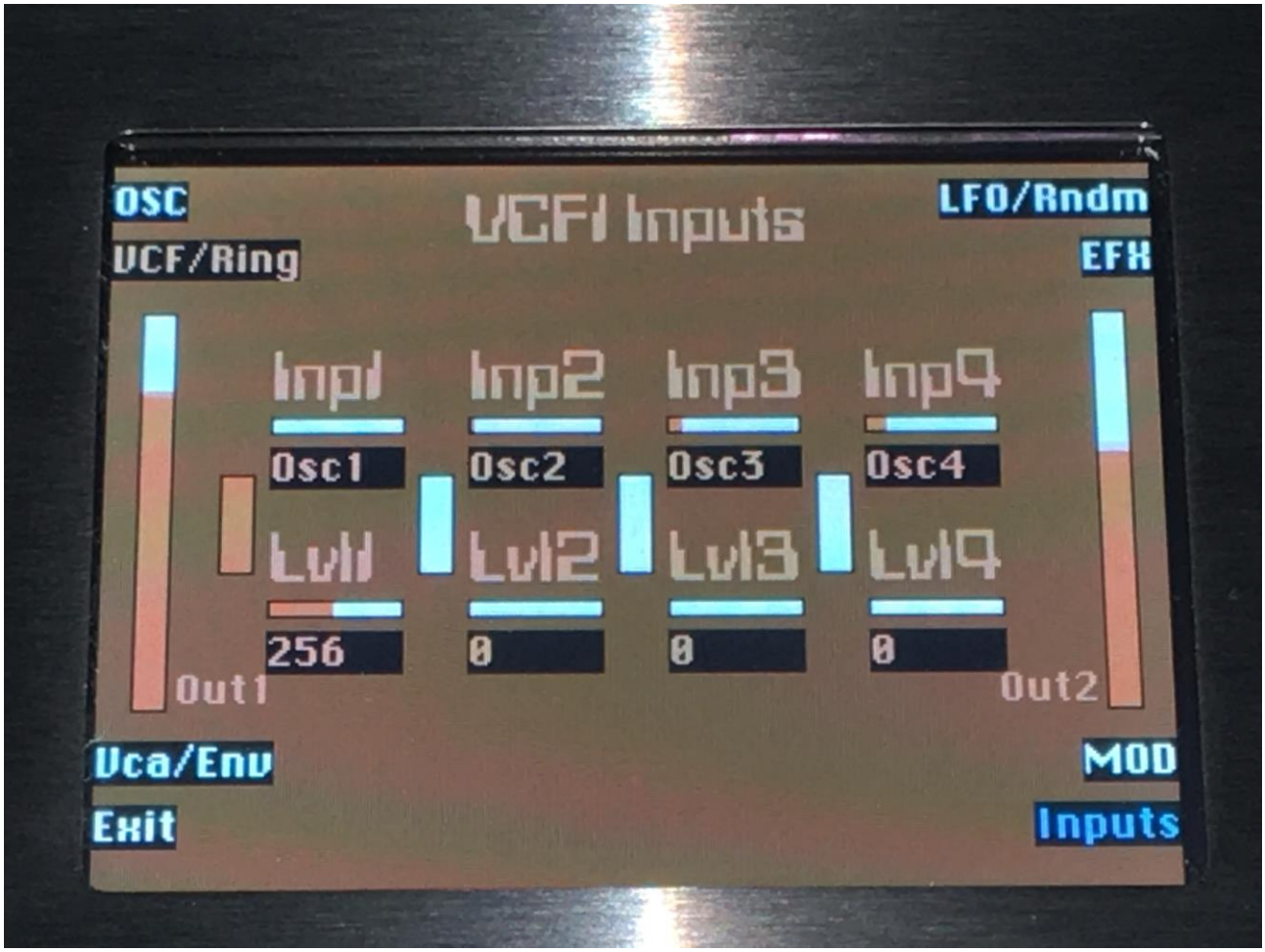
Reso: Modulates the Resonance parameter.

Cut3/Feed: Modulates the analog filter feedback/Cutoff frequency 3.

Out: Modulates the Out1/2 parameter.

Gfeed: Modulates the G-Ray feedback.

Analog Filter 1 and 2 Inputs Select

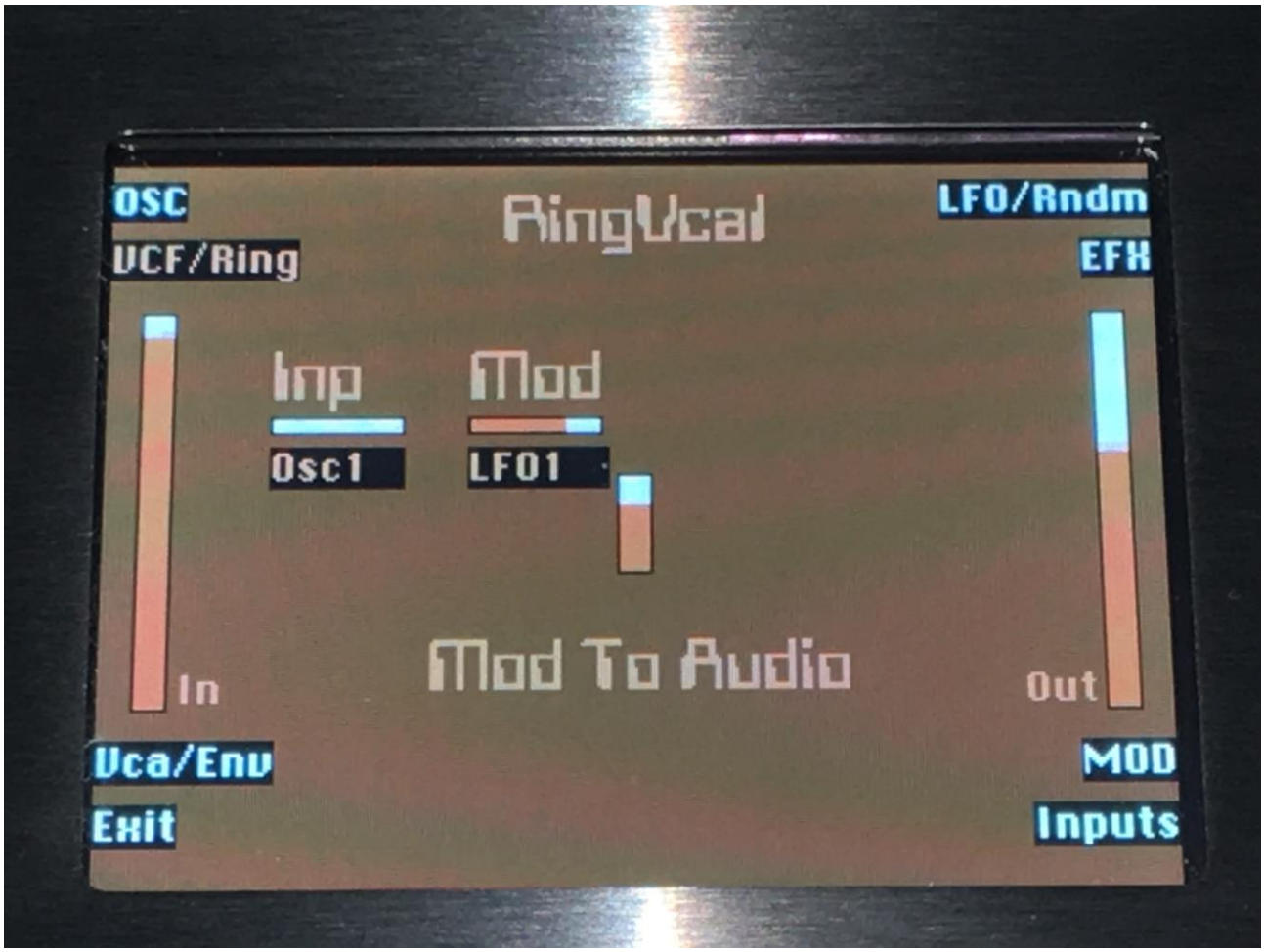


The VU-meters at the left and the right of the screen, shows the filter outputs 1 and 2. The small VU-meters next to the parameters, shows the selected audio sources.

Each analog filter has 4 audio inputs. For each of these, an audio source can be selected, and the input level can be adjusted. For a complete list of audio bus sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the audio input sources, **Edit Knob 5 to 8** (Labelled Lvl1-4) adjusts the input levels in the range 0 to 511.

Ring VCA 1 to 4



The VU-meters at the left and the right of the screen, shows the Ring VCA input and output. The small VU-meter next to the Mod parameter, shows the modulation source.

Inp: Connects any modulation source to the input of the Ring VCA. This is the input, that gets modulated. Since this outputs to both the modulation and the audio bus, it can be used to get modulation signals to the audio bus, if you, for any reason, would like to do that.

Mod: Connects any modulation source to the modulation input of the ring VCA. The first source that can be selected are special to this module: Max. This just adds a maximum value to the modulation input. Select this, if you just want to convert from modulation to audio.

The “MOD” and “Inputs” buttons has no function on the Ring VCA pages.

Setup examples:
Ring Modulator: Connect audio range modulators (like oscillators or samples) to both inputs.

Modulation VCA: Connect the source that you would like to be level modulated to “Inp”, and connect the desired level modulator to “Mod”.

Modulation to audio converter: Connect the modulation source, that you would like to convert, to “Inp”. Select “Max” as “Mod”.

VCA/Env Group

In the VCA/Env group of modules, you will find 4 output VCA's with ADSR Envelopes and 4 extra ADSR Envelopes.

Audio signals can be mixed and routed to output 1 and 2 through the VCA's, either as 2 mono or one stereo signal. Output can also be switched off, if you only want to use a VCA for internal audio level modulation or mix. An ADSR envelope are attached to each of the VCA's. The VCA envelopes can either be in linear or logarithmic mode. A Drone parameter are available, for opening the VCA without the envelope needing to be trigged. VCA output level are modulated by the attached ADSR envelope. Attack, decay and release can be modulated by any modulation source. The VCA's only outputs to the audio bus. If you need VCA's for modulation signals, you should use a Ring VCA.

In this module group, you will also find 4 modulation envelopes, with linear/logarithmic charateristics and an offset control.

In order to trigger any envelope, you will have to set up a trigger to do this. See the "Triggers" section earlier in this manual, for information on how to do this.

The VCA’s in this group outputs only to the audio bus, and all the envelopes outputs only to the modulation bus.

VCA 1 to 4

The VU-meters at the left and the right of the screen, shows the VCA input and output.

A: VCA envelope attack time. The time it will take the amp envelope to rise from zero to its maximum value, when a note event is received and held down. Range: 0 to 511.

D: VCA envelope decay time. When the amp envelope has reached its maximum value, in the time set by the attack parameter, it will decay, until it reaches the sustain level, and stay there, as long as the note that trigged it is held. Range: 0 to 511.

S: VCA envelope sustain level. Explained under the ”Dec” parameter. Range: 0 to 511.

R: VCA envelope release time. The time it will take the amp envelope to decay from the value it is at, when a note off event are received, to zero. Range: 0 to 511.

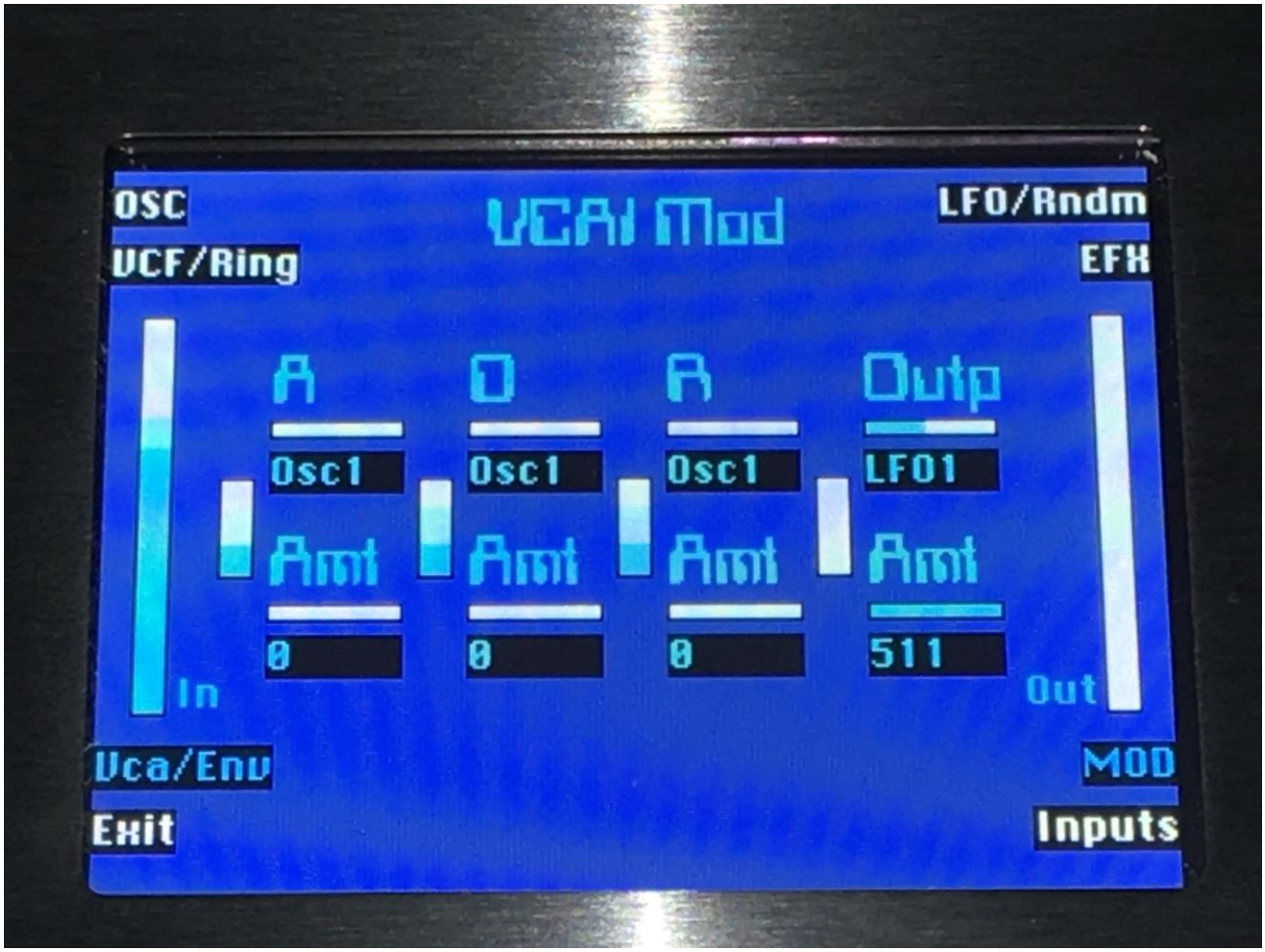
Outp: Selects whether the VCA should output to Audio Out 1 or 2 as a mono signal, or output as a stereo signal to both outputs, or not output to any physical outputs at all. When any of the 4 VCA’s are in stereo mode **(“Streo”),** the volume knob will work on both outputs. Else it will work only on output 1.

Mode: Selects if the VCA envelope curve should be linear **(Lin),** or logarithmic **(Log).** The logarithmic curve gives the sound a softer and less “clicky” attack.

Drone: VCA envelope drone offset level. When this is turned up, the amp envelope will never reach an output value, lower than what this is adjusted to –It will release to this adjusted value, instead of zero. Use this to keep the output of the synth open for drone sounds, or for external input sounds. Range: 0 to 511.

Level: The VCA output level.

VCA 1 to 4 Modulation in Mono Mode



The VU-meters at the left and the right of the screen, shows the VCA input and output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

The parameters on this page:

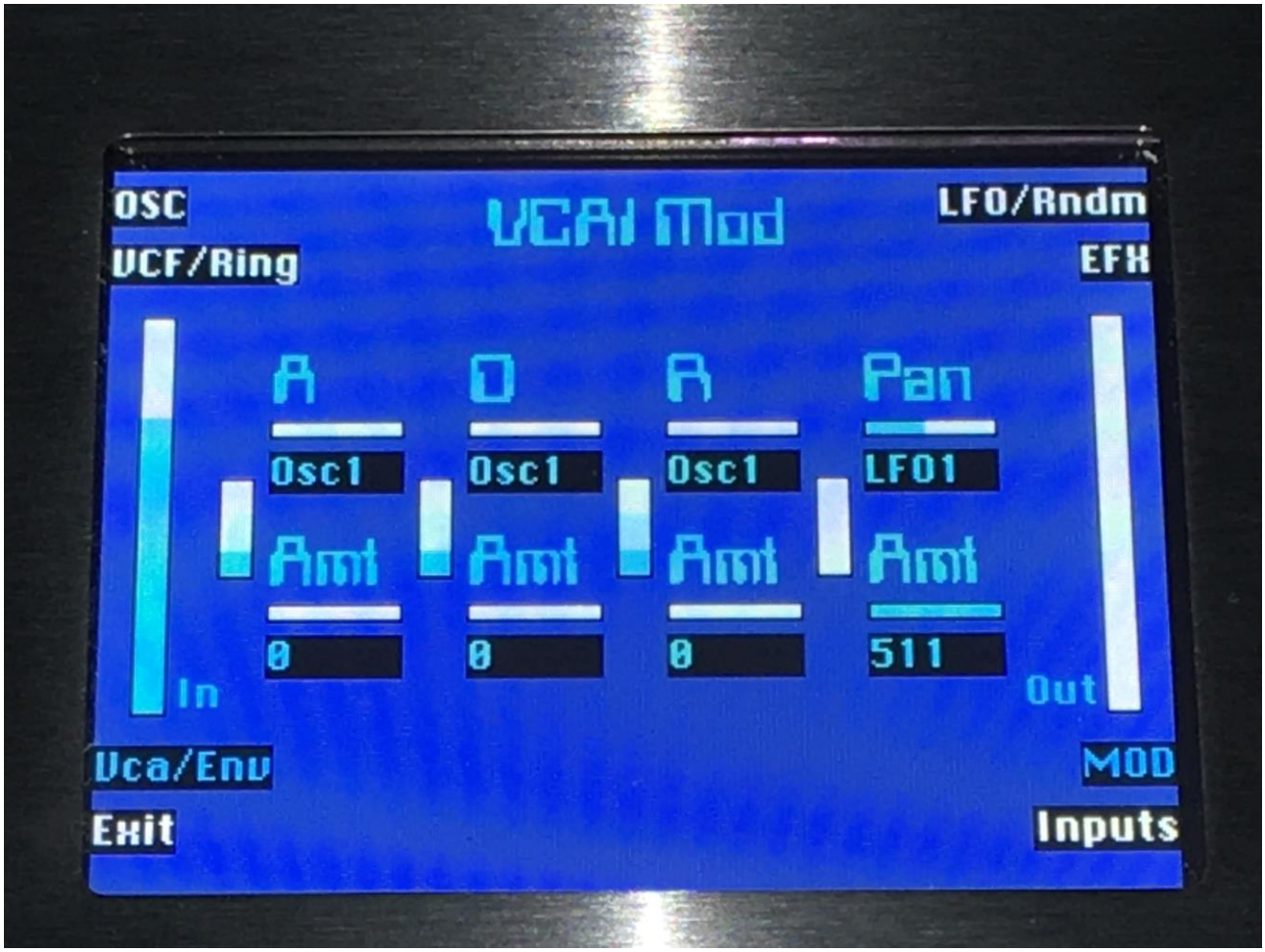
A: Modulates the VCA Envelope attack time.

D: Modulates the VCA Envelope decay time.

R: Modulates the VCA Envelope release time.

Outp: Modulates the output level of the VCA.

VCA 1 to 4 Modulation in Stereo Mode



The VU-meters at the left and the right of the screen, shows the VCA input and output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

The parameters on this page:

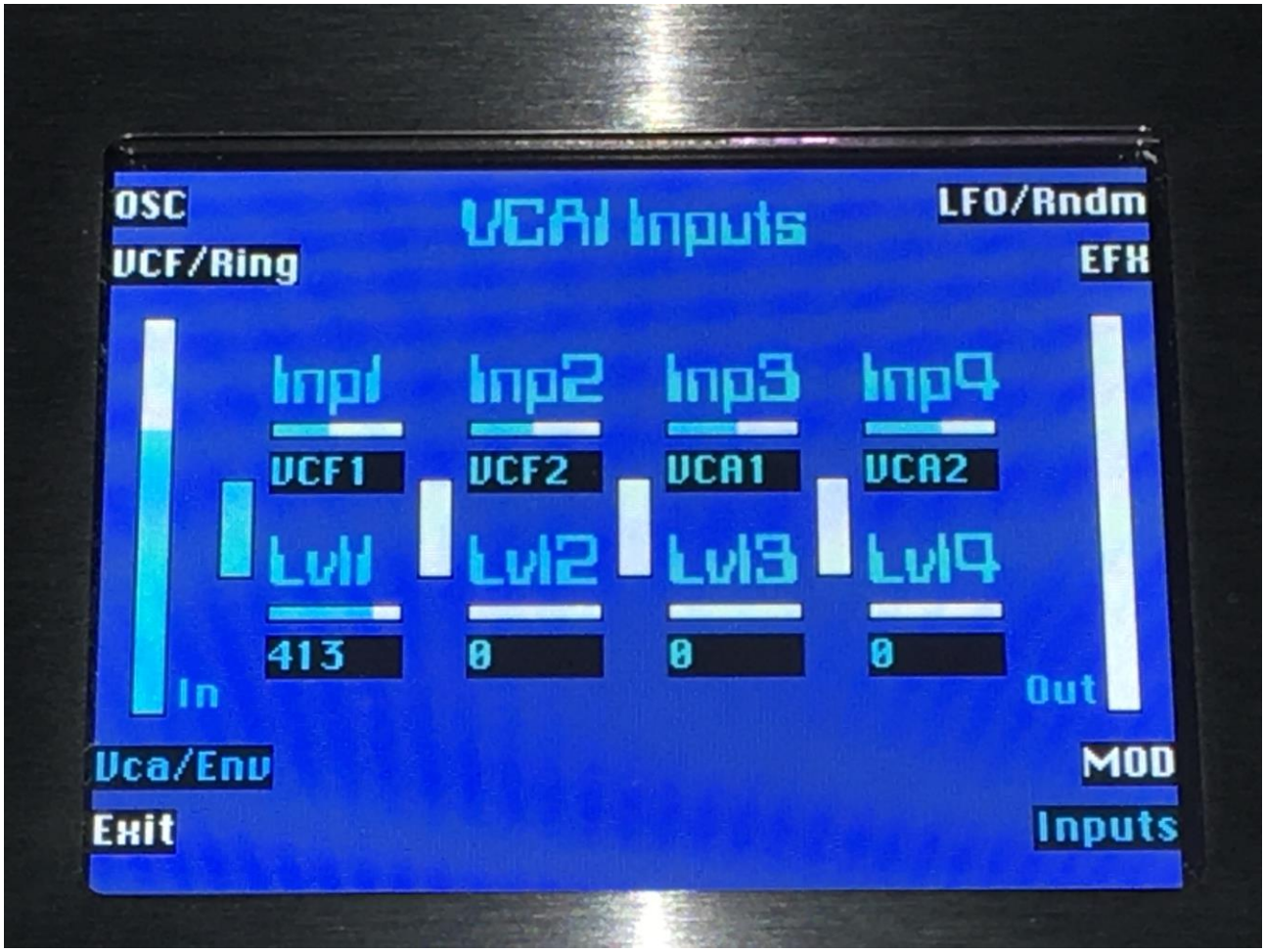
A: Modulates the VCA Envelope attack time.

D: Modulates the VCA Envelope decay time.

R: Modulates the VCA Envelope release time.

Pan: Modulates the left/right stereo position of the VCA.

VCA 1 to 4 Inputs Select

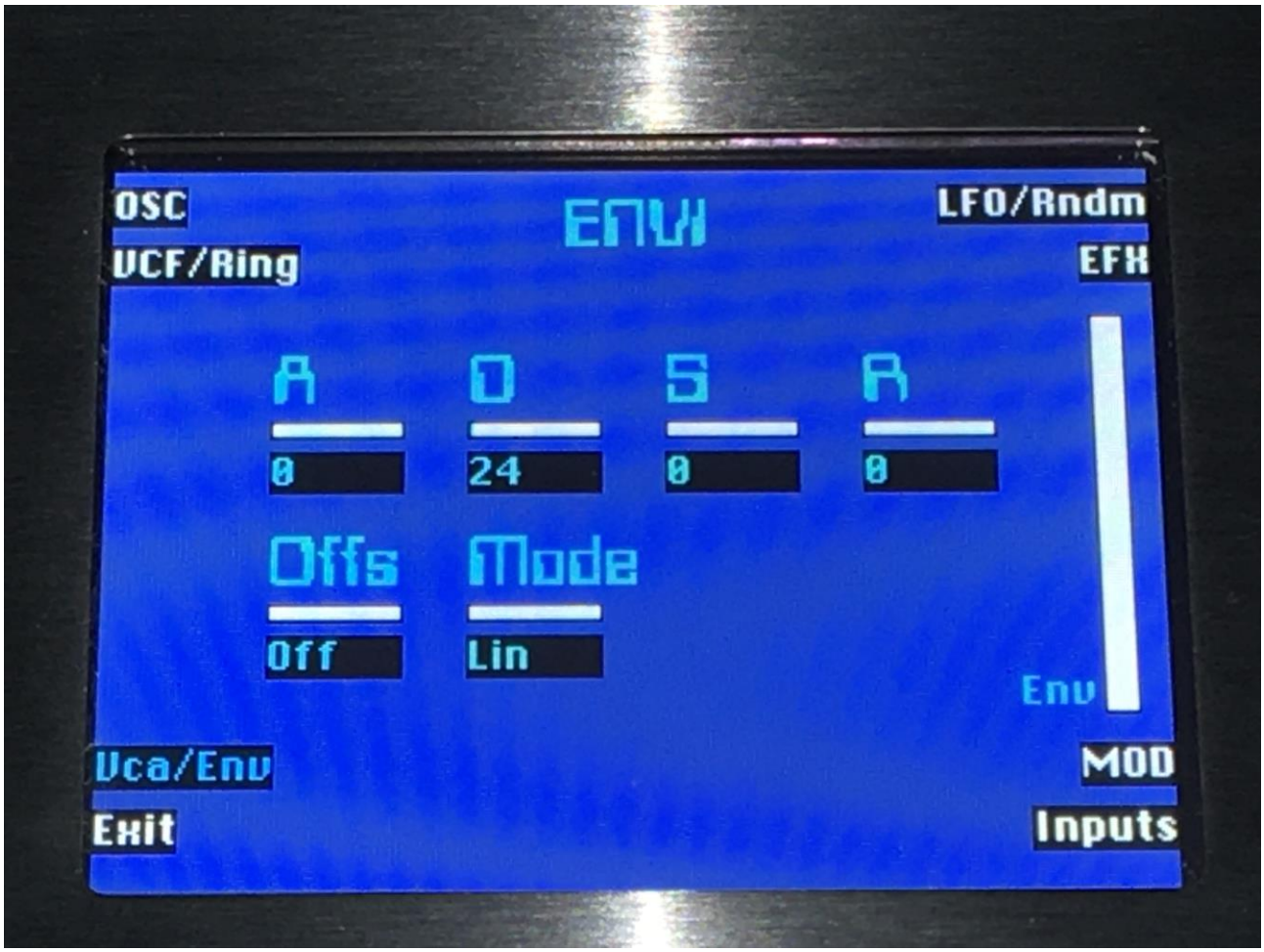


The VU-meters at the left and the right of the screen, shows the VCA input and output. The small VU-meters next to the parameters, shows the selected audio sources.

Each VCA has 4 audio inputs. For each of these, an audio source can be selected, and the input level can be adjusted. For a complete list of audio bus sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the audio input sources, **Edit Knob 5 to 8** (Labelled Lvl1-4) adjusts the input levels in the range 0 to 511.

Envelope 1 to 4



The VU-meter at the right of the screen, shows the Envelope output.

A: Envelope attack time. The time it will take the envelope to rise from zero to its maximum value, when a note event is received and held down. Range: 0 to 511.

D: Envelope decay time. When the envelope has reached its maximum value, in the time set by the attack parameter, it will decay, until it reaches the sustain level, and stay there, as long as the note that trigged it is held. Range: 0 to 511.

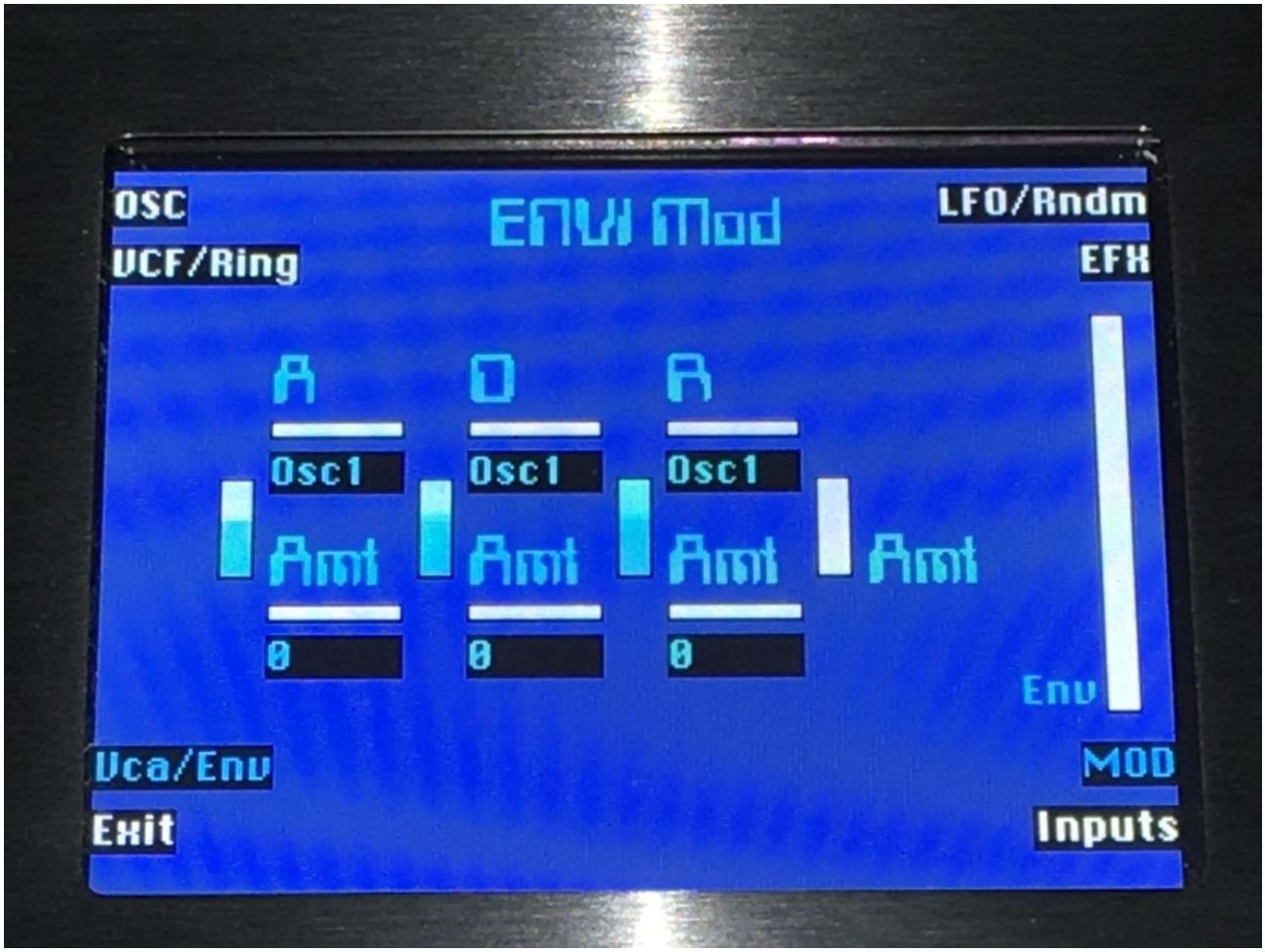
S: Envelope sustain level. Explained under the ”Dec” parameter. Range: 0 to 511.

R: Envelope release time. The time it will take the envelope to decay from the value it is at, when a note off event are received, to zero. Range: 0 to 511.

Offs: Offset:
-Off: The envelope will work around the zero point, and apply both negative and positive modulation to the parameters affected by it.
-On: Positive only, offset added. The envelope will only work above the zero point, and will only add to the values of the parameters affected by it.

Mode: Selects if the envelope curve should be linear **(Lin),** or logarithmic **(Log).** The logarithmic curve gives the envelope a softer and less “clicky” attack.

Envelope 1 to 4 Modulation



The VU-meter at the right of the screen, shows the Envelope output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

The parameters on this page:

A: Modulates the Envelope attack time.

D: Modulates the Envelope decay time.

R: Modulates the Envelope release time.

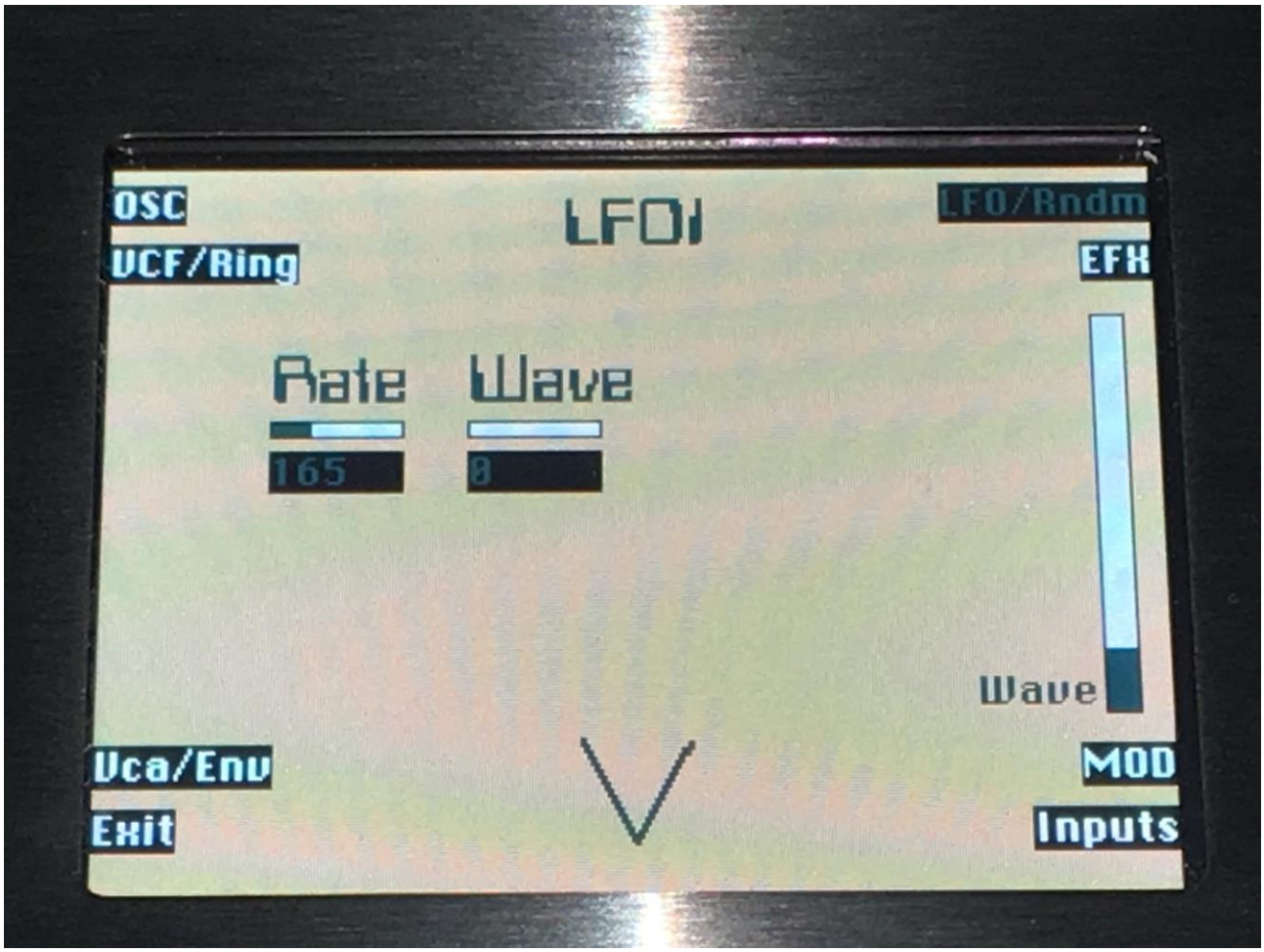
LFO/Rndm Group

In the LFO/Rndm group of modules, you will find 4 LFO’s and 4 Random generators.

The 4 LFO's has continuosly variable waveform and rate paramet LFO/ers. Both of these parameters can be modulated. The 4 LFO’s outputs to the modulation bus.

The 4 Random Generators changes to a new random value every time they are trigged. Trigger sources can be trigger 1-8 and LFO 1-4. Outputs to the modulation bus.

LFO 1 to 4

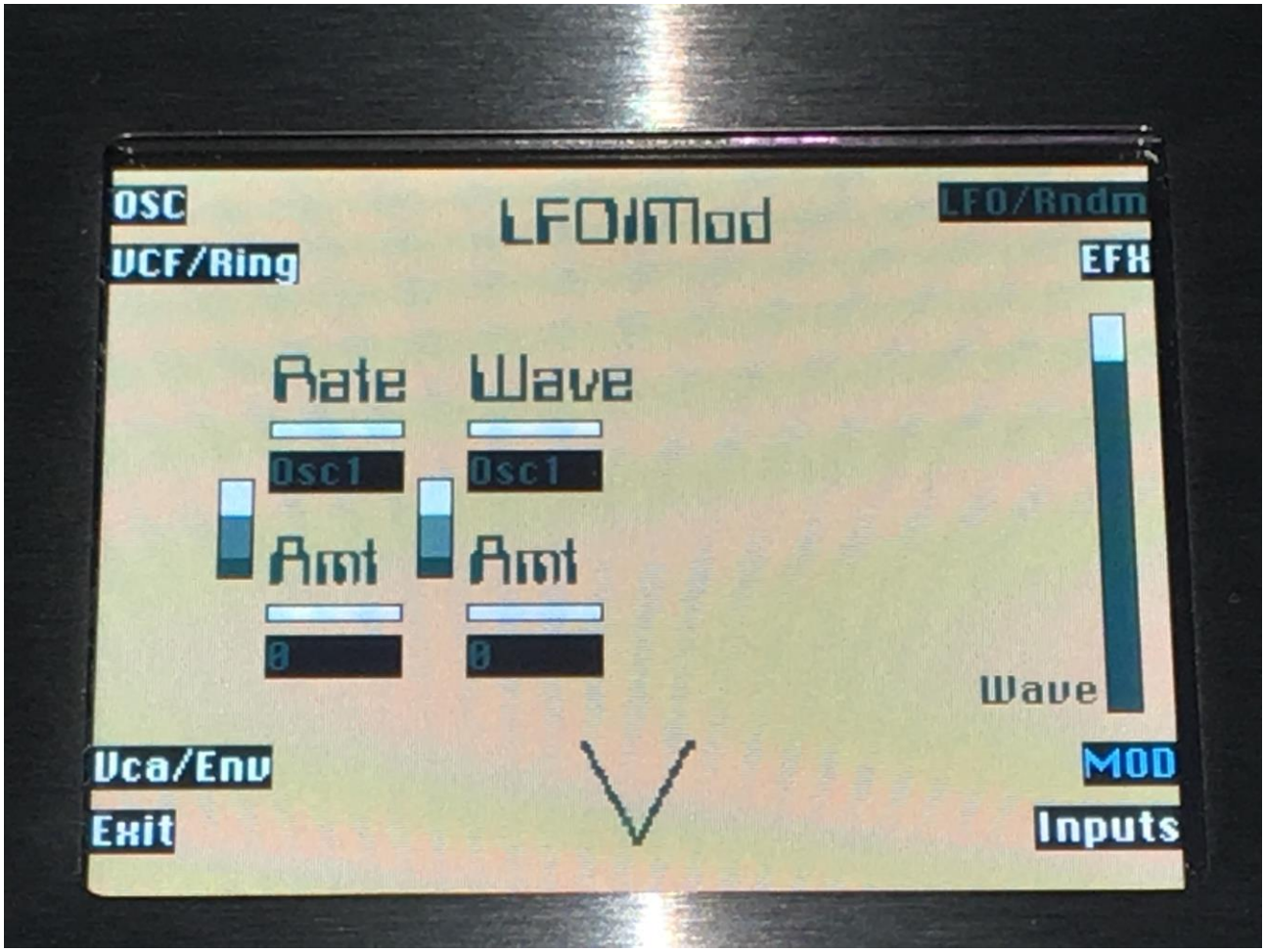


In the bottom of the LFO page, the currently adjusted waveform is shown. The VU-meter at the right of the screen, shows the LFO output.

Rate: LFO rate. Adjusts the speed of the LFO.

Wave: LFO output waveform. Morphs between triangle, sawtooth, square, pulse and FM waveforms. The FM waveforms are high frequency waves, that can be used for FM synthesis.

LFO 1 to 4 Modulation



In the bottom of the LFO page, the currently adjusted waveform is shown. The VU-meter at the right of the screen, shows the LFO output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

Edit Knob 1 to 2 selects the modulation sources, **Edit Knob 5 to 6** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

The parameters on this page:

Rate: Modulates the LFO rate.

Wave: Modulates the LFO waveshape.

Random Generator 1 to 4

The VU-meter at the right of the screen, shows the random generator output.

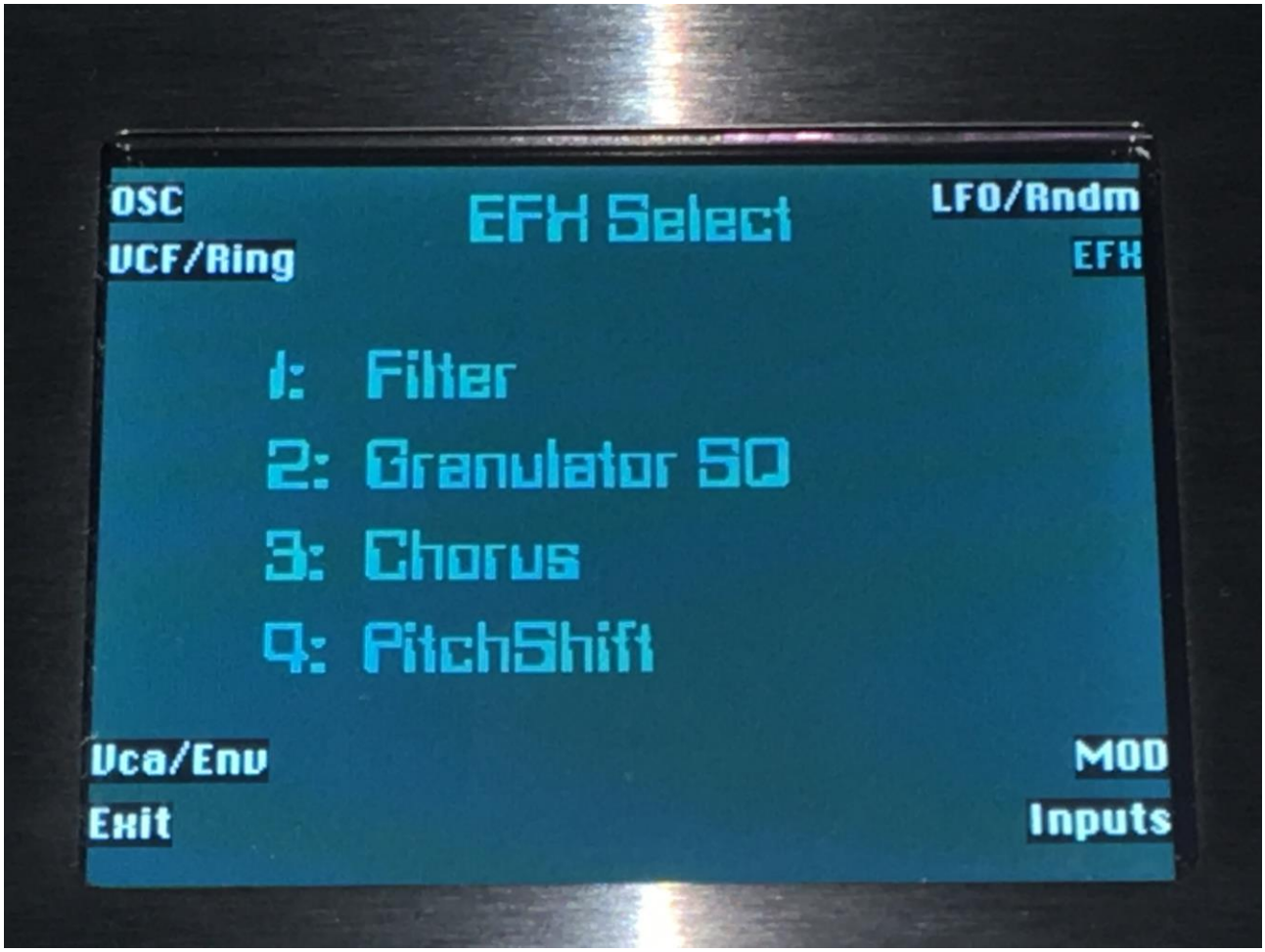
Trigger: Selects what should trigger the random generator, to shift to a new random value. Choices are: **Trigger 1 to 8, LFO 1 to 4.**

EFX Group

In the EFX group of modules, you will find 4 effects processors.

All effects has a bypass/Freeze switch and a mix parameter. All effects outputs to both the audio and the modulation bus, and many parameters can be modulated.

The Effects select page



On this page, you can select an effect for each of the 4 effects processor, by turning **Edit Knob 1 to 4.**

List of Effects

Filter – 16 filter types and 2 EQ types. Derived from Fuzion.

Chorus – Gotharman's special chorus with an added Deep parameter, that adds space to the chorus.

Distortion – 4 types: Valve, Sine, Fuzz, Xdis.

Bit Crush – Lowers the sample rate and the bit resolution of the sound, to obtain lo-fi effects.

Pitch Shifter – Changes the pitch of the sound up to 4 octaves up or down, without changing the time resolution or "tempo" of the sound. Adjustable sense.

Resonator – Simulates the resonances that comes, if a sound goes through a small box. Anamono X's resonators are synthetic, with more focus on making sounds, than on simulating actual boxes.

Stretcher – Tries to time stretch the input signal, while at the same time keeping up with it. Impossible? -Yes, indeed :-)

FM – Adds self-FM to the input signal in +/- 1 octave, +/- 2 octaves or +/- 4 octaves ranges.

Delay 1 – Only EFX 1 and 2. Delay with time and feedback controls, plus Gotharman's Deep, Size, Beam and Xfade controls. Deep adds space to the delay, Size makes the playback range more narrow than the input recording range, and beam beams the delay to previously unknown places. The Xfade control on this delay, creates valleys between the delay taps. The more it is turned up, the more time the valleys takes up.

Roto Delay – Only EFX 1 and 2. New Gotharman delay! This is a 2 tap delay, that is constantly crossfading between the 2 taps. When the Xfade control is turned down, the crossfading is rough, the more it is turned up, the more smooth the crossfading gets. Other controls are the same as the first delay.

Bright Delay – Only EFX 1 and 2. First delay, but with a brighter sound, created by a resonator.

Bright Roto Delay – Only EFX 1 and 2. Roto delay, but with a brighter sound, created by a resonator.

Granulator – Only EFX 1 and 2. Cuts the input signal up in grains, that can be re-arranged. The anAmoNo X granulator can sync to the sequencer.

Variator – Only EFX 1 and 2. Creates new variations of the input signal. Both pitch and rhythmic variations.

Reverb – Only EFX 1 and 2. Takes up 2 effect slots: 1+3 and/or 2+4.

Glitch Shifter – Imperfect pitch shifter.

Glitch Shifter 2 – Imperfect pitch shifter with a slightly different sound than the first one.

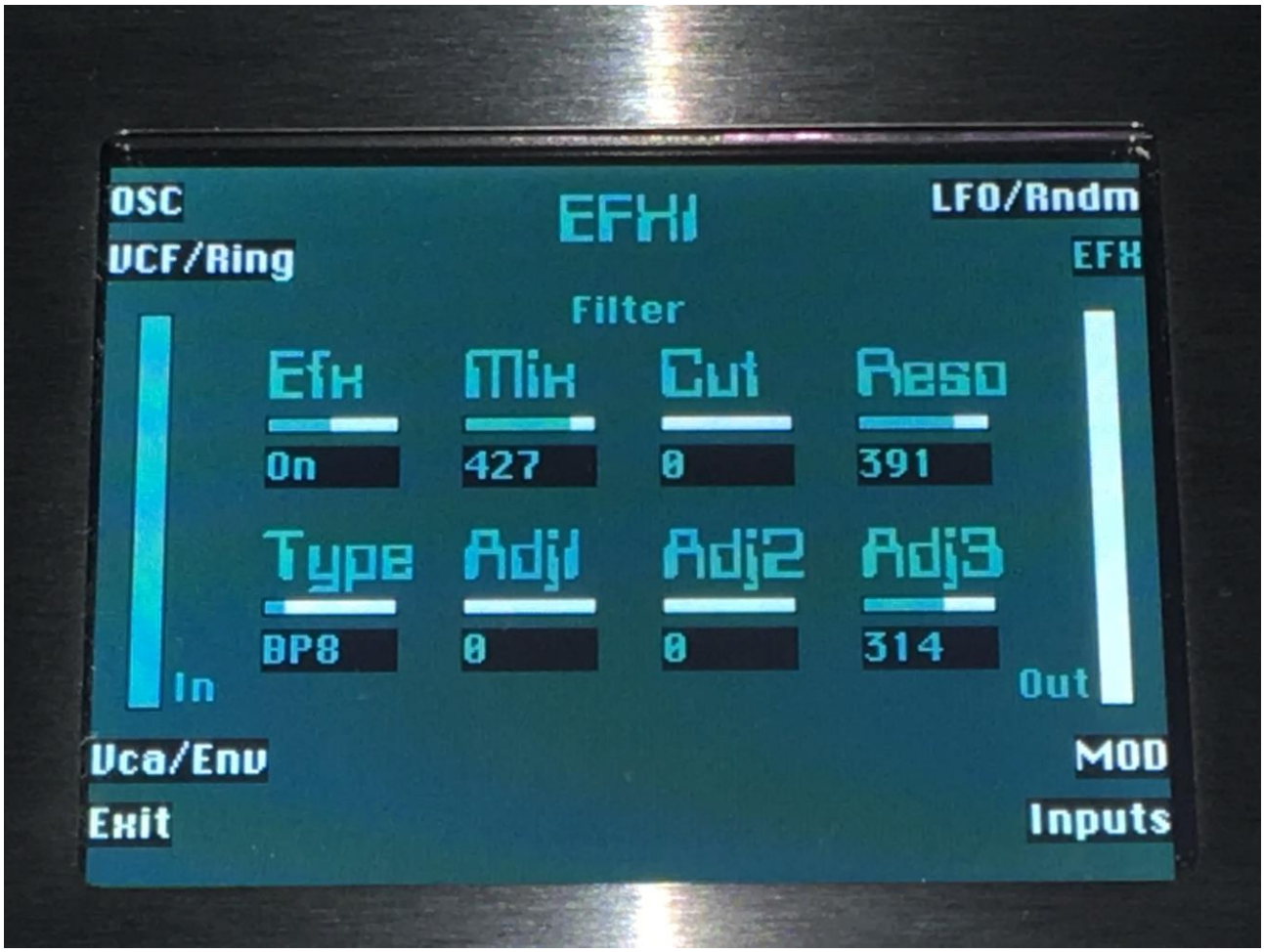
Pitch Shaper – 1 input version of Gotharman's special Pitch Shaper, that forces an audio signal to play back at a specific pitch, determined by an adjustable frequency.

Pitch Shaper 2 – 2 input version of Gotharman's special Pitch Shaper, that forces an audio signal to play back at a specific pitch, determined by the frequency of another audio signal.

Wave Shaper - Re-shapes the input signal.

Effects Parameters

Filter



The VU-meters at the left and the right of the screen, shows the effect input and output.

Efx: Off, on, Freeze. When the effect is off, it is bypassed, and its input mixer can function as a mixer. When the effect are in Freeze mode, the input signal is no longer sampled. The sound that the effect holds, will just keep playing back on and on again. NOT ALL EFFECTS ARE AFFECTED BY FREEZE!

Mix: The mix between the un-effected signal on the effect input, and the effected signal on the effect output, that is sent to the audio bus.

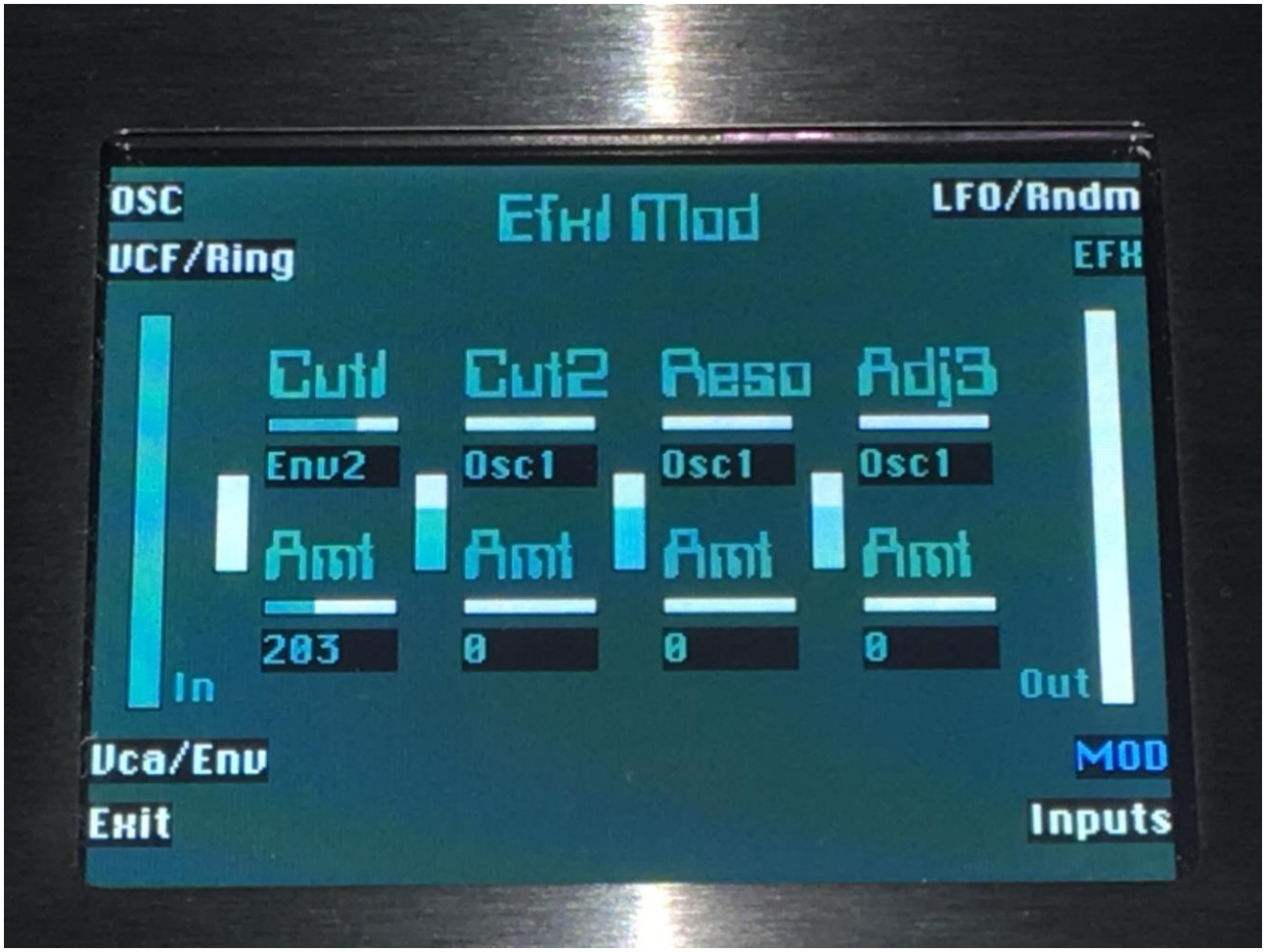
Cut: Filter cutoff frequency.

Reso: Filter resonance setting.

Type: Filter type. Possibilities are:
-LPF: Low pass filter
-BPF: Band pass filter
-BP8: Steep band pass filter
-HPF: High pass filter
-ADD: Reverse filter. Adds harmonics to the sound.
-BEF: Band eliminate filter
-BASS: A filter with most power in the bass area
-LOFI: Agressive low pass filter
-LPF2: Low pass filter 2, with a slightly different response than the first variant
-BPF2: Band pass filter 2, with a slightly different response than the first variant
-BP82: Steep band pass filter 2, with a slightly different response than the first variant
-HPF2: High pass filter 2, with a slightly different response than the first variant
-ADD2: Reverse filter 2, with a slightly different response than the first variant
-BEF2: Band eliminate filter 2, with a slightly different response than the first variant
-BAS2: Bass filter 2, with a slightly different response than the first variant
-LOFI2: Agressive low pass filter 2, with a slightly different response than the first variant
-Peq1: Parametric EQ
-Peq2: Steeper parametric EQ

Adj1, Adj2, Adj3: Changes the filter response. For the parametric EQ types, Adj3 acts as cut/boost.

Filter Modulation



The VU-meters at the left and the right of the screen, shows the effect input and output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

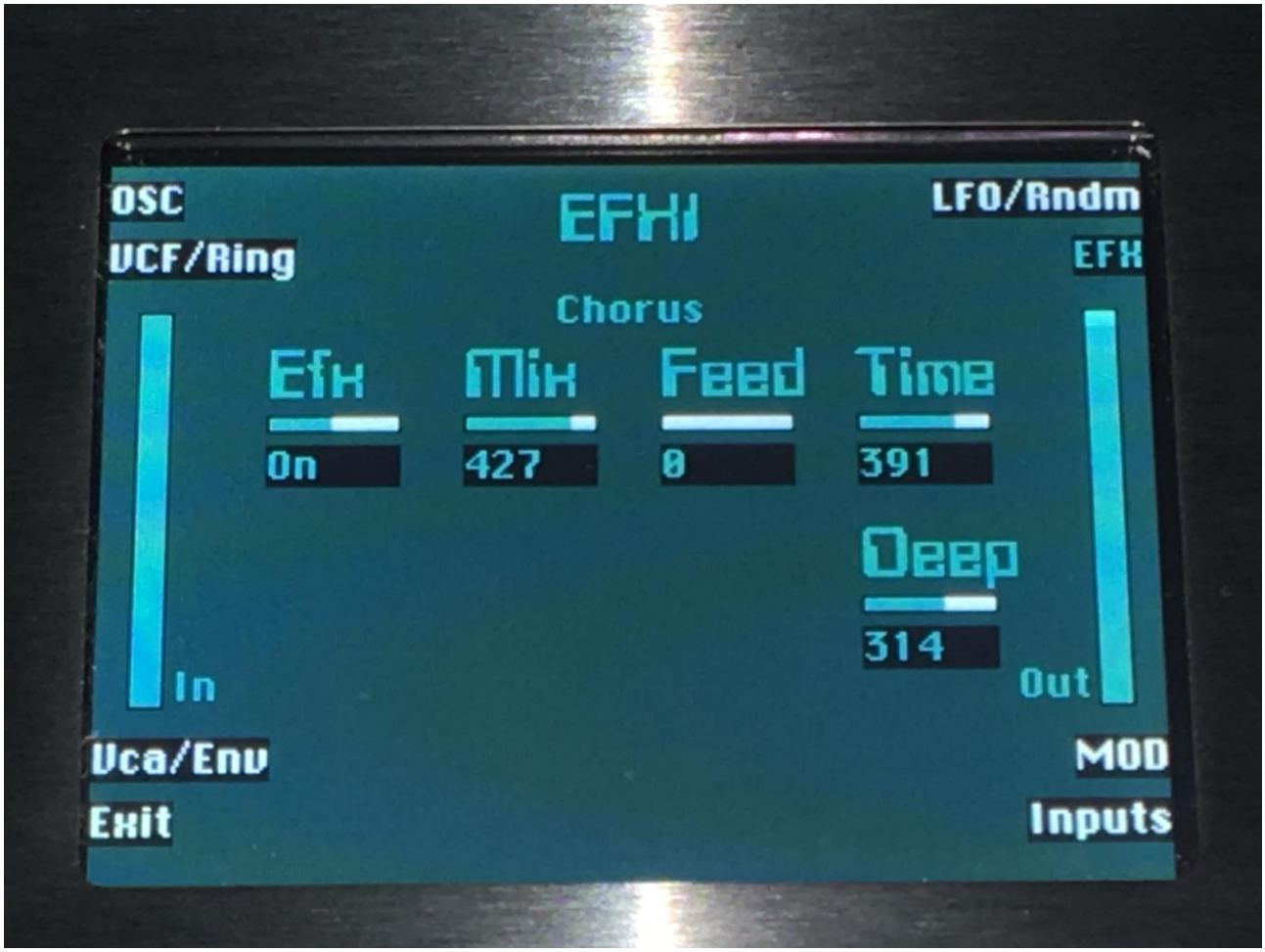
The parameters on this page:

Cut1 and Cut2: Modulates the filter cutoff frequency.

Reso: Modulates the filter resonance.

Adj3: Modulates the filter adjust 3 parameter.

Chorus



The VU-meters at the left and the right of the screen, shows the effect input and output.

Efx: Off, on, Freeze. When the effect is off, it is bypassed, and its input mixer can function as a mixer. When the effect are in Freeze mode, the input signal is no longer sampled. The sound that the effect holds, will just keep playing back on and on again. NOT ALL EFFECTS ARE AFFECTED BY FREEZE!

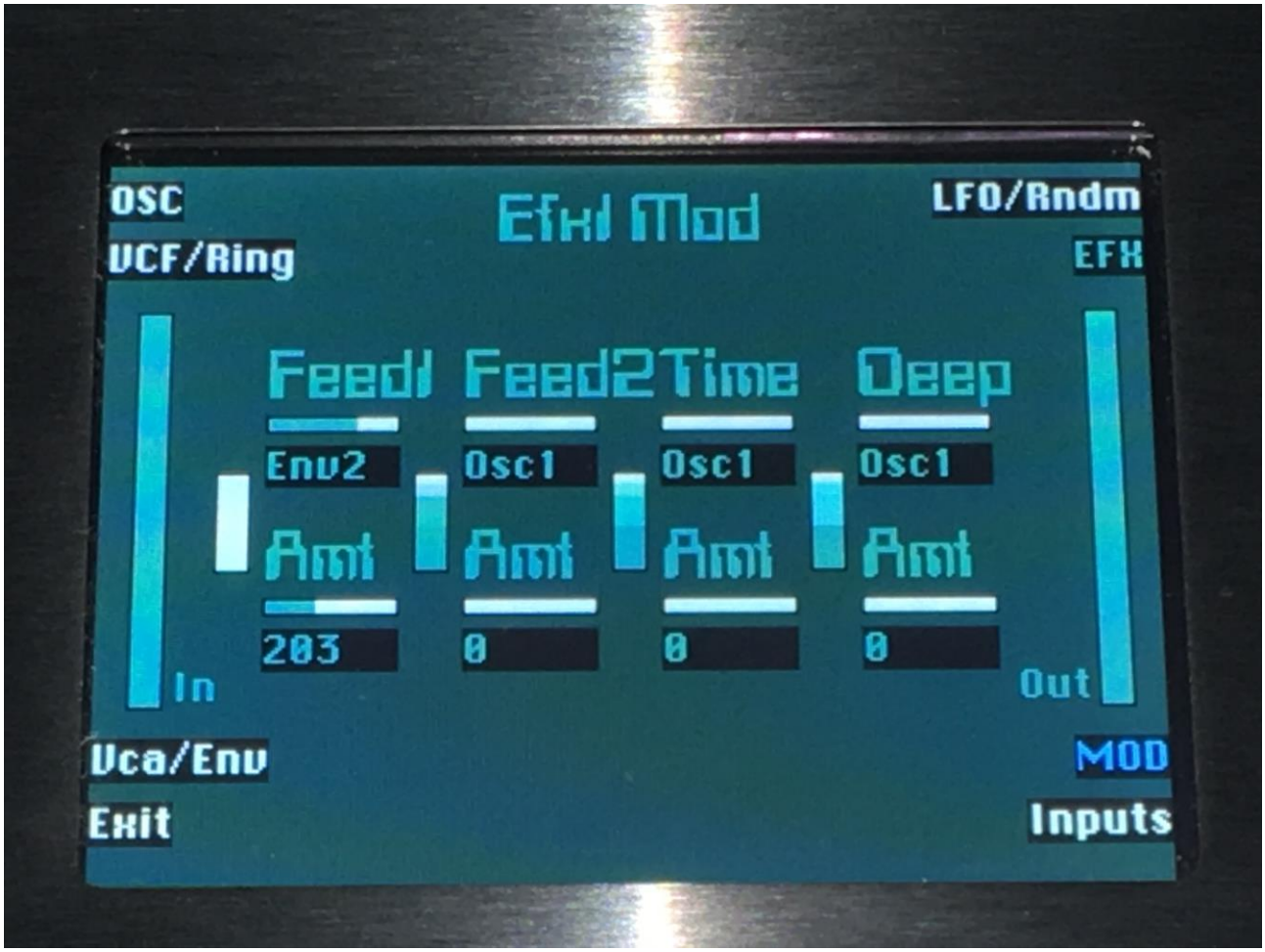
Mix: The mix between the un-effected signal on the effect input, and the effected signal on the effect output, that is sent to the audio bus.

Feed: Chorus feedback amount.

Time: Chorus Time. This should be modulated by an LFO, to get the traditional chorus effect.

Deep: Adjusts how deep the chorus box should be. A Gotharman special.

Chorus Modulation



The VU-meters at the left and the right of the screen, shows the effect input and output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

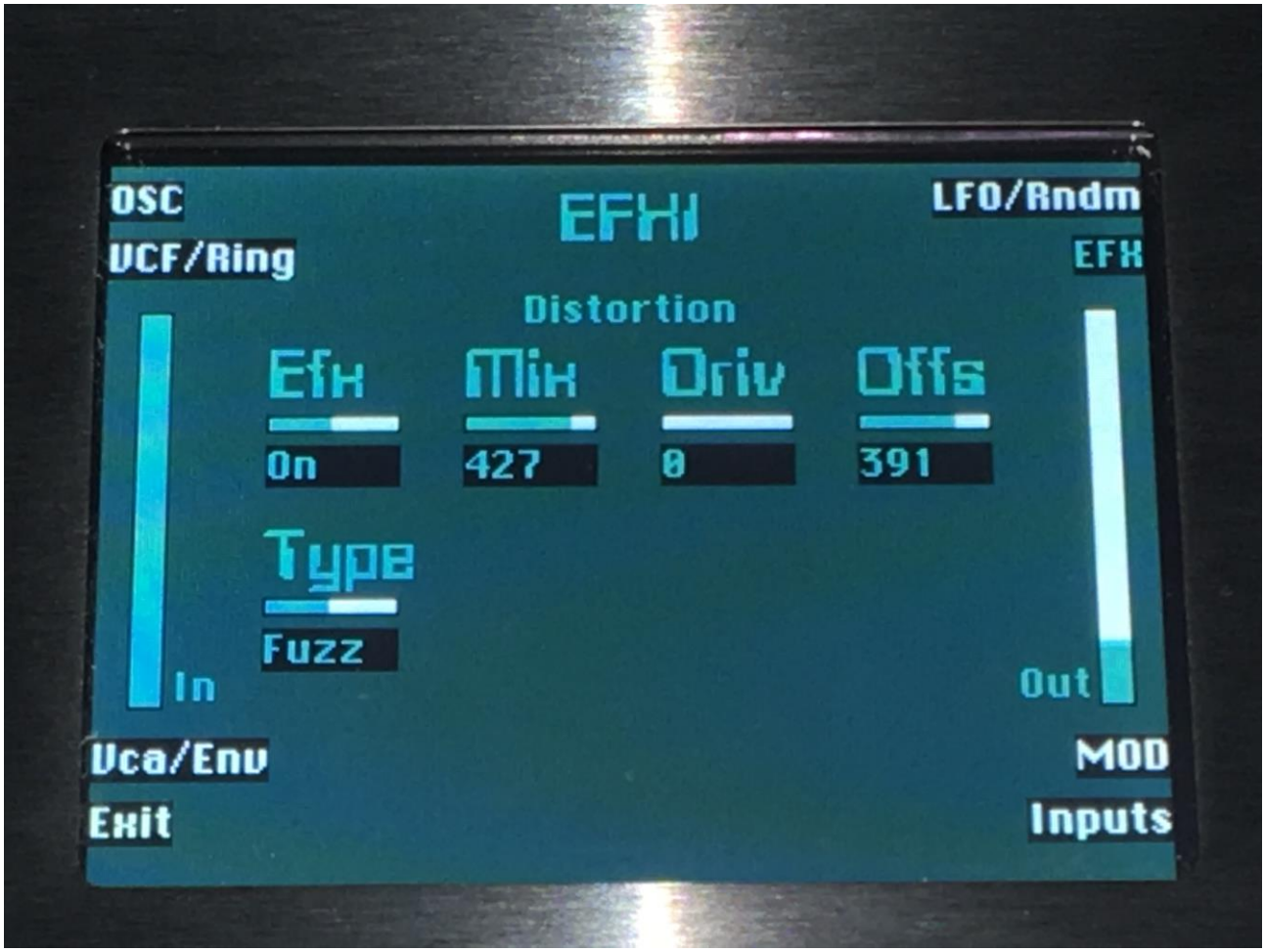
The parameters on this page:

Feed1 and Feed2: Modulates the chorus feedback.

Time: Modulates the time parameter.

Deep: Modulates the Deep parameter.

Distortion



The VU-meters at the left and the right of the screen, shows the effect input and output.

Efx: Off, on, Freeze. When the effect is off, it is bypassed, and its input mixer can function as a mixer. When the effect are in Freeze mode, the input signal is no longer sampled. The sound that the effect holds, will just keep playing back on and on again. NOT ALL EFFECTS ARE AFFECTED BY FREEZE!

Mix: The mix between the un-effected signal on the effect input, and the effected signal on the effect output, that is sent to the audio bus.

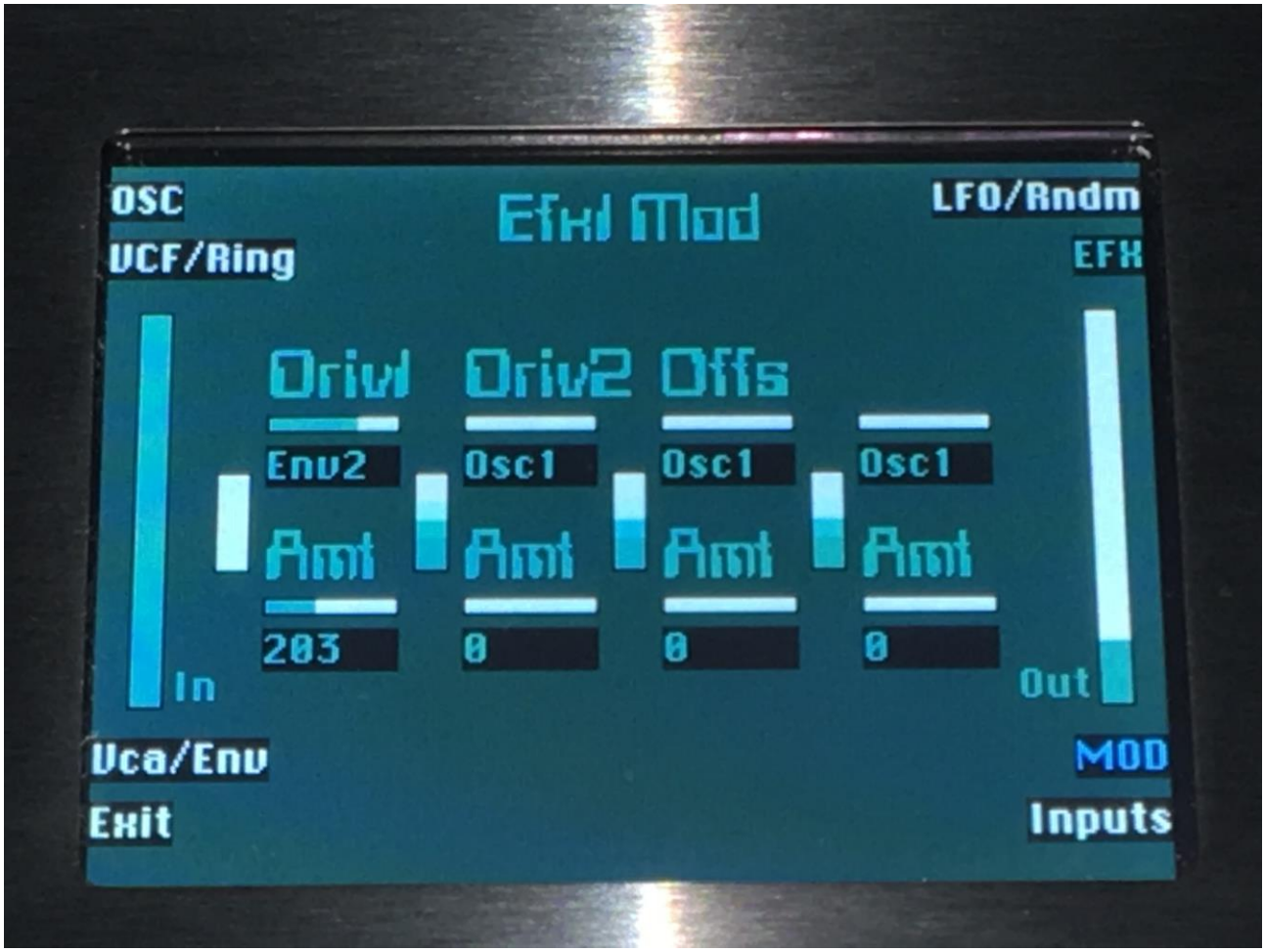
Drive: The higher the value, the more the sound will distort. If this is set to zero, no sound will pass through the distortion.

Offs: Distortion offset. The more this is turned up, the more asymmetric the distortion will get.

Type: Distortion type. Choices are:
-Valve: A digital simulation of a classic valve distortion.
-Sine: A noisy and warm sine shaping distortion.
-Fuzz: Simulates a classic fuzz distortion.

-Xdis: Complete destruction of the sound.

Distortion Modulation



The VU-meters at the left and the right of the screen, shows the effect input and output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

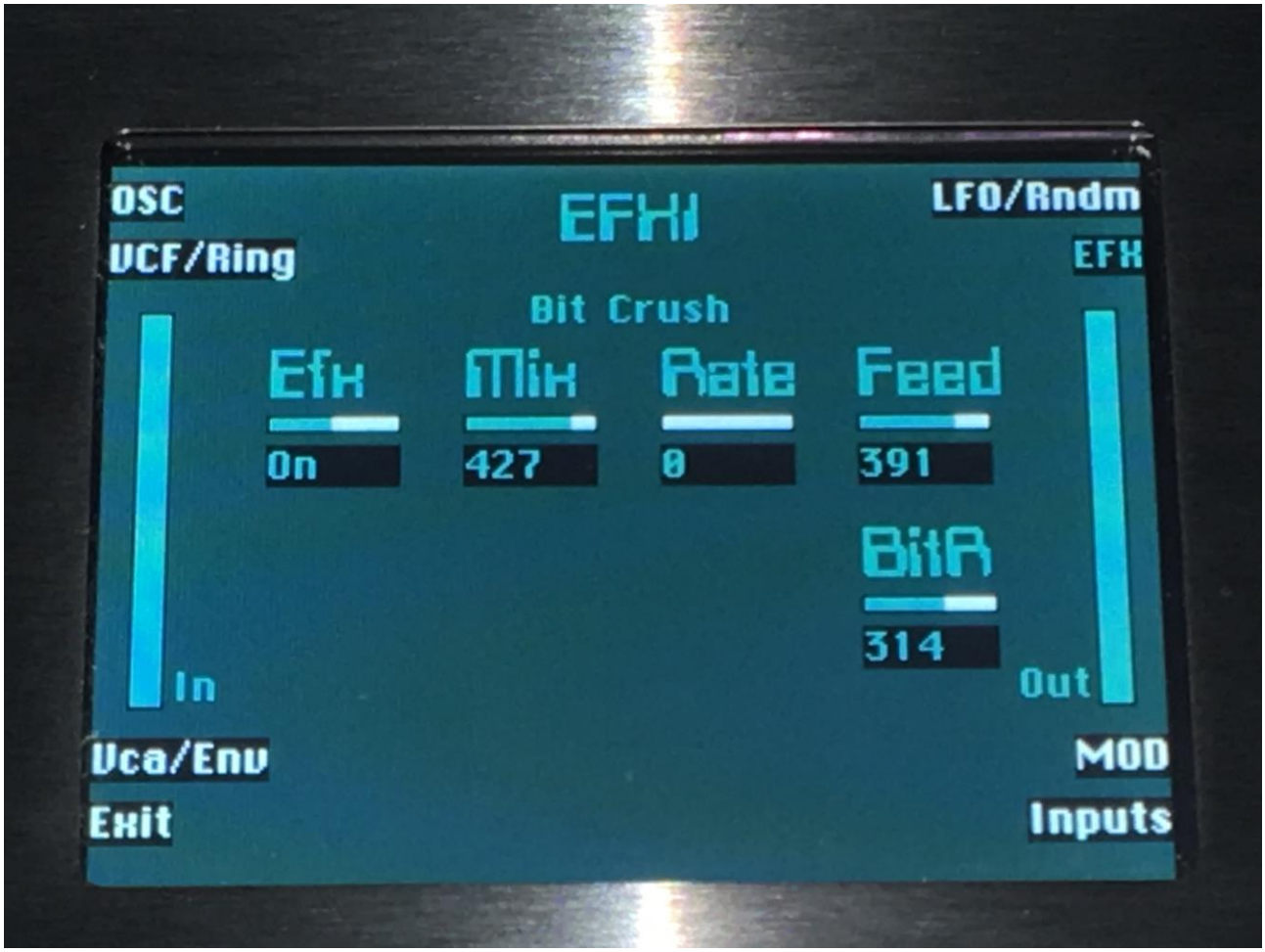
Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

The parameters on this page:

Driv1 and Driv2: Modulates the drive parameter.

Offs: Modulates the offset parameter.

Bit Crush



The VU-meters at the left and the right of the screen, shows the effect input and output.

Efx: Off, on, Freeze. When the effect is off, it is bypassed, and its input mixer can function as a mixer. When the effect are in Freeze mode, the input signal is no longer sampled. The sound that the effect holds, will just keep playing back on and on again. NOT ALL EFFECTS ARE AFFECTED BY FREEZE!

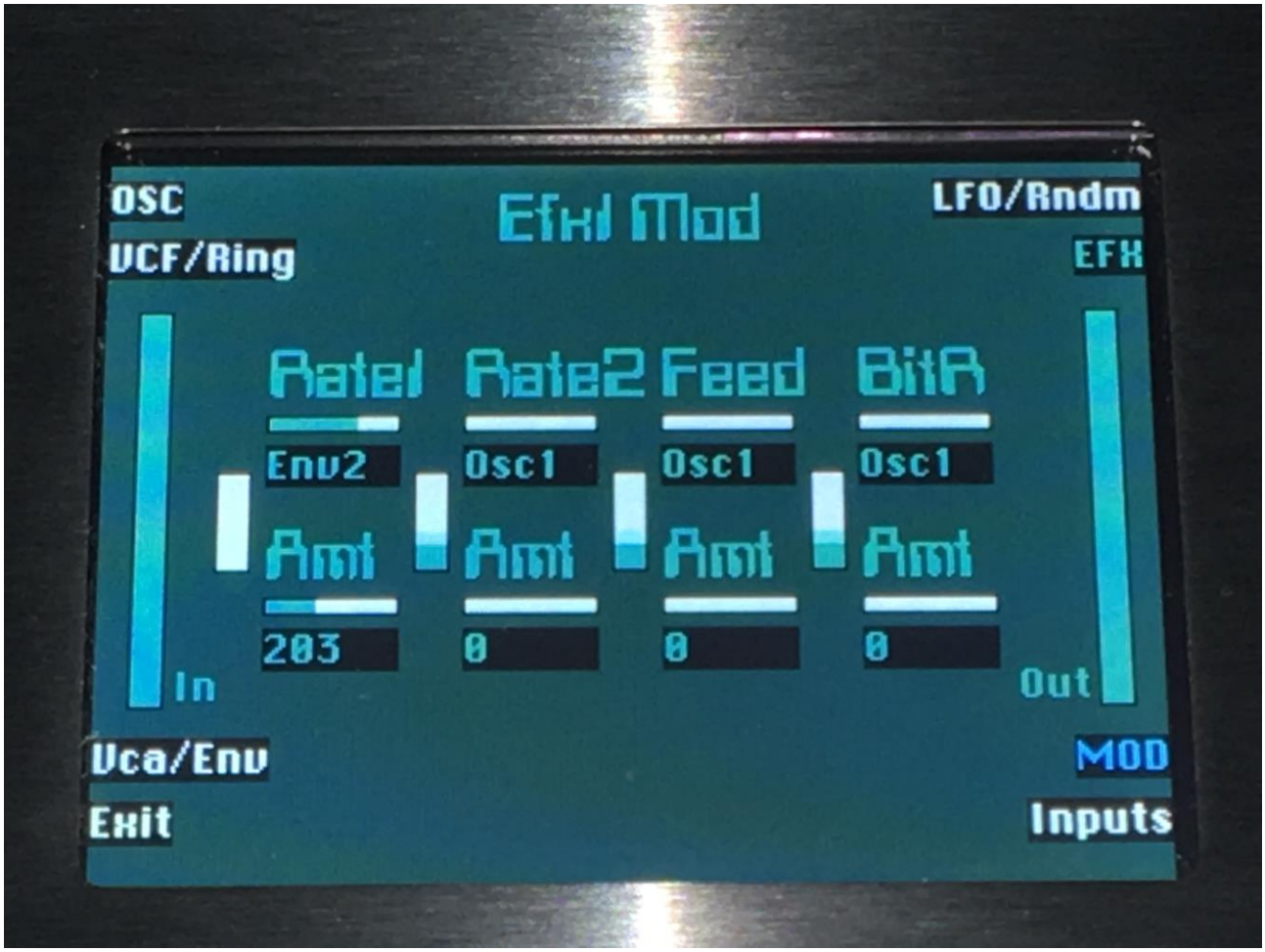
Mix: The mix between the un-effected signal on the effect input, and the effected signal on the effect output, that is sent to the audio bus.

Rate: Sample Rate Reduction. The more this is turned up, the lower the sample rate will be. From 44.1 KHz to 1 KHz.

Feed: Feedback. Turning this up will slightly overdrive the sound.

BitR: Bit Reduction. The more this is turned up, the lower the bit resolution will get. When it is turned fully down, resolution is 16 bit, when turned fully up, it is 1 bit.

Bit Crush Modulation



The VU-meters at the left and the right of the screen, shows the effect input and output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

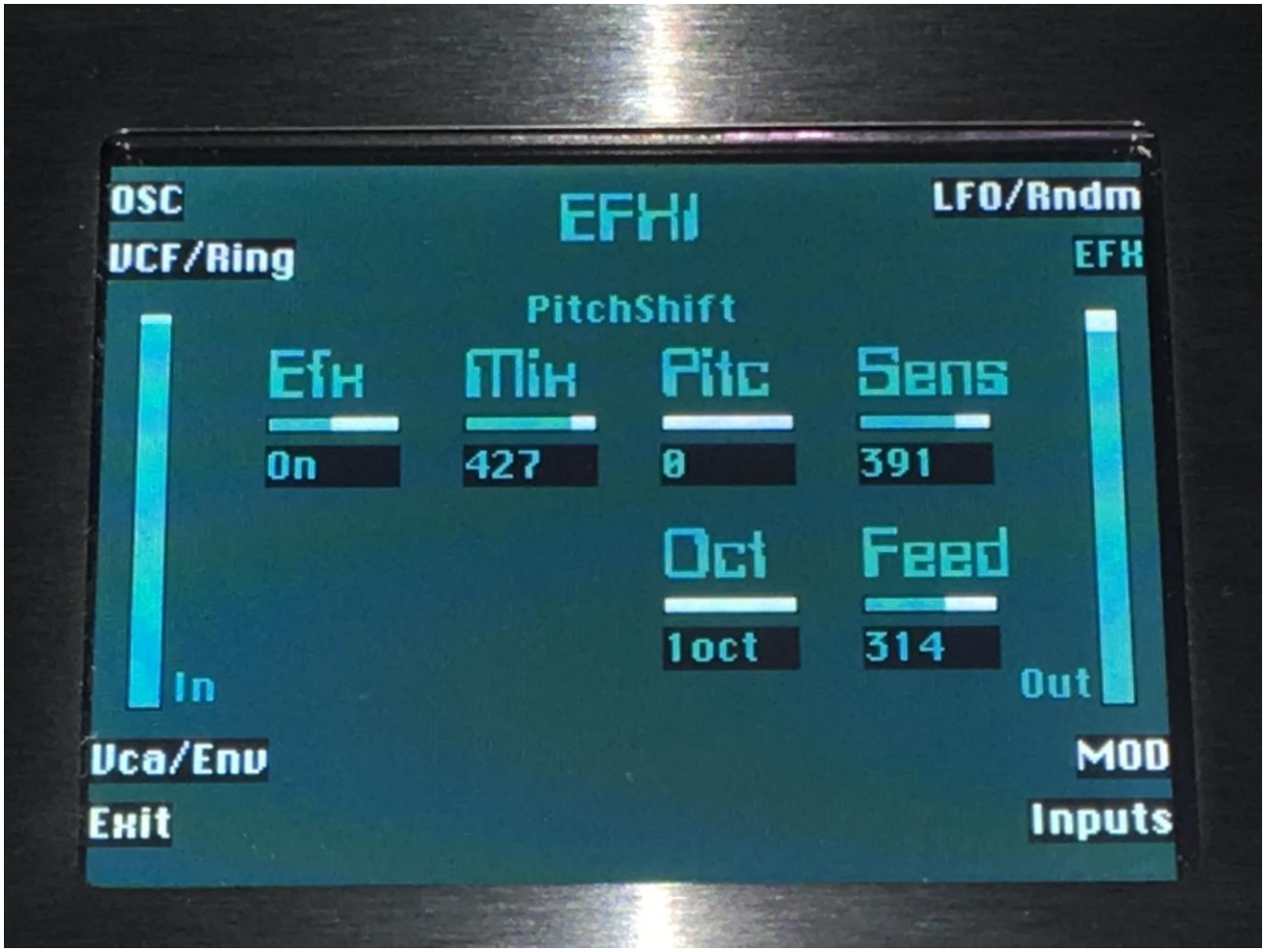
The parameters on this page:

Rate1 and Rate2: Modulates the sample rate parameter.

Feed: Modulates the feedback parameter.

BitR: Modulates the bit reduction parameter.

Pitch Shifter



The VU-meters at the left and the right of the screen, shows the effect input and output.

Efx: Off, on, Freeze. When the effect is off, it is bypassed, and its input mixer can function as a mixer. When the effect are in Freeze mode, the input signal is no longer sampled. The sound that the effect holds, will just keep playing back on and on again. NOT ALL EFFECTS ARE AFFECTED BY FREEZE!

Mix: The mix between the un-effected signal on the effect input, and the effected signal on the effect output, that is sent to the audio bus.

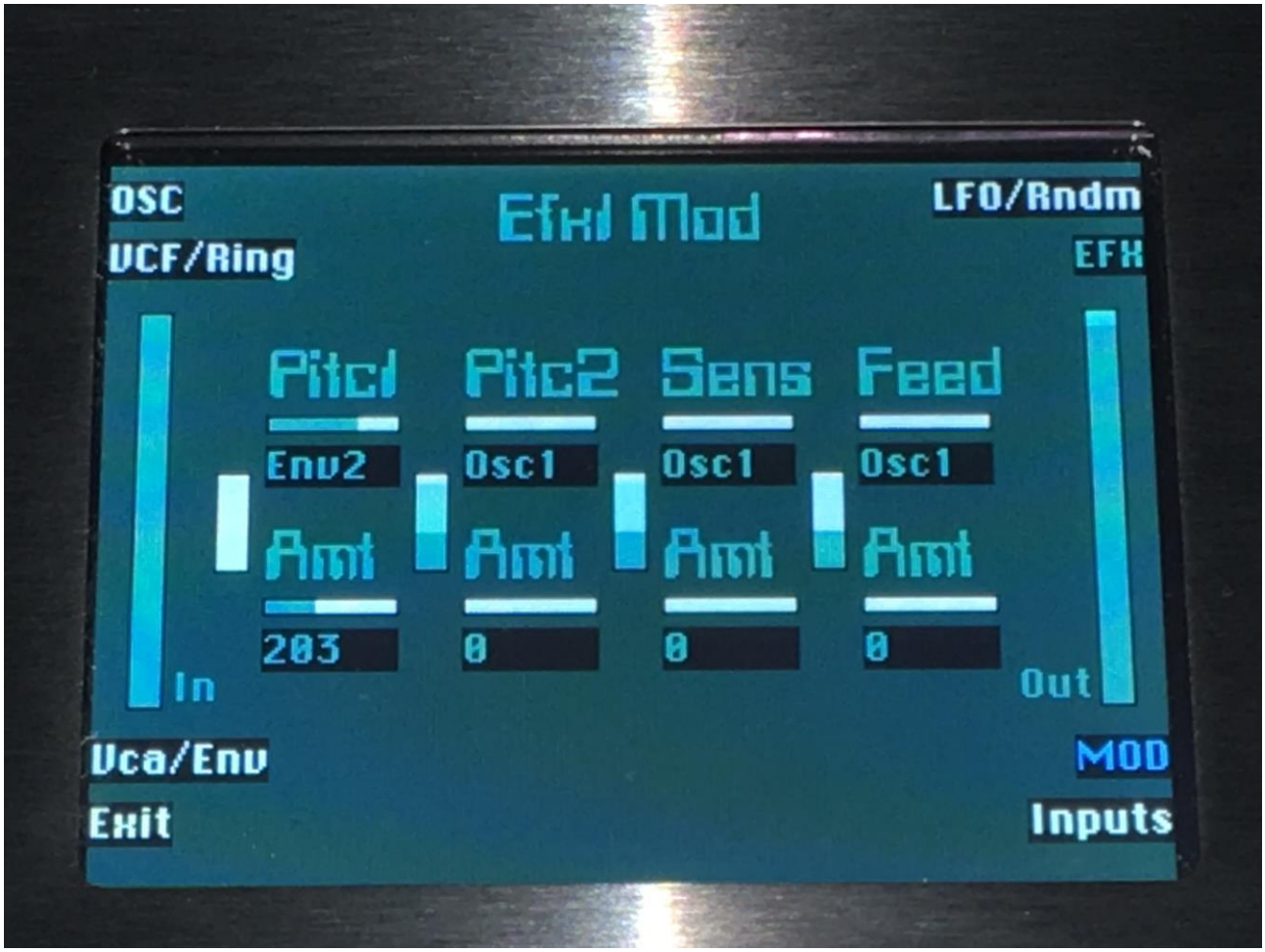
Pitc: Smoothly pitches the sound from up to 4 octaves below the original pitch, to 4 octaves above.

Sense: Pitch detection sense. On a pure waveform, turn this fully down to make sure, that it detects all the waves of it, and pitch shifts correctly. On more complex sounds, turn this up until the desired effect are obtained. At higher settings, only portions of the sound will be pitch shifted, and when it doesn't detect any pitch, it will repeat the portion it detected, making the sound "granulate".

Oct: The octave range of the pitch shifter. From +/- 1 to +/- 4 octaves.

Feed: Pitch shifter feedback. Adjusts the portion of the output signal, that is fed back to the input.

Pitch Shifter Modulation



The VU-meters at the left and the right of the screen, shows the effect input and output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

The parameters on this page:

Pitc1 and Pitc2: Modulates the pitch shift parameter.

Sens: Modulates the Sense parameter.

Feed: Modulates the Feed parameter.

Resonator

The VU-meters at the left and the right of the screen, shows the effect input and output.

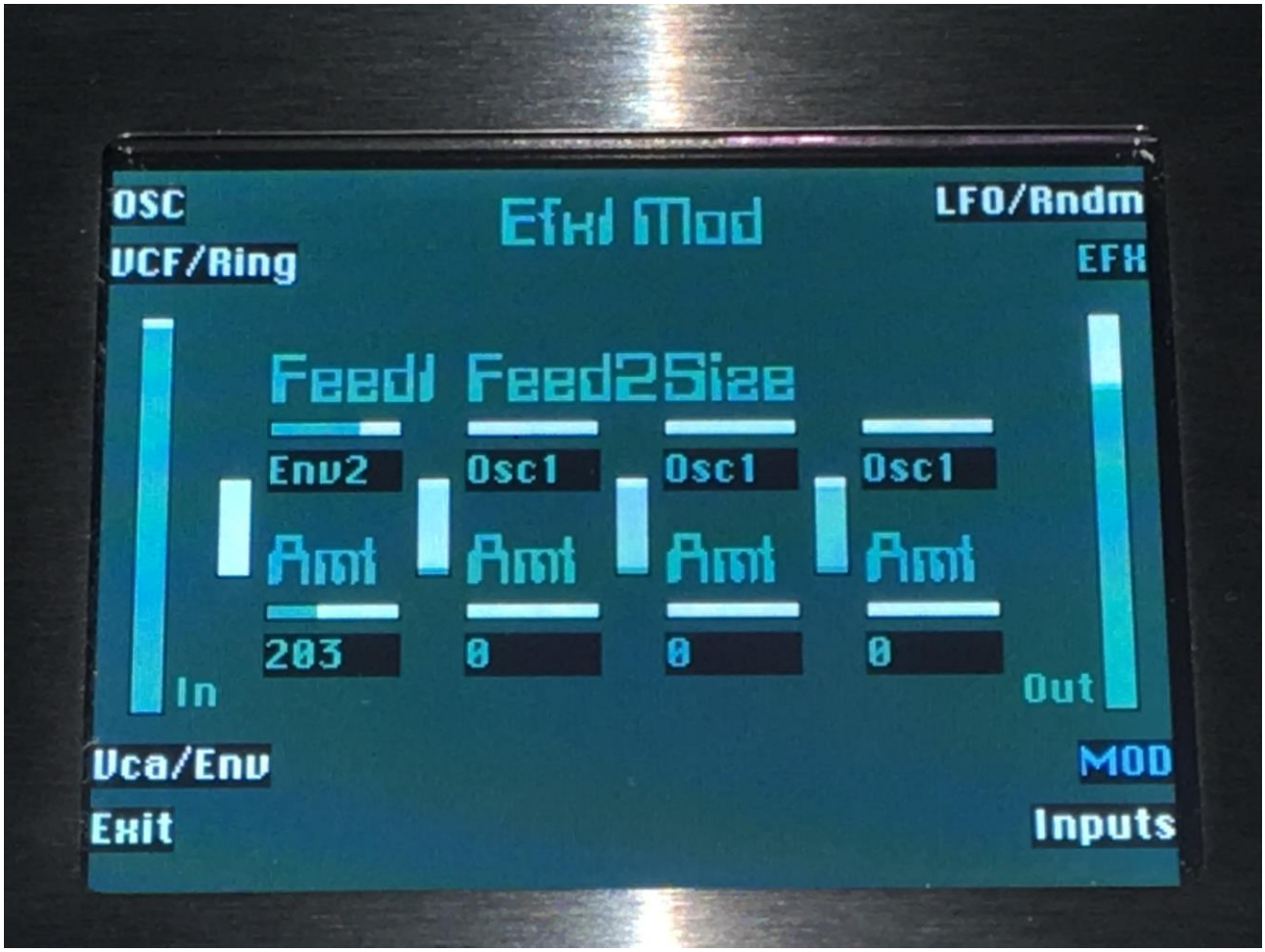
Efx: Off, on, Freeze. When the effect is off, it is bypassed, and its input mixer can function as a mixer. When the effect are in Freeze mode, the input signal is no longer sampled. The sound that the effect holds, will just keep playing back on and on again. NOT ALL EFFECTS ARE AFFECTED BY FREEZE!

Mix: The mix between the un-effected signal on the effect input, and the effected signal on the effect output, that is sent to the audio bus.

Feed: Resonator feedback. The more this is turned up, the more it will resonate.

Size: The size of the resonator box. Different sizes will give different resonance frequencies.

Resonator Modulation



The VU-meters at the left and the right of the screen, shows the effect input and output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

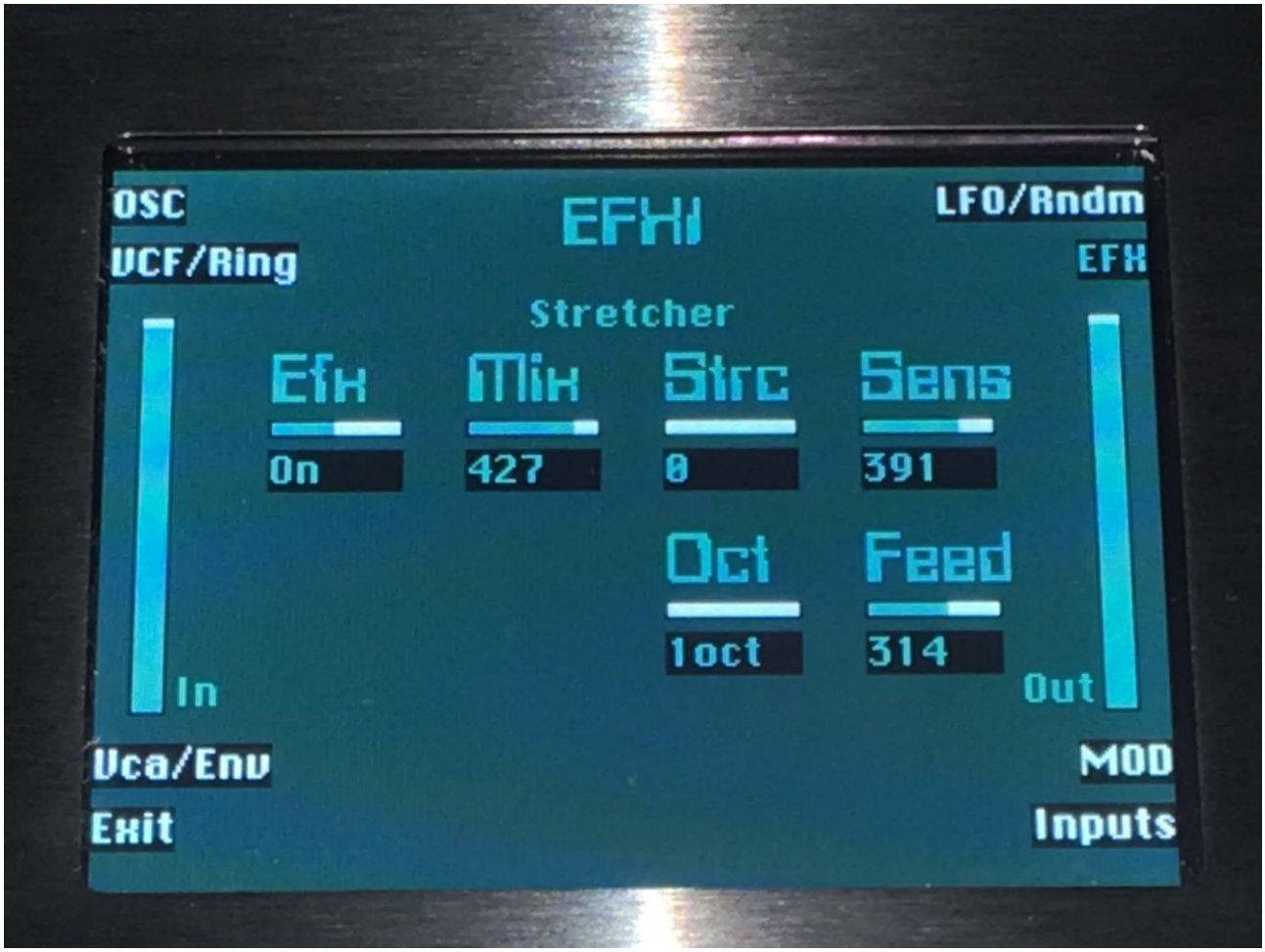
Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

The parameters on this page:

Feed1 and Feed2: Modulates the feed parameter.

Size: Modulates the Size parameter.

Stretcher



The VU-meters at the left and the right of the screen, shows the effect input and output.

Efx: Off, on, Freeze. When the effect is off, it is bypassed, and its input mixer can function as a mixer. When the effect are in Freeze mode, the input signal is no longer sampled. The sound that the effect holds, will just keep playing back on and on again. NOT ALL EFFECTS ARE AFFECTED BY FREEZE!

Mix: The mix between the un-effected signal on the effect input, and the effected signal on the effect output, that is sent to the audio bus.

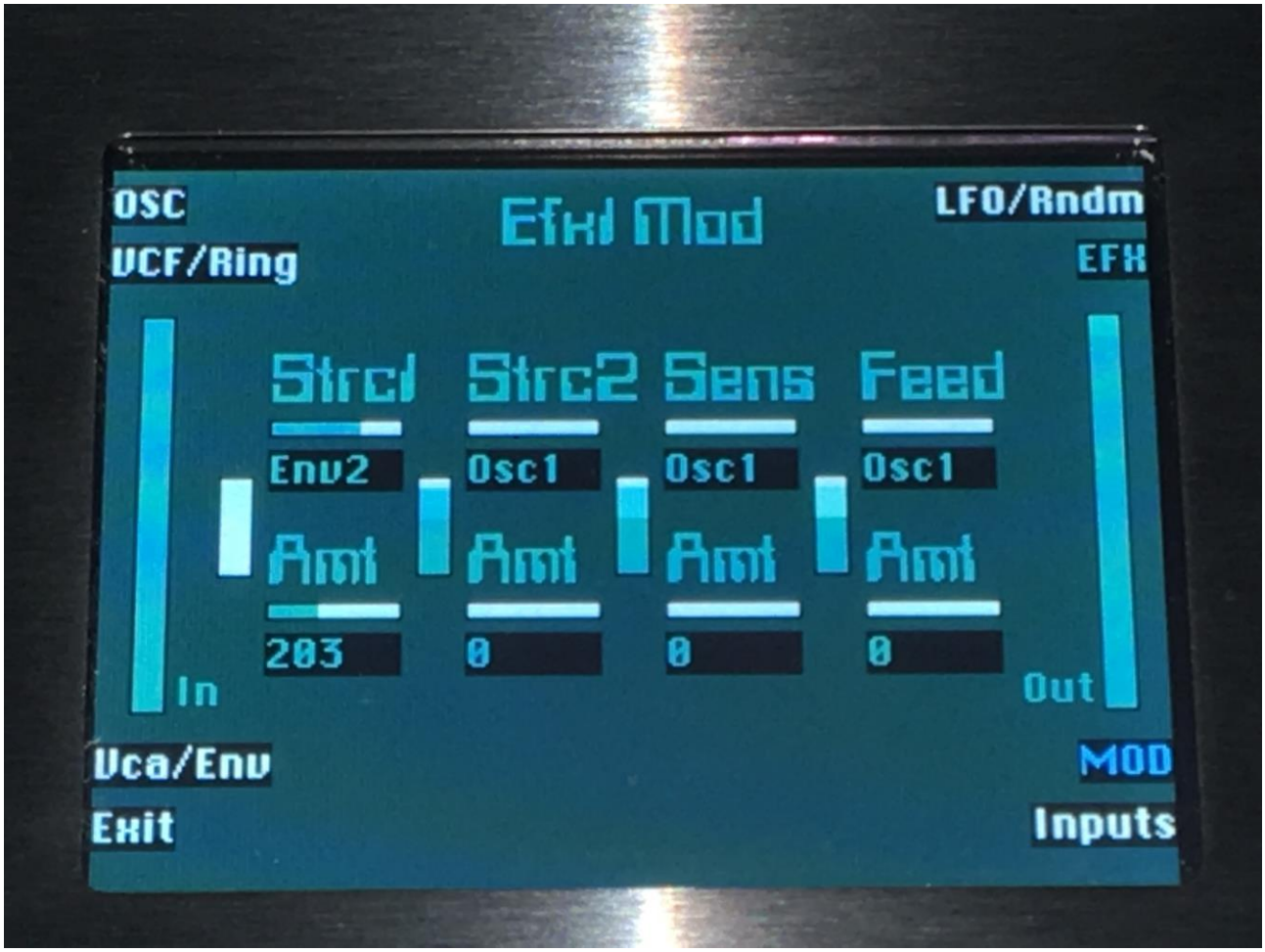
Strc: The degree of time stretch.

Sens: Stretch detection sense. At lower settings the sound will “wobble”, at higher settings it will “granulate”. Adjust this to obtain different effects.

Oct: The octave range of the stretch effect. From +/- 1 to +/- 4 octaves.

Feed: Stretcher feedback. Adjusts the portion of the output signal, that is fed back to the input.

Stretcher Modulation



The VU-meters at the left and the right of the screen, shows the effect input and output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

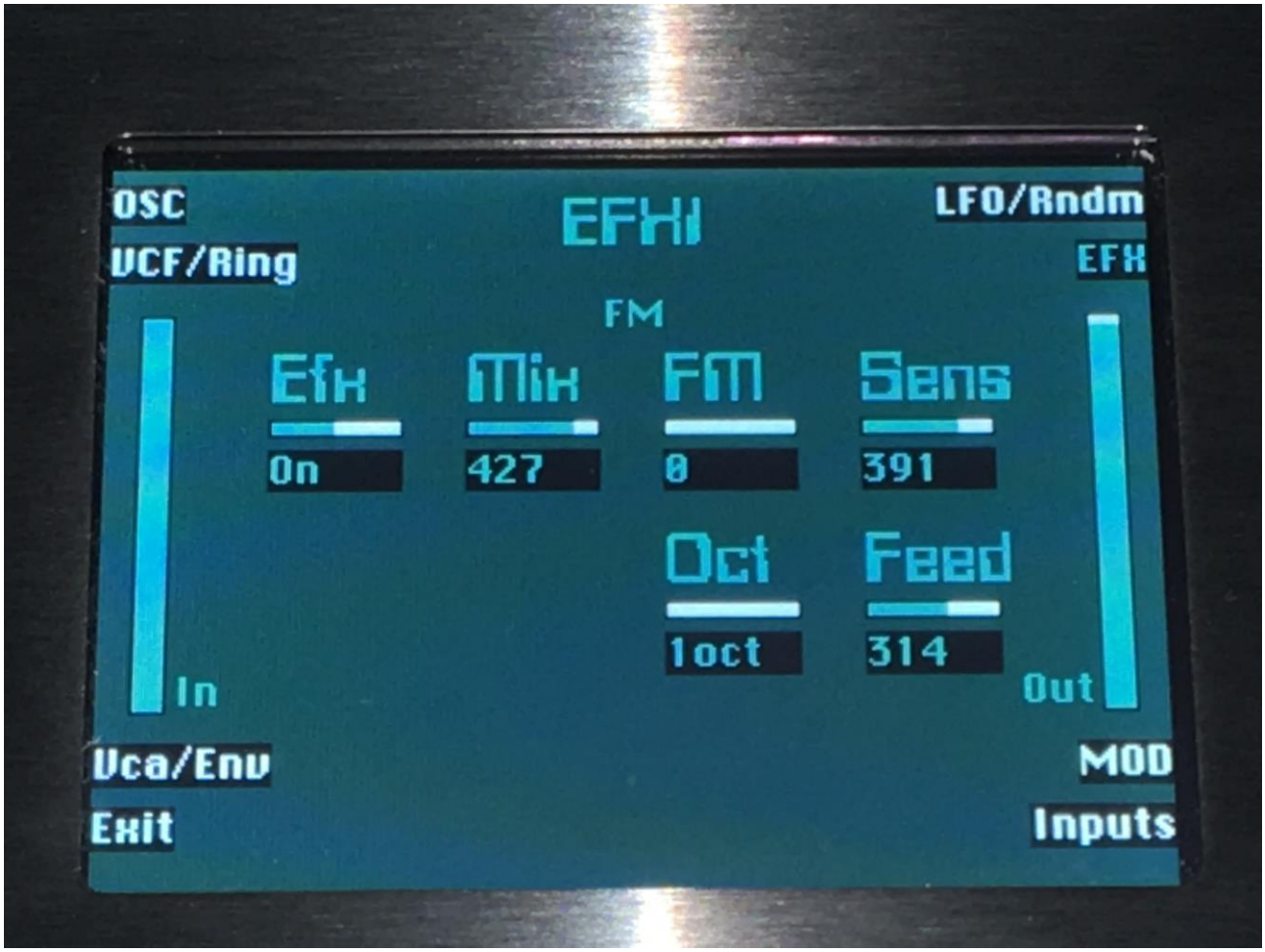
The parameters on this page:

Strc1 and Strc2: Modulates the stretch parameter.

Sens: Modulates the sense parameter.

Feed: Modulates the feed parameter.

FM



The VU-meters at the left and the right of the screen, shows the effect input and output.

Efx: Off, on, Freeze. When the effect is off, it is bypassed, and its input mixer can function as a mixer. When the effect are in Freeze mode, the input signal is no longer sampled. The sound that the effect holds, will just keep playing back on and on again. NOT ALL EFFECTS ARE AFFECTED BY FREEZE!

Mix: The mix between the un-effected signal on the effect input, and the effected signal on the effect output, that is sent to the audio bus.

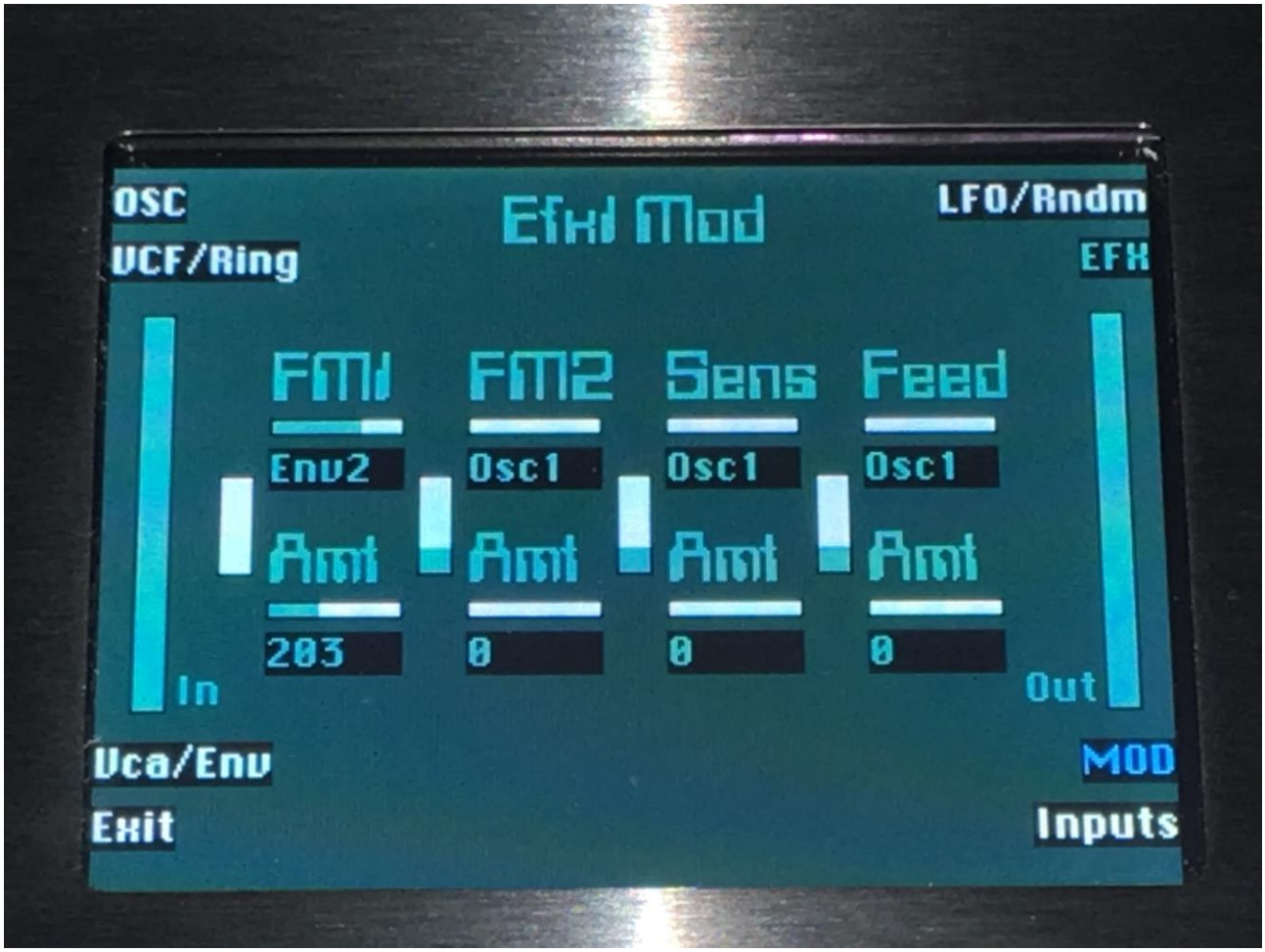
Strch: The degree of self-FM from 0 to up to +/- 4 octaves.

Sense: FM pitch detection sense. On a pure waveform, turn this fully down to make sure, that it detects all the waves of it, and pitch shifts correctly. On more complex sounds, turn this up until the desired effect are obtained. At higher settings, only portions of the sound will be pitch shifted, and when it doesn't detect any pitch, it will repeat the portion it detected, making the sound "granulate".

Oct: The octave range of the FM effect. From +/- 1 to +/- 4 octaves.

Feed: FM feedback. Adjusts the portion of the output signal, that is fed back to the input.

FM Modulation



The VU-meters at the left and the right of the screen, shows the effect input and output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

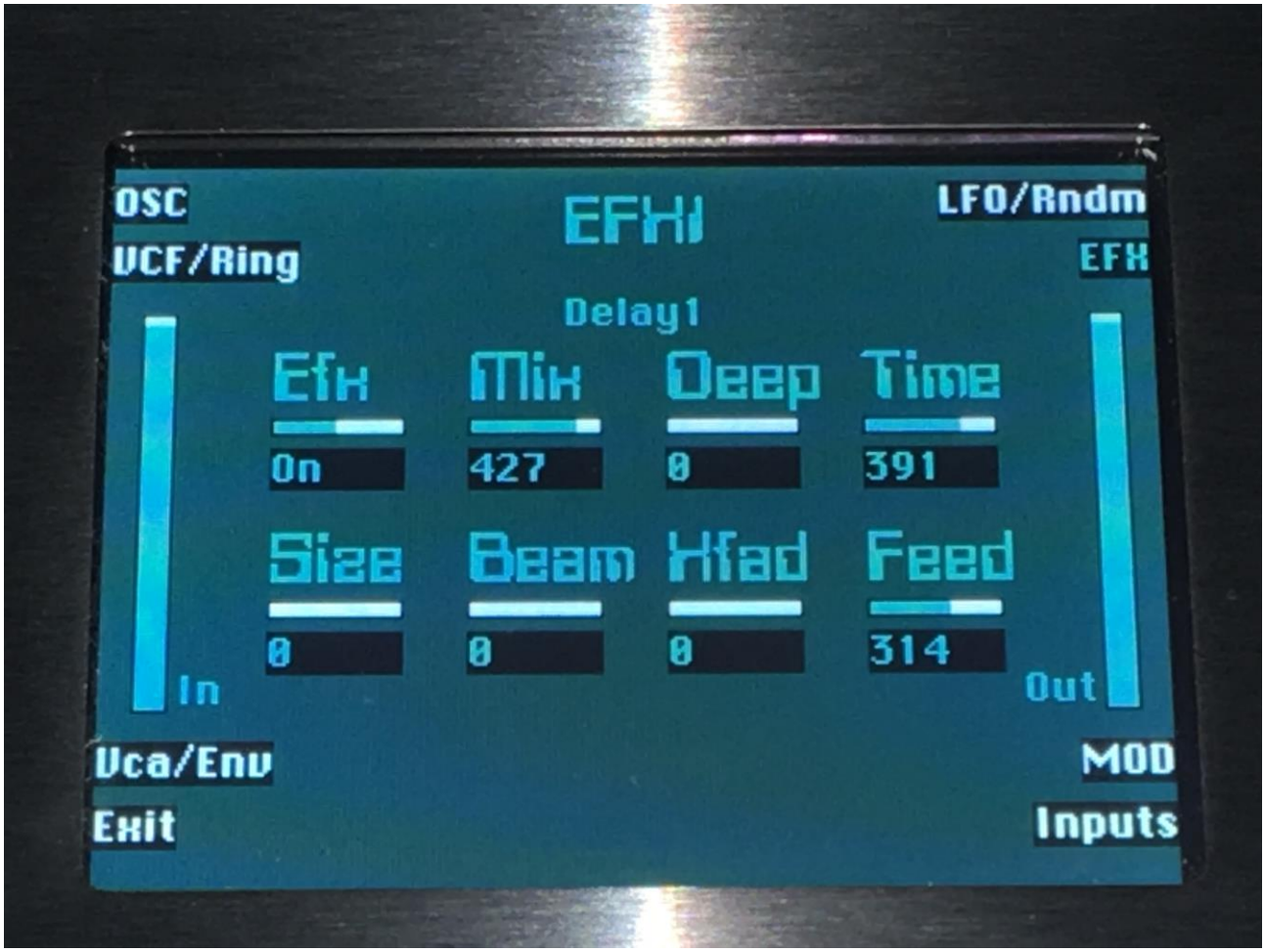
The parameters on this page:

FM1 and FM2: Modulates the FM parameter.

Sens: Modulates the sense parameter.

Feed: Modulates the feed parameter.

Delay1, Roto delay, Bright Delay and Bright Roto Delay



The VU-meters at the left and the right of the screen, shows the effect input and output.

Efx: Off, on, Freeze. When the effect is off, it is bypassed, and its input mixer can function as a mixer. When the effect are in Freeze mode, the input signal is no longer sampled. The sound that the effect holds, will just keep playing back on and on again. NOT ALL EFFECTS ARE AFFECTED BY FREEZE!

Mix: The mix between the un-effected signal on the effect input, and the effected signal on the effect output, that is sent to the audio bus.

Deep: Simulates a delay box, with adjustable physical depth.

Time: Delay time.

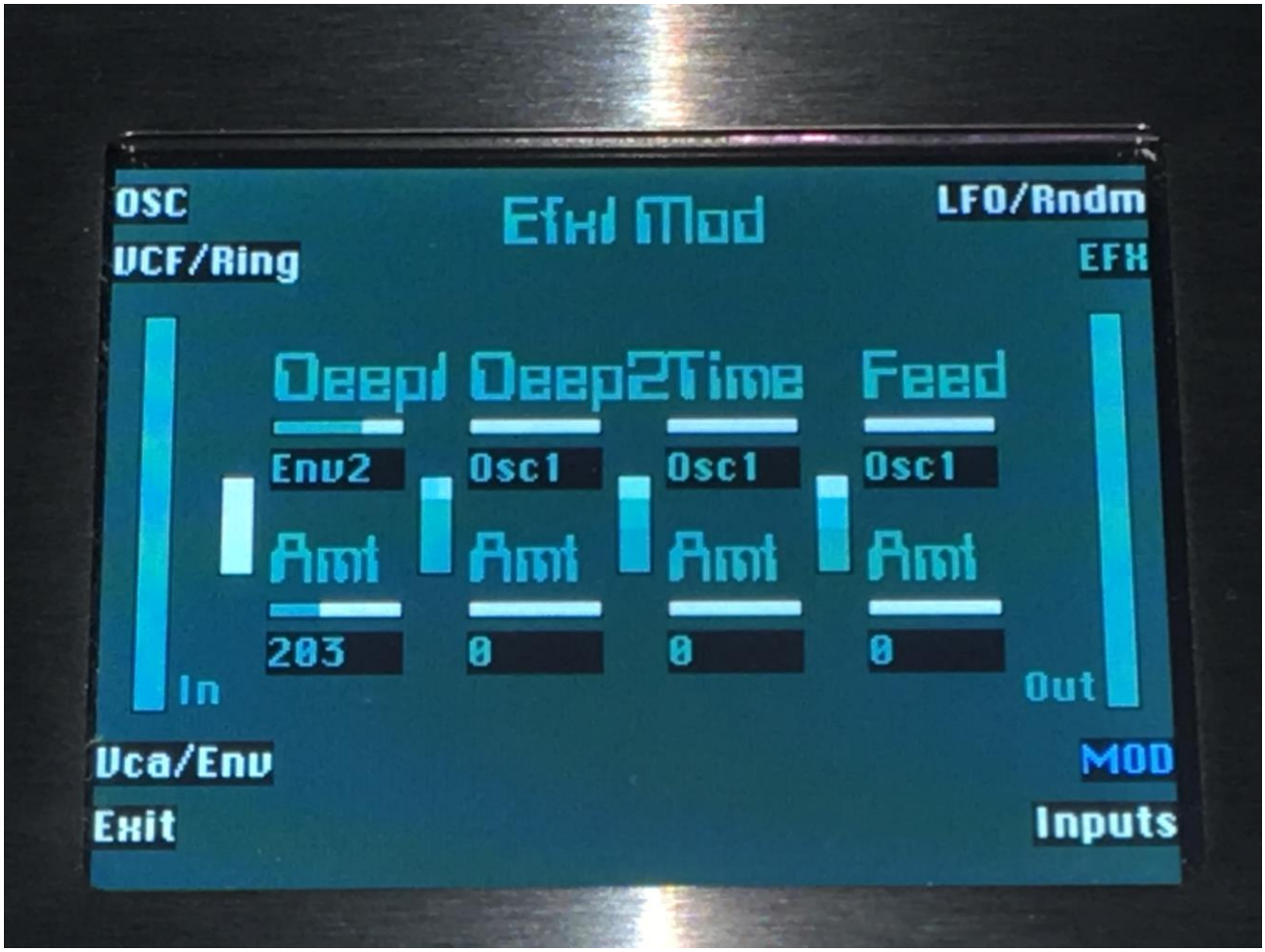
Size: A granular parameter. The more this is turned up, the less space of the delay box is used, causing some echo's to repeat, and others not to sound at all.

Beam: A granular parameter, that "beams" some of the delay sound grains to another place.

Xfade: Crossfade. Makes the delay effect sound smoother, by crossfading the feedback repeats into each other.

Feed: Delay feedback amount. At values over middle, the feedback signal will be gained and create infinite feedback. This might cause some saturation.

Delay1, Roto delay, Bright Delay and Bright Roto Delay Modulation



The VU-meters at the left and the right of the screen, shows the effect input and output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

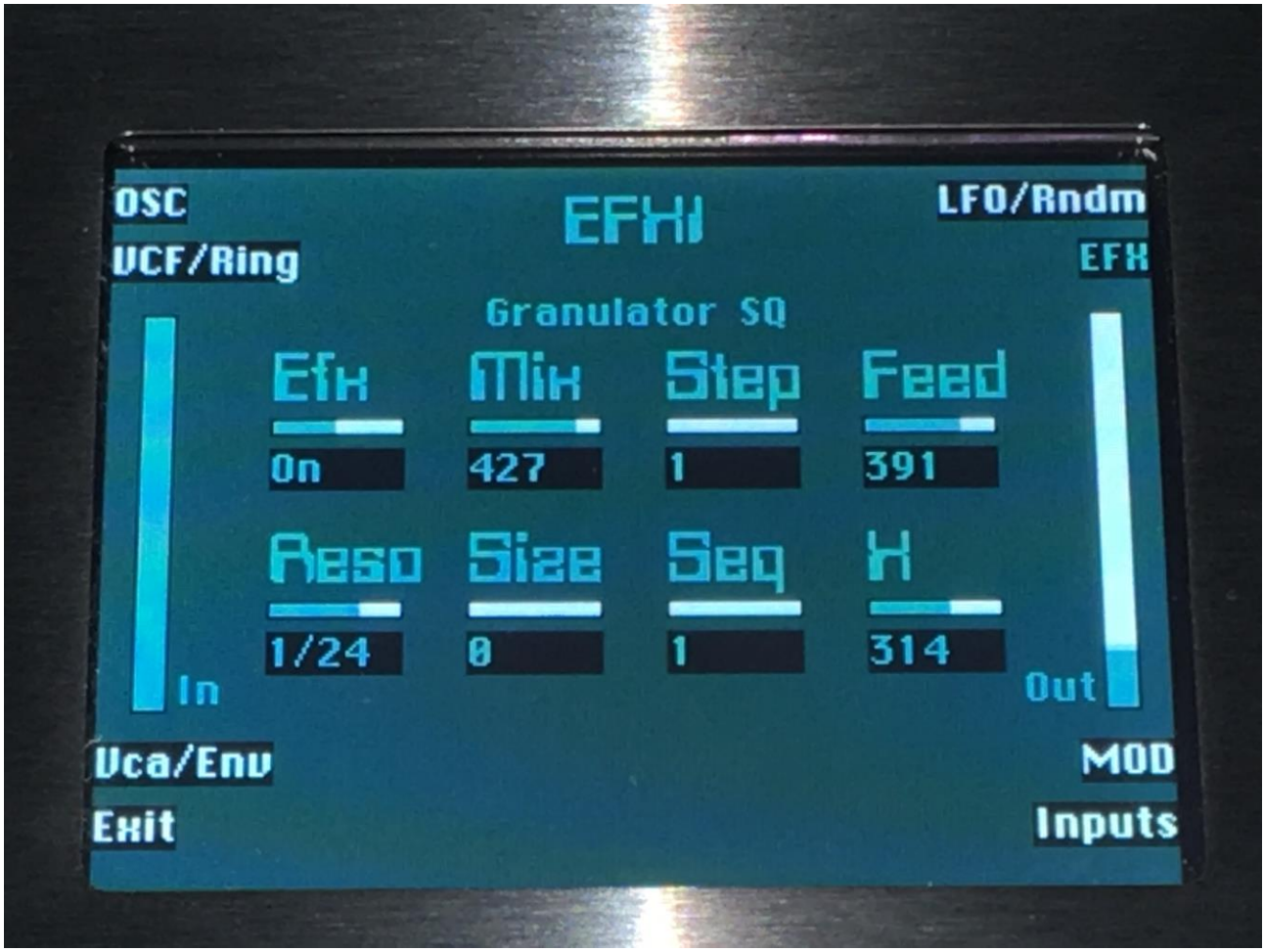
The parameters on this page:

Deep1 and Deep2: Modulates the deep parameter.

Time: Modulates the delay time parameter.

Feed: Modulates the feed parameter.

Granulator SQ



The VU-meters at the left and the right of the screen, shows the effect input and output. The numbers in the bottom of the display, shows which granulator step is currently playing back.

Efx: Off, on, Freeze. When the effect is off, it is bypassed, and its input mixer can function as a mixer. When the effect are in Freeze mode, the input signal is no longer sampled. The sound that the effect holds, will just keep playing back on and on again. NOT ALL EFFECTS ARE AFFECTED BY FREEZE!

Mix: The mix between the un-effected signal on the effect input, and the effected signal on the effect output, that is sent to the audio bus.

Step: Sets how many steps the granulator sequencers should go through, until they starts over again from step one. Range: 1 to 16.

Feed: Adjusts how much of the Granulator output signal should be fed back to its input.

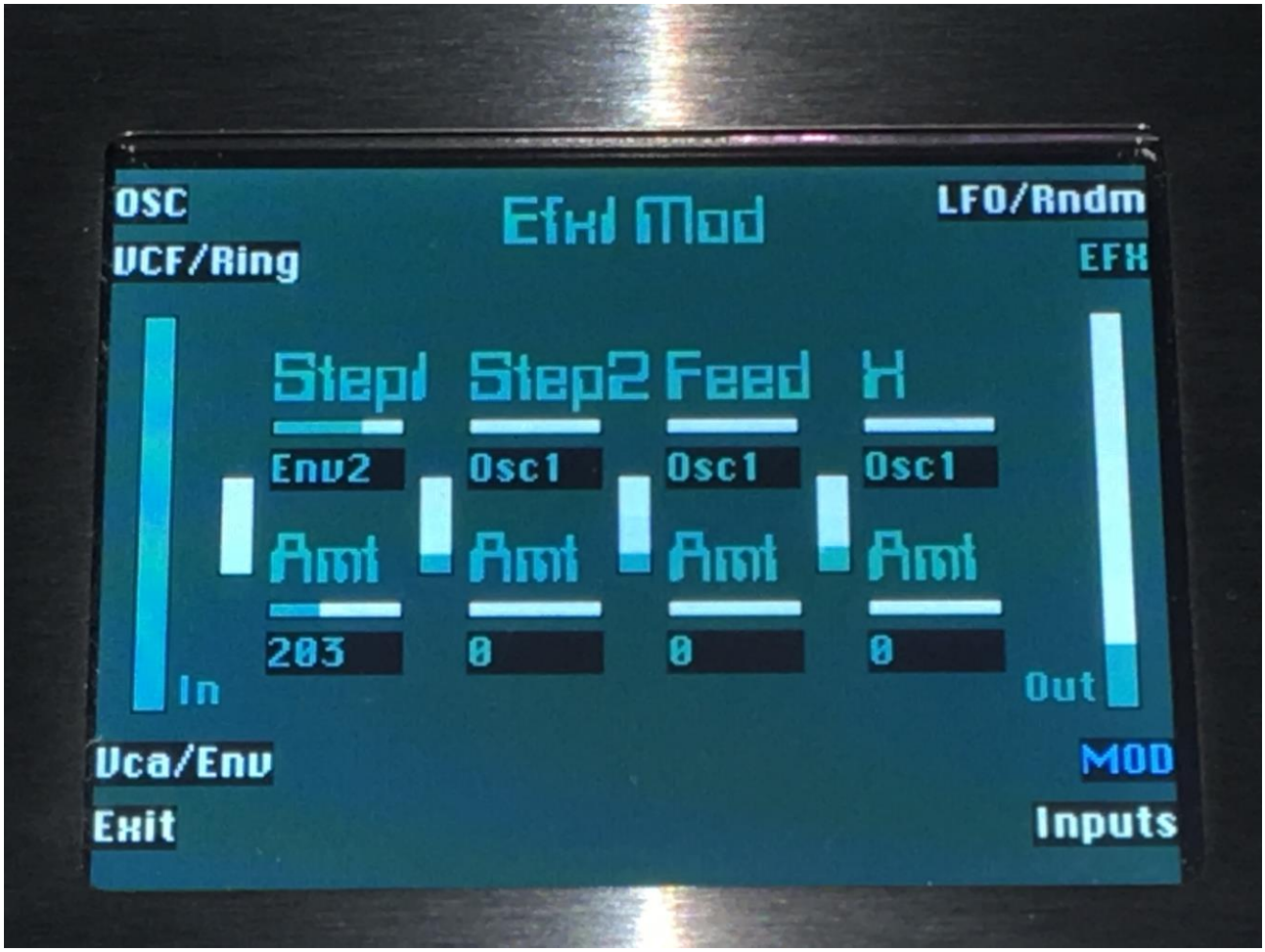
Resolution: Adjusts the resolution of the sequencer track, that controls the granulator. The granulator only uses the controller values of the sequencer steps, so the controller track and the granulator can run in different resolutions.

Size: A granular parameter. The more this is turned up, the less space of each granulator step is used, causing the granulator to “stutter”.

Seq: Selects which of the 16 sequencer controller tracks, the granulator should get it step values from. Each value selects a different portion of the granulator input, to be played back.

X: “X” intermodulation of the sound. Another Gotharman special ☺

Granulator Modulation



The VU-meters at the left and the right of the screen, shows the effect input and output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

The parameters on this page:

Step1 and Step2: Modulates the number of steps parameter.

Feed: Modulates the feed parameter.

X: Modulates the "X" parameter.

Variator

The VU-meters at the left and the right of the screen, shows the effect input and output.

Efx: Off, on, Freeze. When the effect is off, it is bypassed, and its input mixer can function as a mixer. When the effect are in Freeze mode, the input signal is no longer sampled. The sound that the effect holds, will just keep playing back on and on again. NOT ALL EFFECTS ARE AFFECTED BY FREEZE!

Mix: The mix between the un-effected signal on the effect input, and the effected signal on the effect output, that is sent to the audio bus.

Gran: Determines the variation pattern. Range: 0 to 511.

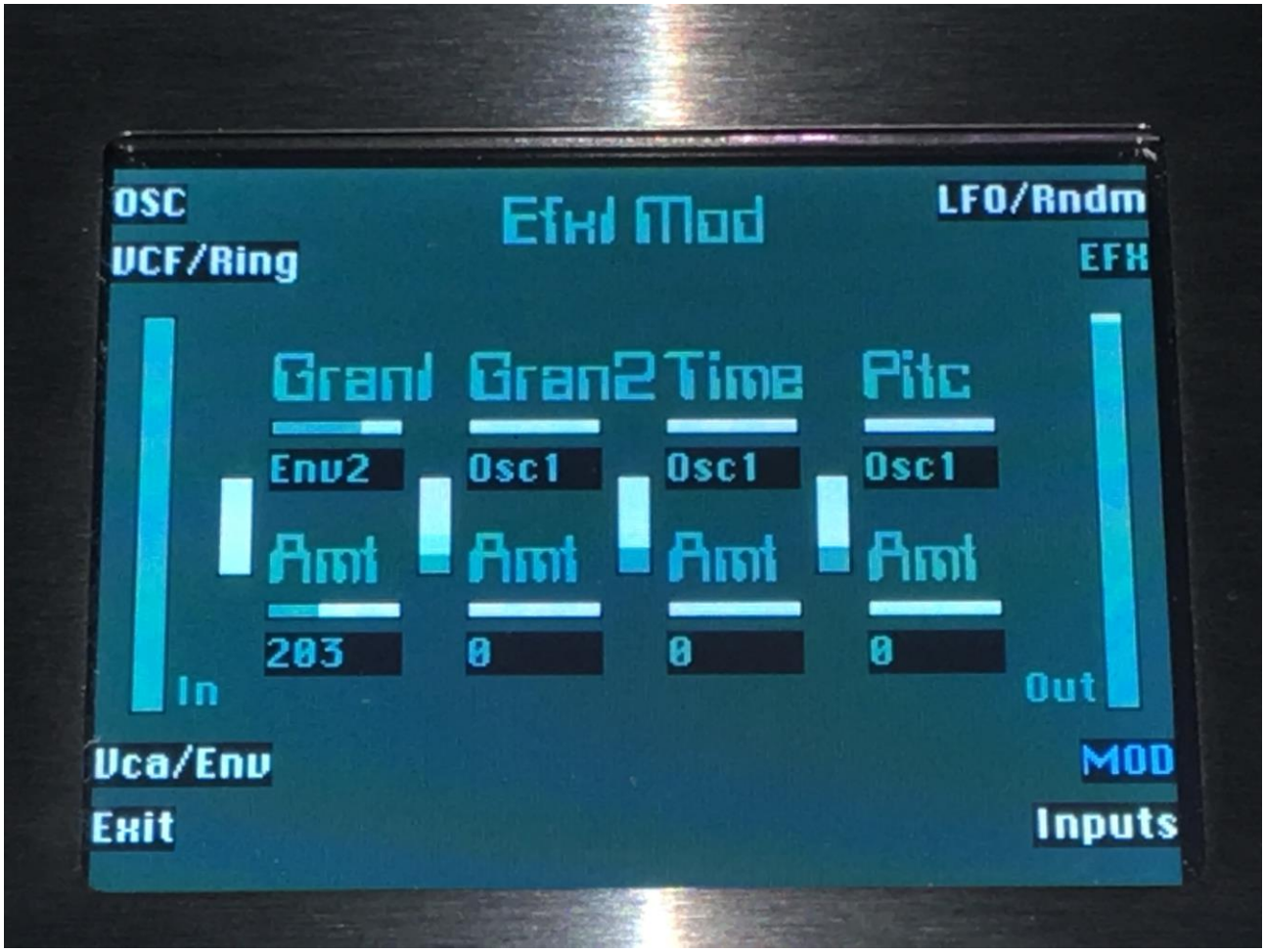
Time: The size of the RAM buffer used for the variator.

Size: The size of one grain.

Feed: Adjusts how much of the Variator output signal should be fed back to its input.

Pitc: The amount of Variator pitch shift.

Variator Modulation



The VU-meters at the left and the right of the screen, shows the effect input and output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

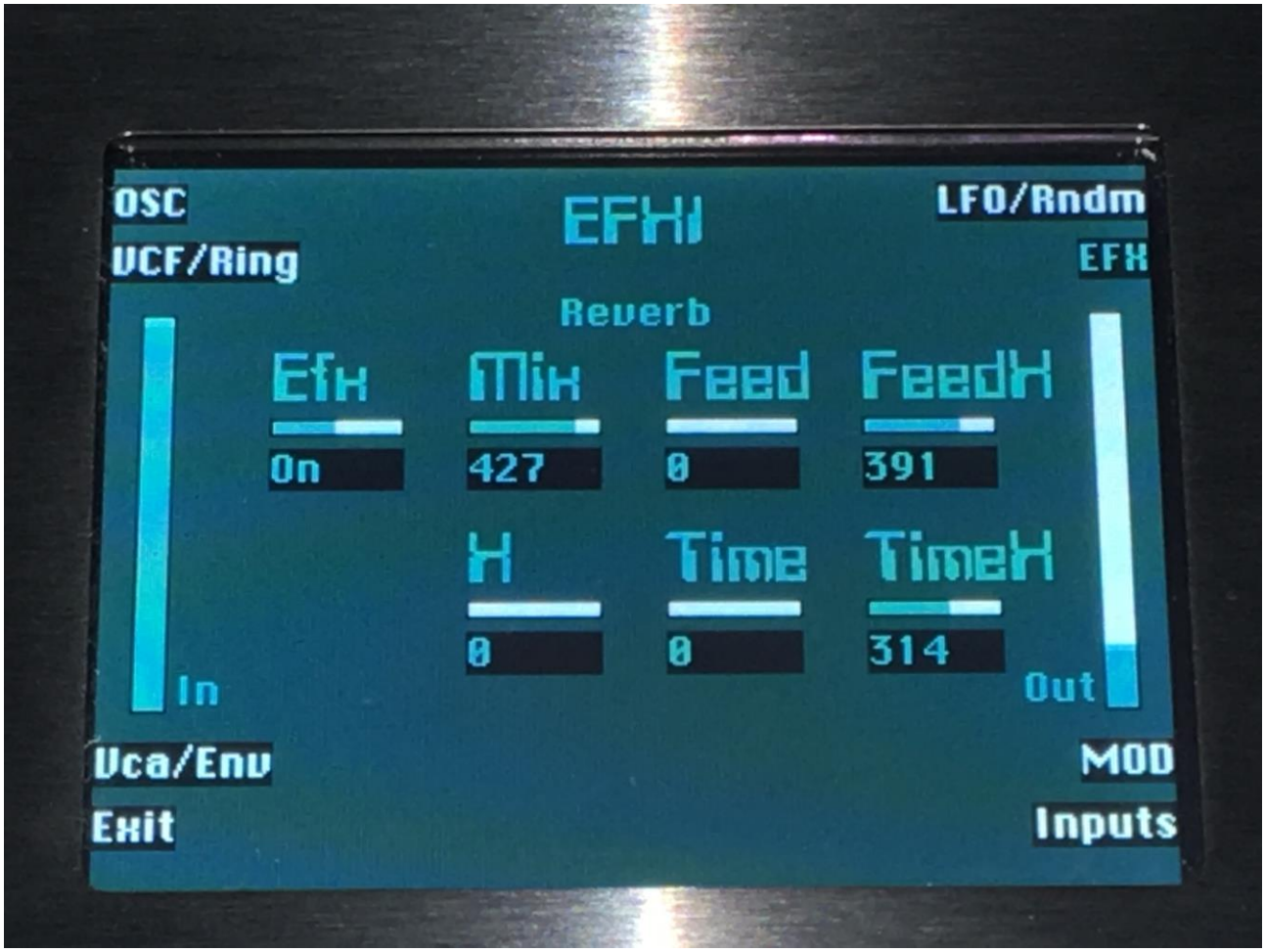
The parameters on this page:

Gran1 and Gran2: Modulates the gran variation pattern parameter.

Time: Modulates the time parameter.

Pitc: Modulates the pitch shift parameter.

Reverb



The VU-meters at the left and the right of the screen, shows the effect input and output.

Efx: Off, on, Freeze. When the effect is off, it is bypassed, and its input mixer can function as a mixer. When the effect are in Freeze mode, the input signal is no longer sampled. The sound that the effect holds, will just keep playing back on and on again. NOT ALL EFFECTS ARE AFFECTED BY FREEZE!

Mix: The mix between the un-effected signal on the effect input, and the effected signal on the effect output, that is sent to the audio bus.

Feed: Reverb feedback.

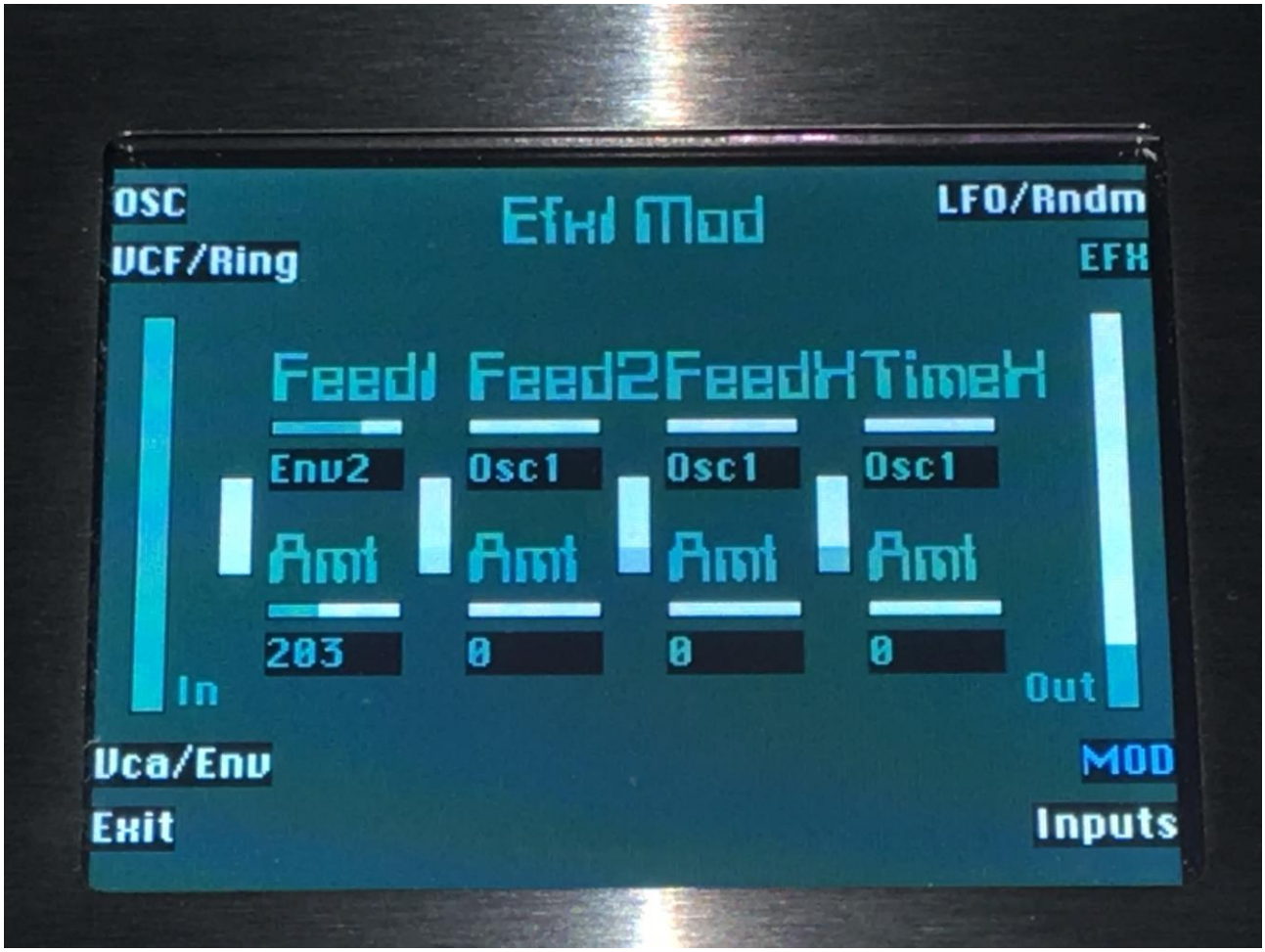
Feed X: Adjusts how much the following reverb taps will decrease in feedback. Lower settings gives a delay effect. As this is turned up, it goes over in a metallic reverb type, and at higher settings it gives a more full reverb.

X: **“X” intermodulation of the sound. Another Gotharman special ☺**

Time: Reverb time. The total reverb time is a combination of time, timeX, feed and feedX.

Time X: Adjusts how much the following reverb taps will decrease in time. Lower settings is good for a short reverb, and higher settings for a long reverb.

Reverb Modulation



The VU-meters at the left and the right of the screen, shows the effect input and output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

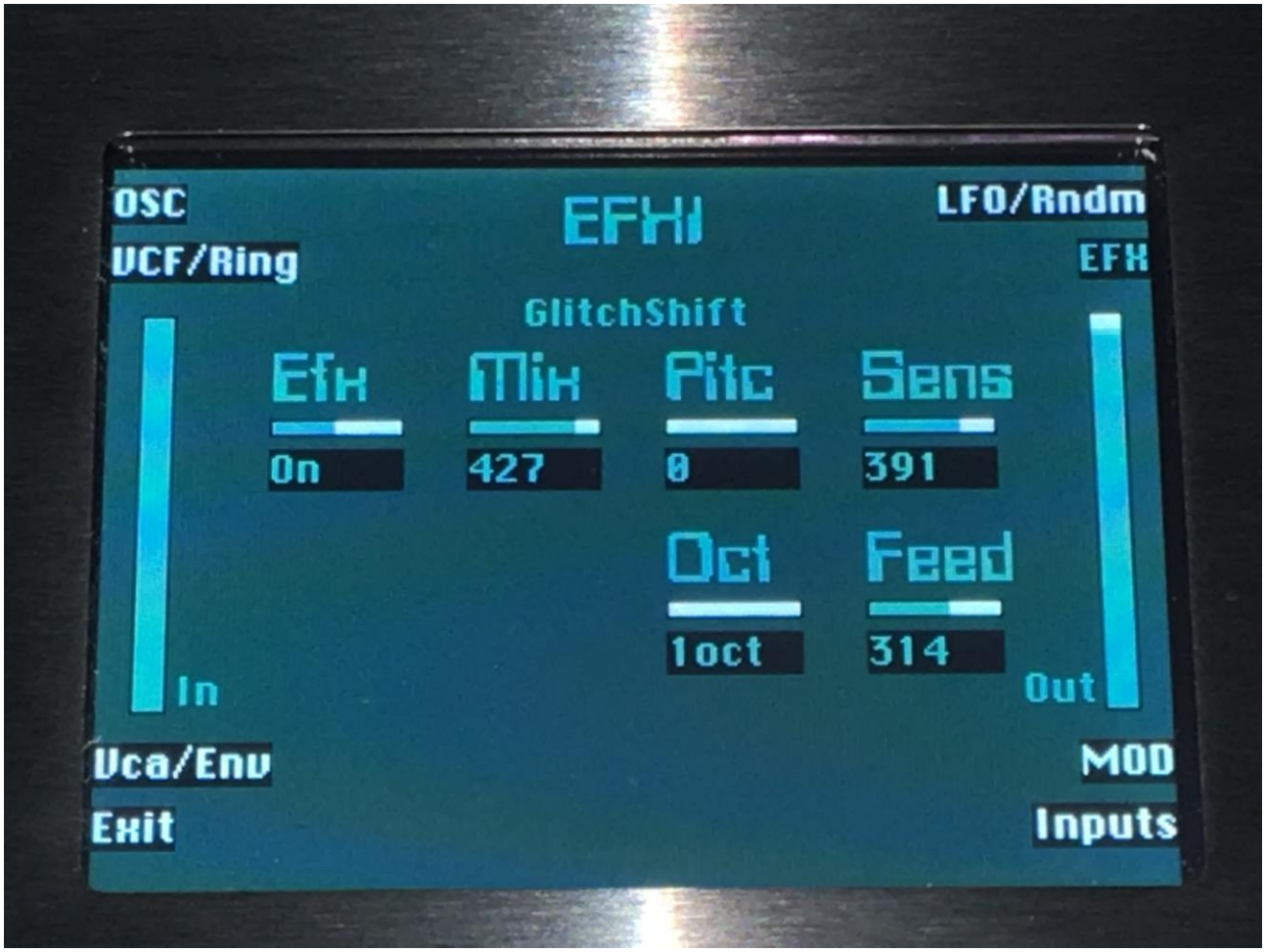
The parameters on this page:

Feed1 and Feed2: Modulates the feedback parameter.

FeedX: Modulates the feed x parameter.

TimeX: Modulates the time x parameter.

Glitch Shifter, Glitch Shifter 2



The VU-meters at the left and the right of the screen, shows the effect input and output.

Efx: Off, on, Freeze. When the effect is off, it is bypassed, and its input mixer can function as a mixer. When the effect are in Freeze mode, the input signal is no longer sampled. The sound that the effect holds, will just keep playing back on and on again. NOT ALL EFFECTS ARE AFFECTED BY FREEZE!

Mix: The mix between the un-effected signal on the effect input, and the effected signal on the effect output, that is sent to the audio bus.

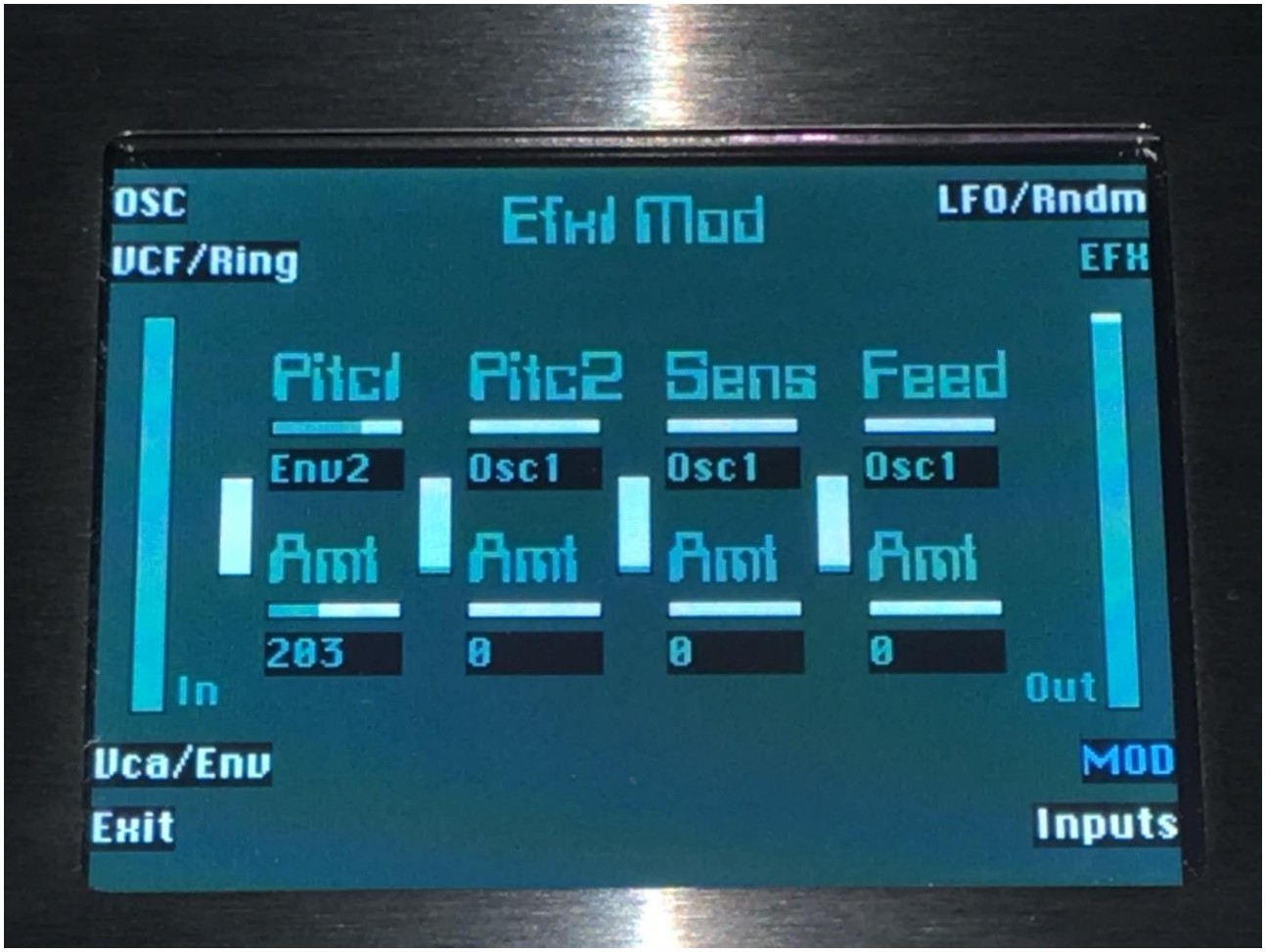
Pitc: Glitchy pitches the sound from up to 4 octaves below the original pitch, to 4 octaves above.

Sense: Pitch detection sense. On a pure waveform, turn this fully down to make sure, that it detects all the waves of it, and pitch shifts correctly. On more complex sounds, turn this up until the desired effect are obtained. At higher settings, only portions of the sound will be pitch shifted, and when it doesn't detect any pitch, it will repeat the portion it detected, making the sound "granulate".

Oct: The octave range of the glitch shifter. From +/- 1 to +/- 4 octaves.

Feed: Glitch shifter feedback. Adjusts the portion of the output signal, that is fed back to the input.

Glitch Shifter, Glitch Shifter 2 Modulation



The VU-meters at the left and the right of the screen, shows the effect input and output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

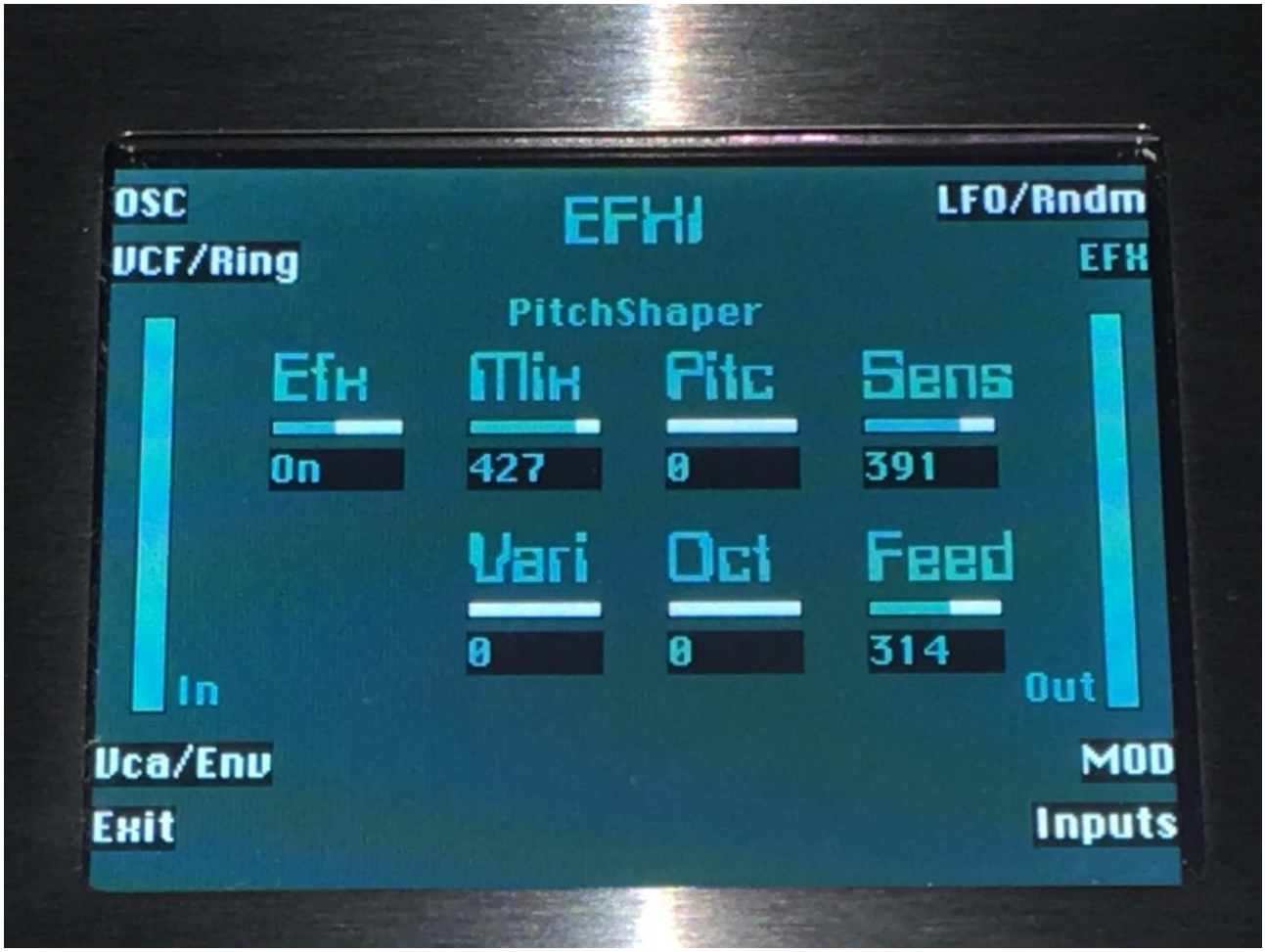
The parameters on this page:

Pitc1 and Pitc2: Modulates the glitch shift parameter.

Sens: Modulates the Sense parameter.

Feed: Modulates the Feed parameter.

Pitch Shaper



The VU-meters at the left and the right of the screen, shows the effect input and output.

Efx: Off, on, Freeze. When the effect is off, it is bypassed, and its input mixer can function as a mixer. When the effect are in Freeze mode, the input signal is no longer sampled. The sound that the effect holds, will just keep playing back on and on again. NOT ALL EFFECTS ARE AFFECTED BY FREEZE!

Mix: The mix between the un-effected signal on the effect input, and the effected signal on the effect output, that is sent to the audio bus.

Pitc: Sets the frequency, that the input signal should be re-pitched to.

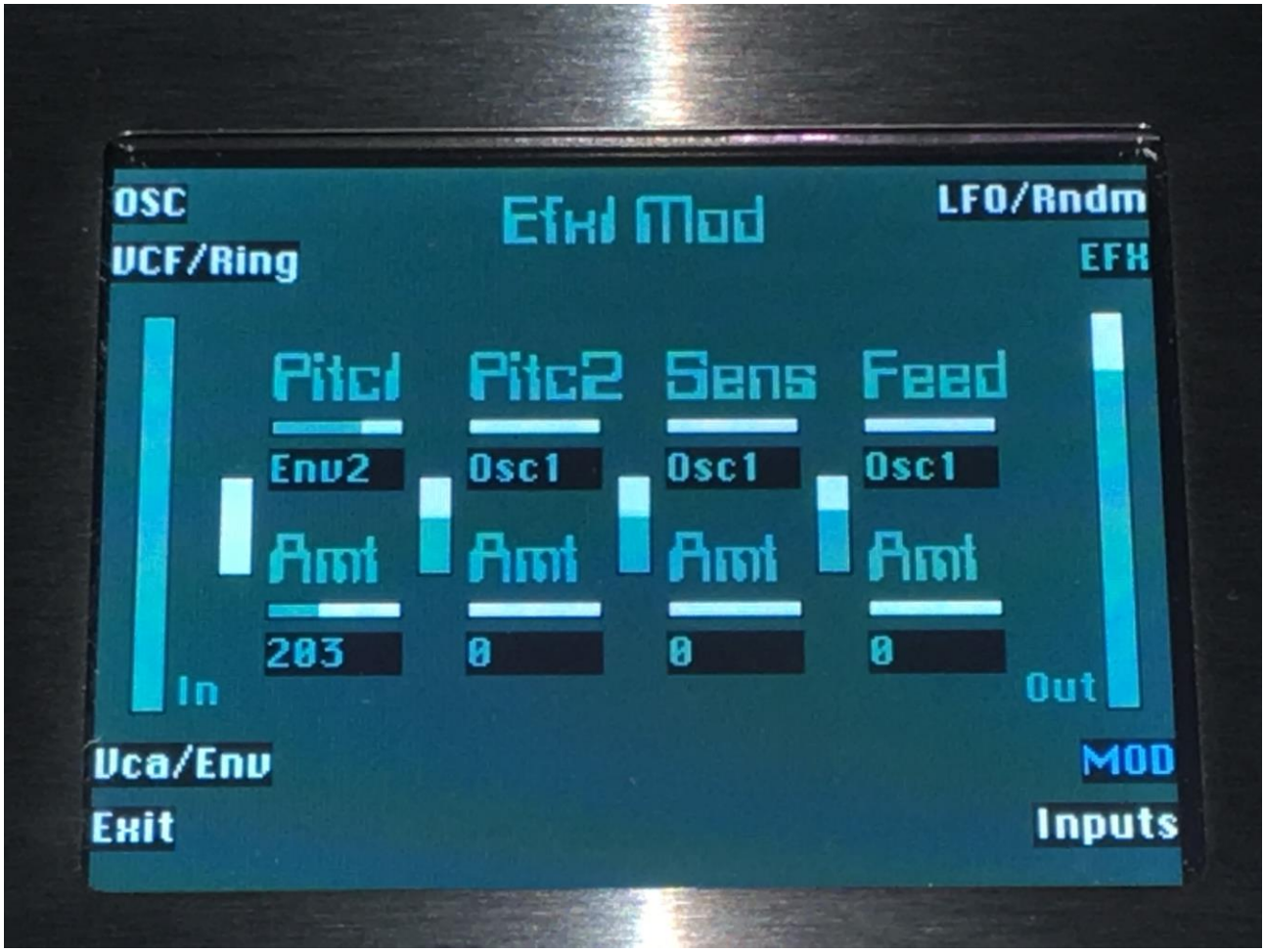
Sense: Pitch detection sense. On a pure waveform, turn this fully down to make sure, that it detects all the waves of it, and pitch shifts correctly. On more complex sounds, turn this up until the desired effect are obtained. At higher settings, only portions of the sound will be pitch shifted, and when it doesn't detect any pitch, it will repeat the portion it detected, making the sound "granulate".

Vari: Pitch variation. The more this is turned up, the more the pitch variations on the input signal affects the pitch shaper frequency.

Oct: Octave transpose. From 0 to +3 octaves.

Feed: Pitch shaper feedback. Adjusts the portion of the output signal, that is fed back to the input.

Pitch Shaper Modulation



The VU-meters at the left and the right of the screen, shows the effect input and output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

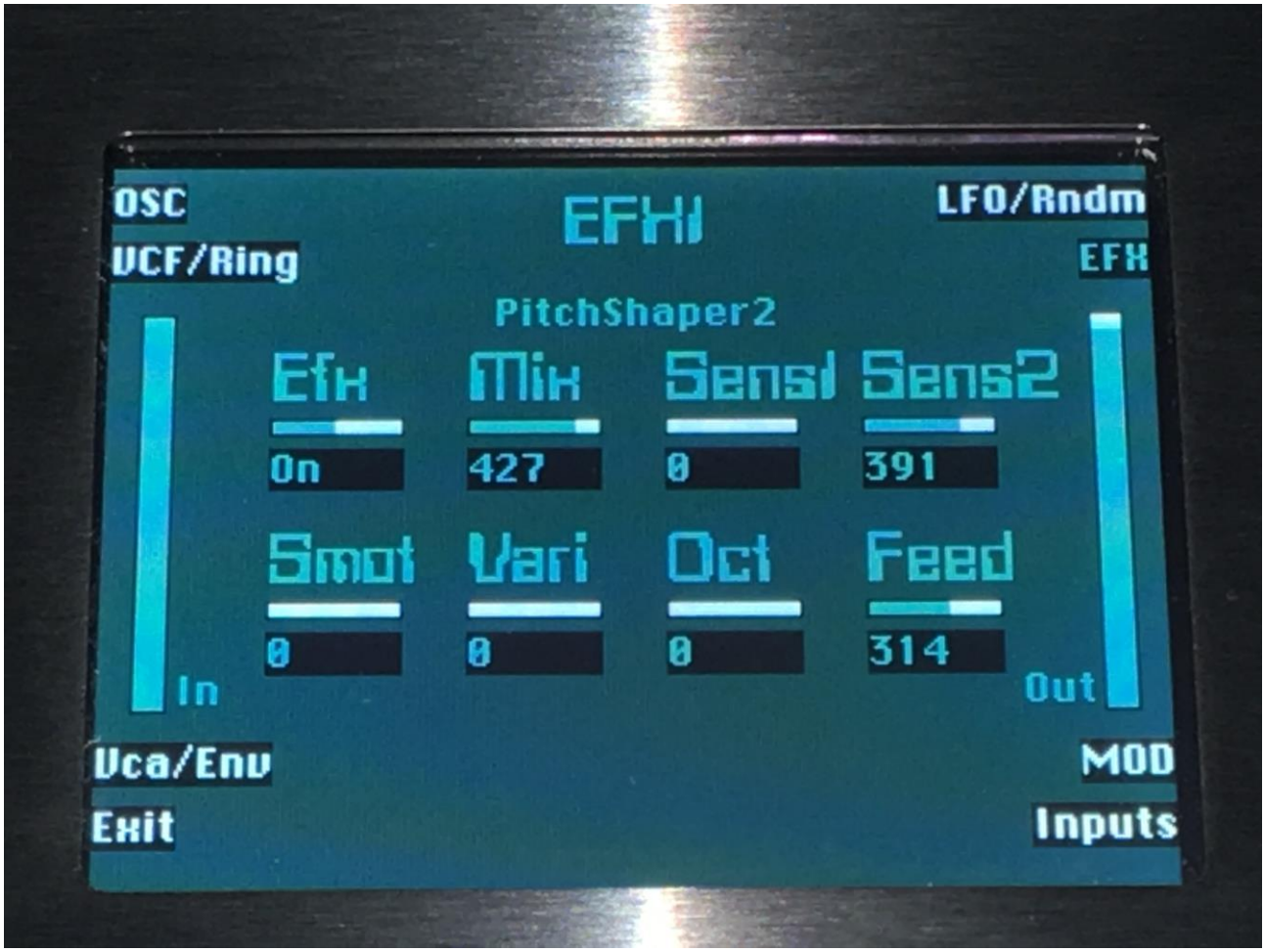
The parameters on this page:

Pitc1 and Pitc2: Modulates the pitc parameter.

Sens: Modulates the Sense parameter.

Feed: Modulates the Feed parameter.

Pitch Shaper 2



The VU-meters at the left and the right of the screen, shows the effect input and output.

Efx: Off, on, Freeze. When the effect is off, it is bypassed, and its input mixer can function as a mixer. When the effect are in Freeze mode, the input signal is no longer sampled. The sound that the effect holds, will just keep playing back on and on again. NOT ALL EFFECTS ARE AFFECTED BY FREEZE!

Mix: The mix between the un-effected signal on the effect input, and the effected signal on the effect output, that is sent to the audio bus.

Sens1: Pitch detection sense input 1. On a pure waveform, turn this fully down to make sure, that it detects all the waves of it, and pitch shifts correctly. On more complex sounds, turn this up until the desired effect are obtained. At higher settings, only portions of the sound will be pitch shifted, and when it doesn't detect any pitch, it will repeat the portion it detected, making the sound "granulate".

Sens2: Pitch detection sense input 2. On a pure waveform, turn this fully down to make sure, that it detects all the waves of it, and pitch shifts correctly. On more complex sounds, turn this up until the desired effect are obtained. At higher settings, only portions of the sound will be pitch shifted, and when it doesn't detect any pitch, it will repeat the portion it detected, making the sound "granulate".

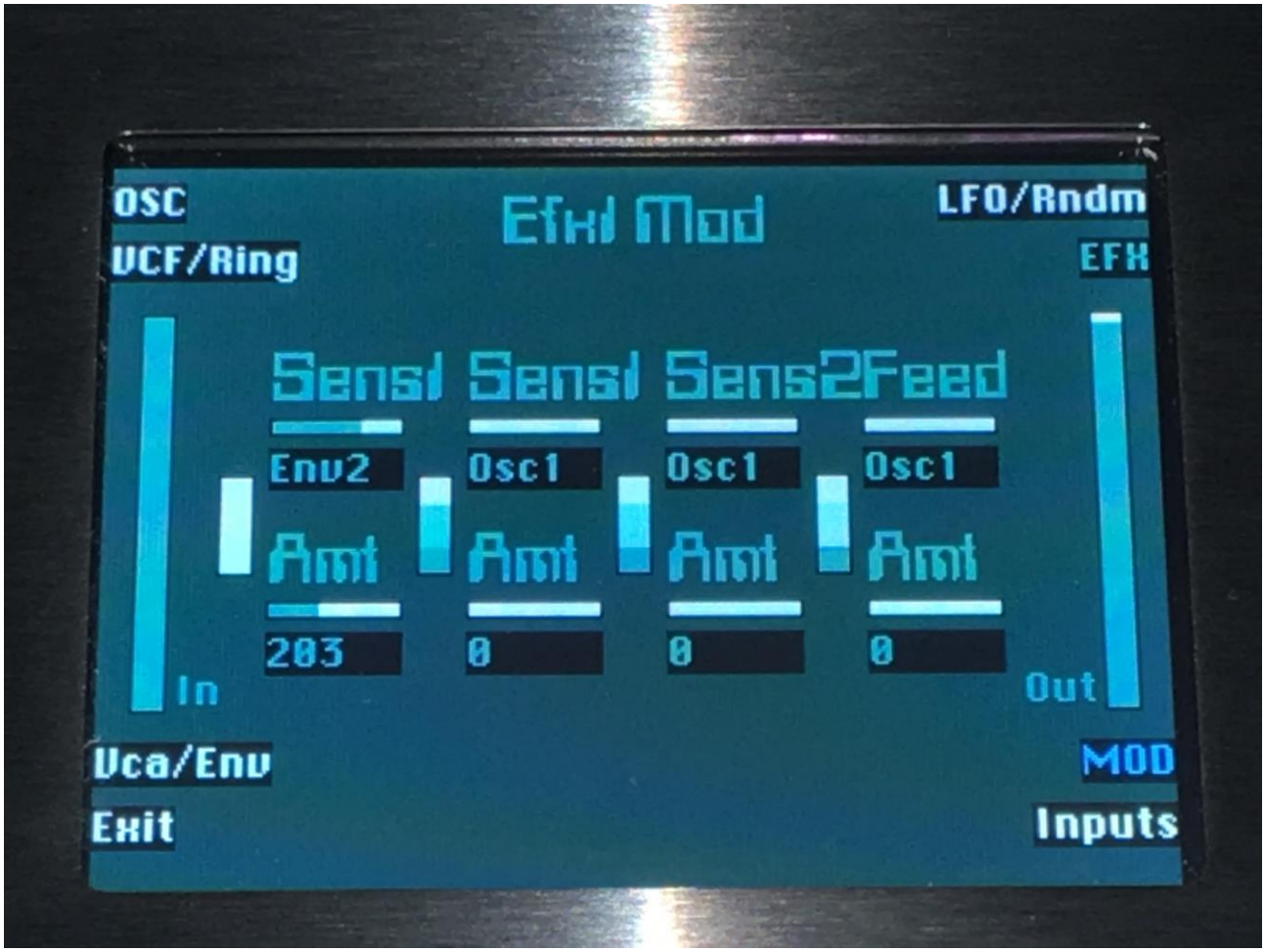
Smot: Smooth. The more this is turned up, the more the changes in pitch are smoothened.

Vari: Pitch variation. The more this is turned up, the more the pitch variations on the input signal affects the pitch shaper frequency.

Oct: Octave transpose. From 0 to +3 octaves.

Feed: Pitch shaper feedback. Adjusts the portion of the output signal, that is fed back to the input.

Pitch Shaper 2 Modulation



The VU-meters at the left and the right of the screen, shows the effect input and output. The small VU-meters next to the parameters, shows the selected modulation sources.

For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

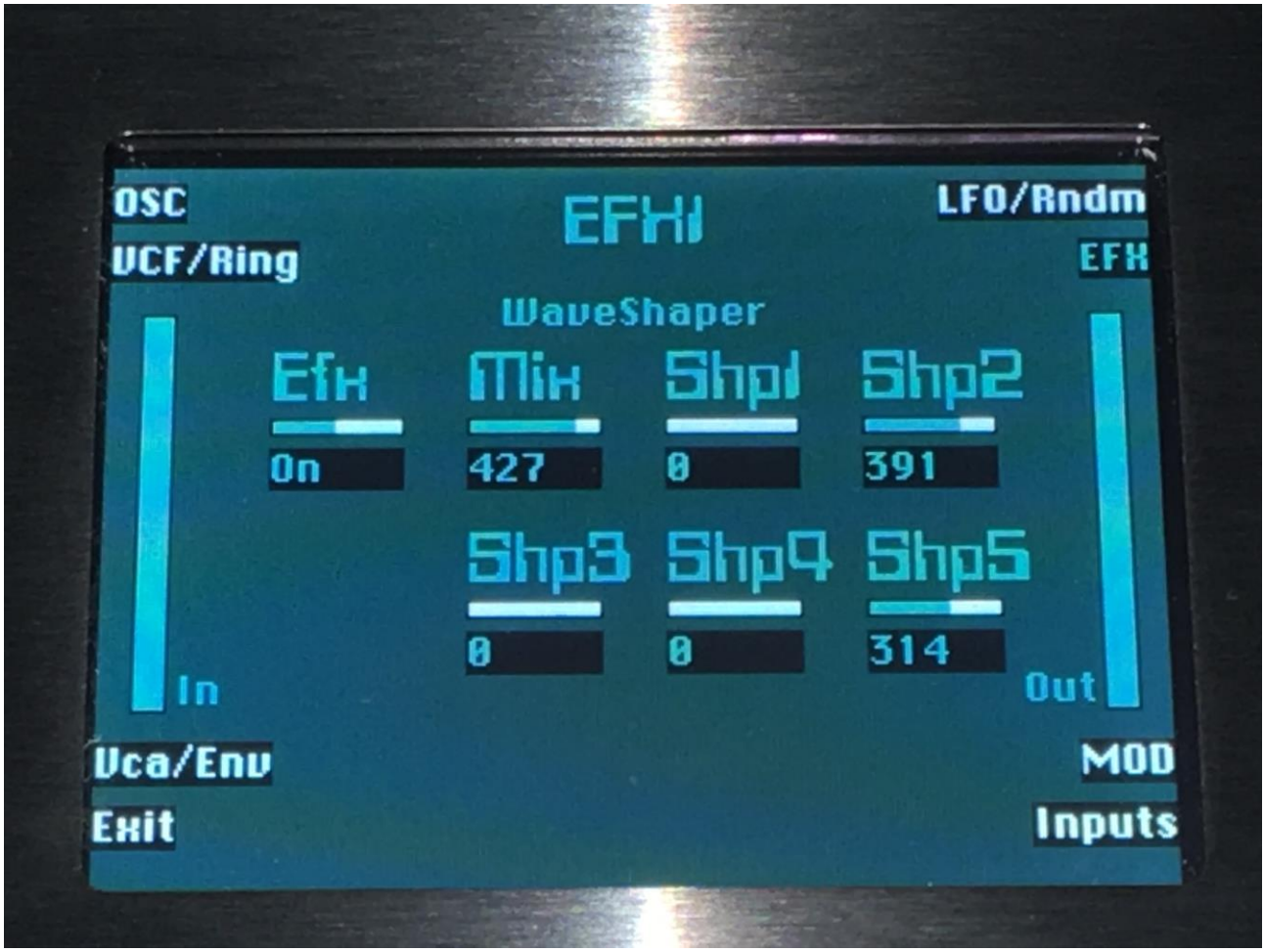
Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

The parameters on this page:

Sens1 and Sens2: Modulates the sens 1 and 2 parameters.

Feed: Modulates the Feed parameter.

Wave Shaper



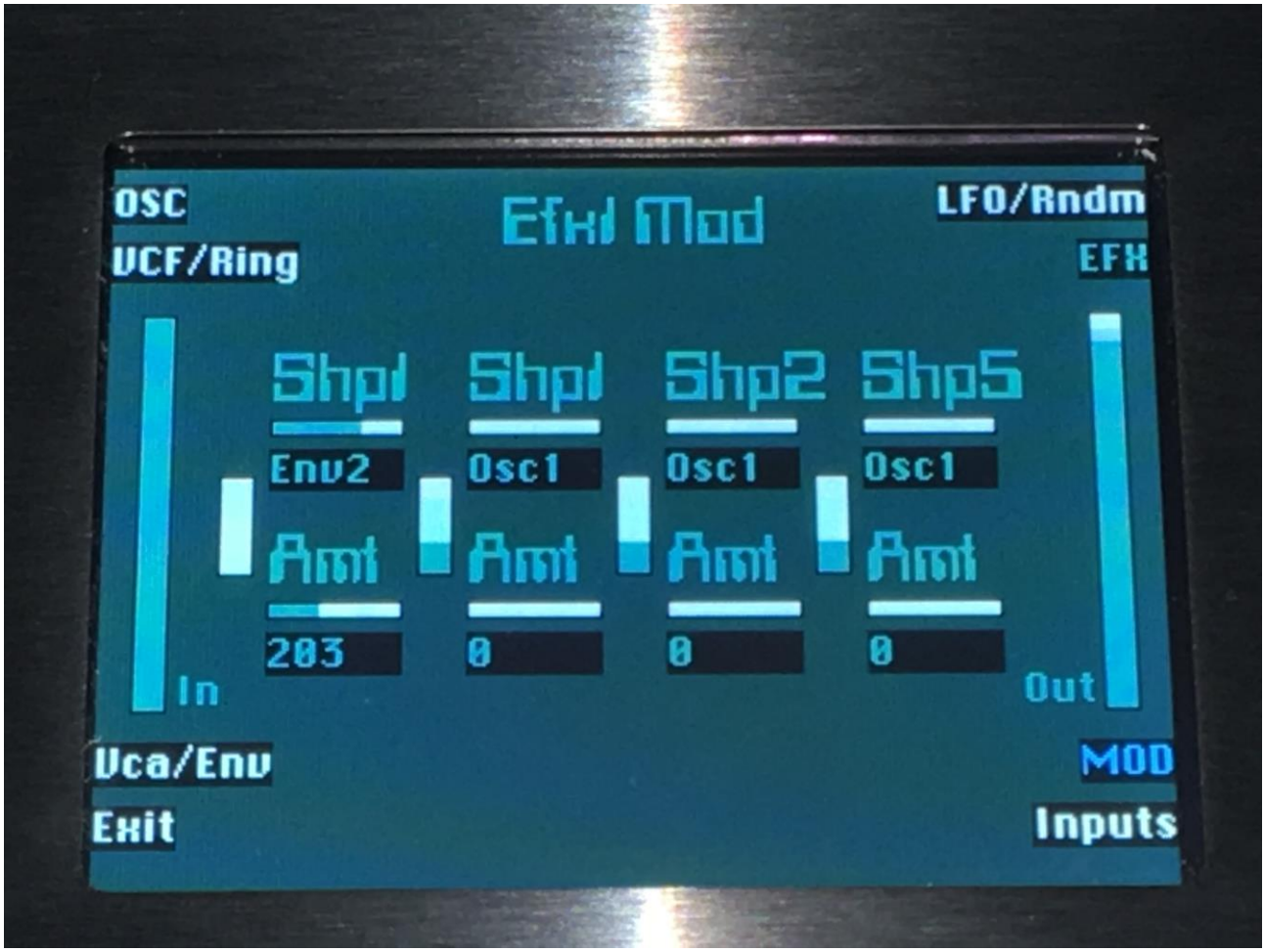
The VU-meters at the left and the right of the screen, shows the effect input and output.

Efx: Off, on, Freeze. When the effect is off, it is bypassed, and its input mixer can function as a mixer. When the effect are in Freeze mode, the input signal is no longer sampled. The sound that the effect holds, will just keep playing back on and on again. NOT ALL EFFECTS ARE AFFECTED BY FREEZE!

Mix: The mix between the un-effected signal on the effect input, and the effected signal on the effect output, that is sent to the audio bus.

Shp1 to Shp5: Sets the shape of the output waveform.

Wave Shaper Modulation



The VU-meters at the left and the right of the screen, shows the effect input and output. The small VU-meters next to the parameters, shows the selected modulation sources.

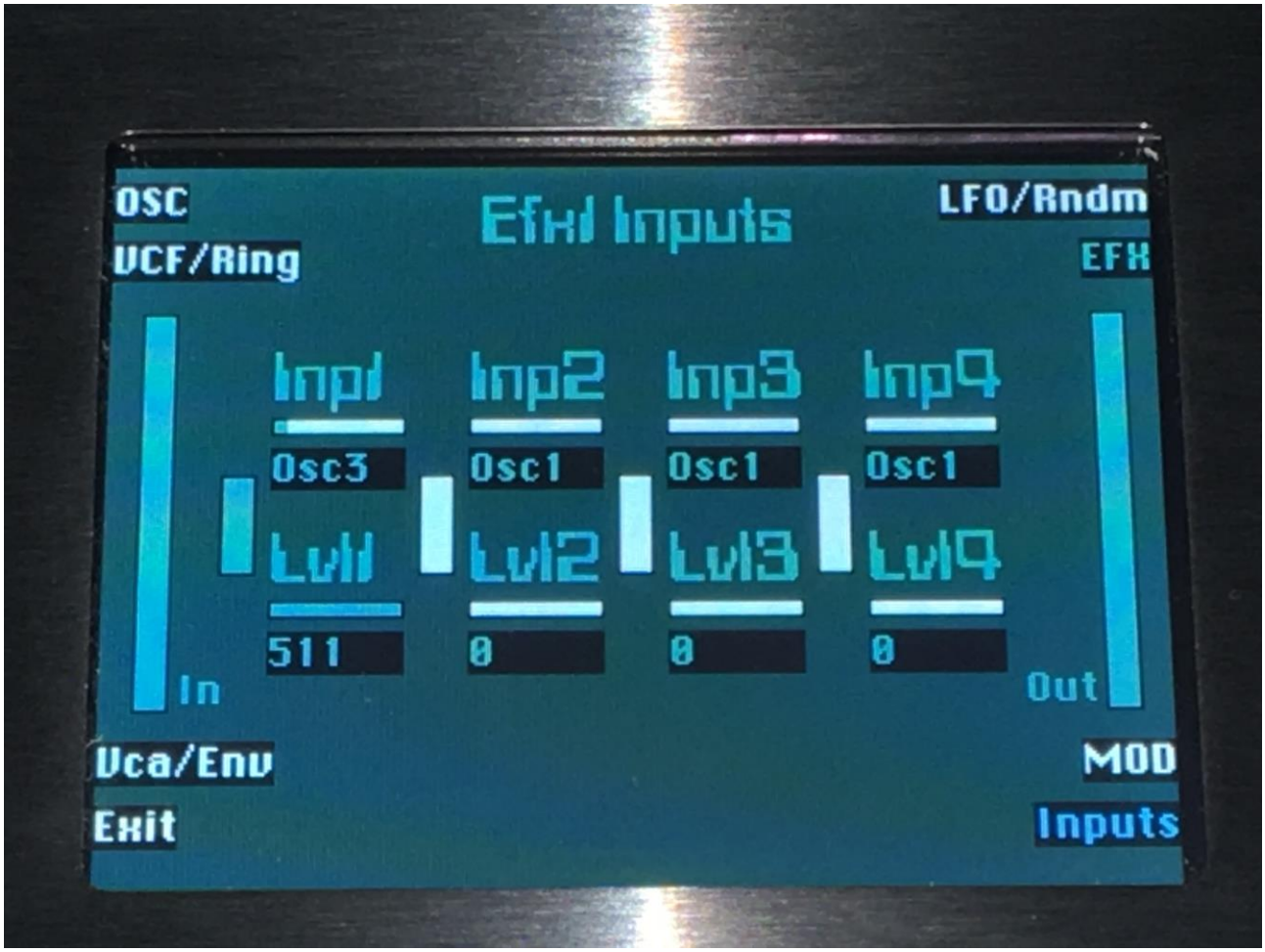
For each parameter, that can be modulated, it is possible to select a modulation source, and to adjust the modulation amount. For a complete list of modulation sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the modulation sources, **Edit Knob 5 to 8** (Labelled Amt) adjusts the modulation amount in the range 0 to 511.

The parameters on this page:

Shp1, Shp2 and Shp5: Modulates the shape of the output waveform.

EFX 1 to 4 Inputs Select



The VU-meters at the left and the right of the screen, shows the EFX input and output. The small VU-meters next to the parameters, shows the selected audio sources.

Each EFX has 4 audio inputs. For each of these, an audio source can be selected, and the input level can be adjusted. For a complete list of audio bus sources, see the list in the start of this section.

Edit Knob 1 to 4 selects the audio input sources, **Edit Knob 5 to 8** (Labelled Lvl1-4) adjusts the input levels in the range 0 to 511.

The Sequencer

The Anamono X sequencer has 2 different types of tracks: Note tracks and controller tracks. It has 8 note tracks and 16 controller tracks.

Each note track controls 1 trigger – Note track 1 controls trigger 1, note track 2 controls trigger 2 and so on, and each track has a note number subtrack, a gate time subtrack, a delay time subtrack and a step on/off subtrack. Note number, gate time, delay time and swing can be modulated. The triggers has to be set up, in order to make a note track control the Anamono X synth modules. Via the triggers it is also possible to output the notes from the note track to MIDI out. See the "Triggers" section earlier in this manual, for details on how to set up the triggers.

Each controller track puts out their value to the Anamono X modulation bus and, if selected, to MIDI out. Each controller track has a controller value subtrack and a slide subtrack, that makes it possible to make the steps slide from one value to the next, instead of just shift.

All tracks has separate last step and resolution settings, so even polyrhythmic sequences are possible. The step length of each track can be from 1 to 64 steps.

The tempo of the sequencer can be set between 1 and 255 BPM. It can sync to MIDI clock, and it is both possible to transmit and re-send MIDI clock to MIDI out.

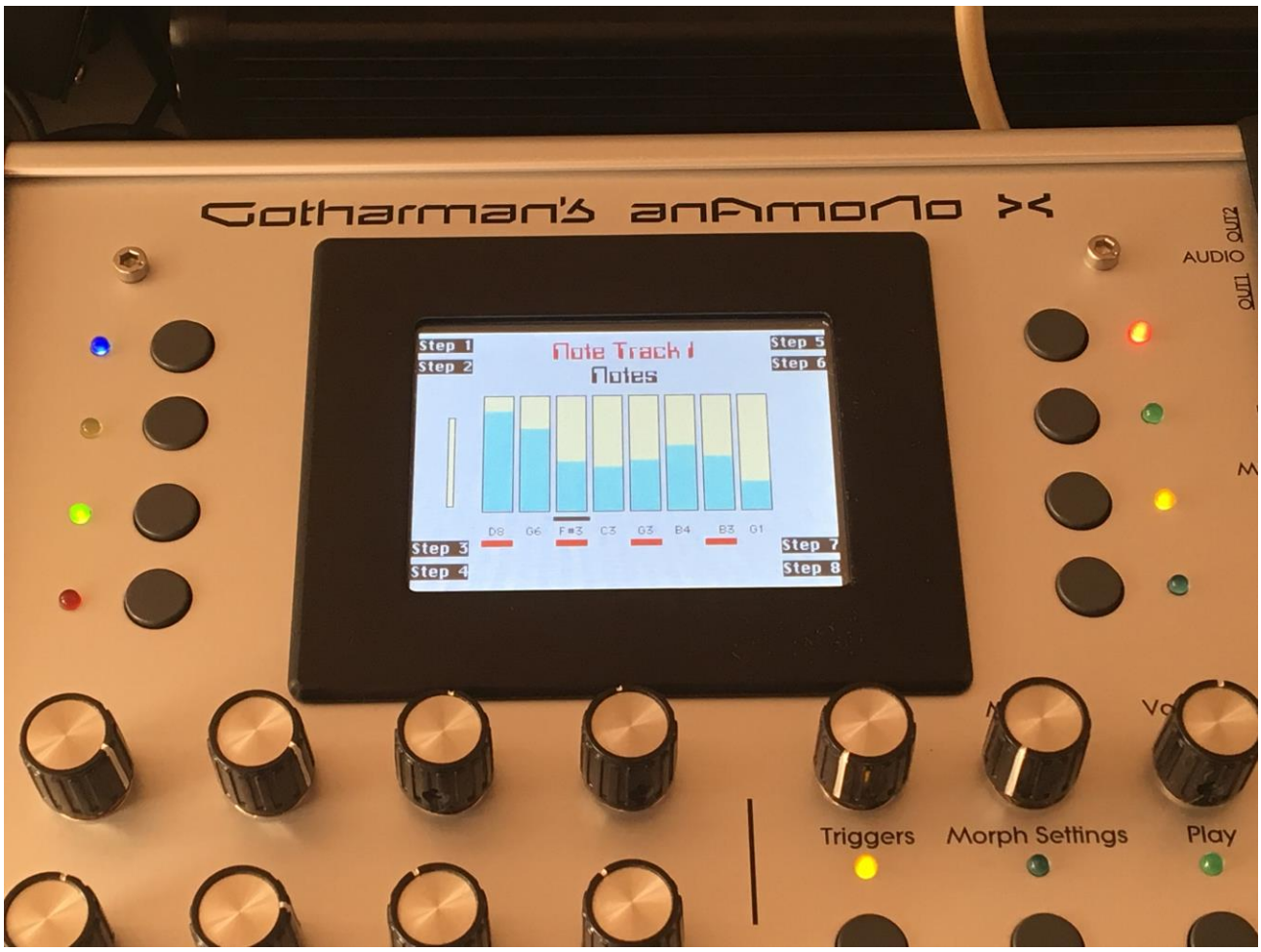
Inputting of note number values can be done in analog/TR fashion, by pushing buttons and rotating knobs, and it can be done by realtime recording. To assist the realtime recording, a metronome is present.

Inputting of controller track values can only be done in analog/TR fashion, not by realtime recording.

It is possible to mute and edit each track separately.

Remember to save all edits you do in the sequencer. Else they will be lost when you change preset, or turn Anamno X off. See how to in the "Save Preset" section.

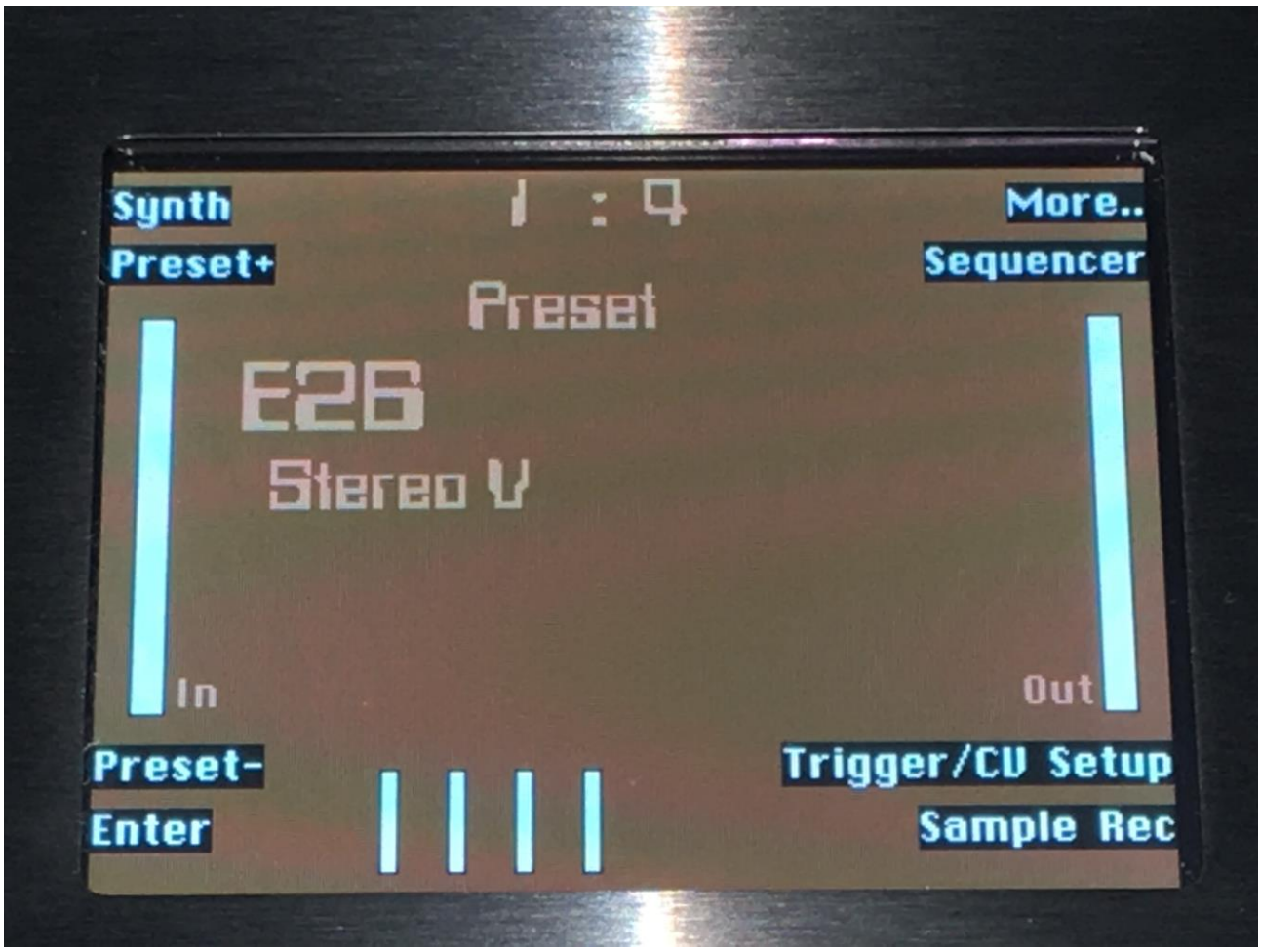
Sequencer playback start/stop



To start and stop sequencer play back, you must push the “Play” button. When the green LED above the play button lights up, it is indicating, that the sequencer is playing back. When the green LED above the play button does not light up, the sequencer playback is stopped.

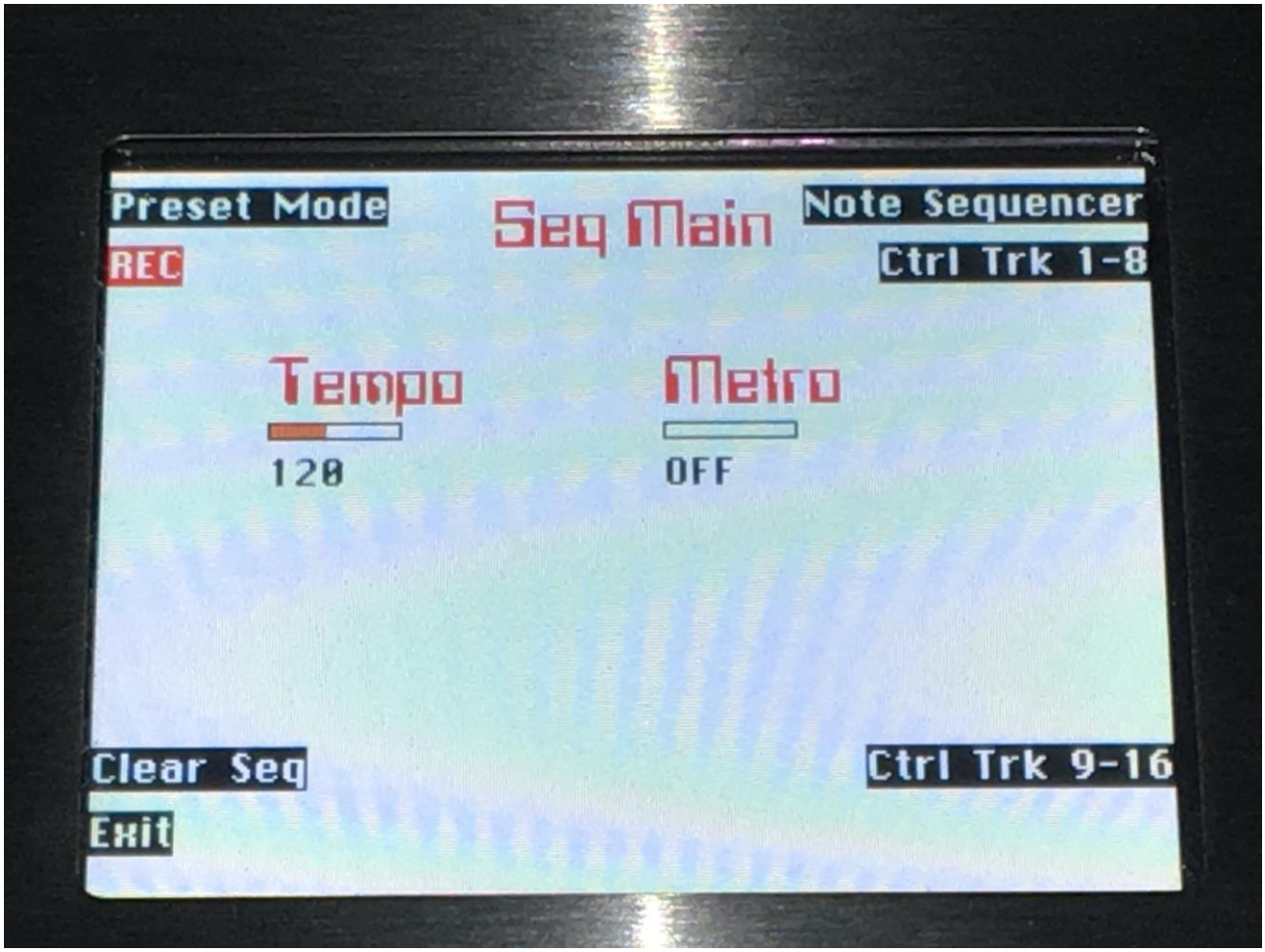
If you hit the play button to start the sequencer, and it doesn’t start, please check in the “COMMON” section (described later in this manual), that it is not set up to external MIDI sync.

Sequencer Main



To enter the Anamono X sequencer, from the preset select screen, push the ”Sequencer” button.

You will now enter the sequencer main page:



The parameters of this page:

Tempo: Sets the sequencer tempo between 1 and 255 BPM. To make the sequencer sync to external MIDI gear, this must be set up in the "COMMON" section, described later in this manual.

Metro: Metronome Off, On, Rec.
-Off: The metronome is off, and will make no sound.
-On: The metronome is on, and when the sequencer is playing, it will put out a click to audio output 1, every time note track 1 passes a 4/4 beat. Every time note track 1 starts over, it will make a click that is slightly higher pitched than the other clicks.
-Rec: When the sequencer is playing, and realtime rec is activated, it will put out a click to audio output 1, every time note track 1 passes a 4/4 beat. Every time note track 1 starts over, it will make a click that is slightly higher pitched than the other clicks.

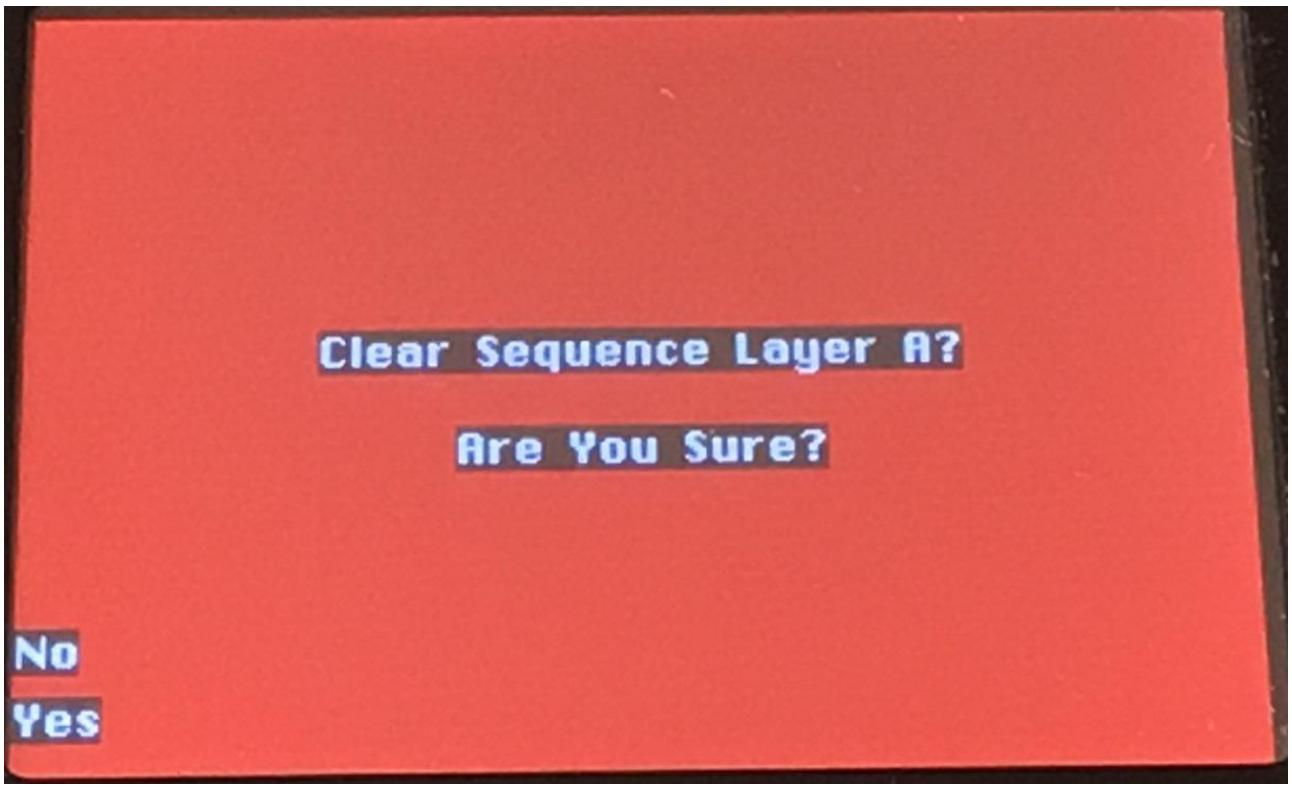
The buttons of this page:

Preset Mode: Pushing this will toggle the sequencer between Preset an Song mode. This section of the manual only describes the preset mode. Song mode is explained later.

Rec: This will toggle **realtime recording** on and off. **Realtime recording** can be switched on and off at any time, regardless of if the sequencer is playing or not. The sequencer must though play, to make it possible to input notes in realtime.

To realtime record notes:
-Set the metronome up as desired.
-Push the "Rec" button on this page, so the yellow LED near it lights up.
-Make sure that the sequencer is playing.
-Play back notes on a connected MIDI device, on the touchscreen keyboard, or push the "Triggers" button, and play the trigger buttons.
-Hit the "Rec" button again, when you are done.
-Enjoy the result.

Clear Seq:
Hitting this button, will make Anamono X jump to this page:



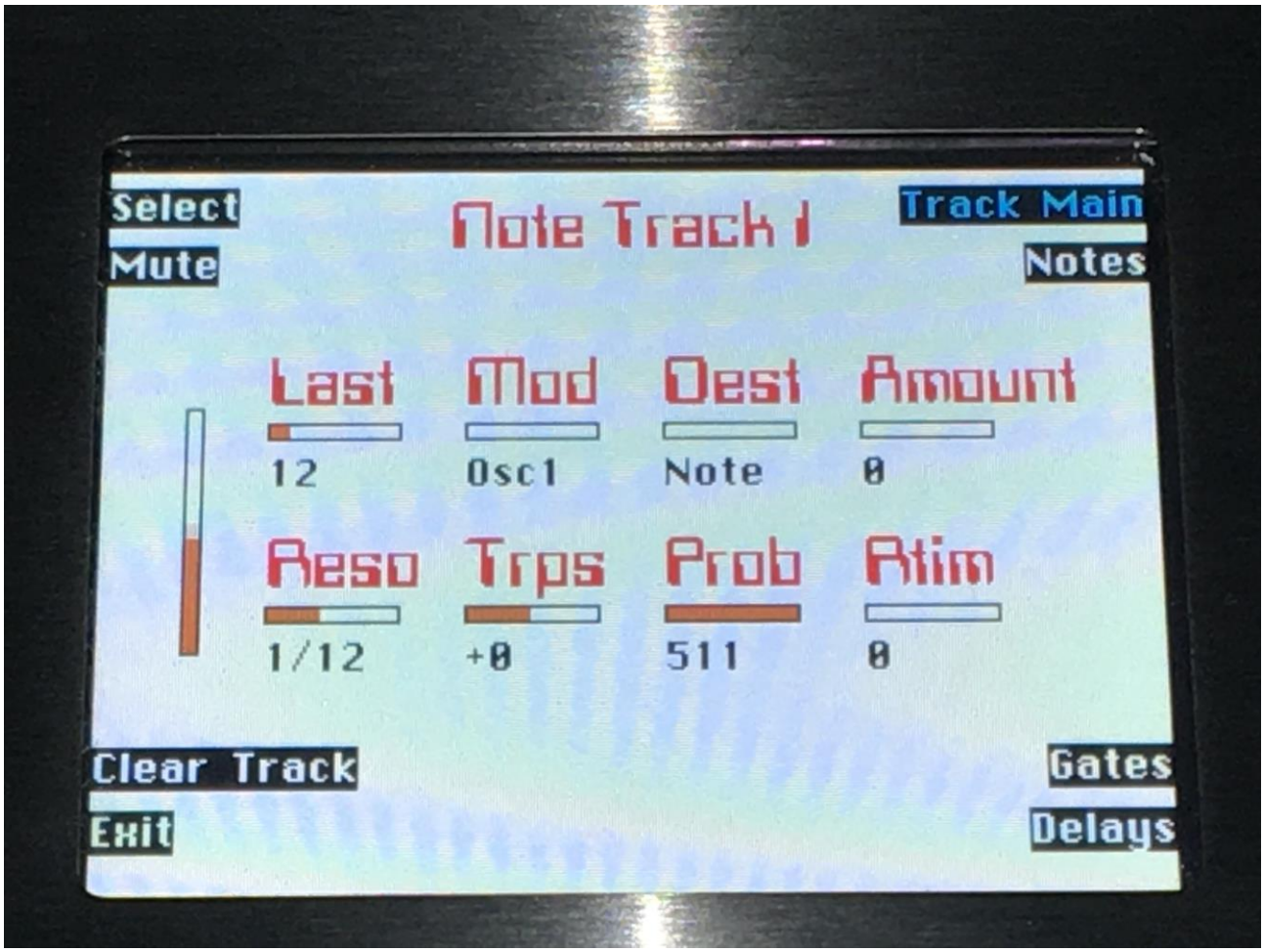
If you push the "Yes" button here, you will clear all tracks of the current preset, on the Morph Layer selected by the "Morph Settings" button.

If you do not wish to do that, push "No".

Note Sequencer, Ctrl Trk 1-8, Ctrl Trk 9-16: Accesses the corresponding sequencer pages.

The Note Track Sequencer

From the sequencer Main page, push the **"Note Sequencer"** button, to enter this page:



This is the track main page of note track 1. All parameters on this page, will affect only note track 1. The VU-meter in the left side of the screen, will show a peak, every time the track triggers a note.

The parameters of this page:

Last: Selects the last step that will be played back on this track, before it loops back, and plays the track again. Range: 1 to 64 steps.

Mod: Track modulation source. Any Anamono X modulation source can be selected to modulate the track. For a complete list of modulation sources, see the list in the start of the synth section in this manual.

Dest: Track modulation destination. Selects what should be modulated on the track. Choices are:
-Note: The note numbers of the track will be modulated.
-Gate: The gate times of the track will be modulated.
-Dly: The delay times of the track will be modulated.
-Swing: Swing modulation will be applied to the track. This is a bit more fine than the delay time modulation.

Amount: Adjusts the amount of modulation that will be applied to the track.

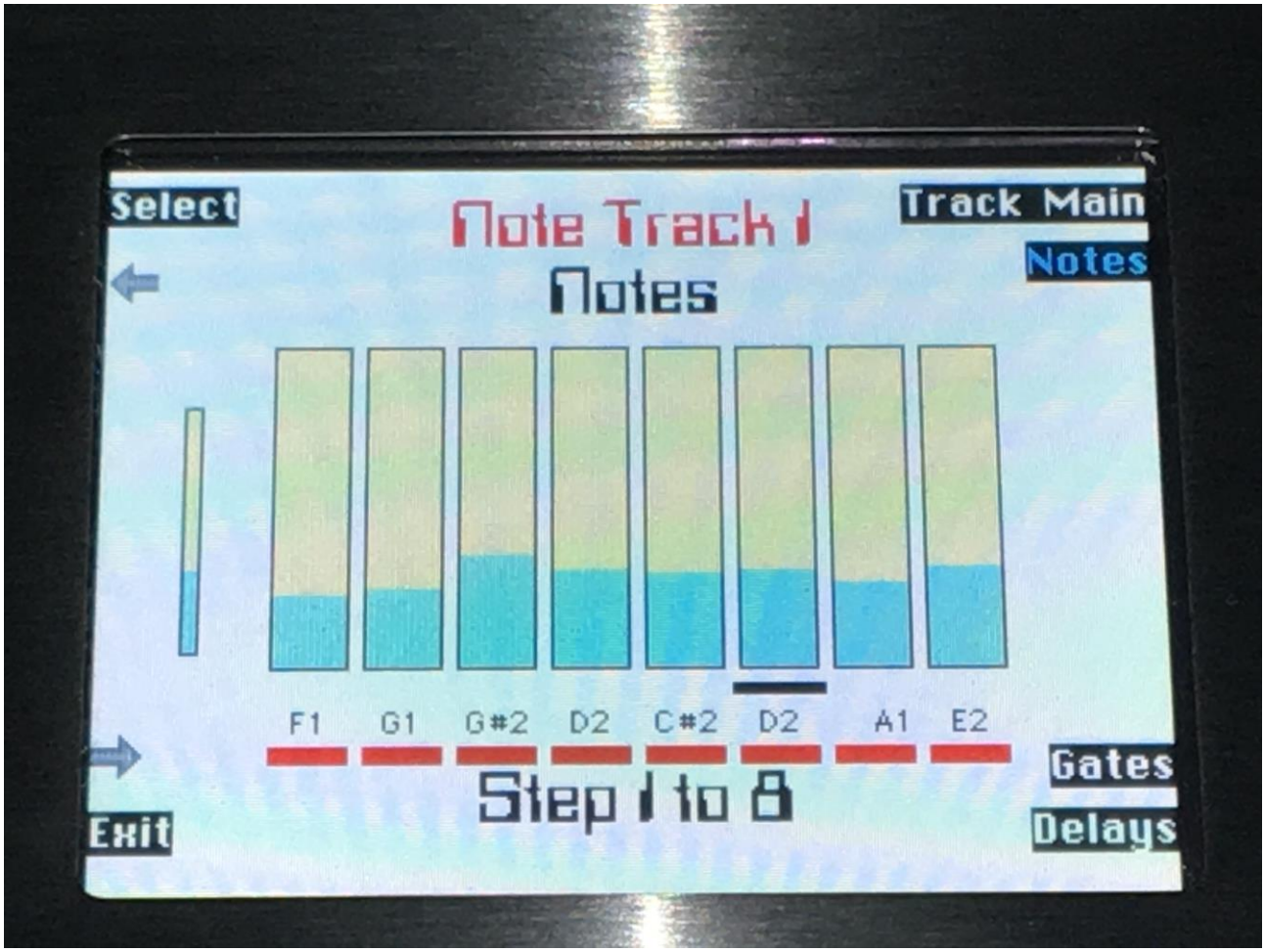
Reso: Track resolution. Values: 1/32, 1/24, 1/16, 1/12, 1/8, 1/6, ¼, ½.
Trps: Track transpose. Will transpose the note numbers of the whole track up to 64 semitones up or down.

Prob: Track Note Randomizer Probability. When this is turned fully up, all programmed note steps of the track will play back. The more it is turned down, the less notes will play back. The notes the will not play back are selected randomly.

Rtim: Track Note Randomizer Time. When turned up, it will create random delays on the programmed note steps triggering.

Note Steps Edit

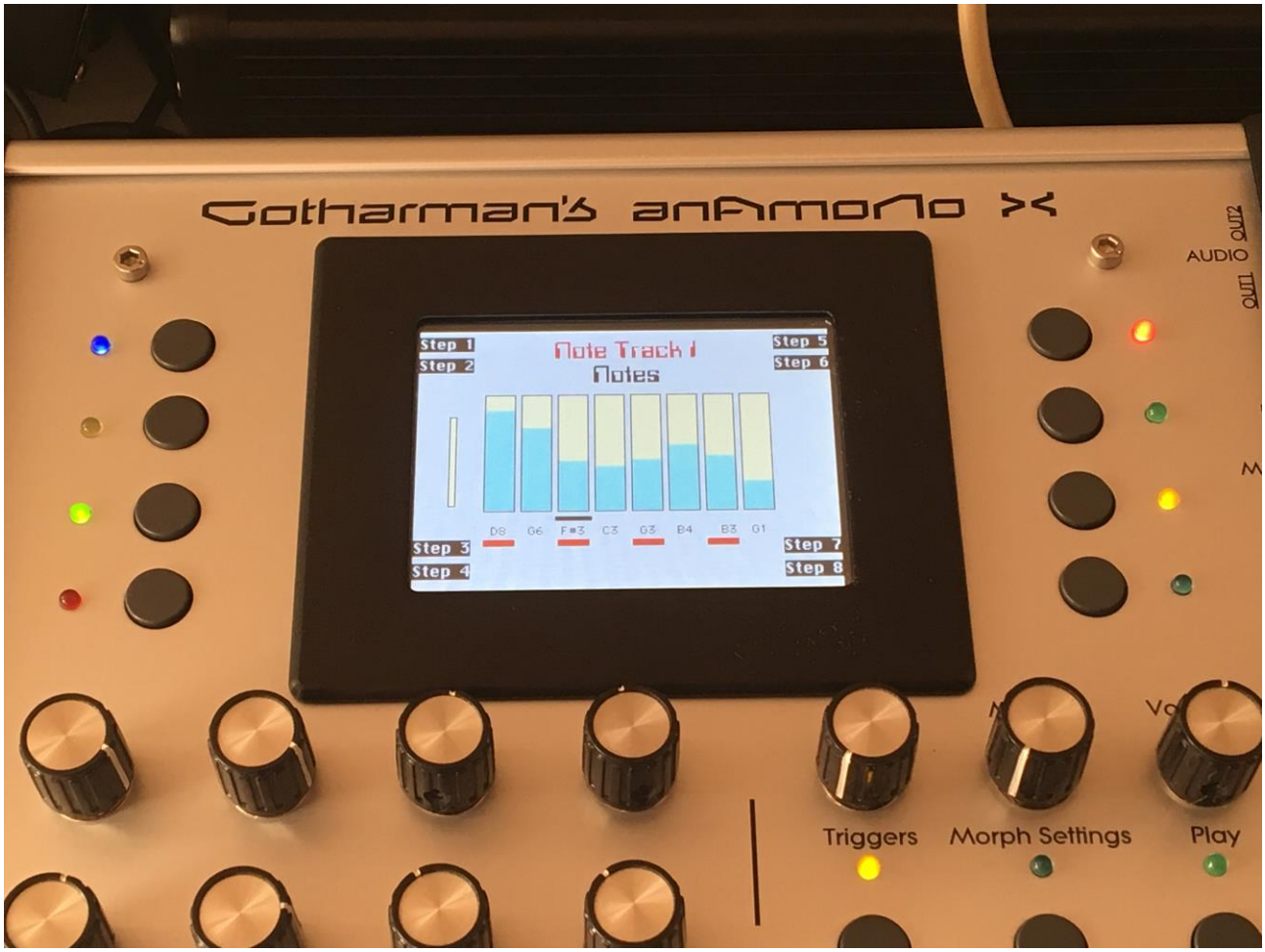
From any note track page, pushing the **“Notes”** button, will get you to the note edit page:



By pushing the arrow buttons on this page, you can select all the possible 64 steps of the track, in groups of 8.

By turning the 8 Edit Knobs, you can set the note numbers for each step in the track. These are shown both as bars, and as note number values below each bar.

To switch each step of the track on or off, push the “Triggers” button:

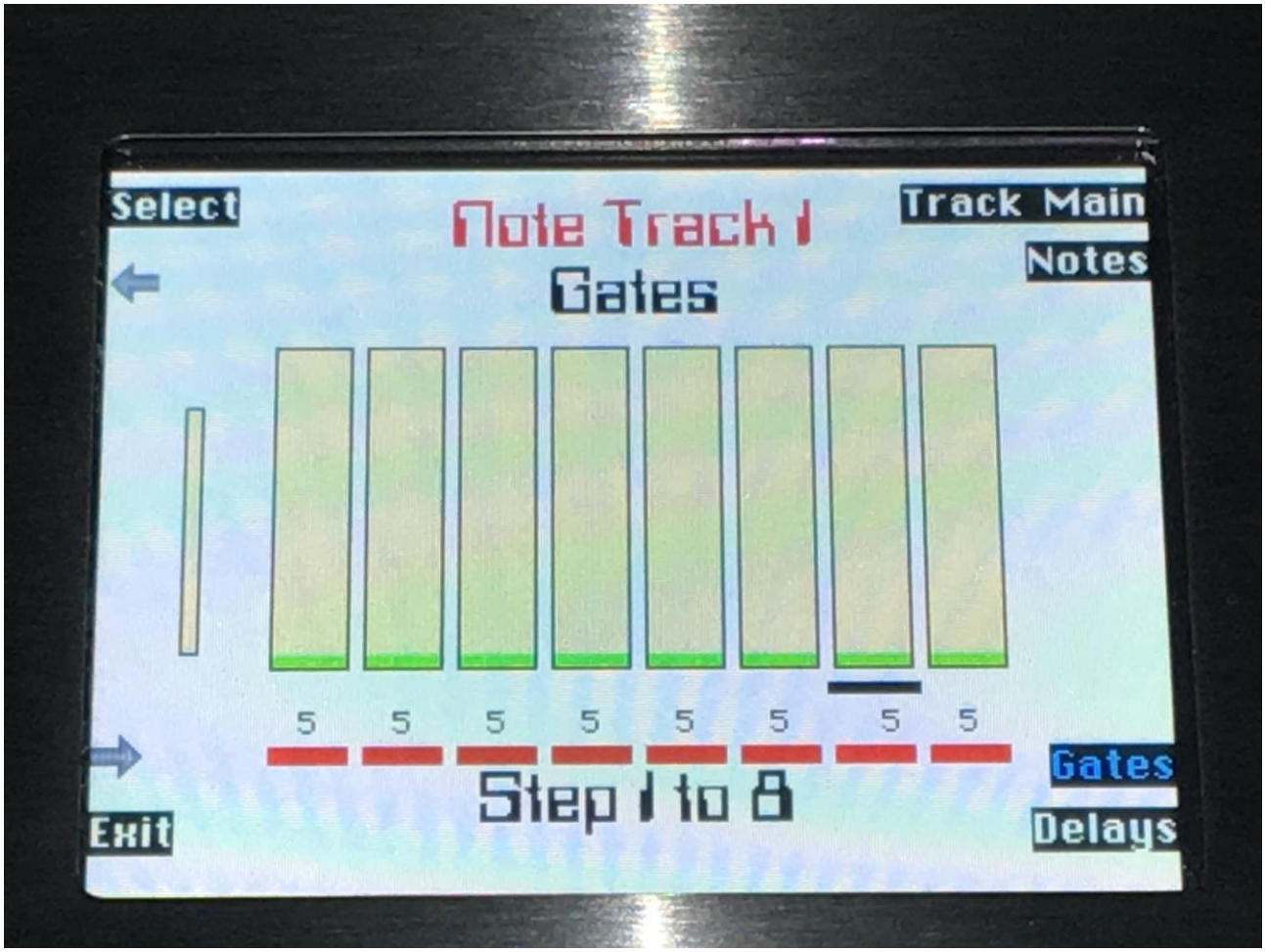


Each display button and LED will now represent one step. Steps can be toggled on and off by pushing the display buttons, and the on/off status will be shown both by the display LED’s, and by red bars on the display.

When a step is being played back, this will be showed both by inverting the step LED status, and by a black bar on the display.

Gate Time Steps Edit

From any note track page, pushing the **"Gates"** button, will get you to the gate time edit page:

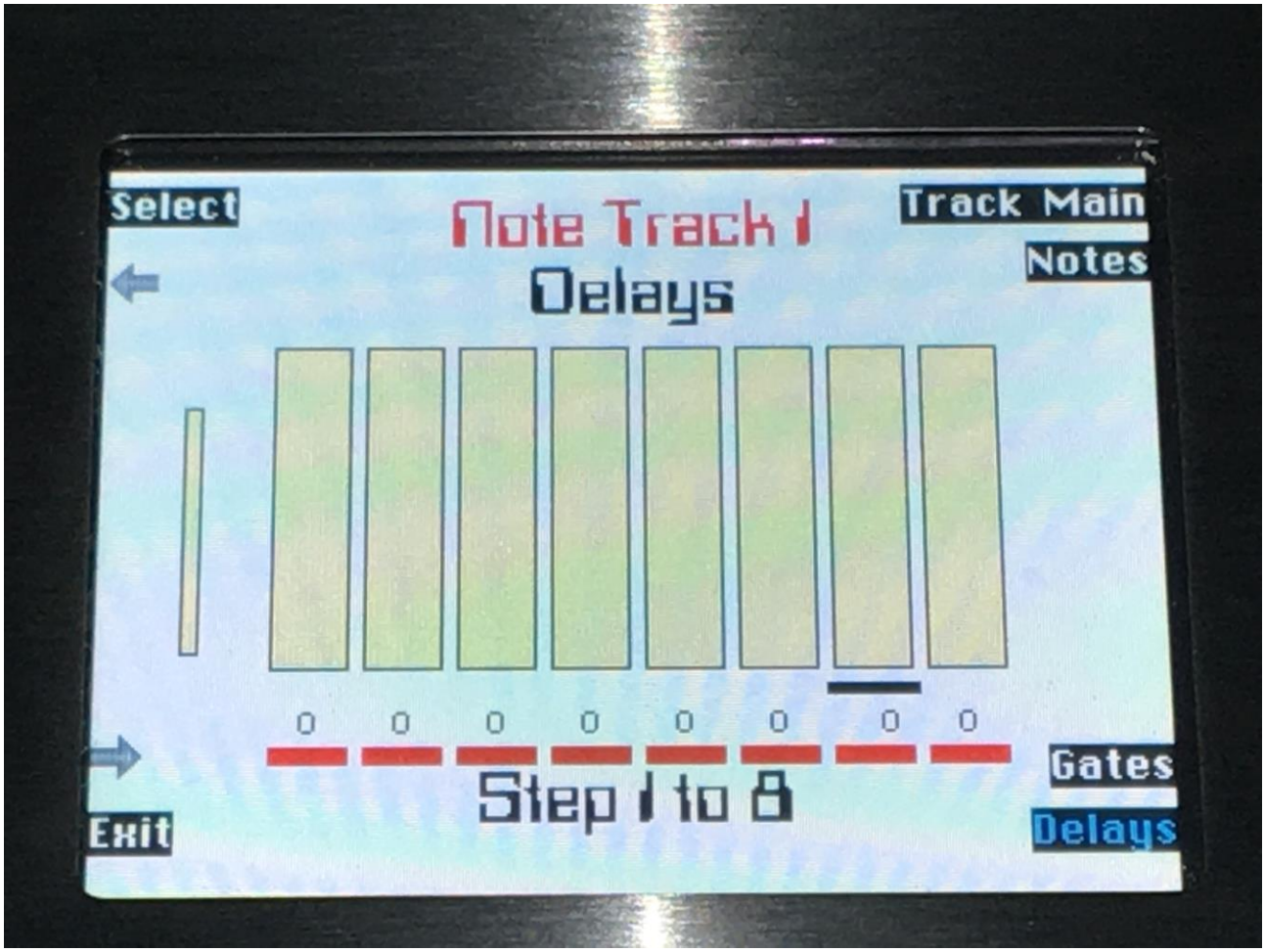


By pushing the arrow buttons on this page, you can select all the possible 64 steps of the track, in groups of 8.

By turning the 8 Edit Knobs, you can set the gate time for each step in the track. These are shown both as bars, and as numbers below each bar.

Delay Time Steps Edit

From any note track page, pushing the **"Delays"** button, will get you to the delay time edit page:

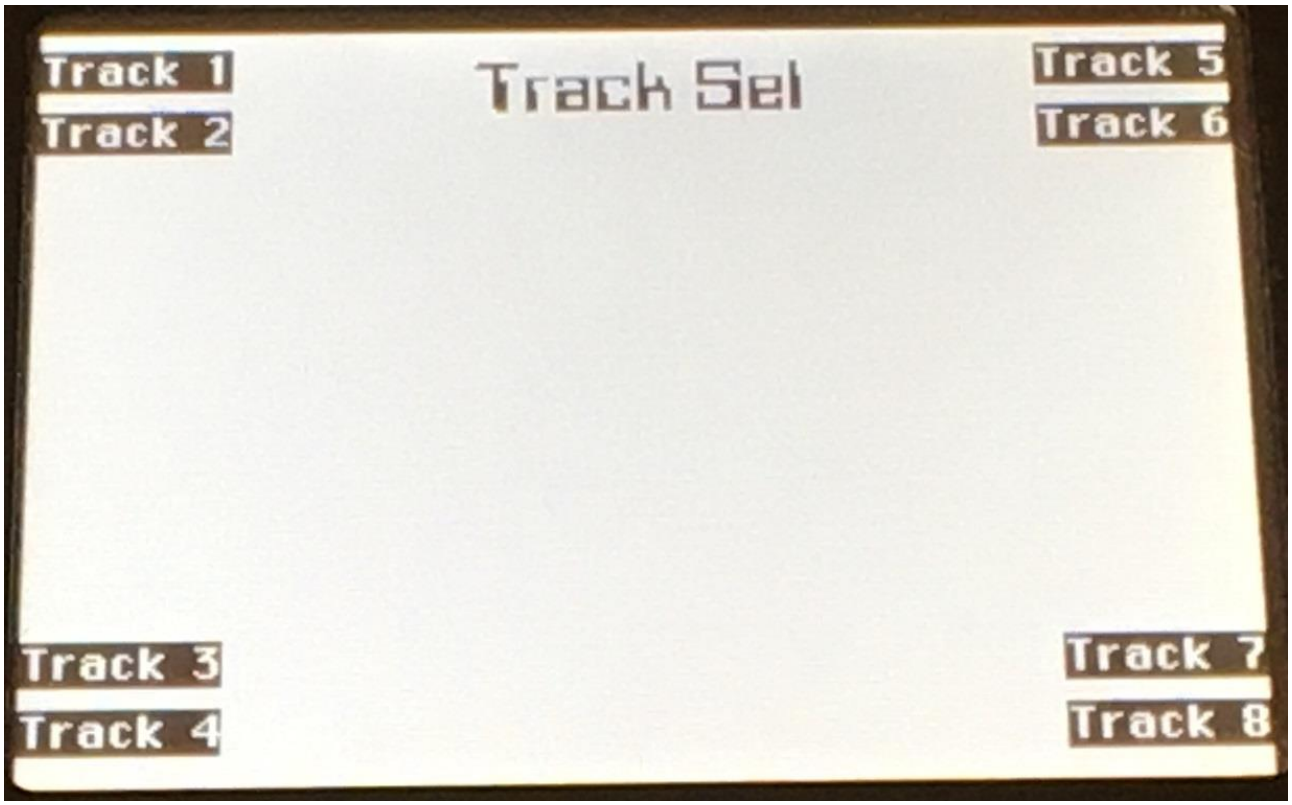


By pushing the arrow buttons on this page, you can select all the possible 64 steps of the track, in groups of 8.

By turning the 8 Edit Knobs, you can set the delay time for each step in the track. These are shown both as bars, and as numbers below each bar.

Selecting the Note Track to edit

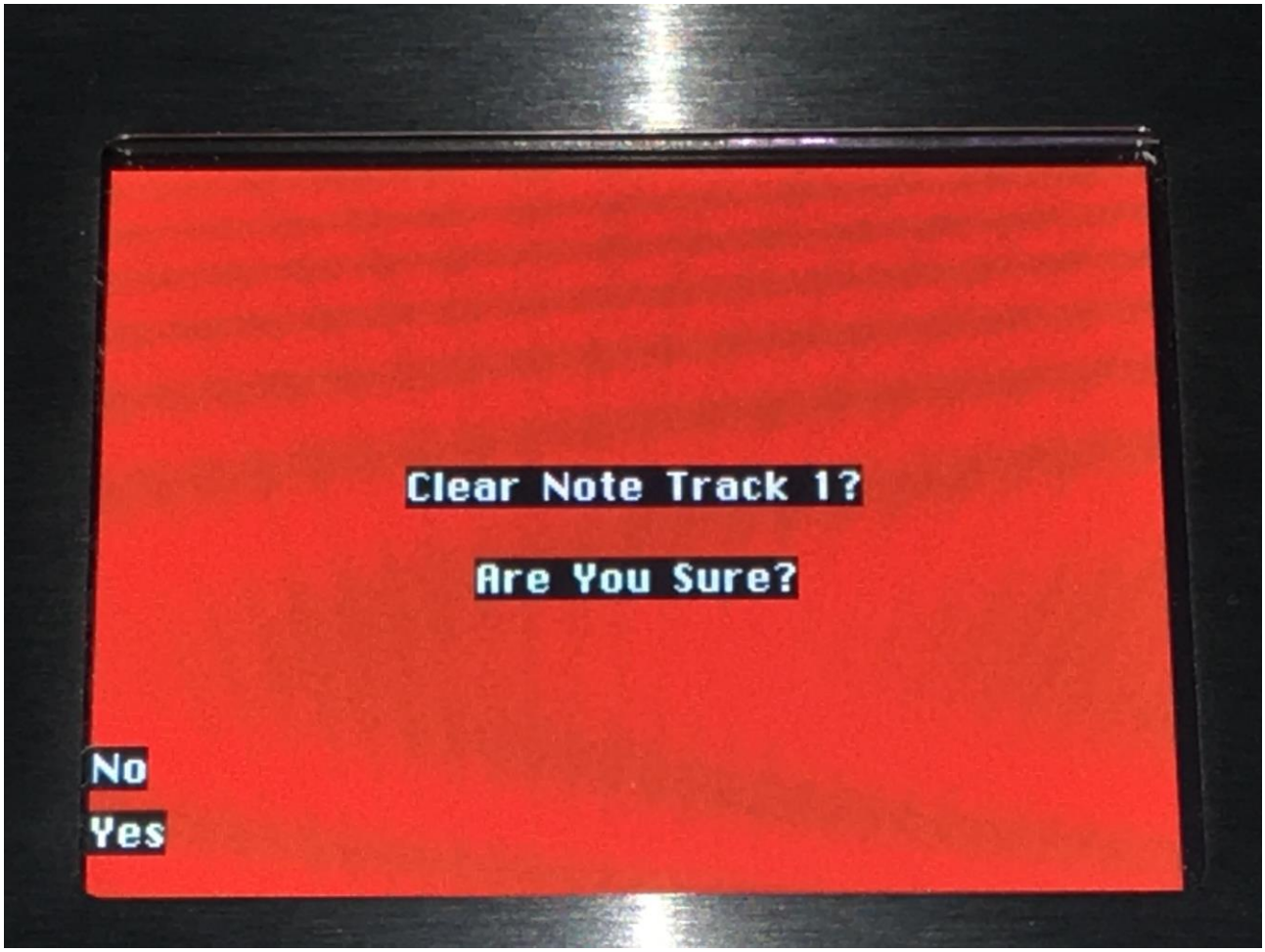
From any of the previously explained note track pages, push the “Select” button, and this screen will appear:



Now push the button, that corresponds to the note track you would like to edit, and you will be taken there.

Clear Note Track

From the track main page, push the **“Clear Track”** button, to enter this page:

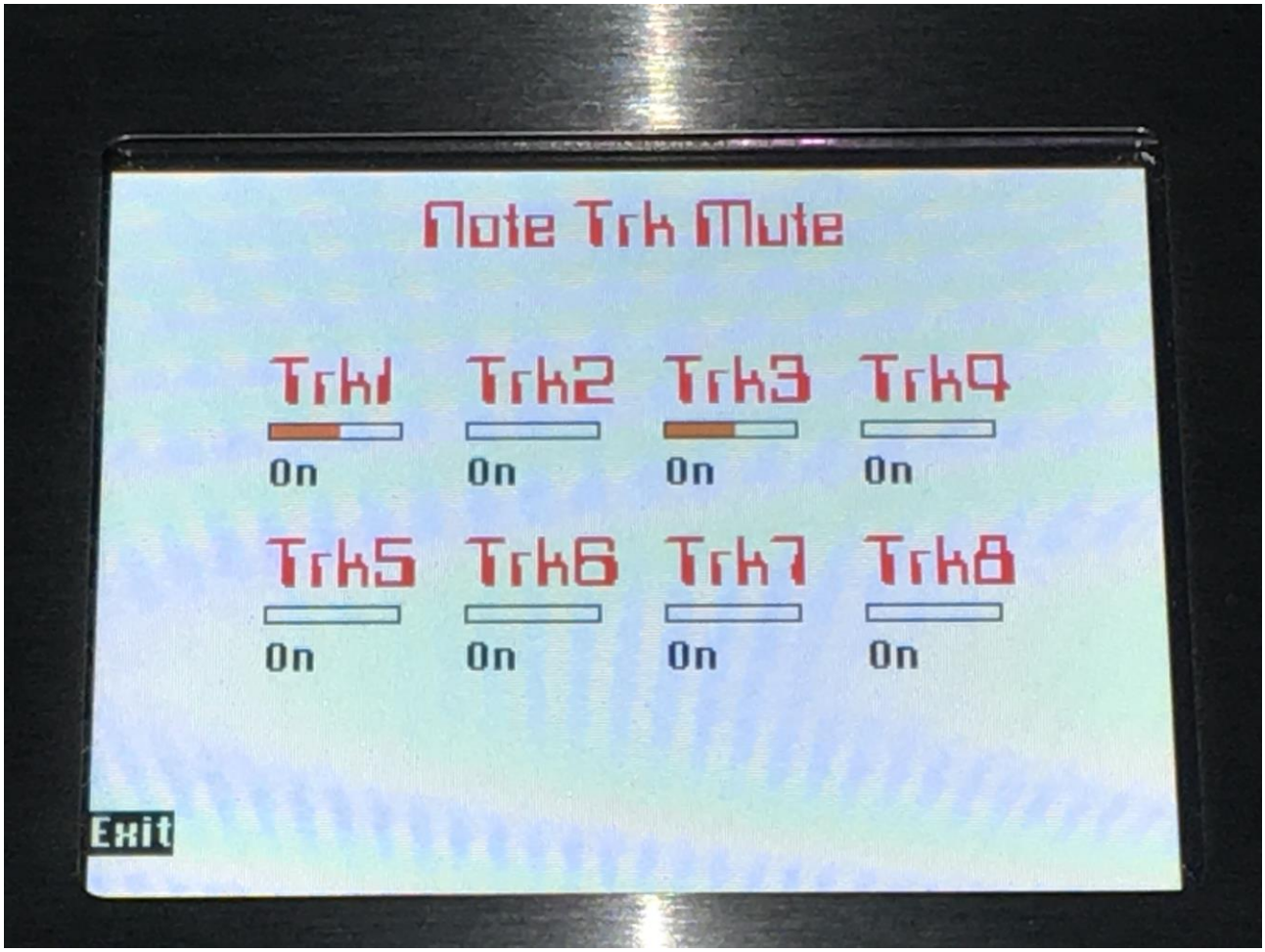


Pushing “Yes” from here, will clear all step on’s of the currently selected note track.

If you would not wish to do this, push “No”, to exit to the track main page.

Mute/Unmute Tracks

From the track main page, push the **“Mute”** button, to enter this page:

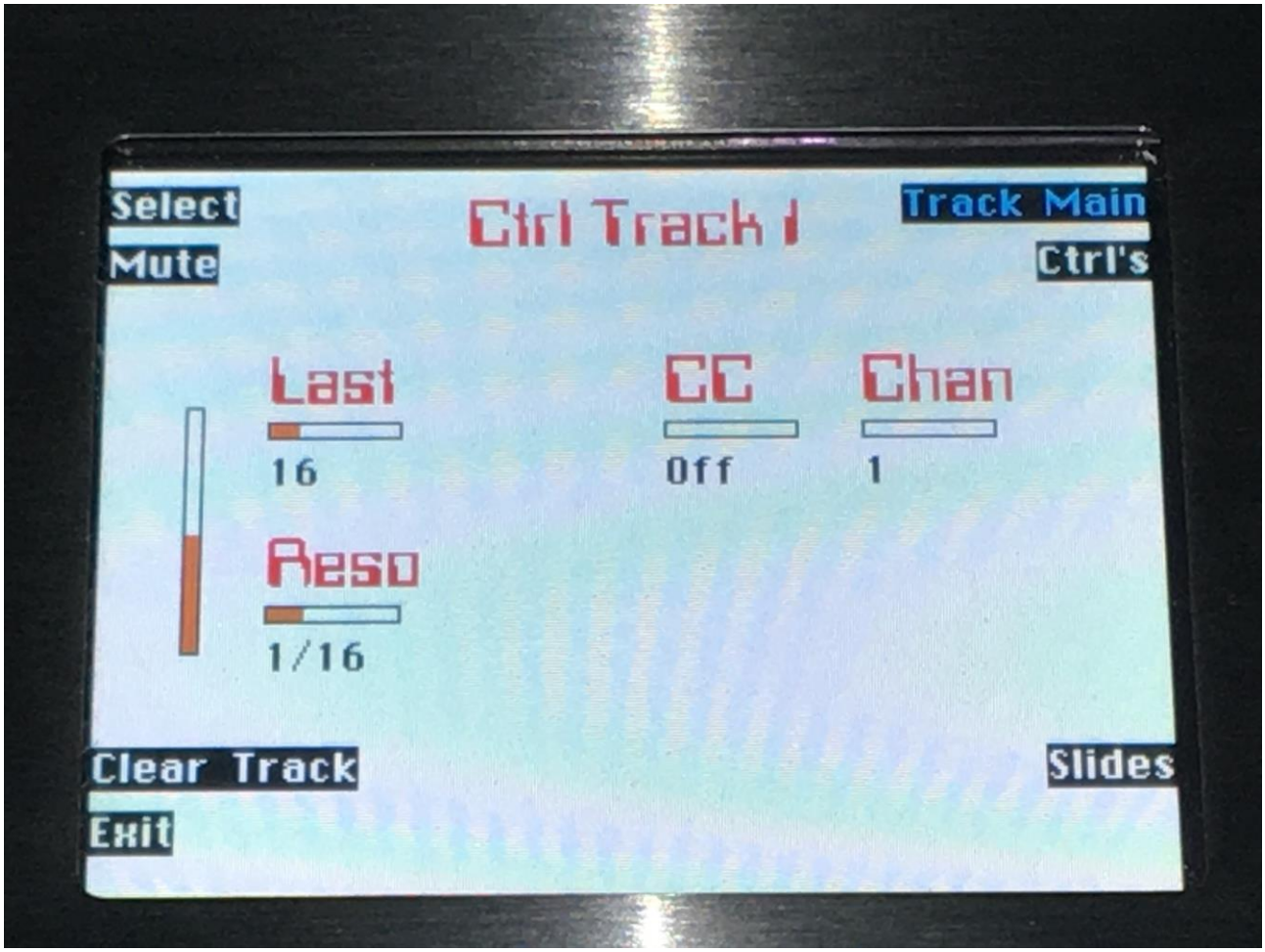


By turning Edit Knob 1 to 8 when on this page, you can turn the output of each of the 8 note tracks on or off. The bars below the track numbers show the track activity.

The Controller Tracks

Since the controller tracks 1 to 8 and 9 to 16 has the same functions, only controller tracks 1 to 8 are explained.

From the sequencer Main page, push the **"Ctrl Trk 1-8" or "Ctrl Trk 9-16"** button, to enter this page:



This is the track main page of controller track 1. All parameters on this page, will affect only controller track 1. The VU-meter in the left side of the screen, will show the last value, that has been put out from the selected track.

The parameters of this page:

Last: Selects the last step that will be played back on this track, before it loops back, and plays the track again. Range: 1 to 64 steps.

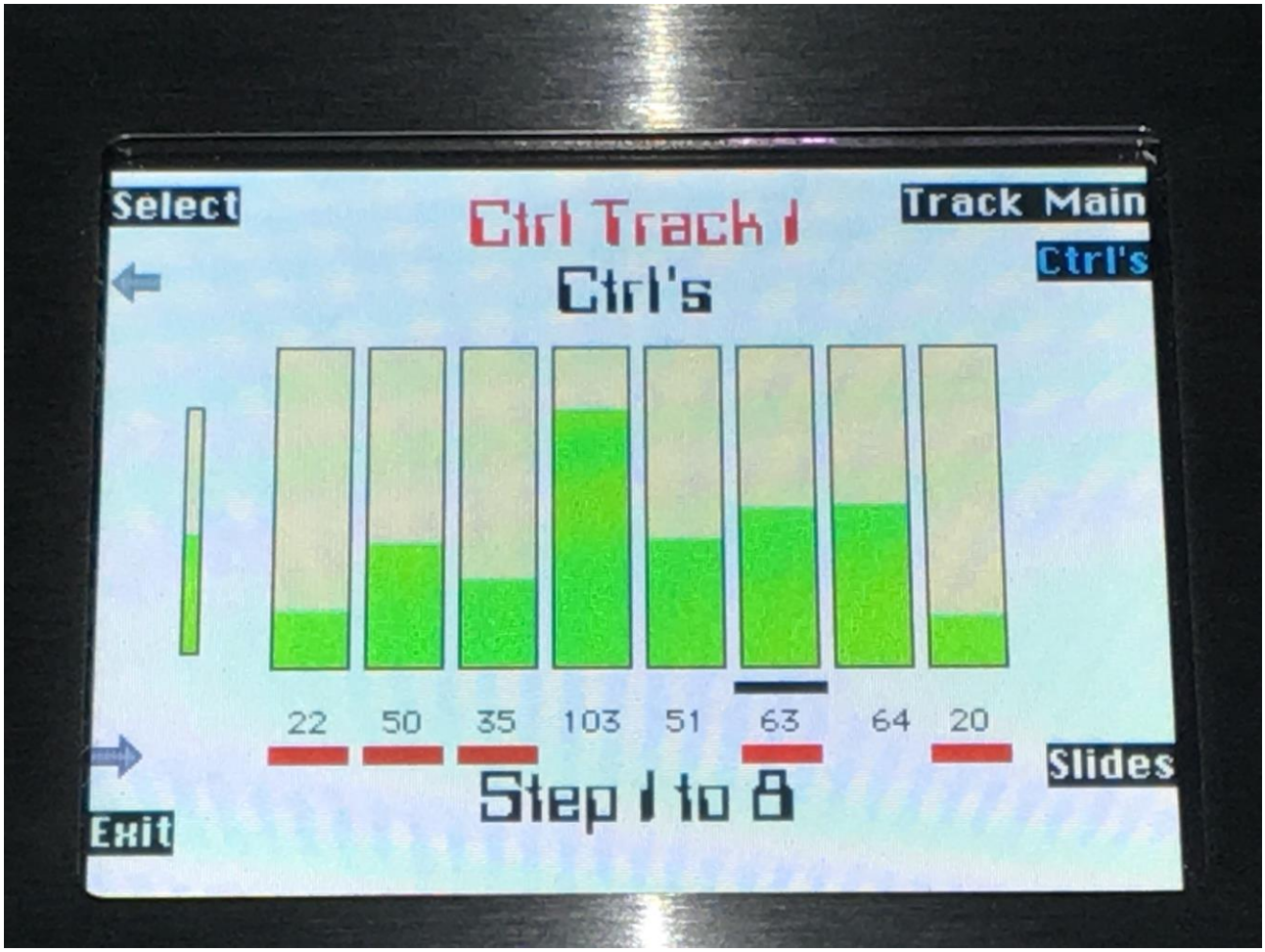
CC: Setting this to any other value than "Off", will make the selected controller track output MIDI CC's to MIDI out. This parameter sets the MIDI CC number. Range: Off, 1-63.

Chan: Sets the MIDI channel, that the selected MIDI CC will be transmitted to. Range: 1 to 16.

Reso: Track resolution. Values: 1/32, 1/24, 1/16, 1/12, 1/8, 1/6, ¼, ½.

Controller Steps Edit

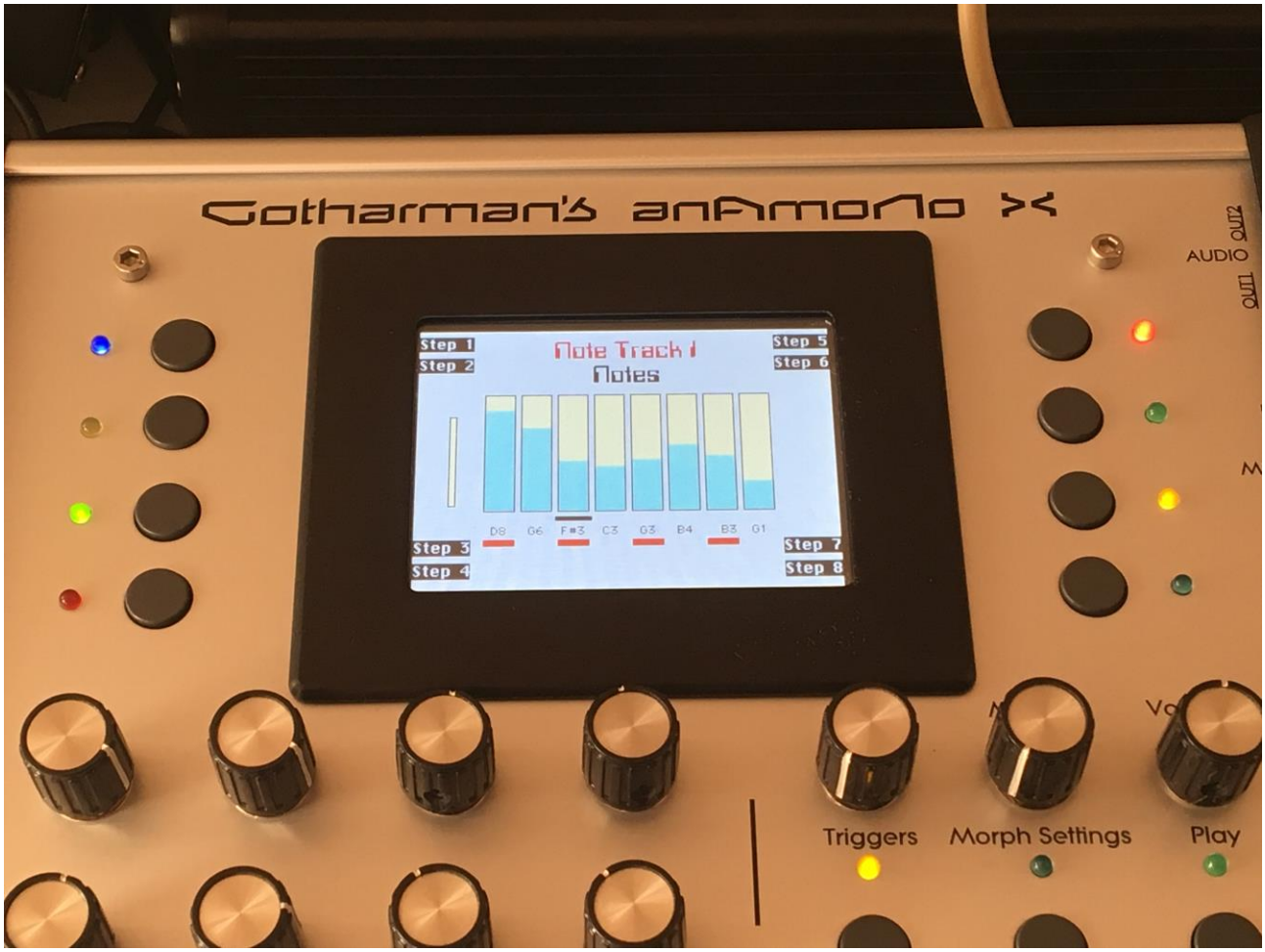
From any controller track page, pushing the **“Ctrl’s”** button, will get you to the controller edit page:



By pushing the arrow buttons on this page, you can select all the possible 64 steps of the track, in groups of 8.

By turning the 8 Edit Knobs, you can set the controller values for each step in the track. These are shown both as bars, and as numeric values below each bar.

To switch each step of the track on or off, push the “Triggers” button:

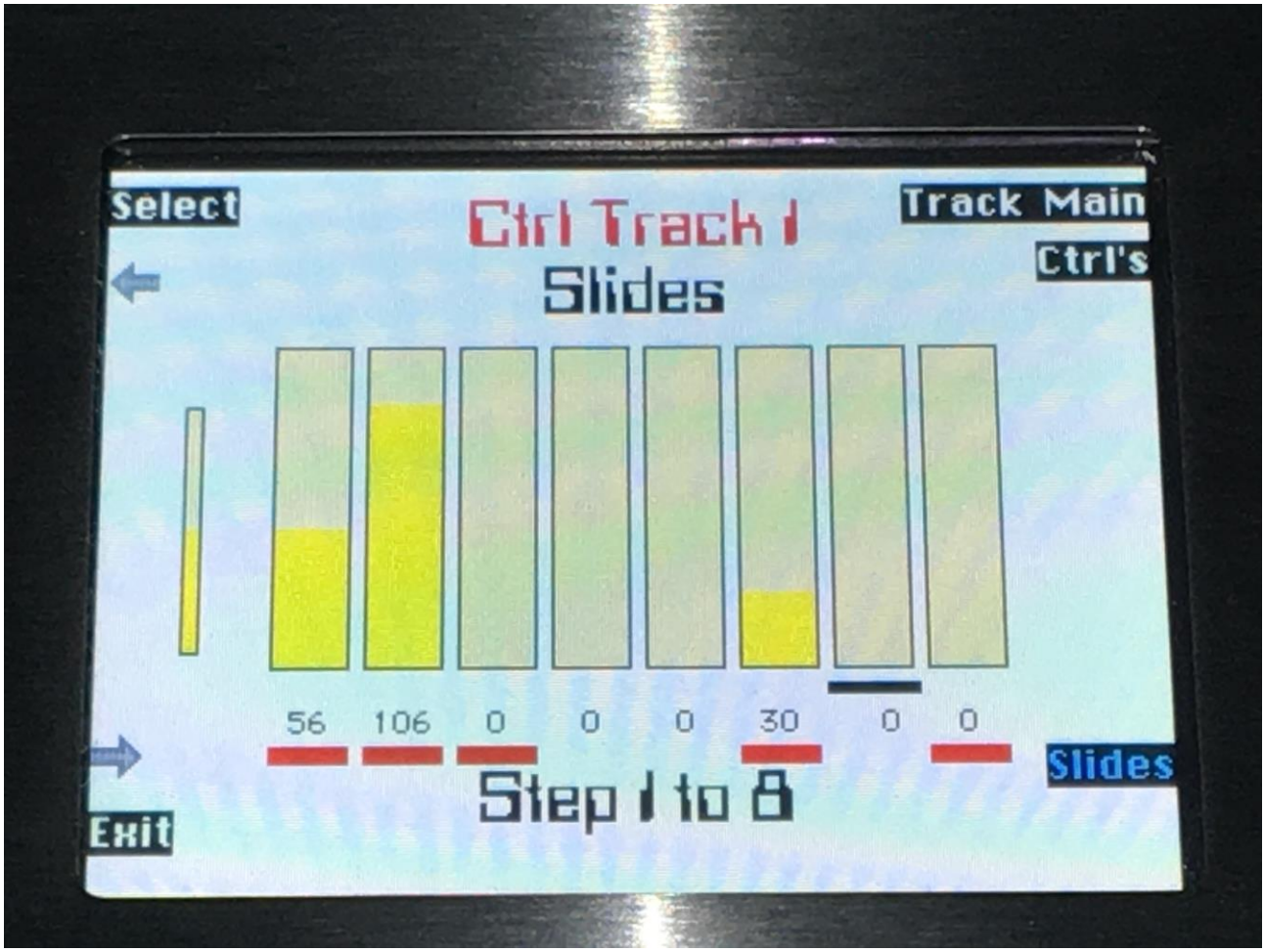


Each display button and LED will now represent one step. Steps can be toggled on and off by pushing the display buttons, and the on/off status will be shown both by the display LED’s, and by red bars on the display.

When a step is being played back, this will be showed both by inverting the step LED status, and by a black bar on the display.

Slide Steps Edit

From any controller track page, pushing the **"Slides"** button, will get you to the slides edit page:



By pushing the arrow buttons on this page, you can select all the possible 64 steps of the track, in groups of 8.

By turning the 8 Edit Knobs, you can set the slide time for each step in the track. These are shown both as bars, and as numbers below each bar.

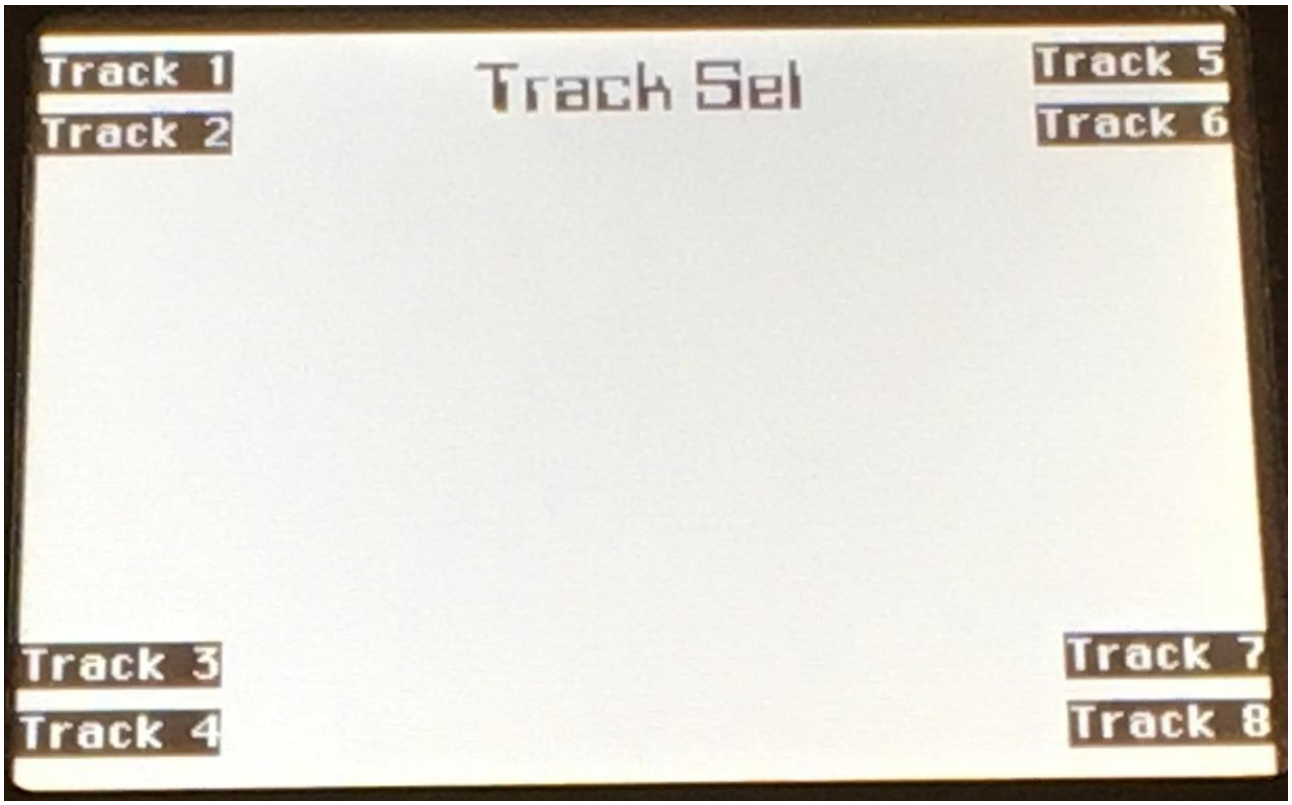
If slide for a step is 0, the controller output of the track, will shift from one value to the other. The more slide for a step is turned up, the faster it will slide towards the value of the next step. When the next step is played back, the output will shift to the value of this, regardsless if the value has been reached by the slide or not.

The tempo of slide is not controlled by the sequencer tempo. Slide is more a kind of advanced envelope.

The resolution of slide is very high, when used internally in Anamono X. The CC's that are transmitted via MIDI out, does not have an equally high resolution, because of the limited speed of MIDI.

Selecting the Controller Track to edit

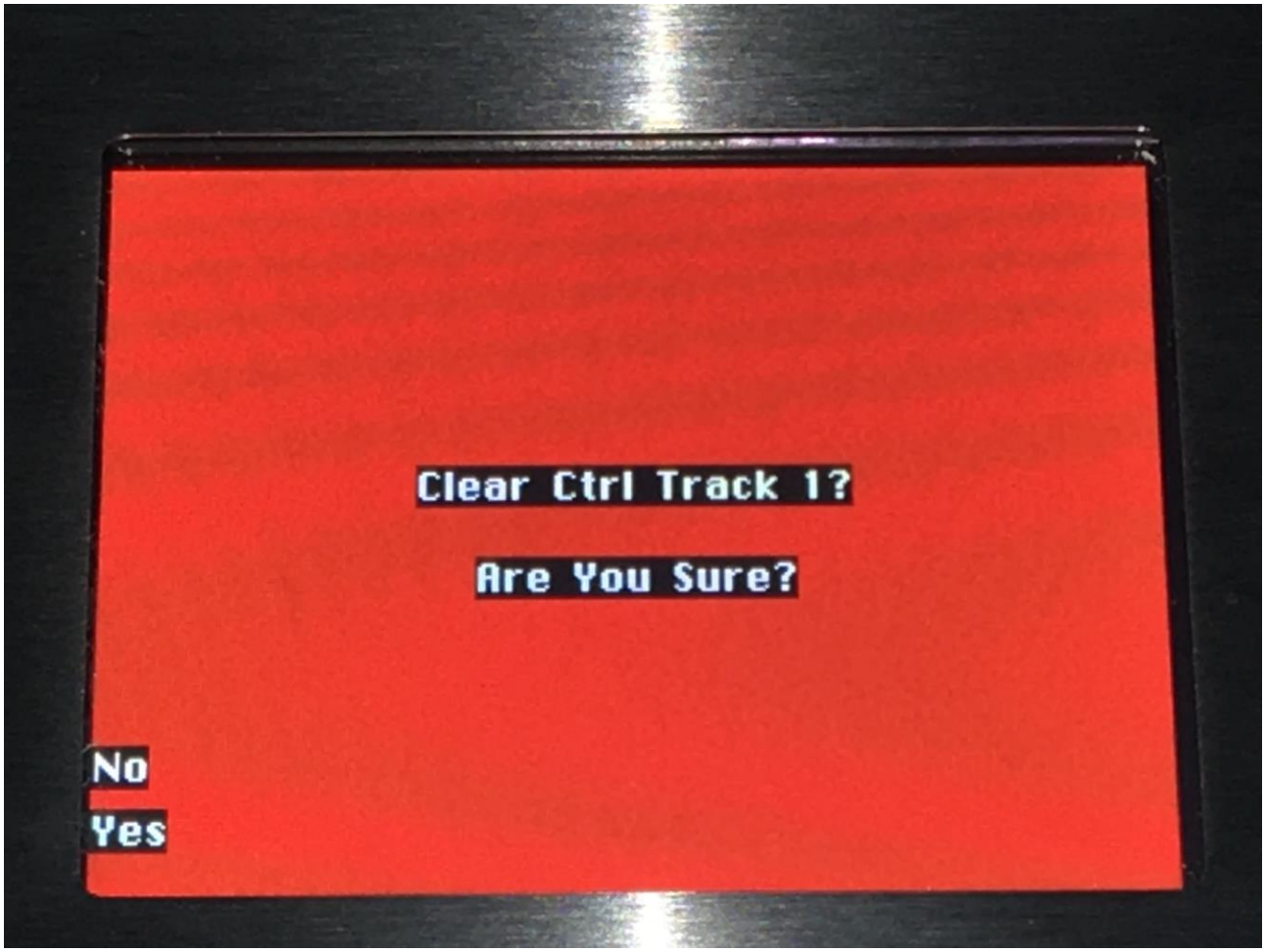
From any of the previously explained controller track pages, push the “Select” button, and this screen will appear:



Now push the button, that corresponds to the controller track you would like to edit, and you will be taken there.

Clear Controller Track

From the track main page, push the **“Clear Track”** button, to enter this page:

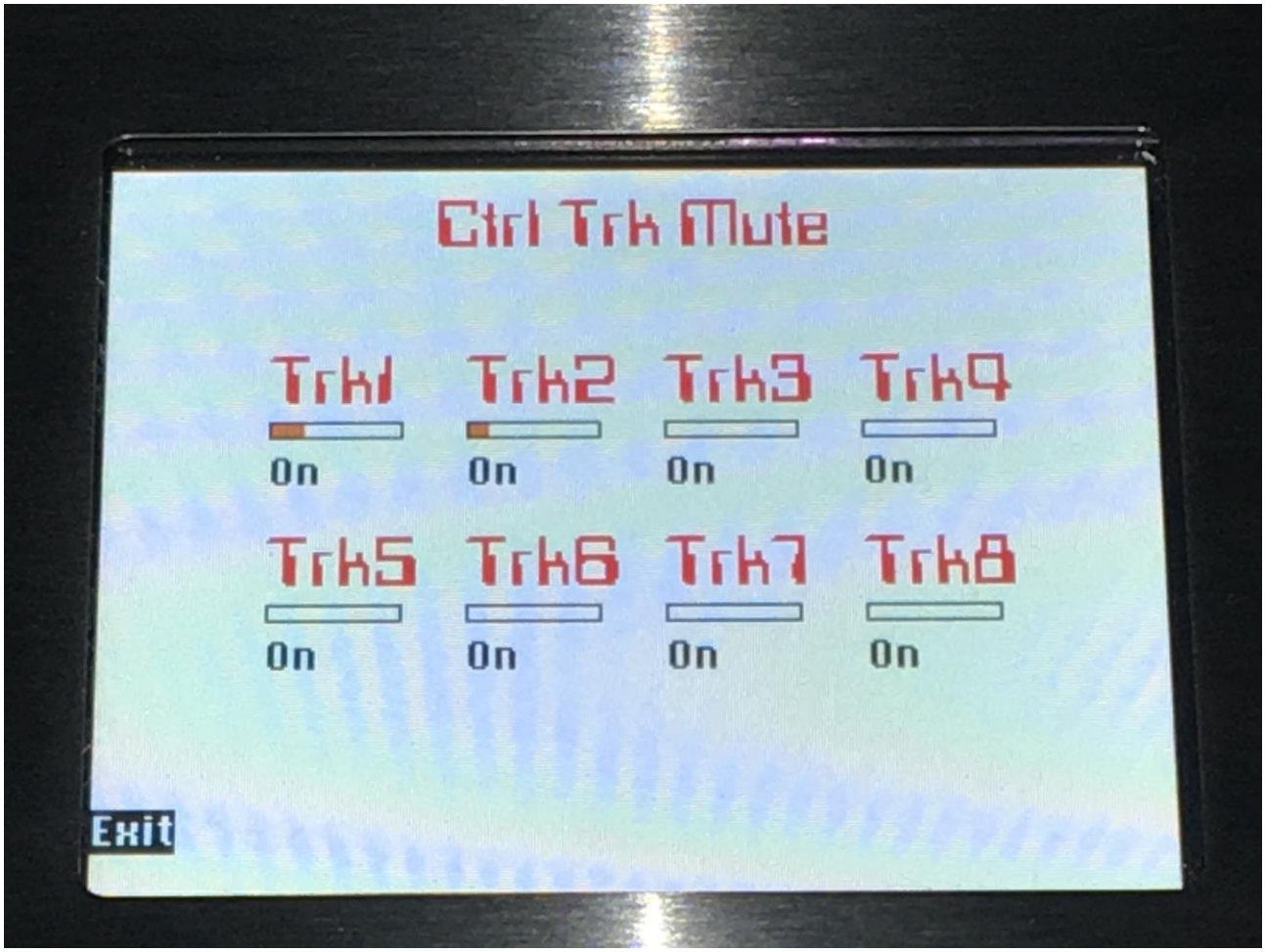


Pushing “Yes” from here, will clear all step on’s of the currently selected controller track.

If you would not wish to do this, push “No”, to exit to the track main page.

Mute/Unmute Tracks

From the track main page, push the **“Mute”** button, to enter this page:



By turning Edit Knob 1 to 8 when on this page, you can turn the output of each of the 8 controller tracks on or off. The bars below the track numbers show the track activity.

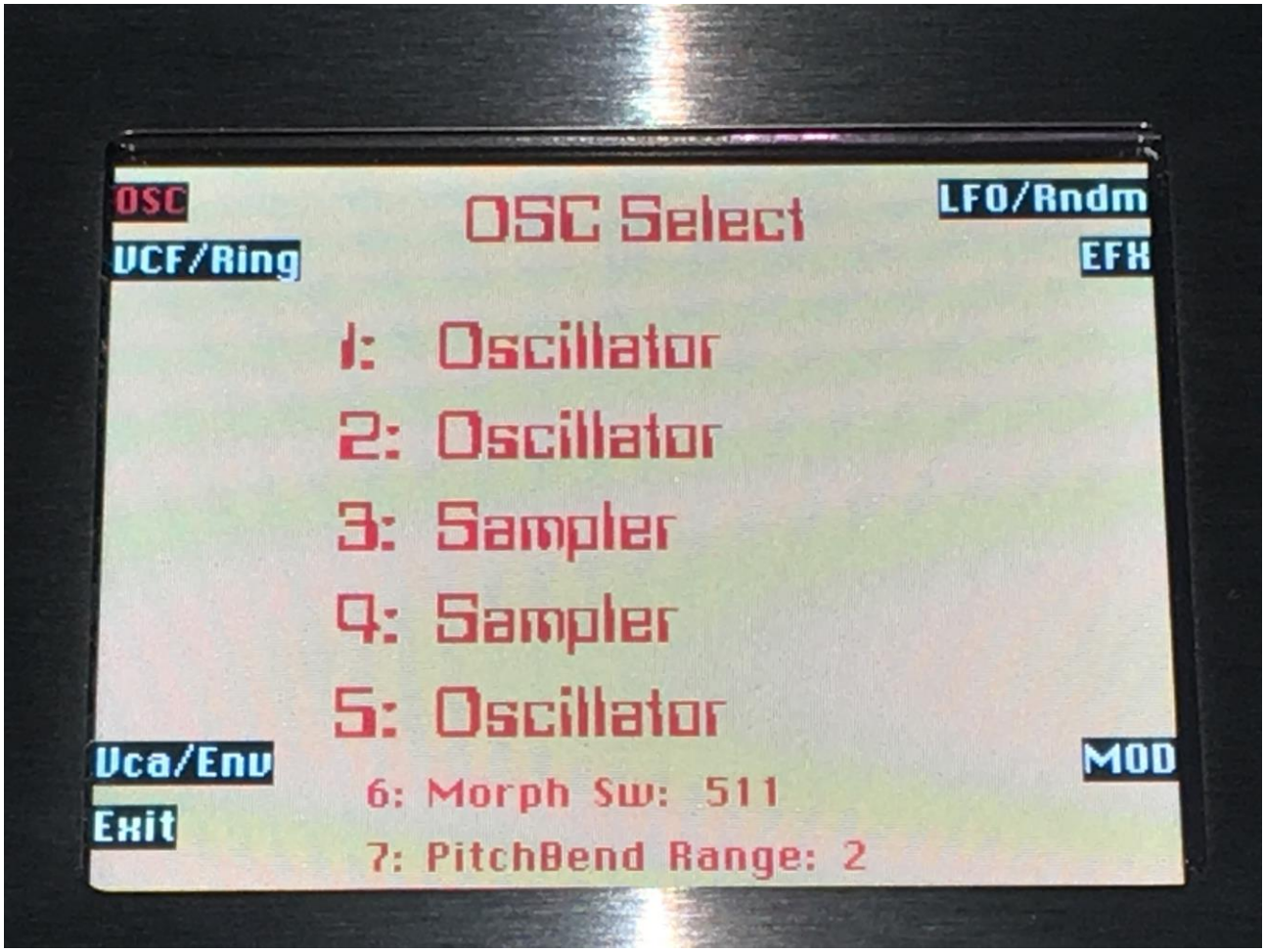
Synth and Sequencer Morphing

On Anamono X it is possible to morph between 2 layers of parameters, layer A and B. For the synth section, the “Morph” knob morphs between the 2 layers, and for the sequencer section, the “X” knob morphs between the 2 layers. The Morph knob transmits and receives MIDI CC 11, and the X knob transmits and receives MIDI CC 10.

To access the parameters of the second layers, on any synth and sequencer page, hit the “Morph Settings” knob, so its blue LED lights up. Now the parameters of layer B will be shown on the screen, and you can edit these, using Edit Knob 1 to 8, just like the layer A parameters.

In order to hear the changes you make on layer B, the Morph or the X knob will have to be turned up.

All continously adjustable parameters can be morphed. Switches are not morphed, but they can be switched at an adjustble position of the Morph/X knob. This position can be set on the synth oscillator group, osc select page, using Edit Knob 6:



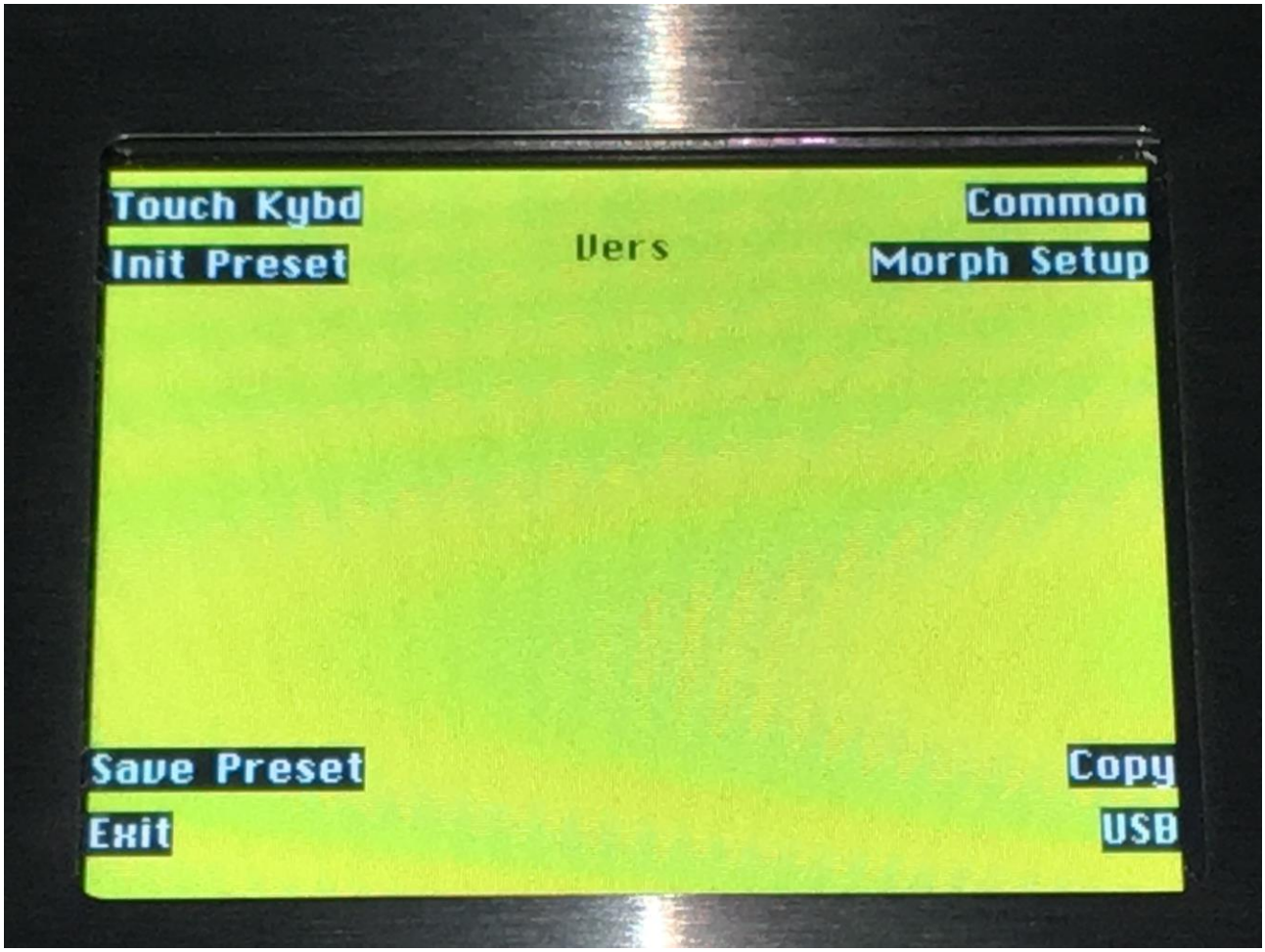
Some switches, like the Oscillator/Sample select swithces, sample select and EFX select can’t be morphed at all. If a parameter cannot be changed, when the Morph Button LED lights up, it cannot be morphed.

All morph settings are stored within each Preset. Remember to save the Preset, to not loose any great sounds.

Morph Setup

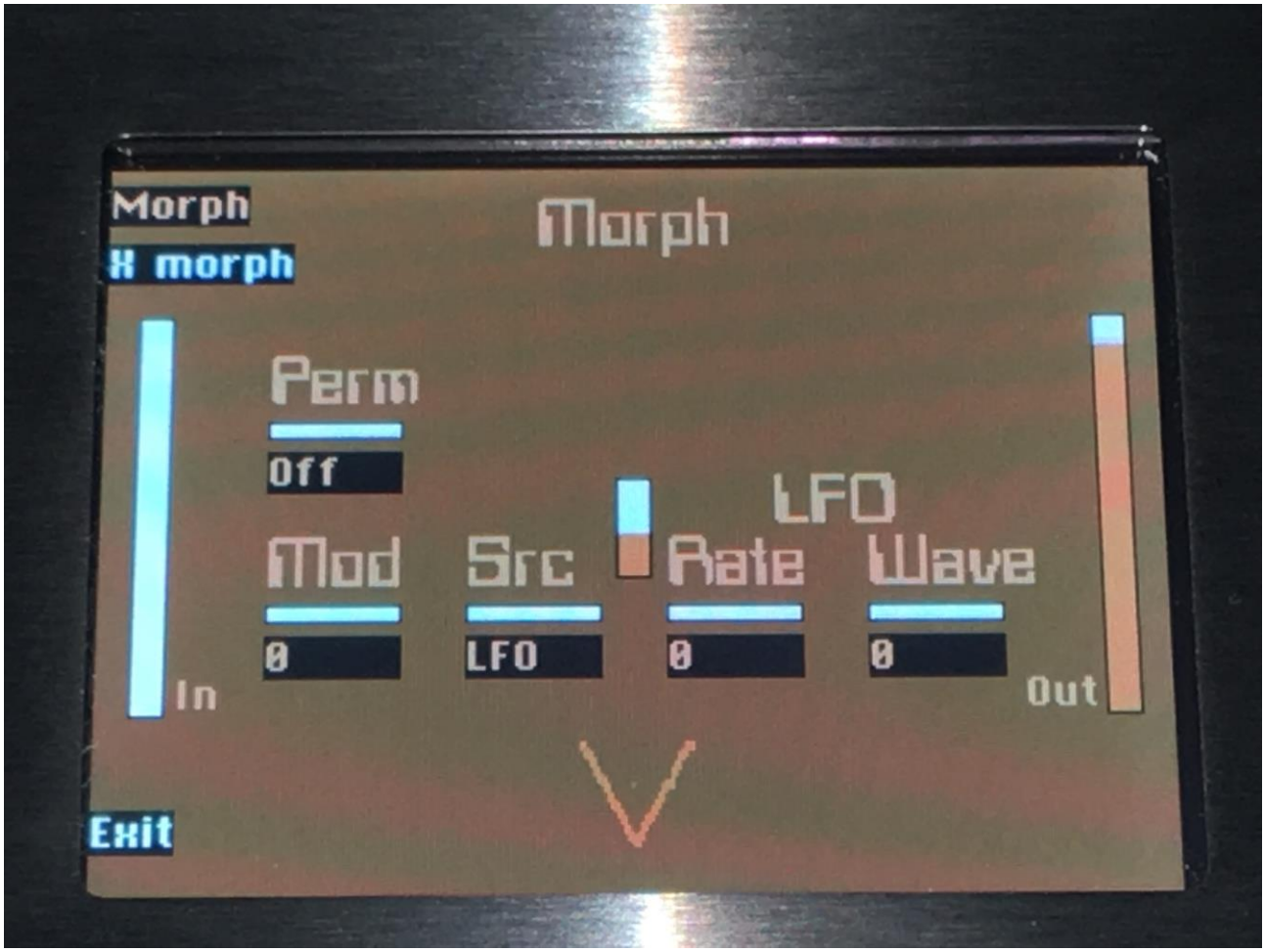
On the Morph Setup page, it is possible to set a permanent morph value, that will override the Morph and X knobs, if you wish to always have a preset playing back in a certain morph or X position.

It is also possible to modulate the morph knobs, using a limited number of modulation sources, including a morph LFO.



To access the Morph Setup page, from the Preset Select screen, push the “More..” Button. From this, push the “Morph Setup” button.

You should now arrive at the Morph Setup page:



Parameters on this page:

Perm: Morph knob permanent value. Will override the value of the Morph knob, and keep morph on the permanent value plus modulation. Range: Off, 1 to 511.

Mod: Morph modulation amount. 0 to 511.

Src: Morph modulation source. Sources are:
-LFO: The morph section LFO. Described below.
-Sq1 to Sq16: Sequencer controller tracks 1 to 16.
-CV1 to CV4: CV inputs 1 to 4.
-Kybd: The last note number value received via MIDI in, on the Anamono X MIDI channel
-Velo: The last note velocity value received via MIDI in, on the Anamono X MIDI channel
-Aft: The last mono aftertouch value received via MIDI in, on the Anamono X MIDI channel
-Knb1: Edit knob 1 value and the last MIDI CC 1 value received via MIDI in, on the Anamono X MIDI channel
-Knb2: Edit knob 2 value and the last MIDI CC 2 value received via MIDI in, on the Anamono X MIDI channel

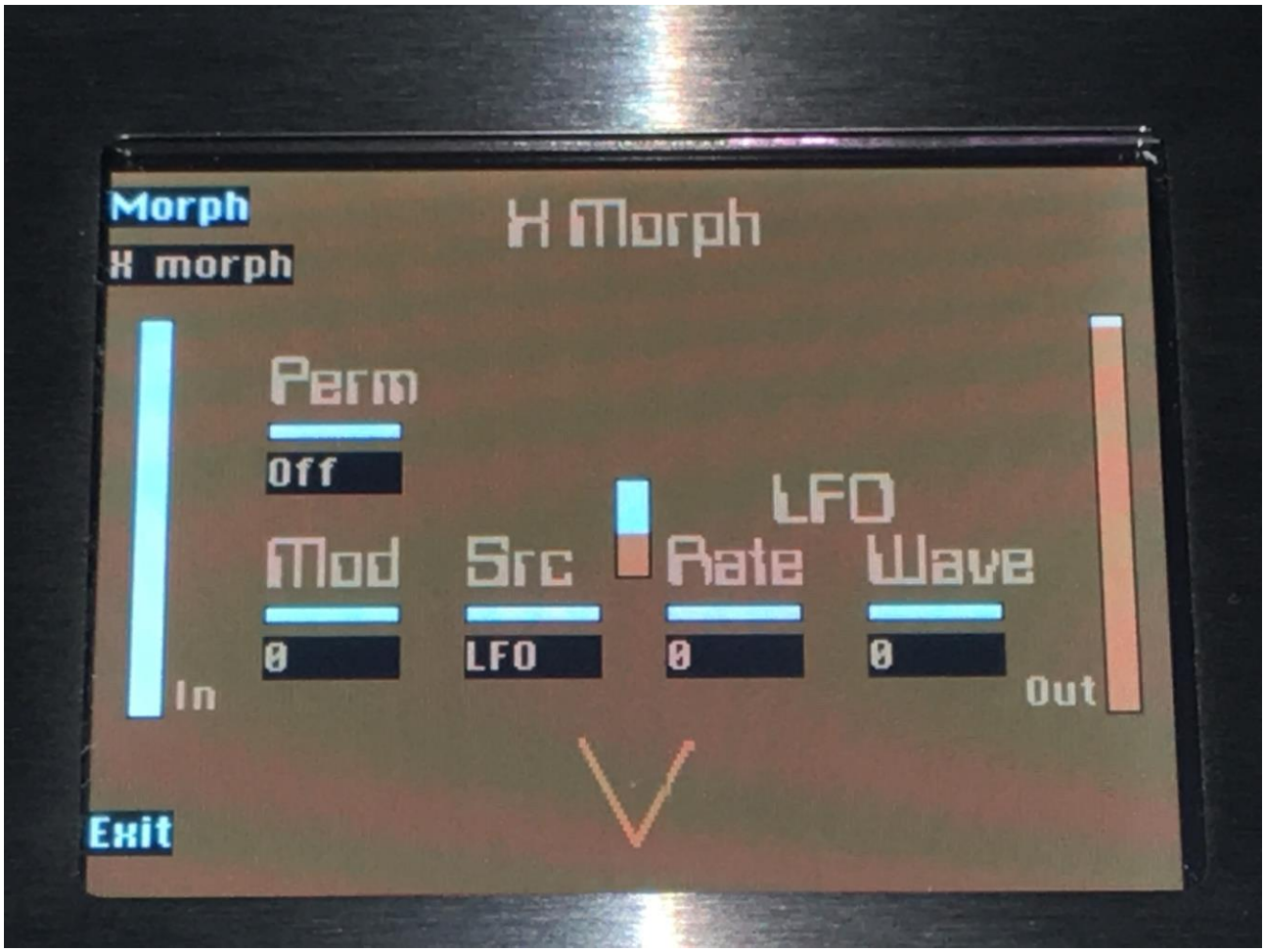
-Knb3: Edit knob 3 value and the last MIDI CC 3 value received via MIDI in, on the Anamono X MIDI channel
-Knb4: Edit knob 4 value and the last MIDI CC 4 value received via MIDI in, on the Anamono X MIDI channel
-Knb5: Edit knob 5 value and the last MIDI CC 5 value received via MIDI in, on the Anamono X MIDI channel
-Knb6: Edit knob 6 value and the last MIDI CC 7 value received via MIDI in, on the Anamono X MIDI channel
-Knb7: Edit knob 7 value and the last MIDI CC 8 value received via MIDI in, on the Anamono X MIDI channel
-Knb8: Edit knob 8 value and the last MIDI CC 9 value received via MIDI in, on the Anamono X MIDI channel

Rate: Morph LFO rate. Sets the tempo of the morph section LFO, that can only modulate the morph parameter.

Wave: Morph LFO output waveform. Morphs between triangle, sawtooth, square, pulse and FM waveforms. The FM waveforms are high frequency waves, that can be used for FM synthesis.

Pushing the **“X Morph”** button, will get you to the Sequencer X Morph setup page. You can, at any time, return to the synth morph setup page, by pushing the **“Morph”** button.

The sequencer X Morph setup page should look like this:



Parameters on this page:

Perm: X Morph knob permanent value. Will override the value of the X knob, and keep X morph on the permanent value plus modulation. Range: Off, 1 to 511.

Mod: X Morph modulation amount. 0 to 511.

Src: X Morph modulation source. Sources are: (The same as for Morph, except for the sequencer controller tracks, since these are morphed by this function)
-LFO: The X morph section LFO. Described below.
-CV1 to CV4: CV inputs 1 to 4.
-Kybd: The last note number value received via MIDI in, on the Anamono X MIDI channel
-Velo: The last note velocity value received via MIDI in, on the Anamono X MIDI channel
-Aft: The last mono aftertouch value received via MIDI in, on the Anamono X MIDI channel

-Knb1: Edit knob 1 value and the last MIDI CC 1 value received via MIDI in, on the Anamono X MIDI channel
-Knb2: Edit knob 2 value and the last MIDI CC 2 value received via MIDI in, on the Anamono X MIDI channel
-Knb3: Edit knob 3 value and the last MIDI CC 3 value received via MIDI in, on the Anamono X MIDI channel
-Knb4: Edit knob 4 value and the last MIDI CC 4 value received via MIDI in, on the Anamono X MIDI channel
-Knb5: Edit knob 5 value and the last MIDI CC 5 value received via MIDI in, on the Anamono X MIDI channel
-Knb6: Edit knob 6 value and the last MIDI CC 7 value received via MIDI in, on the Anamono X MIDI channel
-Knb7: Edit knob 7 value and the last MIDI CC 8 value received via MIDI in, on the Anamono X MIDI channel
-Knb8: Edit knob 8 value and the last MIDI CC 9 value received via MIDI in, on the Anamono X MIDI channel

Rate: X Morph LFO rate. Sets the tempo of the X morph section LFO, that can only modulate the X morph parameter.

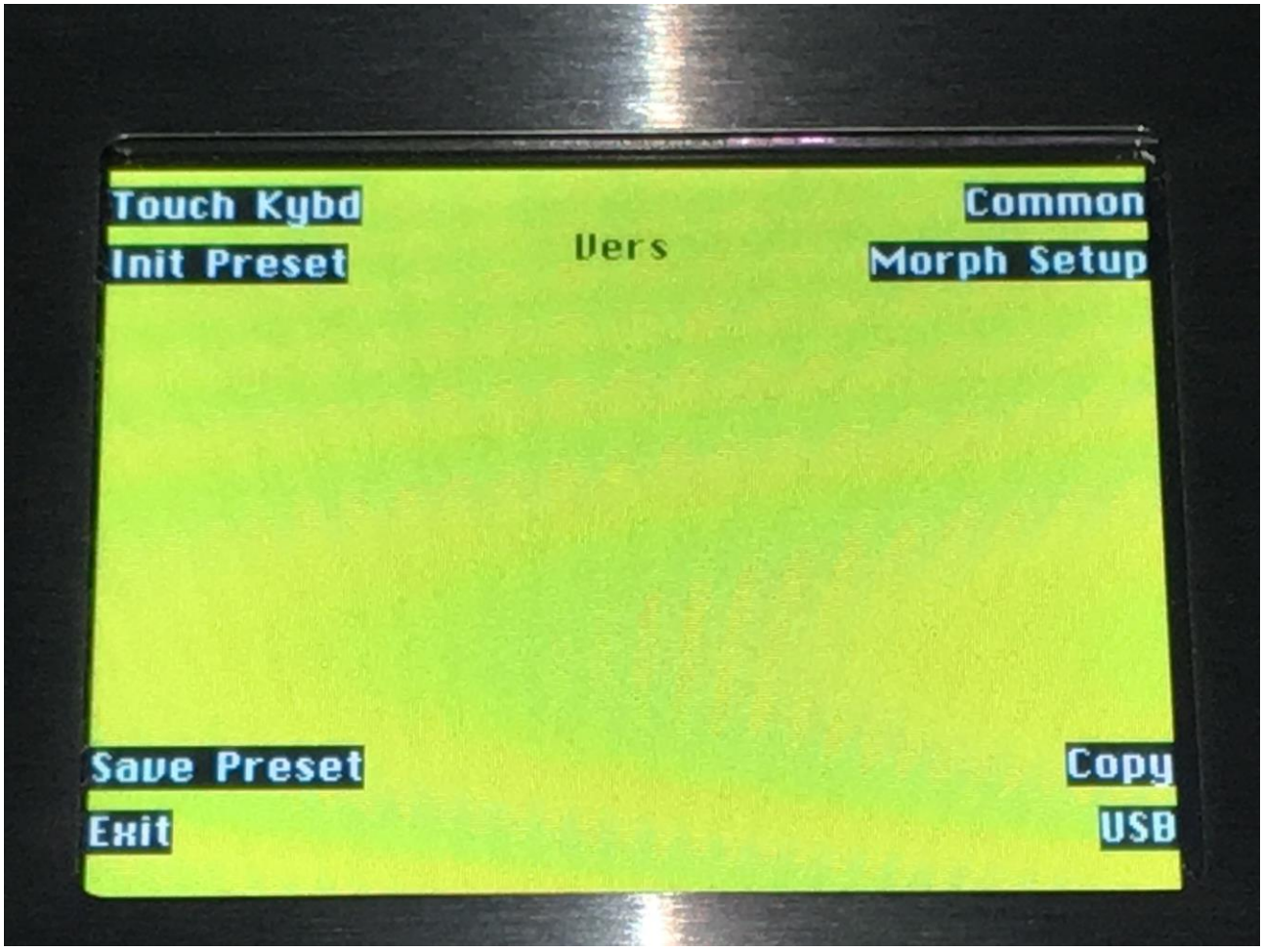
Wave: X Morph LFO output waveform. Morphs between triangle, sawtooth, square, pulse and FM waveforms. The FM waveforms are high frequency waves, that can be used for FM synthesis.

Morph Layer Copy

If you would like to morph between 2 specific sounds, it is possible to copy these from any other preset, to the current presets morph layer A and B.

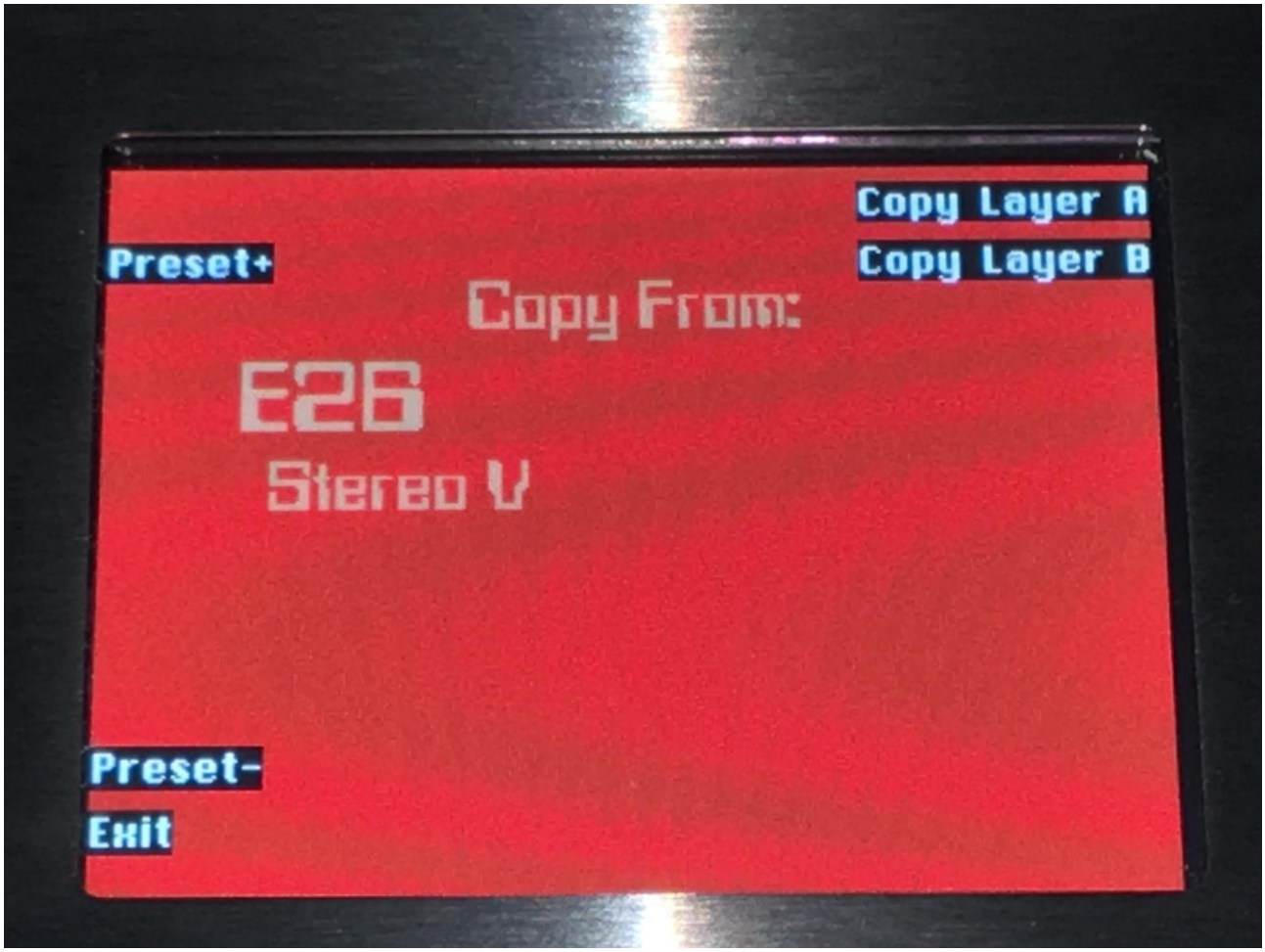
There are though some limitations:
-Because of the limited morphing of switches, you should copy the most complex sound to layer A.
-The triggers setup is not morphed at all, so the sound that uses most triggers, should be placed on layer A.
-If you attempt to morph from an oscillator to a sampler, the sampler will stay in oscillator mode, and use the oscillator settings. If you morph from a sampler to an oscillator, it will stay in sampler mode, and use the sampler settings.
-If you attempt to morph between 2 samplers, that has 2 different samplings selected, only the sampling selected by the sampler of layer A will play back.
-If you attempt to morph between 2 effects processors, that has 2 different effects selected, only the effect selected in layer A will be active.

To access the morph layer copy function, from the Preset Select screen, push the “More..” button, to enter this screen:



Push the “Copy” button.

You should now enter the Copy Morph Layer screen:



Push the Select+/Select- buttons, to select the preset you would like to copy a morph layer from. Push the “Copy Layer A” or “Copy Layer B” button, depending on what layer you would like to copy from.

The destination for the copy, will always be the currently selected preset, and the layer that is currently selected by the “Morph Settings” button.

The copy is only performed to the preset edit buffer. In order to keep the result, the preset must be stored, as described in the “Save Preset” section later in this manual.

CV Inputs

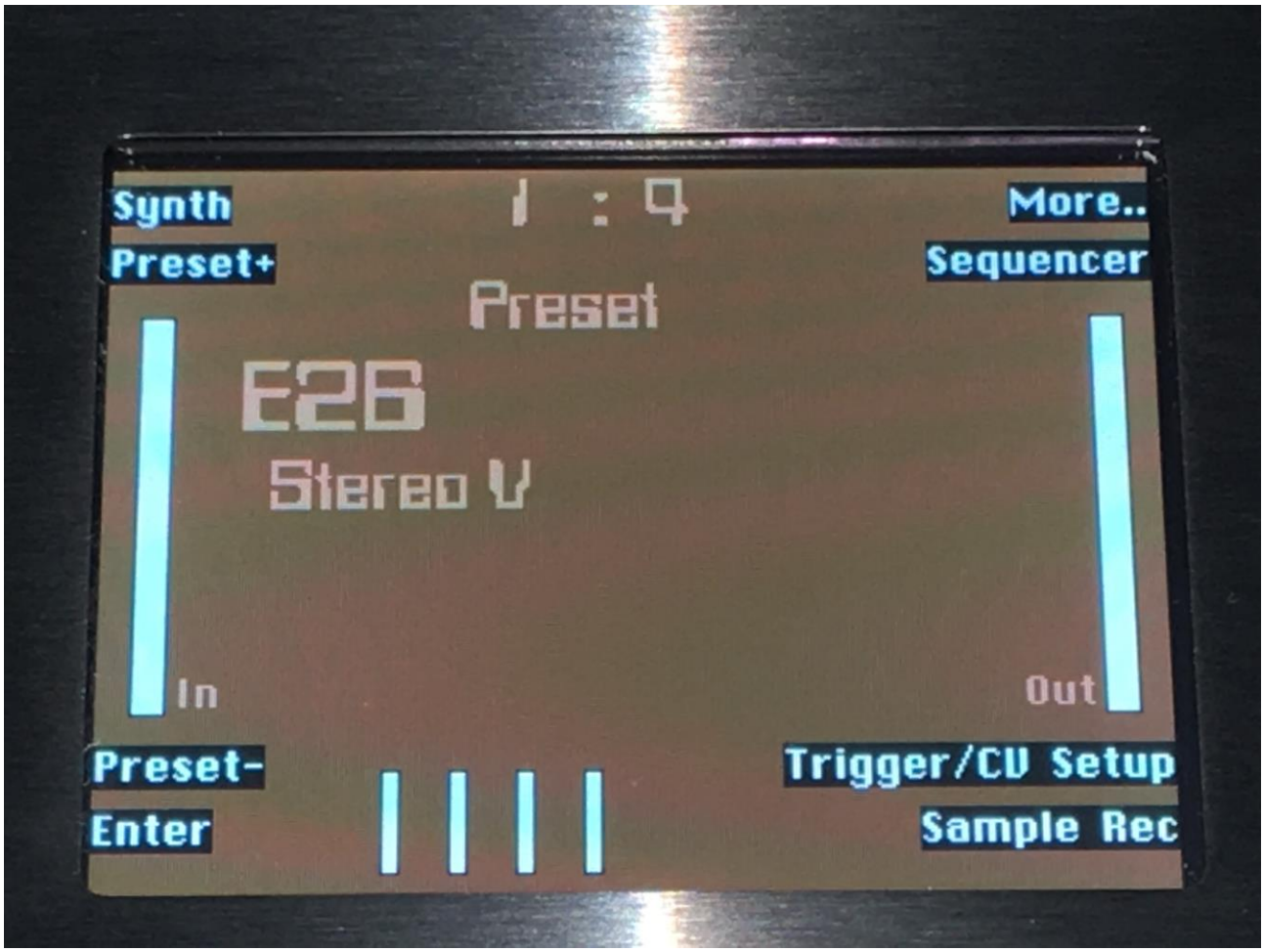
Anamono X has 4 CV inputs. These goes directly to the modulation bus, and can be selected as modulation sources, for any parameter that can be modulated.

Anamono X accepts CV voltages of up to +/- 15 volts. The voltage range of each CV input can be set up to a number of different configurations.

It is also possible to set up each CV input as a trigger for any of the 8 triggers of Anamono X.

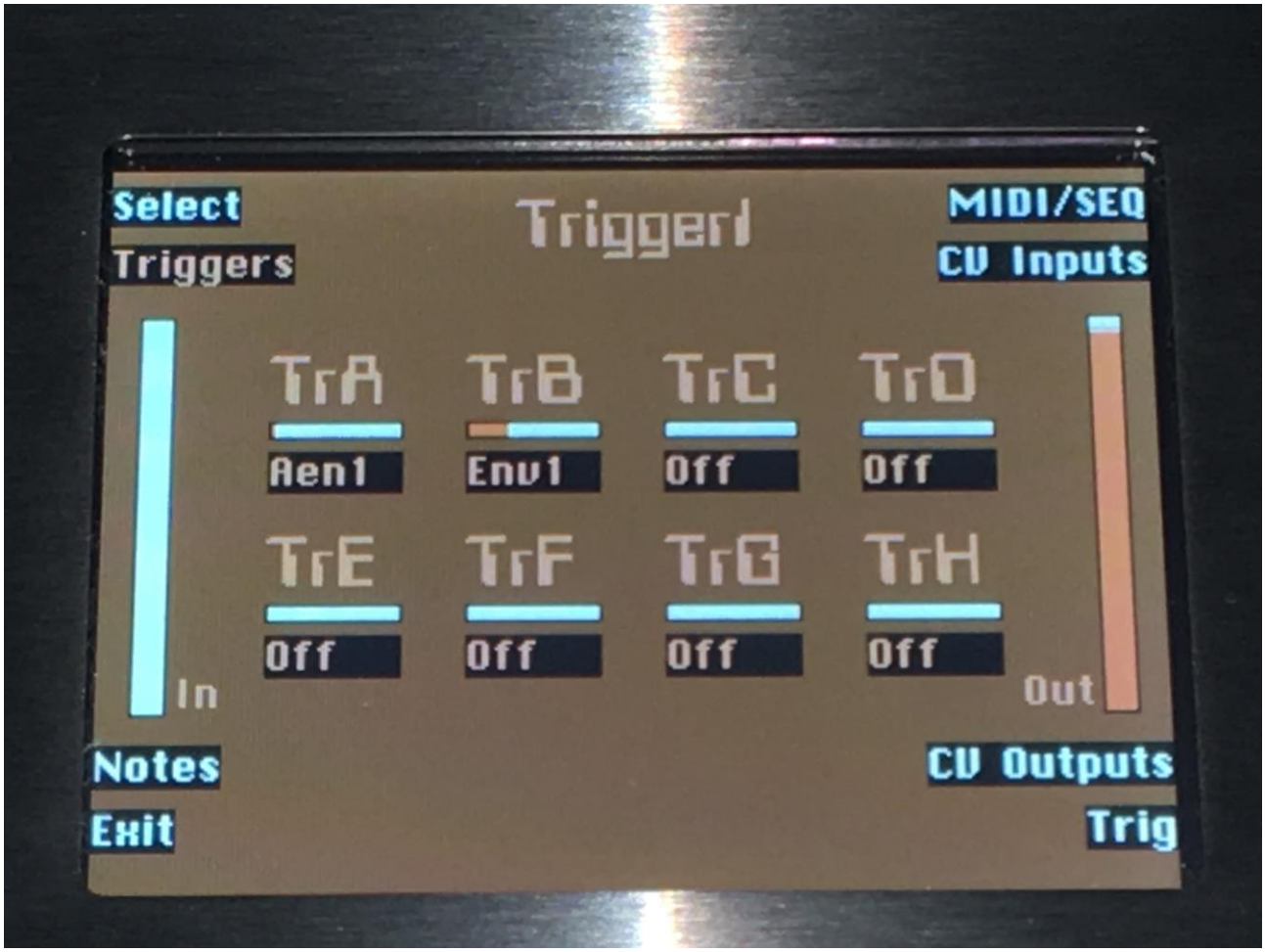
Remember to save all edits you do to the CV Inputs. Else they will be lost when you change preset, or turn Anamono X off. See how to in the ”Save Preset” section.

To set up the CV inputs:



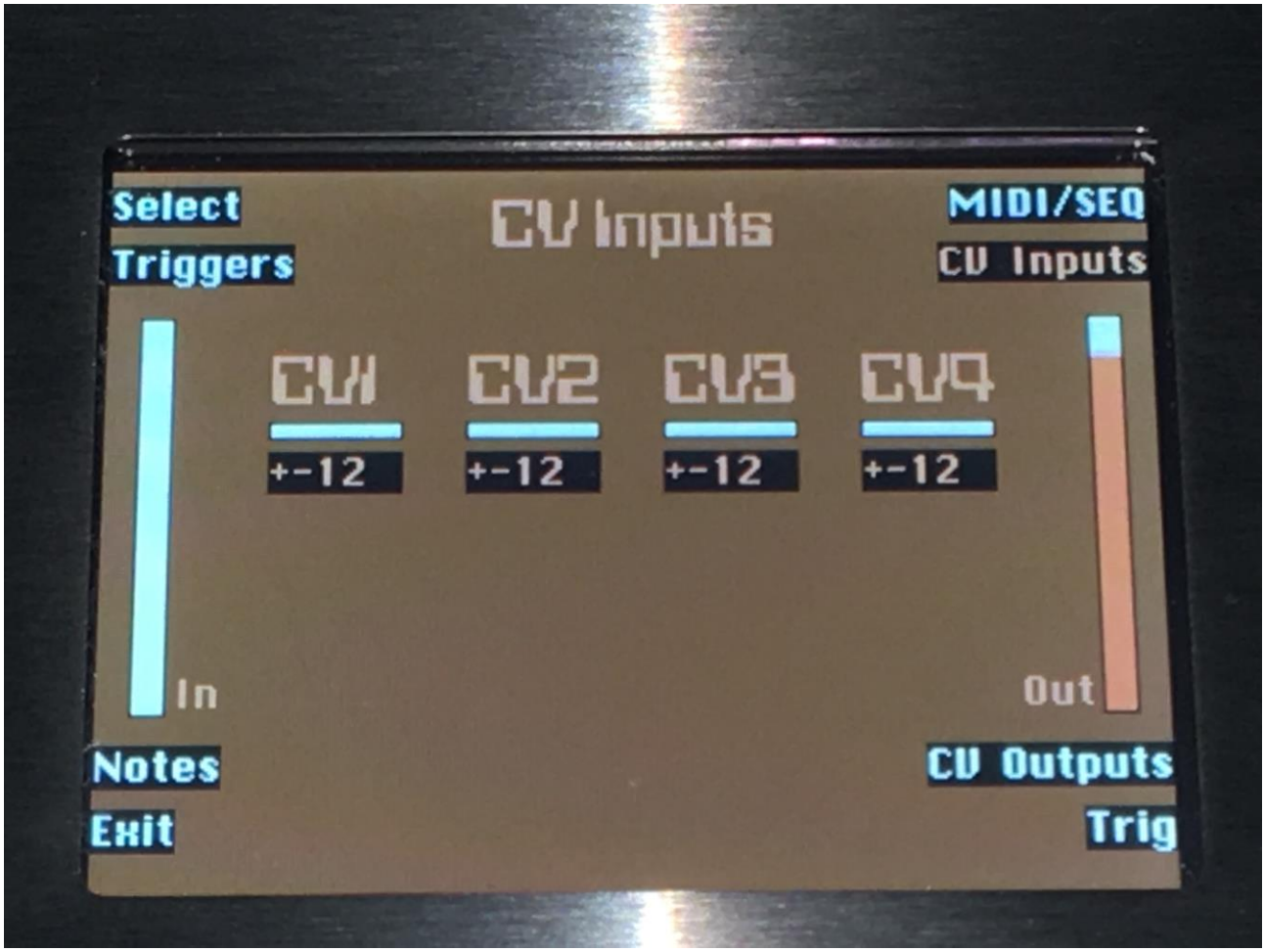
From the Preset Select screen, push the “Trigger/CV Setup” button.

Now you should enter the triggers setup page.



From here push the “CV Inputs” button.

This will take you to the CV Inputs setup page:



Here you can, by turning Edit Knob 1 to 4, set up each CV input. The possibilities for each input are:

+-12: The CV input will work in the range of +/- 12 volts –standard eurorack voltages.
+12: The CV input will work in the range of 0 to 12 volts.
+-5: The CV input will work in the range of +/- 5 volts.
+5: The CV input will work in the range of 0 to 5 volts.
Trg1: The CV input will work as a trigger input for trigger 1. On the modulation bus, it will work in the +/- 12 volts range.
Trg2: The CV input will work as a trigger input for trigger 2. On the modulation bus, it will work in the +/- 12 volts range.
Trg3: The CV input will work as a trigger input for trigger 3. On the modulation bus, it will work in the +/- 12 volts range.
Trg4: The CV input will work as a trigger input for trigger 4. On the modulation bus, it will work in the +/- 12 volts range.
Trg5: The CV input will work as a trigger input for trigger 5. On the modulation bus, it will work in the +/- 12 volts range.
Trg6: The CV input will work as a trigger input for trigger 6. On the modulation bus, it will work in the +/- 12 volts range.

Trg7: The CV input will work as a trigger input for trigger 7. On the modulation bus, it will work in the +/- 12 volts range.
Trg8: The CV input will work as a trigger input for trigger 8. On the modulation bus, it will work in the +/- 12 volts range.

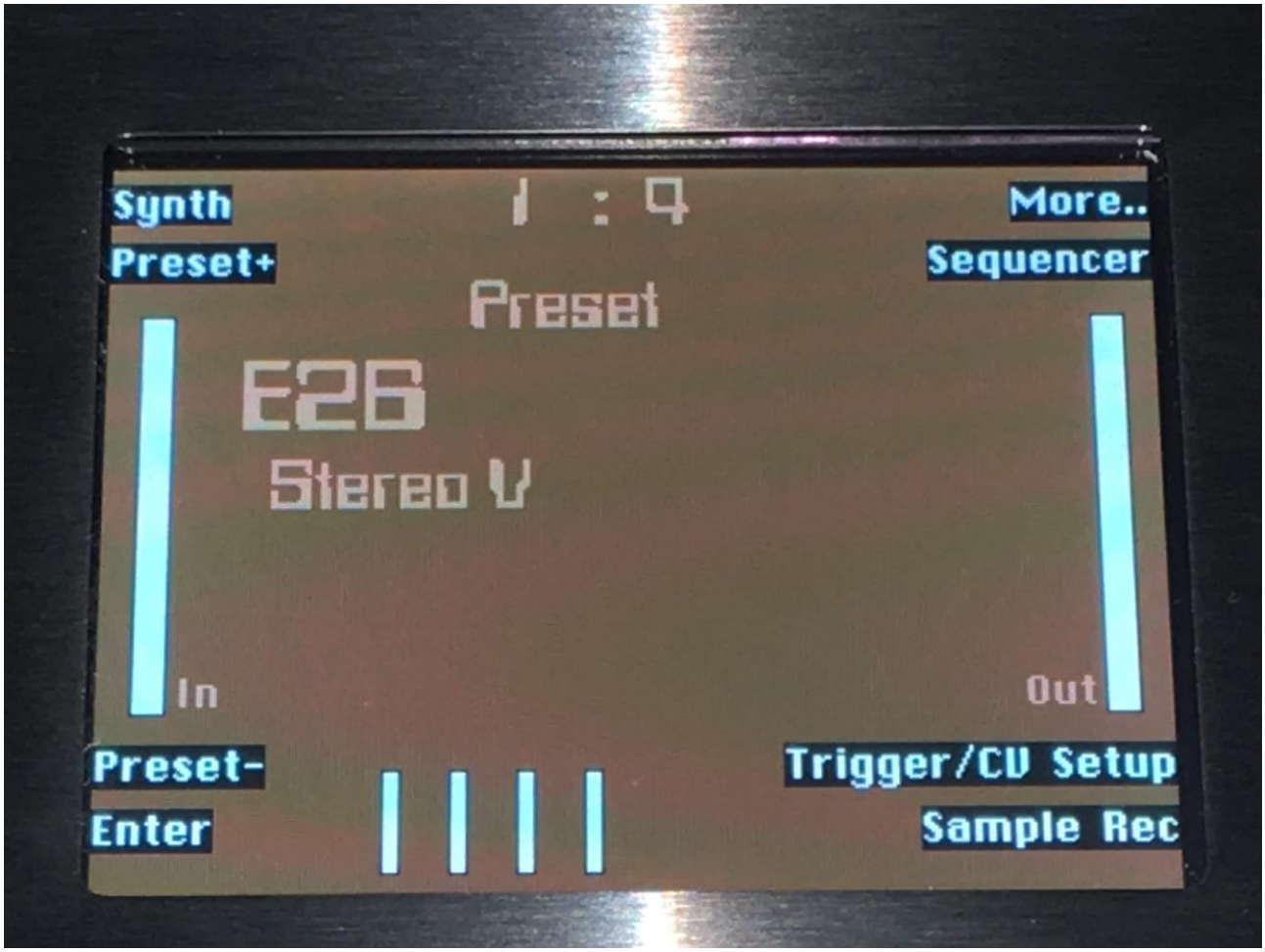
CV Outputs (Optional)

It is possible to have 4 CV outputs installed in Anamono X. If installed, these are located right below the CV Inputs.

From each of these it is possible to control external analog gear with both a static voltage and a modulation source at the same time. The setup of these is stored within each Anamono X preset, so it is possible to get the external analog gear memory!

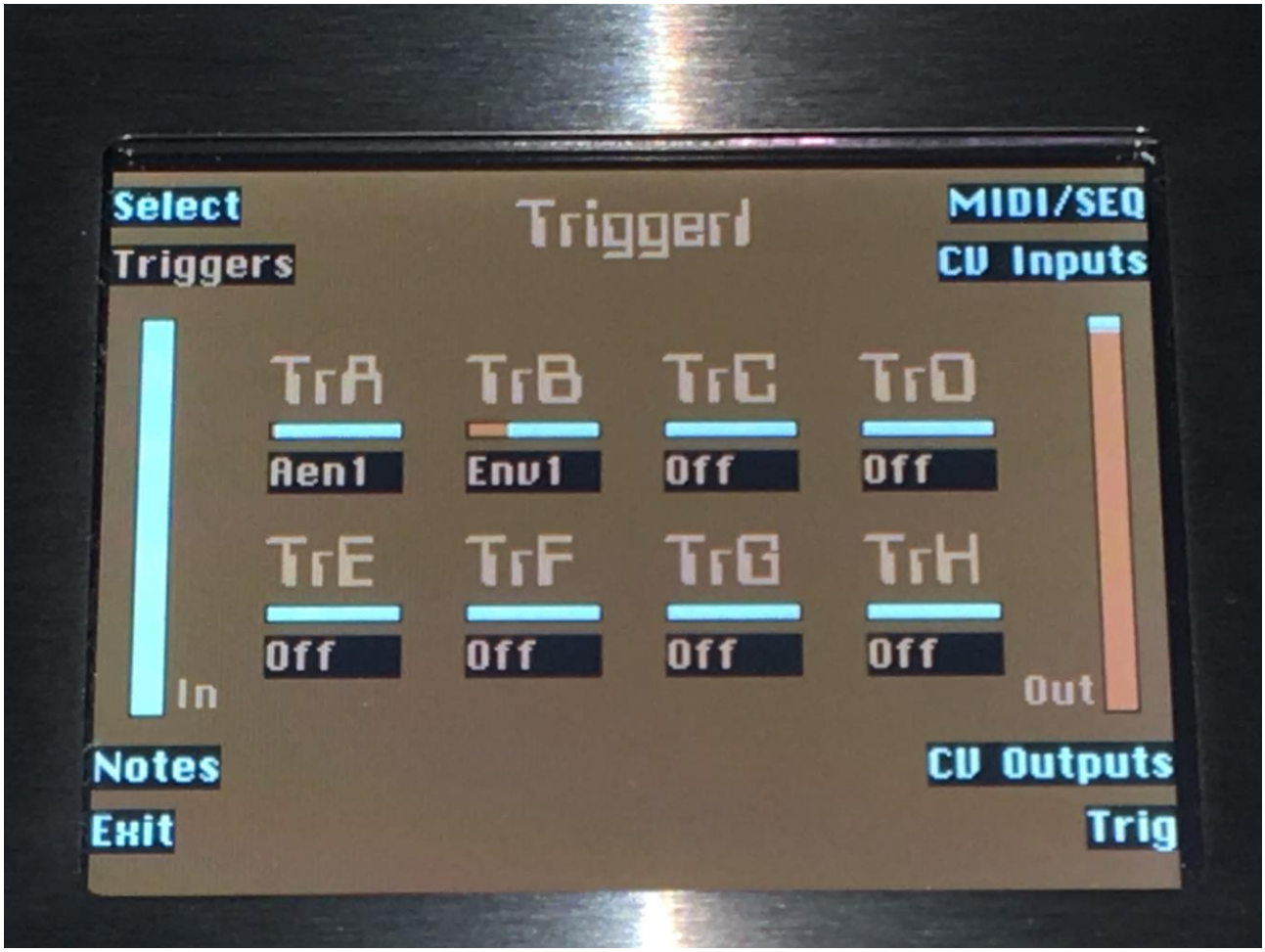
Remember to save all edits you do to the CV Inputs. Else they will be lost when you change preset, or turn Anamono X off. See how to in the ”Save Preset” section.

To set up the CV outputs:



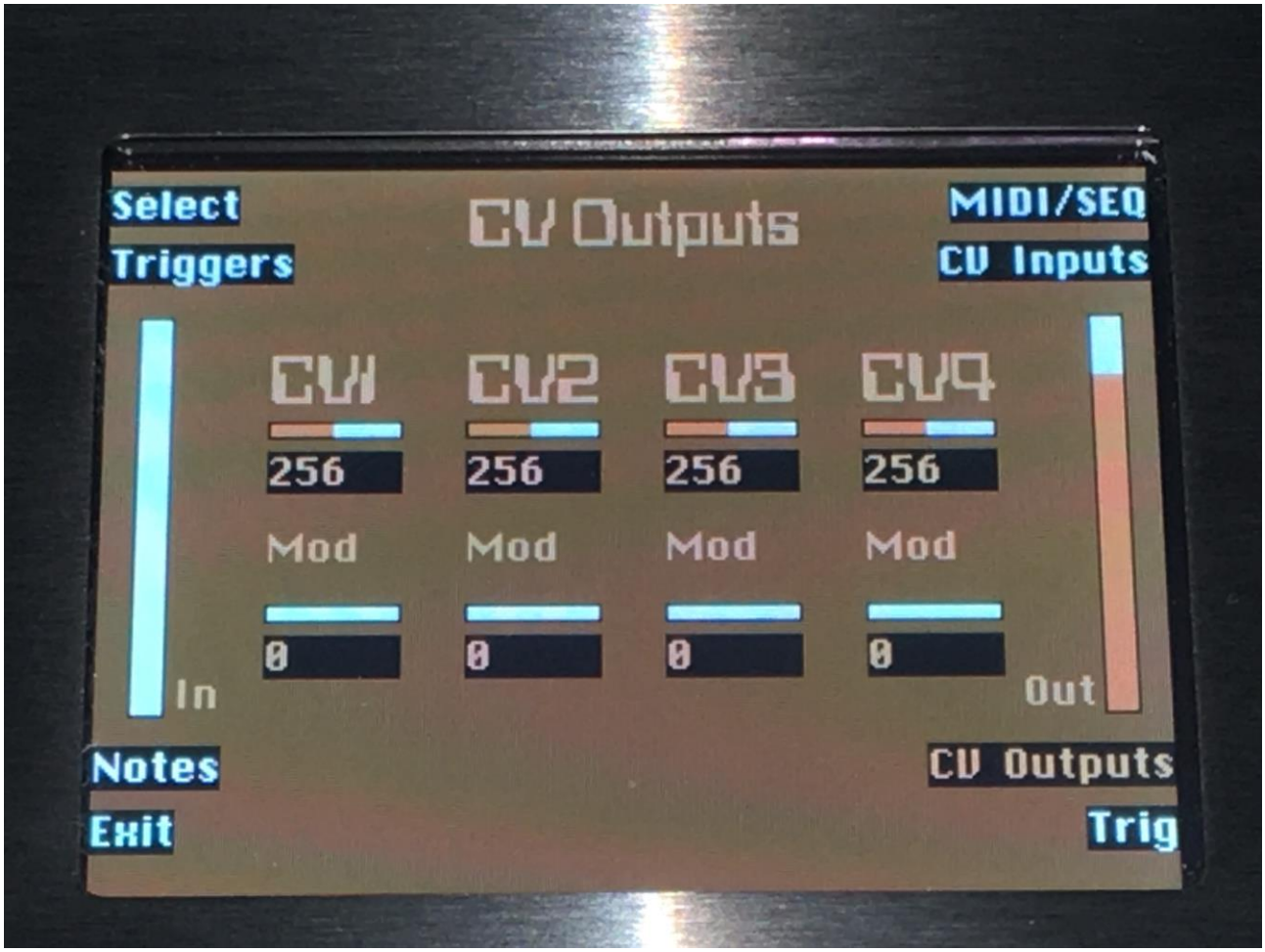
From the Preset Select screen, push the “Trigger/CV Setup” button.

Now you should enter the triggers setup page.



From here push the “CV Outputs” button.

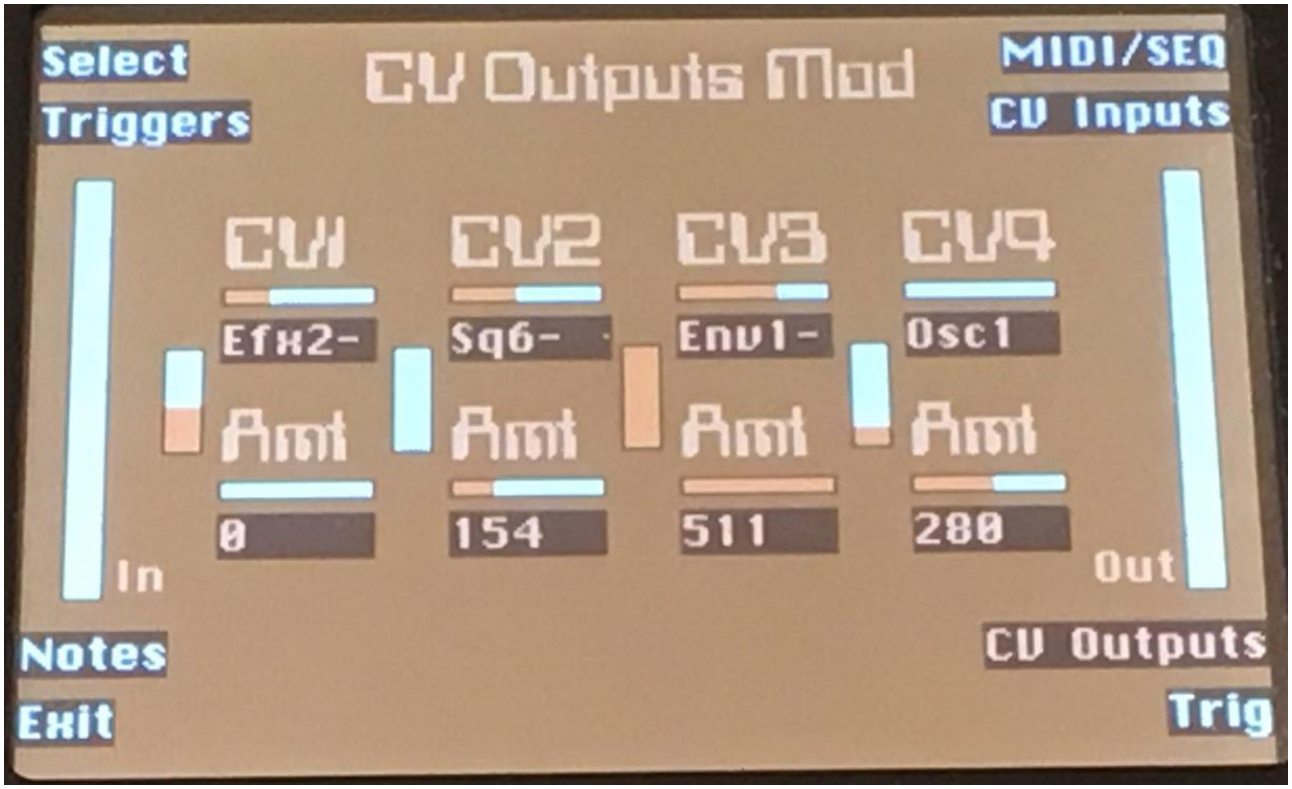
This will take you to the CV Outputs setup page:



On this page, you can by turning Edit Knob 1 to 4, set a static voltage to each CV output. This is useful, if you for instance, are controlling cutoff or resonance of an external filter, or tune of an external oscillator.

With Edit Knob 5 to 8, you can adjust the modulation amount for each CV output. To select the modulation source for each CV output, push the “CV Outputs” button one more time.

You will now enter this page:



Here you can, by Edit Knob 1 to 4, select the modulation source for each CV output. For a complete list of modulation sources, see the list in the start of the synth section in this manual.

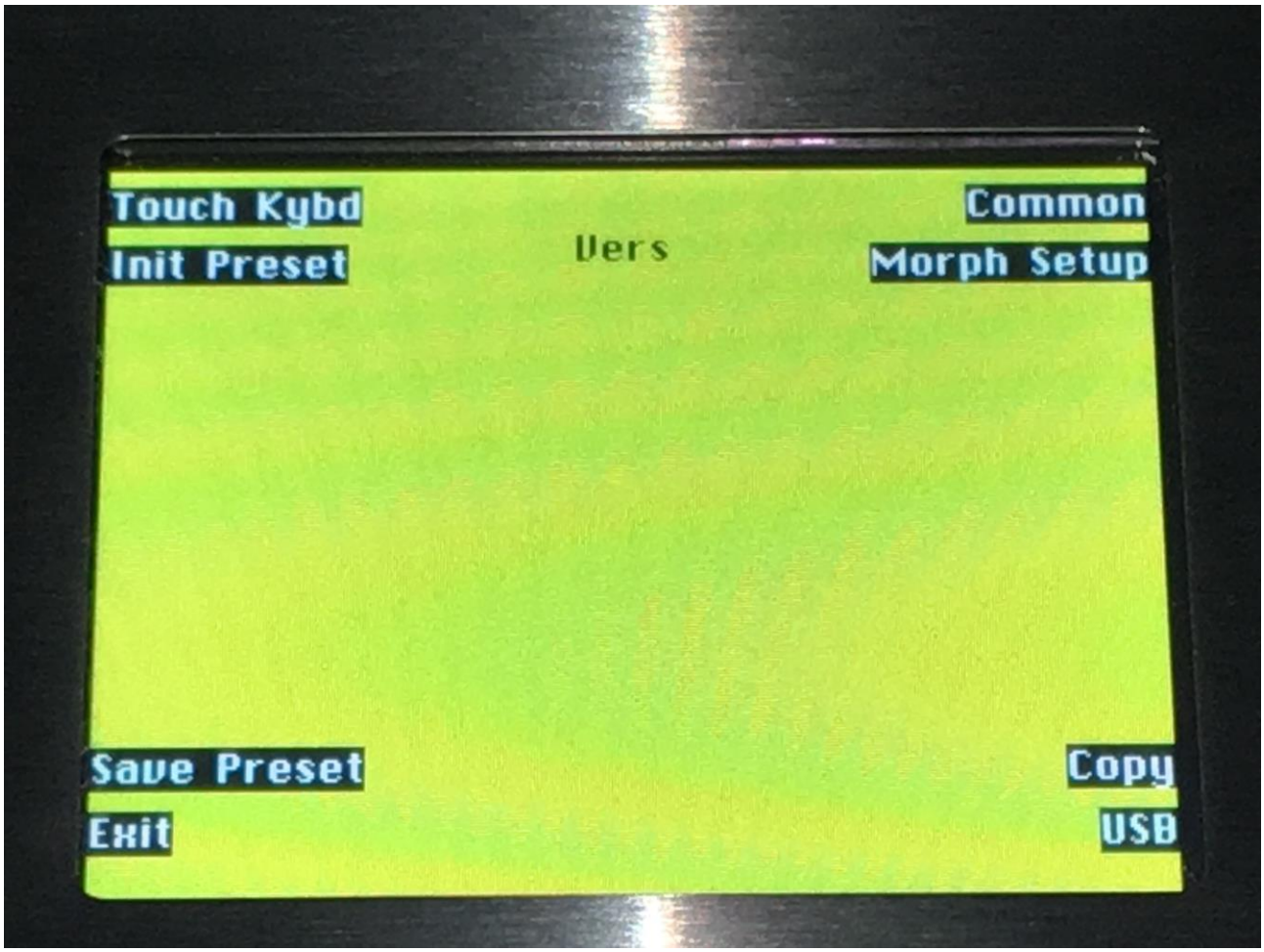
With Edit Knob 5 to 8, you can adjust the modulation amount for each CV output.

Save Preset

When you have created a new preset, it should be saved for later recall. If you do not save your presets, they will be lost forever, as soon as you select another preset, or turn off your Anamono X.

A preset that is saved on Anamono contains all the data previously described in this manual:
-All sequencer data
-All synthesizers settings
-All trigger settings
-All CV in/out settings

From the Preset Select screen, push the ”More..” button, to enter this page:



From this page, push the ”Save Preset” button.

You should now enter this page:

Push the ”Preset+” and ”Preset-” buttons, to select the preset location, on which you would like to save your new preset. Holding one of these buttons down, will scroll through the preset locations. Holding both down, will scroll fast through the locations. Preset number and name is shown for presets that are already saved. If you save your new preset on such a location, the old preset will be overwritten. On preset locations, where a preset has not yet been saved, the name will be shown as ”<empty>”.

Push the ”Next” button, when you have found the right location.

Use edit knob 1 to 8 to select the first 8 letters of the name for your new preset.

Press ”Next” when you are done.

Use edit knob 1 to 8 to select the last 8 letters of the name for your new preset.

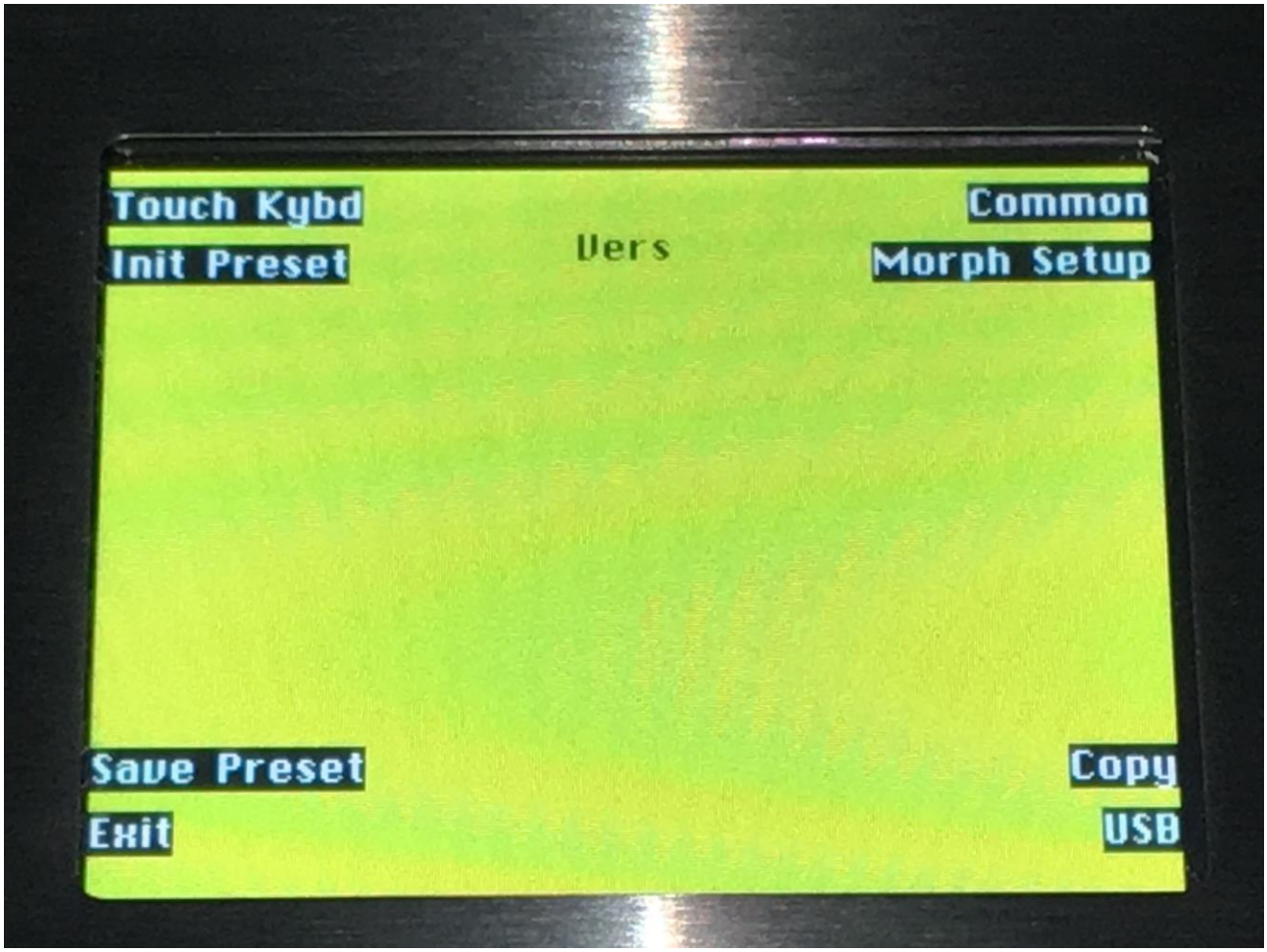
Press ”Save” when you are done. Your preset will now be saved, and Anamono X will exit from the save pages.

Initialize Preset

If you would like to start out from scratch, with a completely clean preset, this is the function to use.

Please notice that the preset on the selected location are not immediately wiped out. It will not be overwritten until you save the new preset, so even though you have initialized it, it can still be recalled, if you should regret, by selecting another preset, and then select this one again.

From the Preset Select screen, push the ”More..” button, to enter this page:



Push the ”Init Preset” button.

Anamono X will now ask you to confirm.

Press ”Yes” to initialize the currently selected preset and return to the previous page, or press ”No” just to exit, without initializing.

Song Mode

It is possible to arrange chained playback of Presets in 1024 Song locations.

Each Song can have up to 128 steps. For each Song step a Preset can be selected, and it can be set how many times track one of the preset should play back, until it advances to the next song step.

If the last step of the Song is set to ”End”, playback will stop, when the Song has played back the last preset. If the last step of a Song is set to ”Loop”, it will jump back to step 1, and continue playback, after the last preset has played.

Songs can be realtime recorded, simply by hitting the ”Rec” button on the song main page and the ”Play” button, and select the presets you want in your song.

Songs can also be recorded/edited by putting the Preset numbers and number of times to play back, into a list.

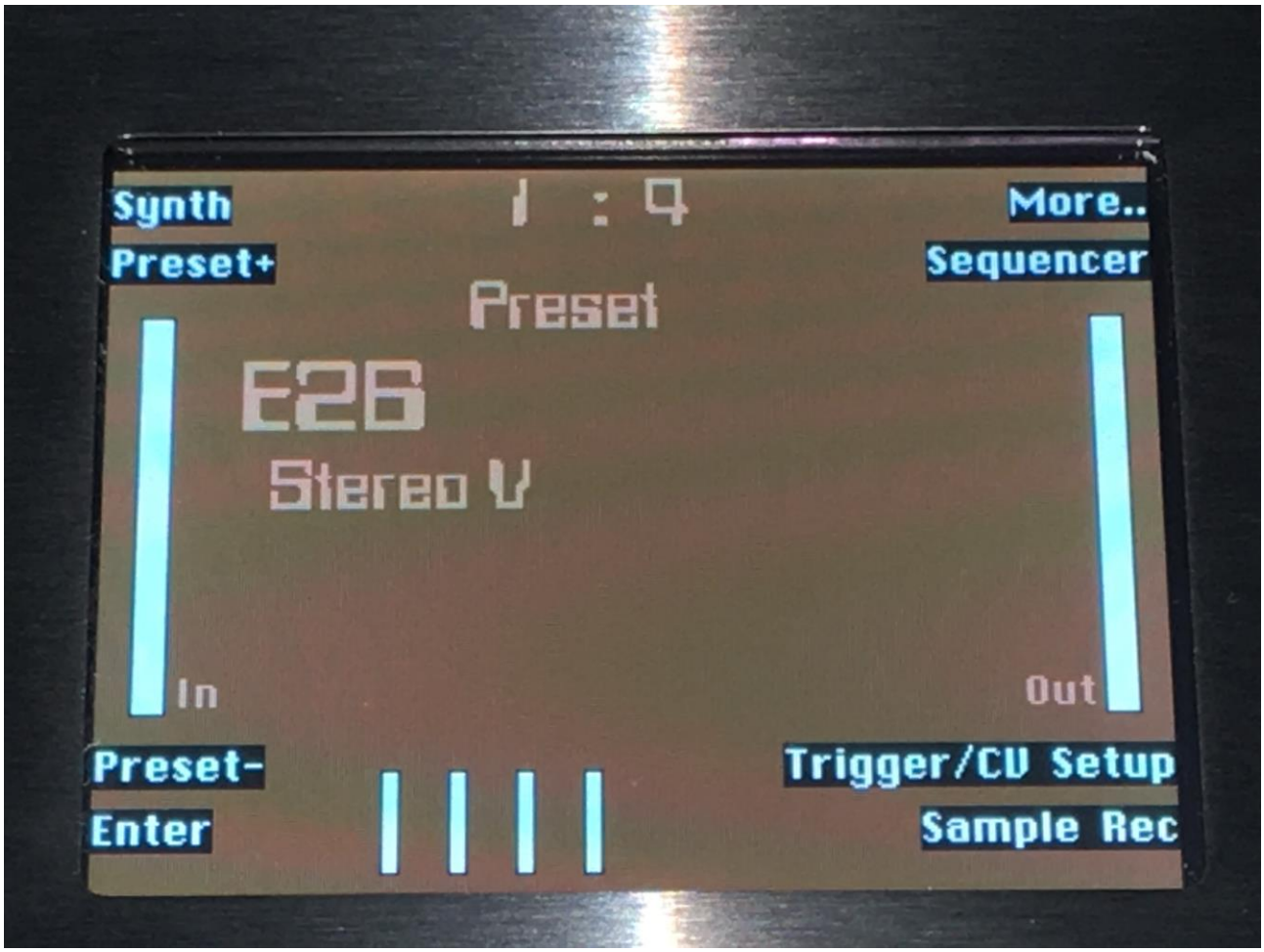
Any presets can be used in any songs.

If you , for some reason, maybe in a live situation, needs a preset to play back more or less times than it is programmed to, the Anamono X song mode has a ”Halt” button, which will stop the song sequencer from incrementing to the next song step, and keep playing back the currently playing preset, until Halt is switched off again.

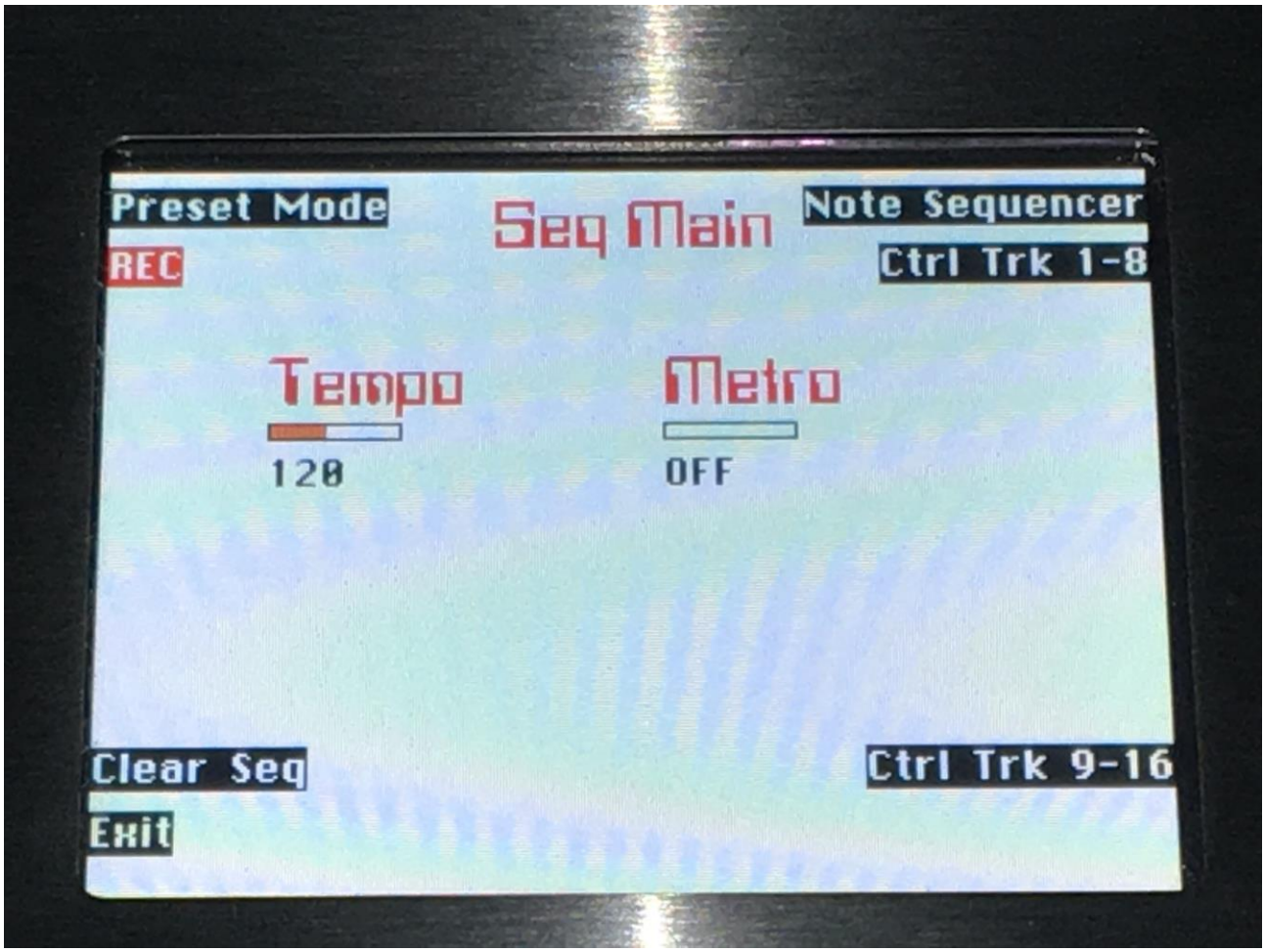
In song mode you still have access to edit all preset synth parameters, in the currently playing preset, but you can’t immediately save any changes you make, since in song mode, you can only save the song. Here the ”Halt” button comes in handy again. To save the changes you have made to a preset, hit the Halt button, so its LED is lit, stop the sequencer playback and go back to preset mode. The halted and edited preset will now show, and you can save the changes.

Accessing Song Mode

If you would like to make a new song from scratch, it can be a good idea to select the preset you would like to have on the first song step, from the preset select page, before you enters song mode. This is not something you have to do, I have just experienced, when testing this, that it makes things a bit easier. When you select a non-recorded empty song, the last selected preset will automatically be placed on song step 1.

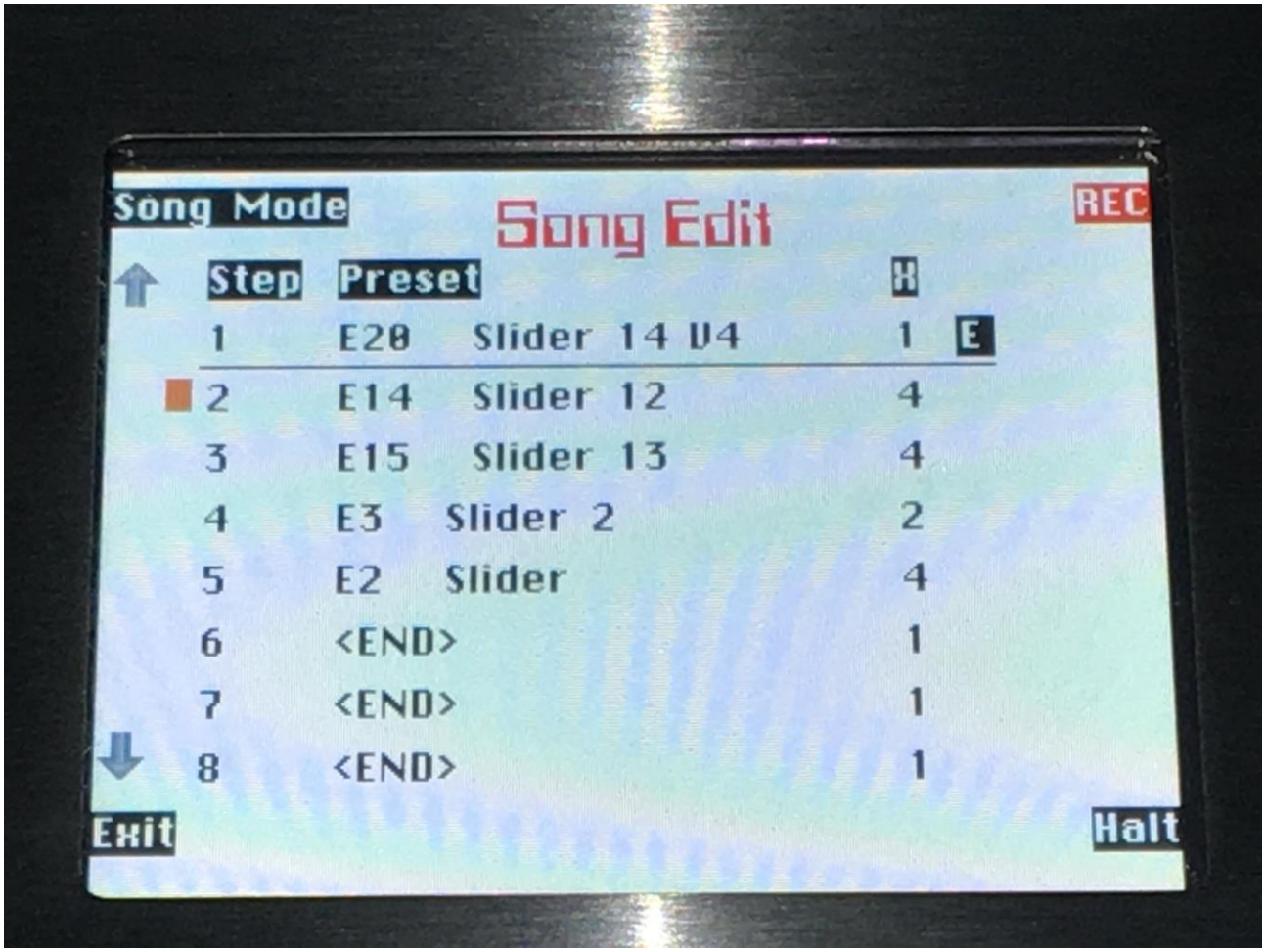


From the Preset Select page, hit the ”Sequencer” button.



On the sequencer main page you will, in the top of the left row, find a button that says ”Preset Mode”. Please hit this, after making sure, that the sequencer is stopped.

The Song Edit Page



Now, the button that you pushed, will change its name to ”Song Mode”, and a completely new page will appear. This is the Song Edit page.

On the Song Edit page, you have an overview of the programmed song steps, and the possibility of editing these.

By hitting the 2 arrow buttons, you can select a song step for editing. The selected step is shown, by being underlined, and with an “E” in a black box to the right of it. The little square on the left, is showing what song step is currently being played back.

For each song step, the song step number is shown, the preset number and name, and the number of times track 1 will play back (under the X).

To edit a song step, use edit knob 1 to select <End>, preset bank A to P, or <Loop>. <End> will make song playback stop, when it reaches that step, <Loop> will make it jump back to song step 1, and start all over again.

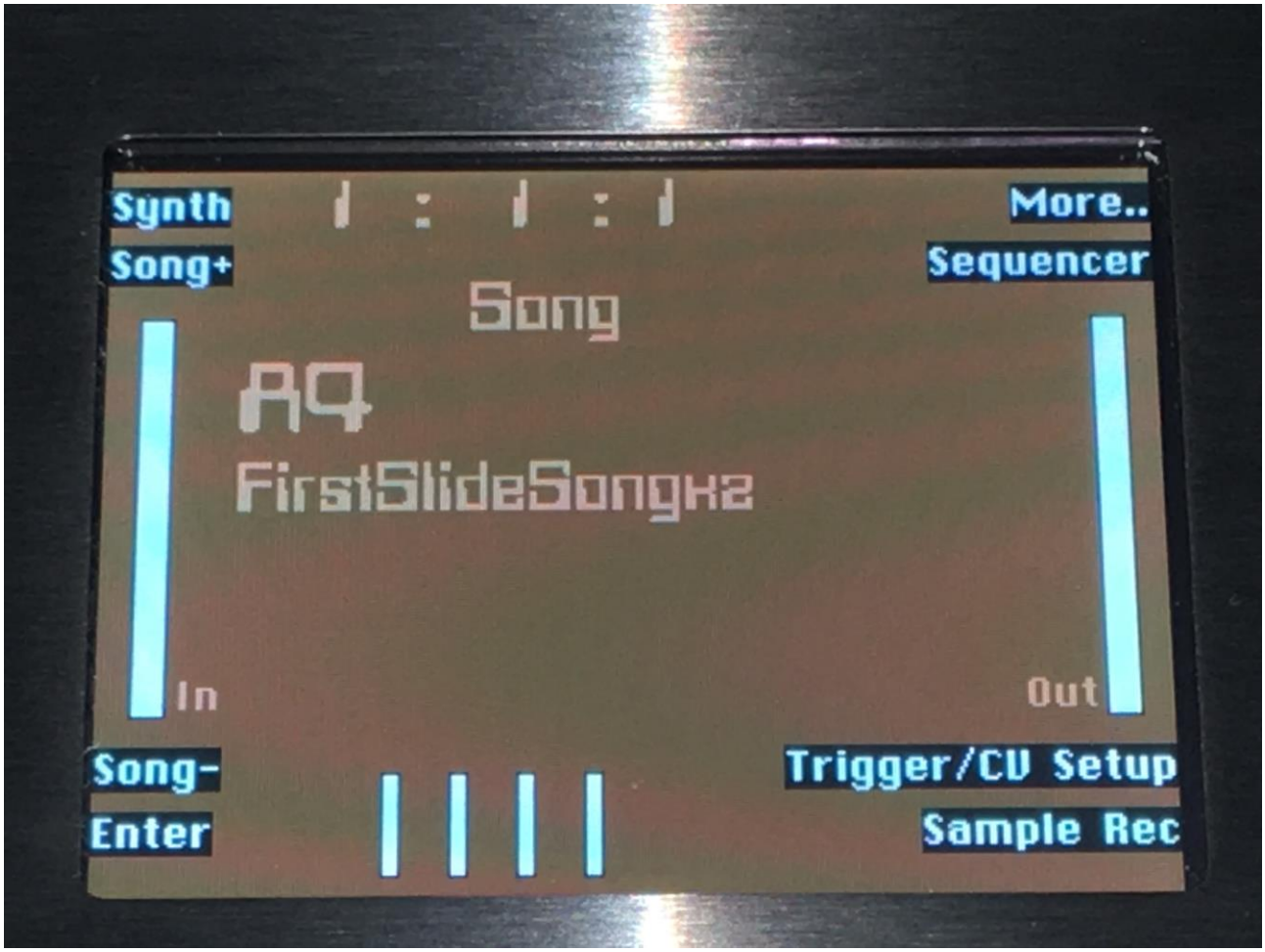
Use edit knob 2 to select the preset number, and edit knob 3 to select the number of times, you want track 1 to play back.

On Song Edit page, you will also find the Halt button.

If you would like a preset to play back more or less than the programmed number of times, hit this so the button LED is lit, and the currently playing preset will keep playing back, until you hit the Halt button again, so its LED is unlit. Then the Song sequencer will continue with the following song steps, as soon as track 1 loops. The number of times a preset is played back, using the Halt button, is not remembered by Anamono X. This is only a live feature. If you would like to permanently make a preset play back a different number of times, than it is programmed to, you should edit this.

Also, if you have made any changes to the currently playing preset, that you would like to keep, go to this page, hit the Halt button, and stop the sequencer playback.
Now go back to Preset mode, and save the preset.

The Song Select Page



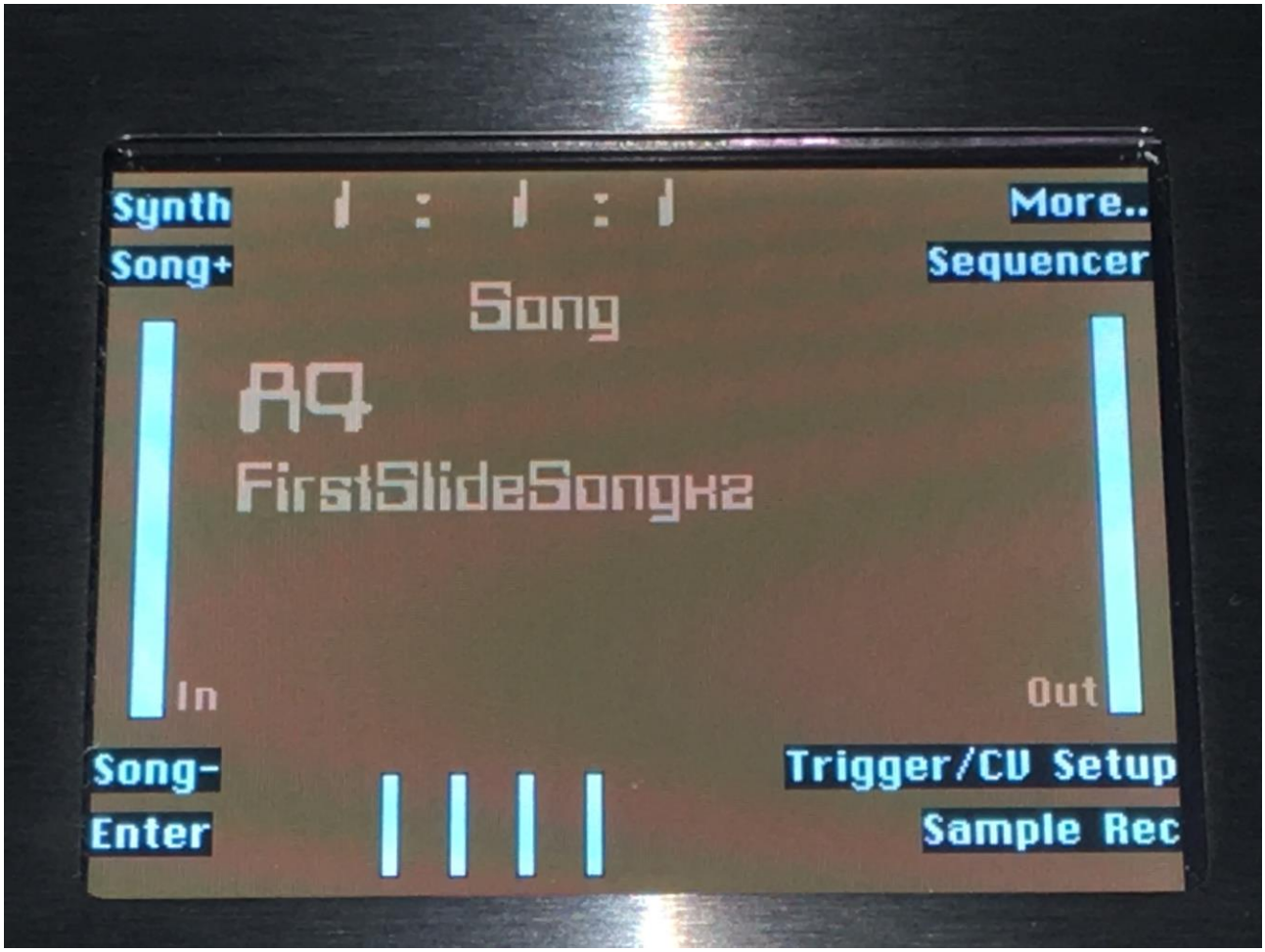
When you, in song mode, exit from the sequencer pages (the song edit page), you will exit to the Song Select page, instead of the Preset Select page. This reads out ”Song” in the upper part of the display, instead of the ”Preset” that it reads out on the Preset Select page, to make sure that you know where you are.

On the top of the Song Select page, you might have noticed, that the sequencer position ruler has gained an extra digit. The first digit of this now shows the song step number, that is currently being played back. The 2 other digits is still showing the bar and the beat of the preset, that is currently playing back.

Other changes to this, compared to the Preset Select page, are that the 2 buttons that was used to select preset with, now has been renamed to Song, and is used to select song with. It is only possible to select another song, while the sequencer is stopped.

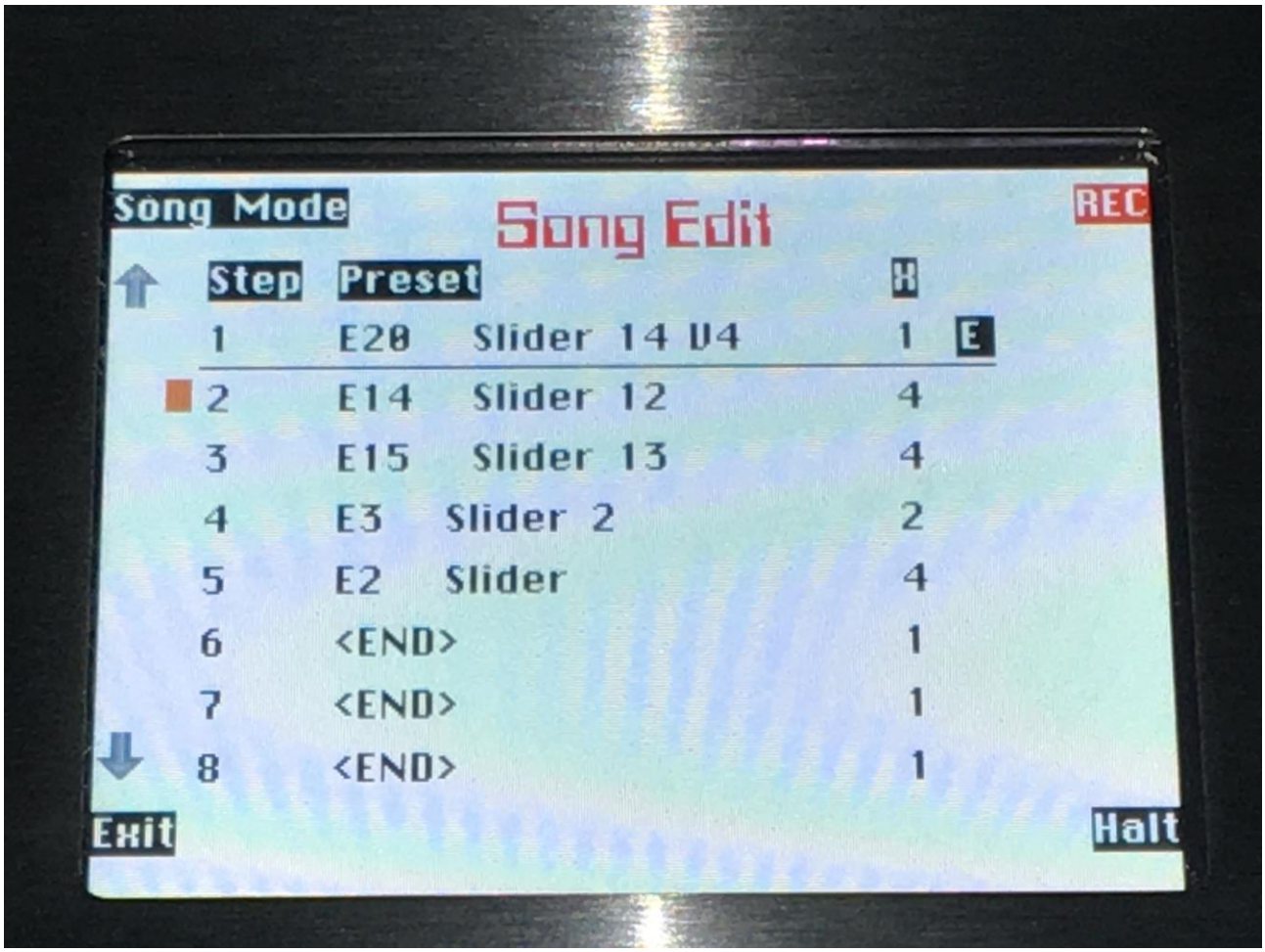
Besides from these changes, everything is the same as in preset mode. You can still edit the synth parameters of the currently playing preset, but to save any preset changes, you will need to use the special ”Halt” mode, as explained earlier in this section.

Song Realtime Recording



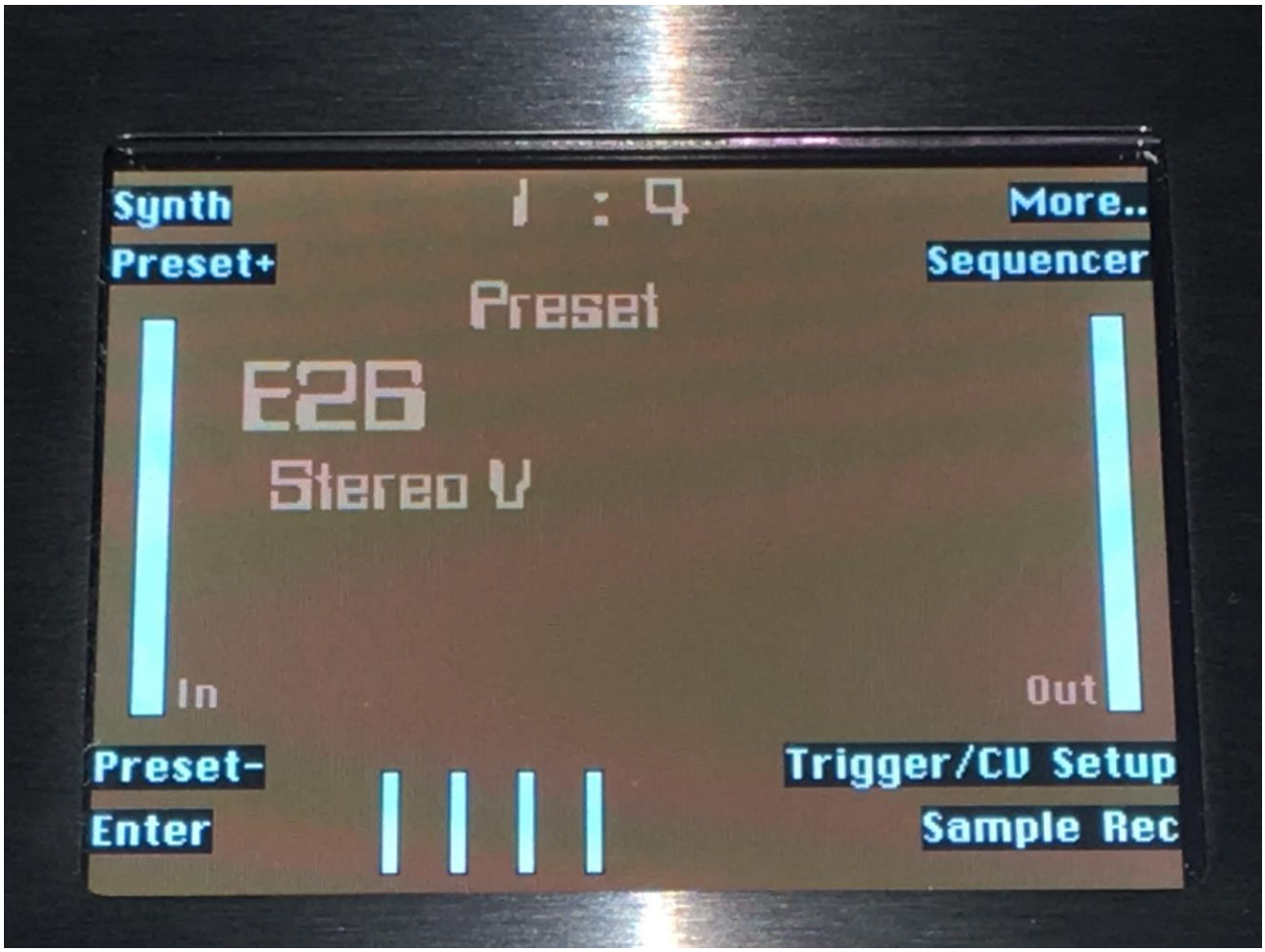
On the Song Select page, push any of the 2 Song buttons, to select the song you would like to record. 1024 songs are available, from A00 to P64.

Now push the Sequencer button, to go to the song edit page.



Make sure that the sequencer is stopped, and push the **“REC”** button.

Now exit from the song edit page.



Anamono X will now show the Preset select page.

If you selected an empty song, the last preset you selected, before you jumped to song mode, will be shown. If you selected a song that was already recorded, the preset on the selected step of this song will be shown.

Now, if the shown preset are the preset you would like to have on step 1 of your song, you can proceed recording your song, by pressing the Play button.

If you would like another preset on step 1 of your song, please select this, using the preset select buttons, and then push the Paly button, to start the recording of the song.

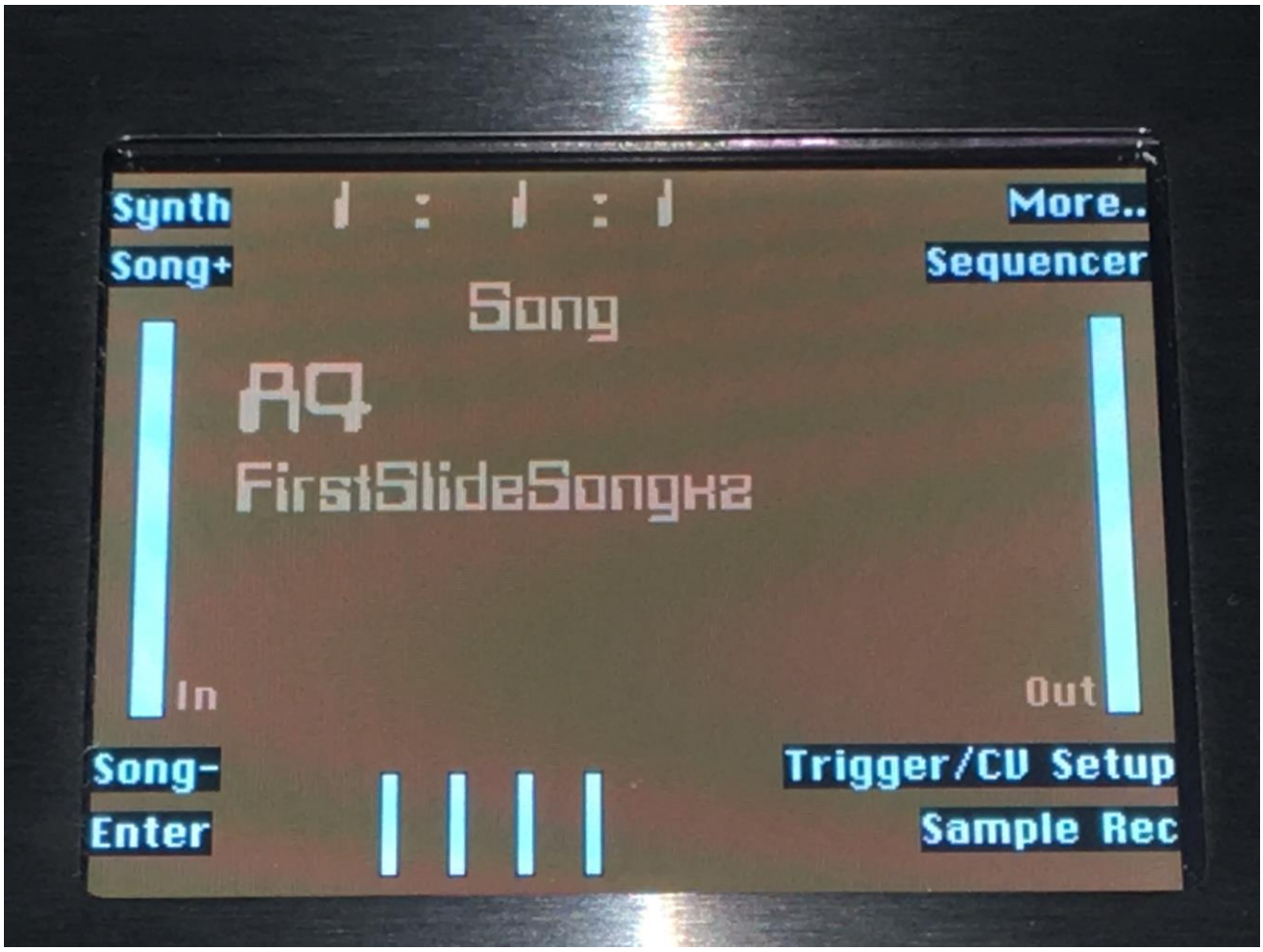
The preset you selected will now start to play back.

From here you can now select other presets, at the time you want these to play back in your song.

Preset changes will only be registrered and recorded, when track 1 in the currently playing preset reaches its end and starts over. When the changes has been registrered, the song step number in the position ruler will increment by one.

When you are done changing presets, and you think that your song is ready, hit the Play button to stop song recording.

Push the Sequencer button to go back to the song edit page, and hit the REC button, so its LED does not light, to exit from song realtime recording.



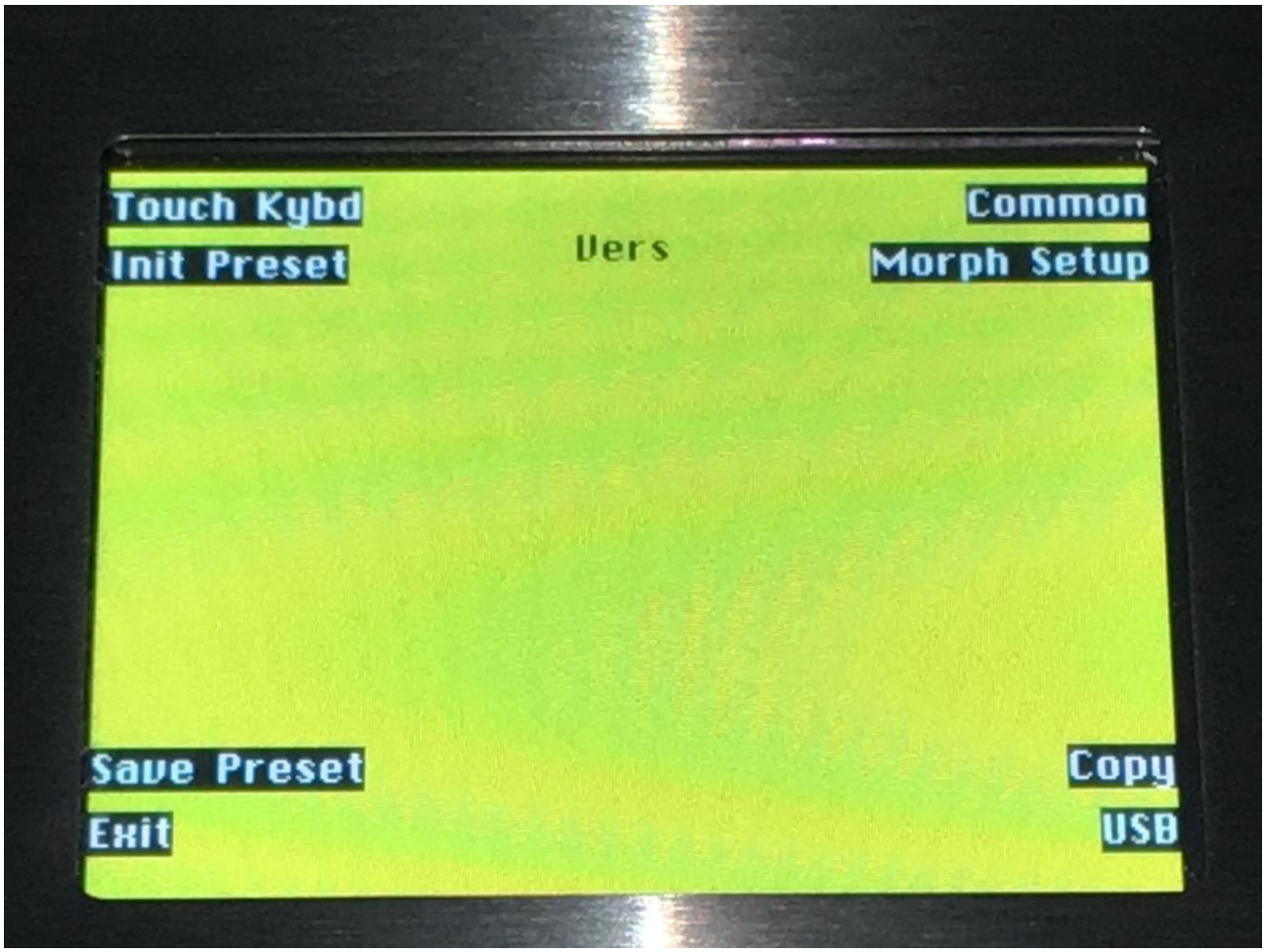
To listen to the song you have just created, just hit the Play button.

If there are anything you would like to edit, go to the Song Edit page, as described earlier.

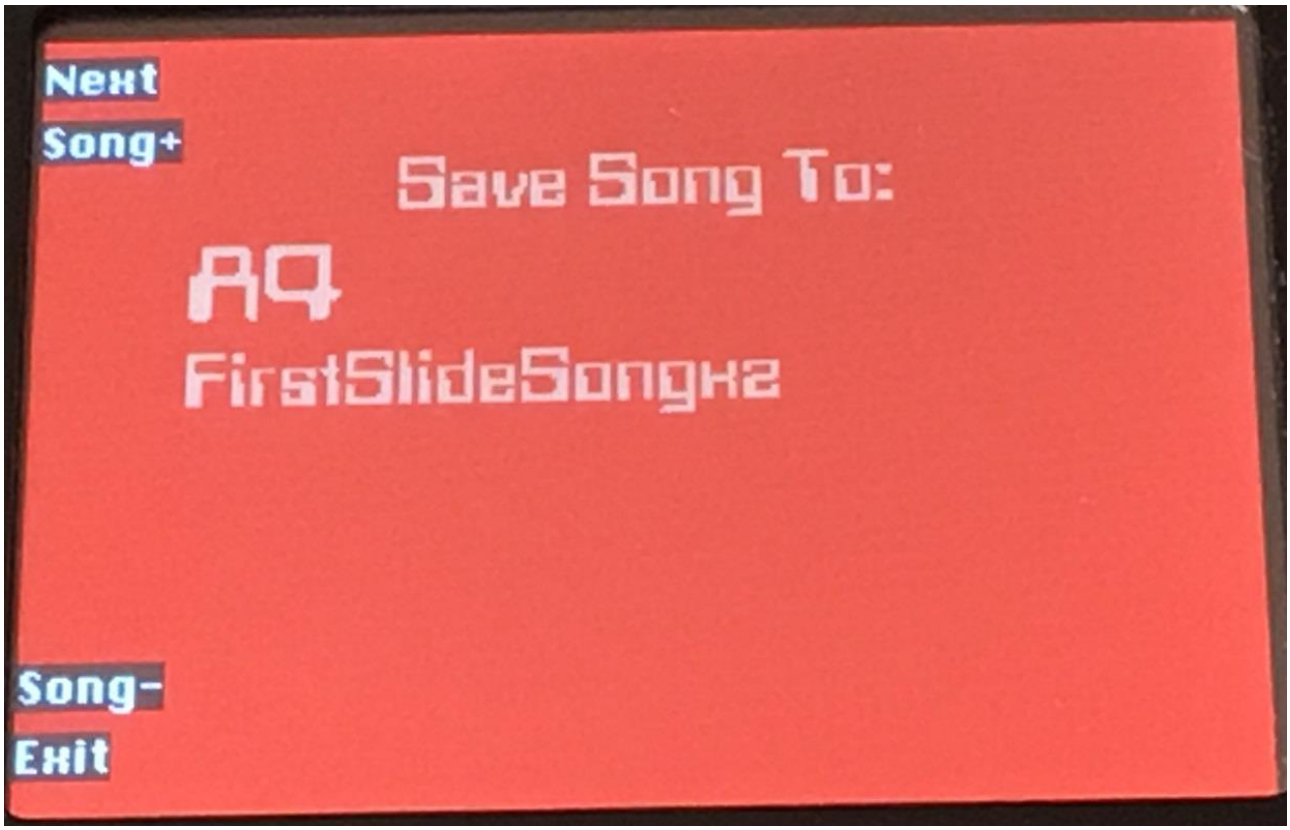
If you would like to keep your work, you should save your new song.

Save Song

Anamono X songs are not saved within the presets, so they must be saved separately. To do so, when in song mode, from the song select page, push the More.. button to enter this page:

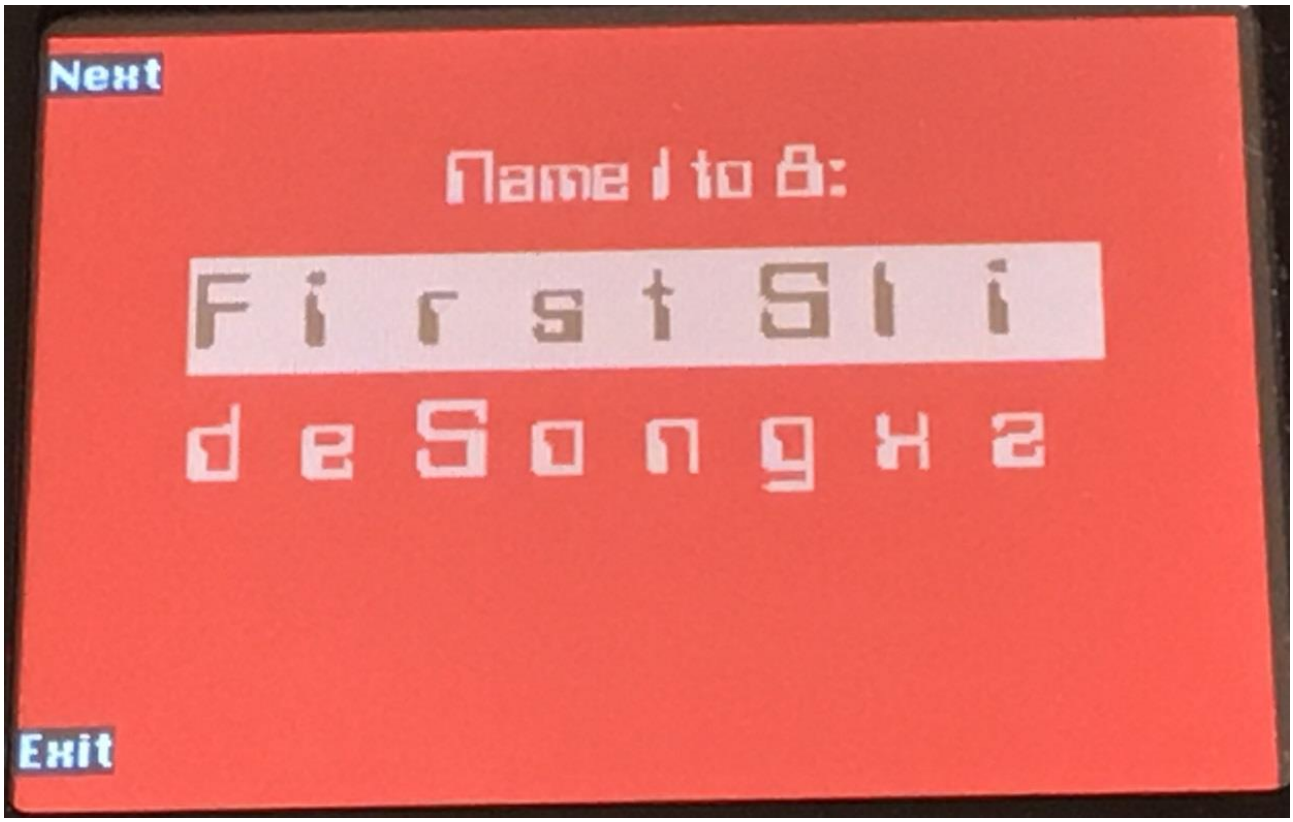


From the More.. page, push the Save Song button.



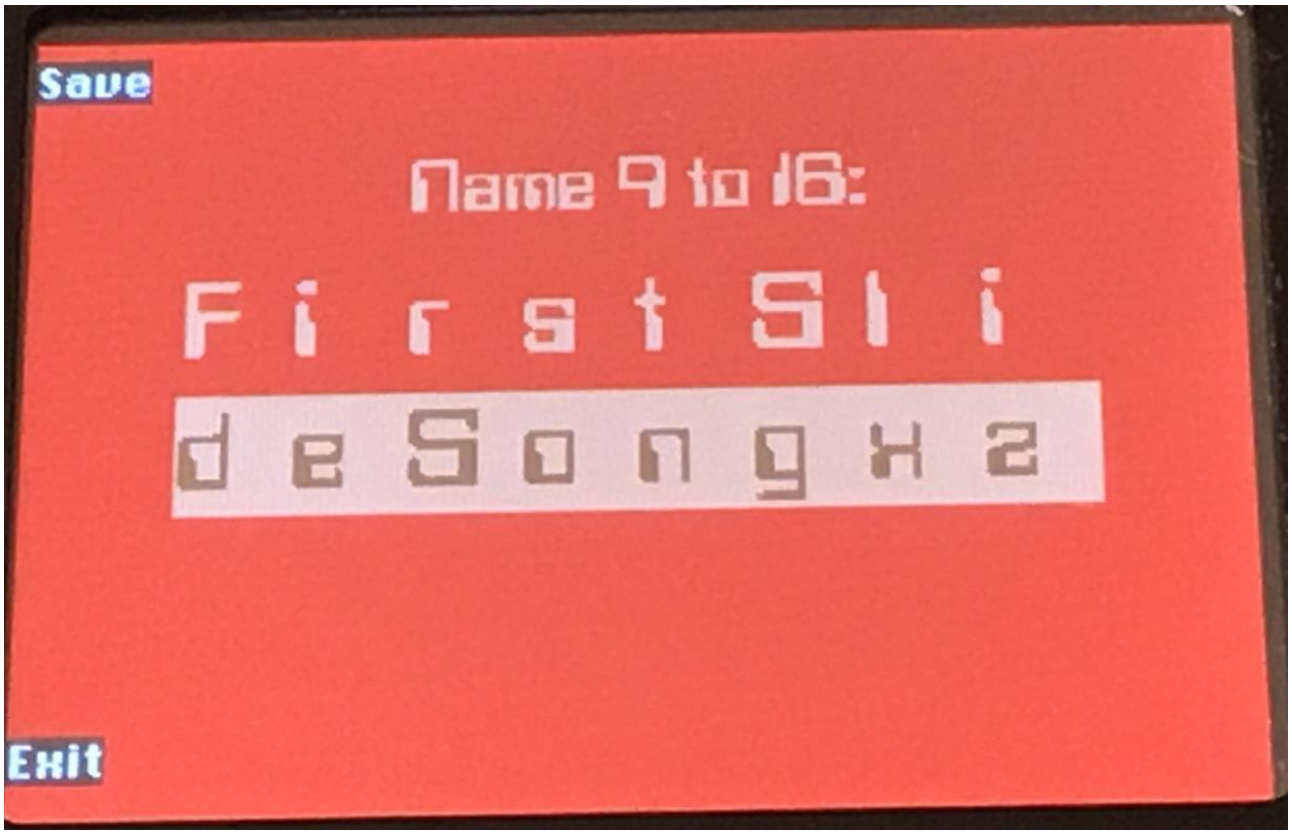
Push the Song+/Song- buttons to select the song location, on which you would like to save your song. If a song is previously saved on the locations you choose, its name will be shown. If no song is previously saved, <empty> will be shown.

Push the next button to continue.



Select the first 8 characters of the name for your song, using edit knob 1 to 8.

Push the next button to continue.



Select the last 8 characters of the name for your song, using edit knob 1 to 8.

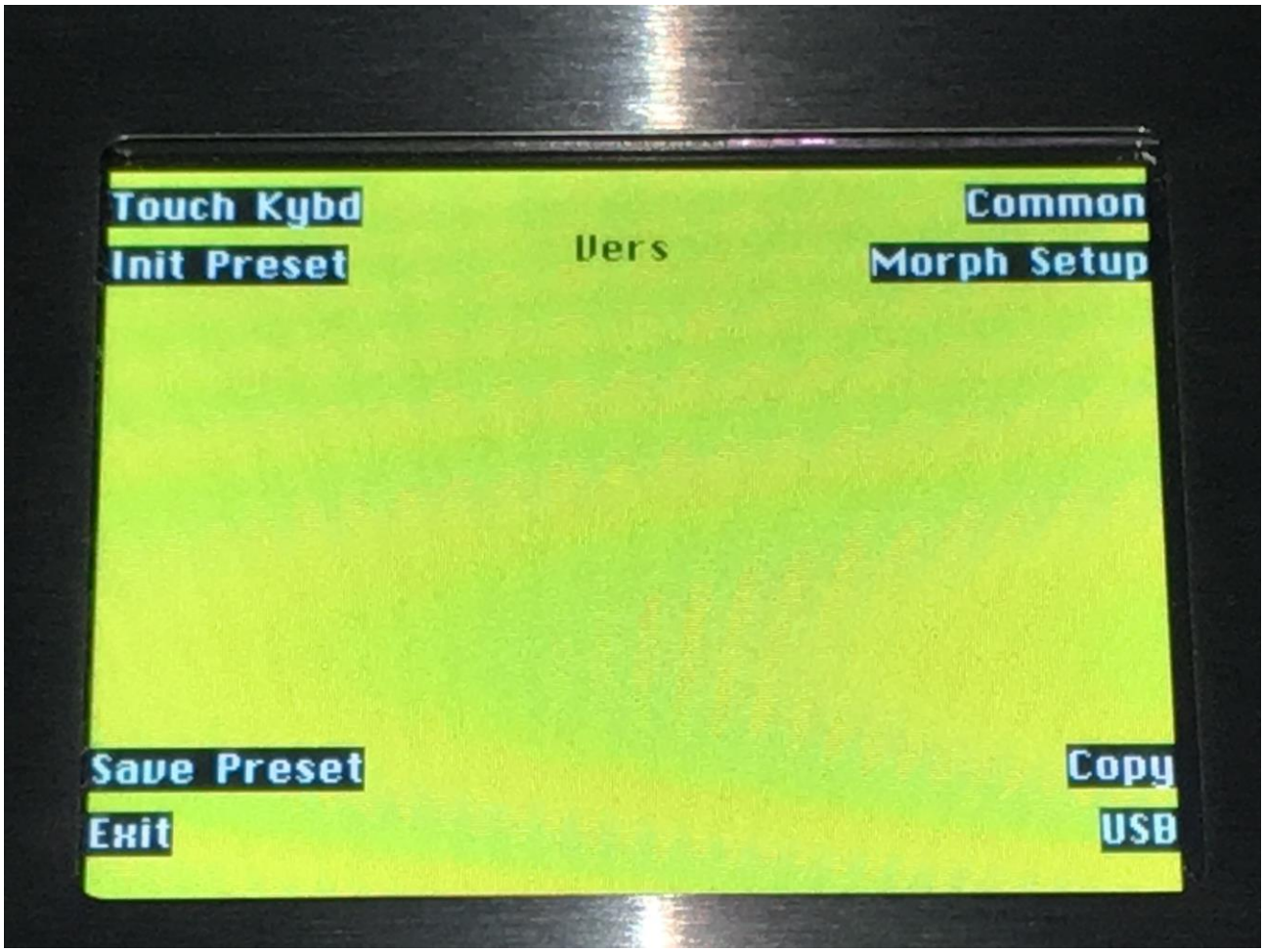
Push the save button to save your song.

After your song has been saved, Anamono X will return to the ”More..” page.

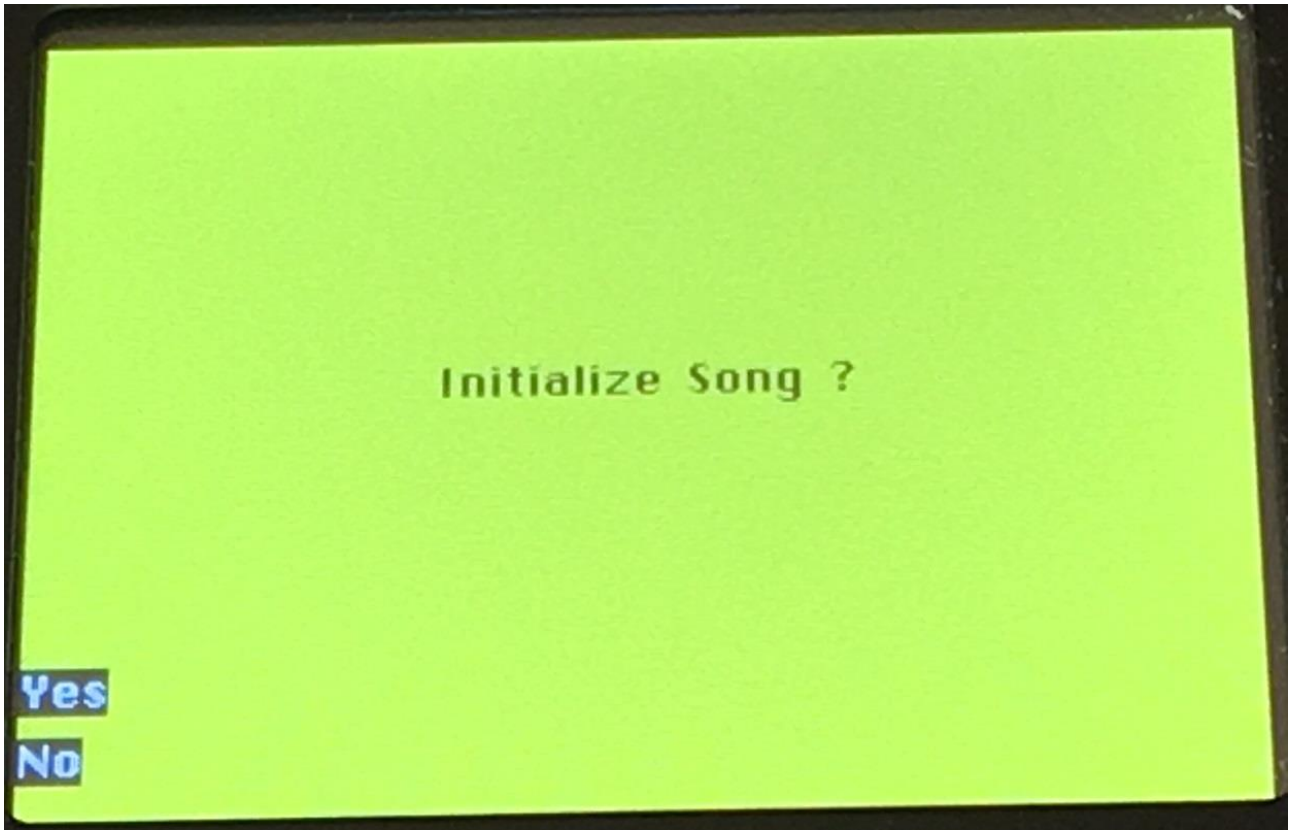
Initializing a Song

If you would just like to start all over with an empty song, it is possible to initialize it.

To do so, in song mode, access the More.. page:



From here, hit the Init Song button.



Anamono X will now ask, if you really would like to initialize this song. If that is so, hit the ”Yes” button to confirm. If you are not really sure, hit the ”No” button to exit.

After you have either initialized the song or not, Anamono X will return to the More.. page.

Please notice, that when initializing a song, this is only done in Anamono X’s temporary song RAM, NOT on the FLASH memory, so if you did this by mistake, or you regretted doing it, you can always recall the song, by selecting another song, and select this again. Then nothing will be lost. It is not until you save the song, that permanent changes is done.

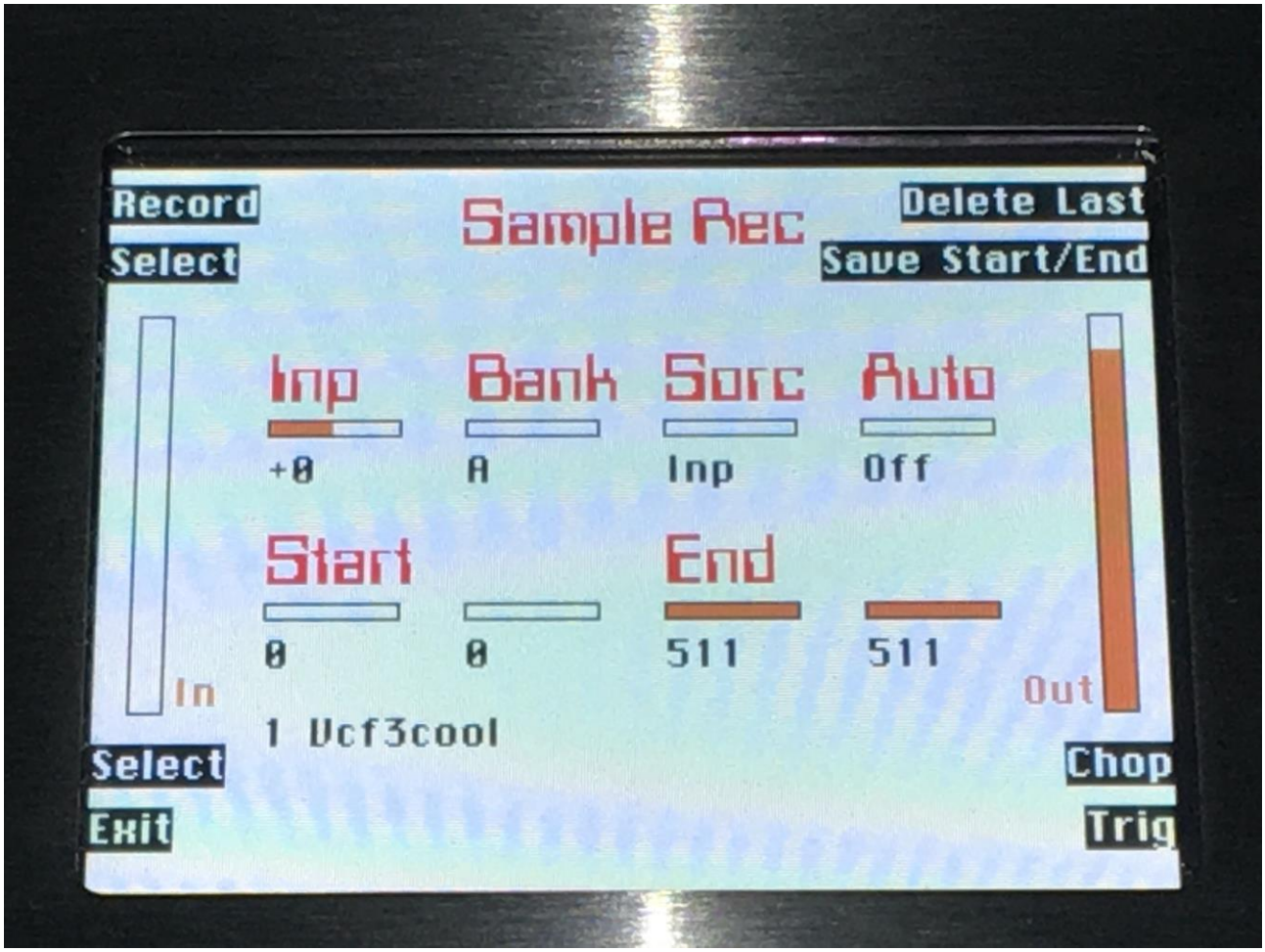
Sample Record and Edit

To get samples into Anamono X, for using them in the synth section samplers, you can either import .wav files from a USB drive, or record your own samples from Anamono X's audio input or output 1. This section will describe the latter. For how to import .wav files, please see the USB section of this manual.

Anamono X has 2 banks of FLASH memory for storing samples, Bank A and Bank B. Bank A holds up to 21 minutes of samples, maximum 220, and Bank B holds up to 27 minutes of samples, maximum 256 – A total of 476 samples/47 minutes. One sampling can maximum be 27 minutes long.

All samples that are imported or recorded, stays in Anamono X's FLASH memory, even after a power off. Since they are played back directly from the FLASH memory, there are no loading times. All Anamono X's samples are immediately available, right after power on, and can be selected in the synth oscillator section, just like synth waveforms.

From the Preset select screen, push the ”Sample Rec” button, to enter the sample record page:



On this page you can audition samples from the FLASH memory, adjust the audio input level, switch input monitoring on and off, select sample bank for import and recording, select the source for sample recording, record and delete samples, adjust a samples start and end points, and create sample chops.

To audition the samples that your Anamono X holds, use the ”Select” buttons to select the sample you would like to audition. Hold one of these down for fast scroll, and hold both for really fast scroll. The sample number and name are shown in the bottom of the screen. To audition the selected sample, push the ”Trig” button. On this page, stereo samples will only play back the left audio channel. While auditioning a sampling, this will also be visible on the VU-meter to the right.

To stop the sample playback, select another sampling, switch sample bank, or exit the Sample Rec page.

Use edit knob 2, to switch between sample Bank A and B.

If you apply an audio signal to Anamono X’s audio input, the VU-meter to the left will visualize the applied signal, according to the setting of the Source parameter.

By adjusting the ”Sorc” parameter with edit knob 3, you can switch monitoring of the audio input on and off, and select if sample recording should be from the audio input or of audio output 1. When monitoring are on for the input, the audio signal applied to this, is sent directly to Anamono X’s audio output 1. When you record a sample, you will probably need to have monitoring on, unless you need to avoid some feedback in your audio chain. When processing the audio input in the synth section, you should switch monitoring off, in order to avoid having both the clean and the sythesized inputs at the same time.

Monitor/source settings (Edit Knob 3):

-Inp: Audio input is selected as the samle recording source, monitoring is off.
-InpM: Audio input is selected as the samle recording source, monitoring is on.
-Outp: Audio output 1 is selected as the samle recording source, monitoring is off.

Recording a sample

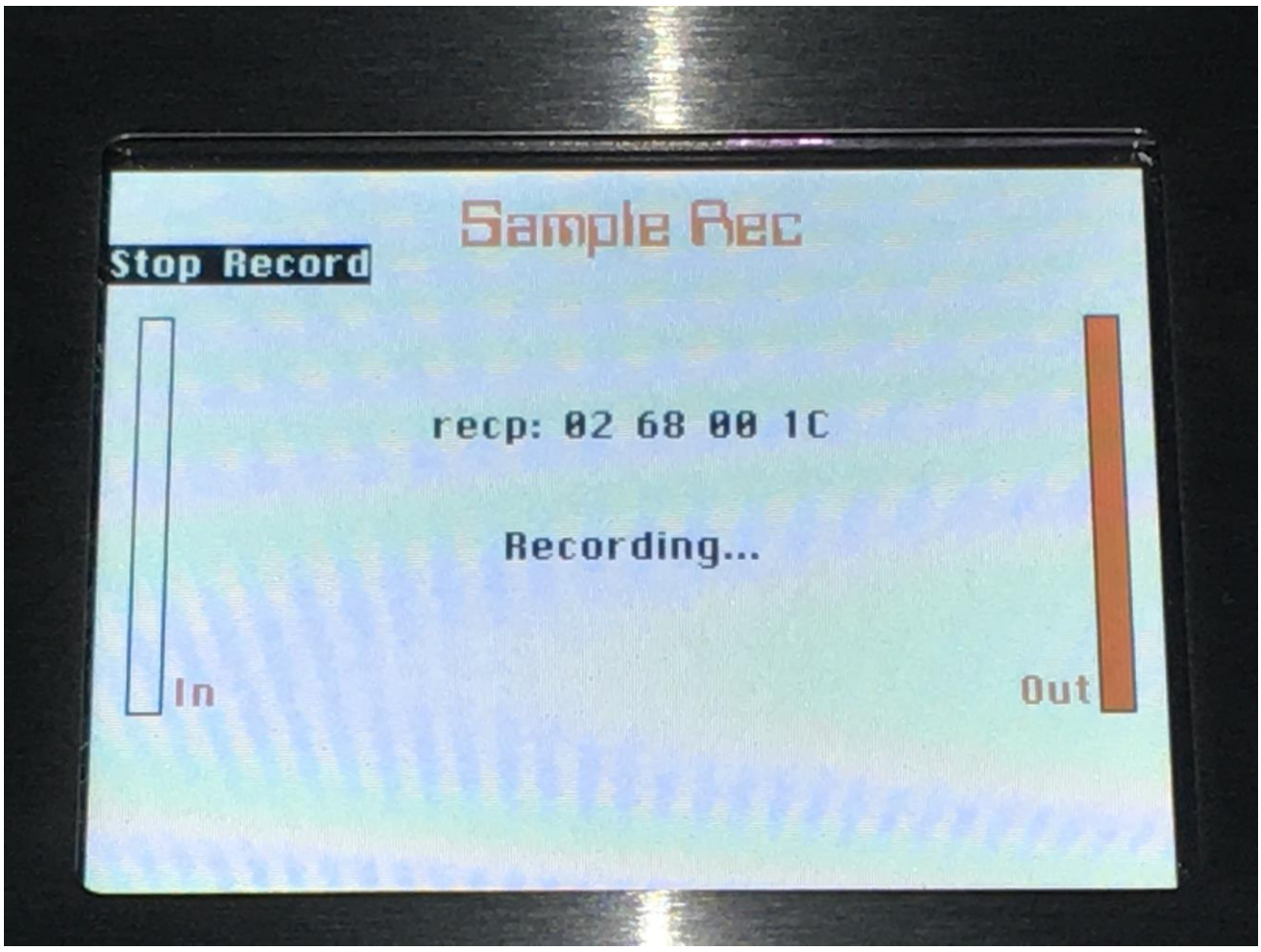
If you selected the audio input as the recording source, adjust the input level (Inp1) to a middle value, using edit knob 1.

Apply the signal, that you wold like to sample. Watch the left VU-meter. Adjust the output level of the sample source (if possible), so the VU-meter is not standing too much in the upper region.

You will get the best results, by having Anamono X's input level control set in the middle position, and adjust the level of the sample source, on the source itself. You should only adjust Anamono X's input level parameter, if it is the only possibility you have, or if the source is too weak.

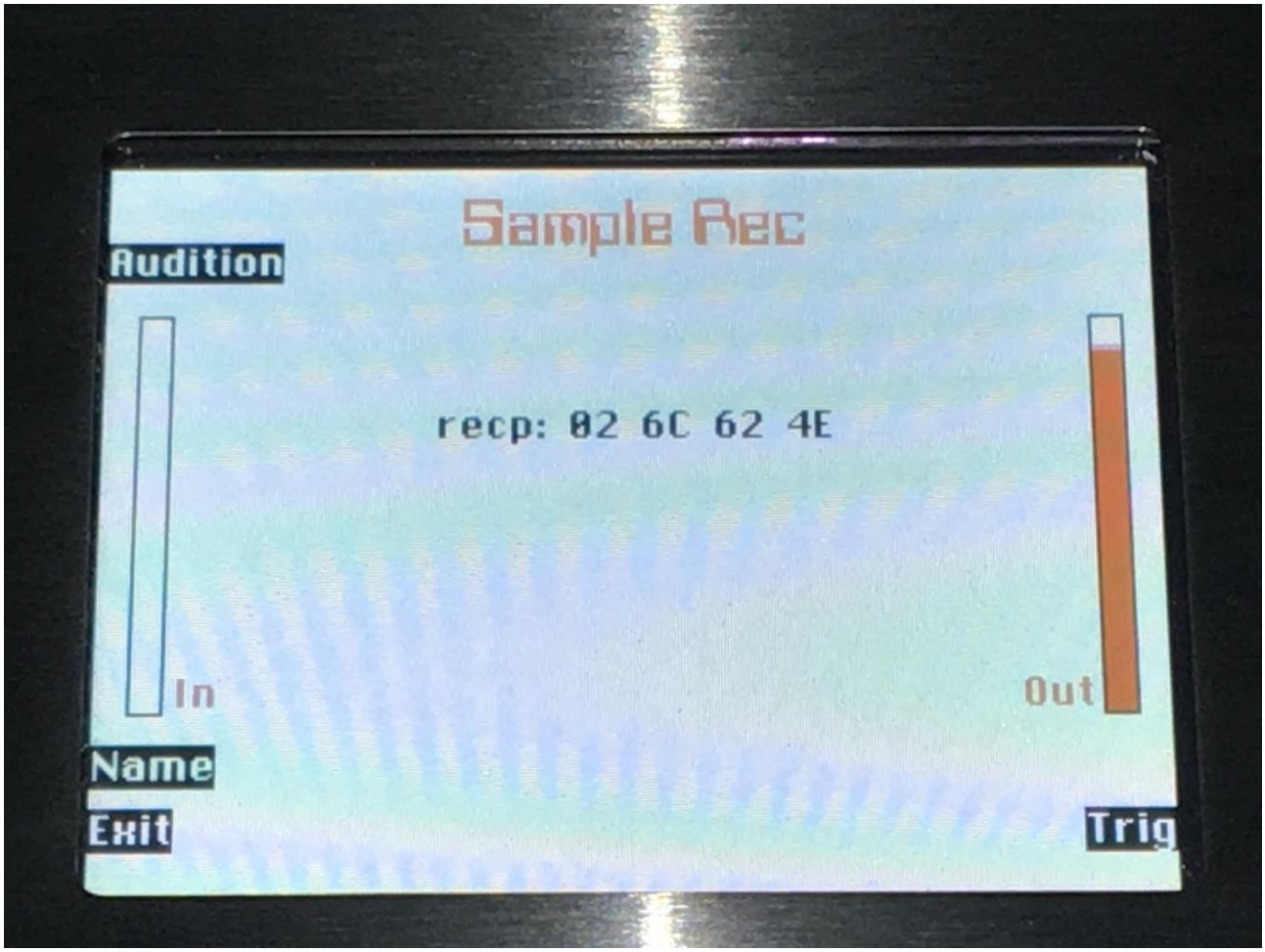
It is possible to make the sample recording start automatically, when the source reaches a certain level. To make this happen, adjust the "Auto" parameter to any other value than "Off".

When you are ready to record the sample, push the "Record" button in the upper left corner.
If you have the Auto parameter set to anything else than Off, it will now write: "Waiting for trigger". While it is waiting for this, it is possible to exit the sample rec page, if you for instance, would like to record your performance, while tweaking some parameters.
Else Anamono X will now start to record the new sampling:



When you are finished recording your sample, push the ”Stop Record” button.

Anamono X will now jump to this screen:

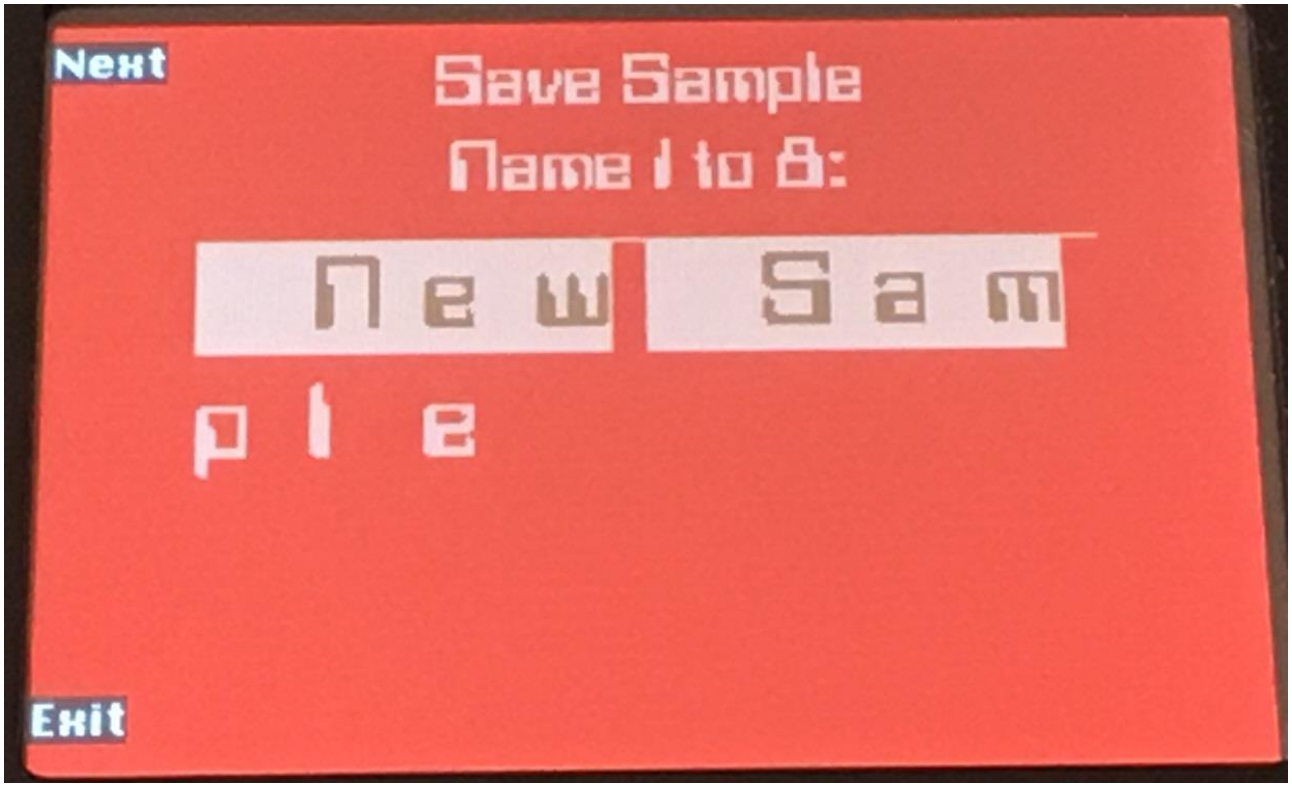


To audition the sample you have just recorded, push the ”Audition” button.

To name and save the sample, push the ”Name” button.

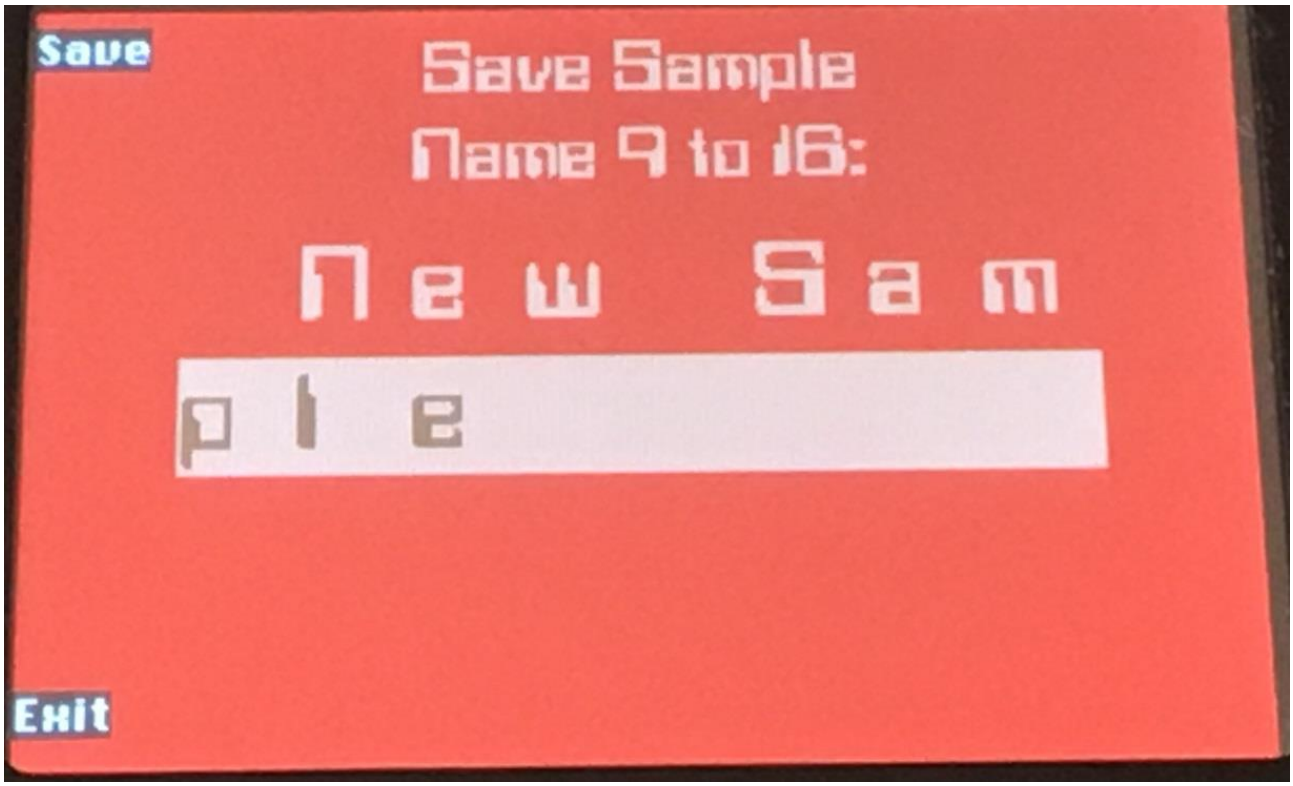
If you would not like to keep this sample, push the ”Exit” button, and the new sample will be erased.

If pushing the ”Name” button, Anamono X will jump to this page:



Here you can use edit knob 1 to 8, to select the first 8 characters of the new sample’s name.

When you have done that, push the ”Next” button, to enter the last 8 characters of the sample name.



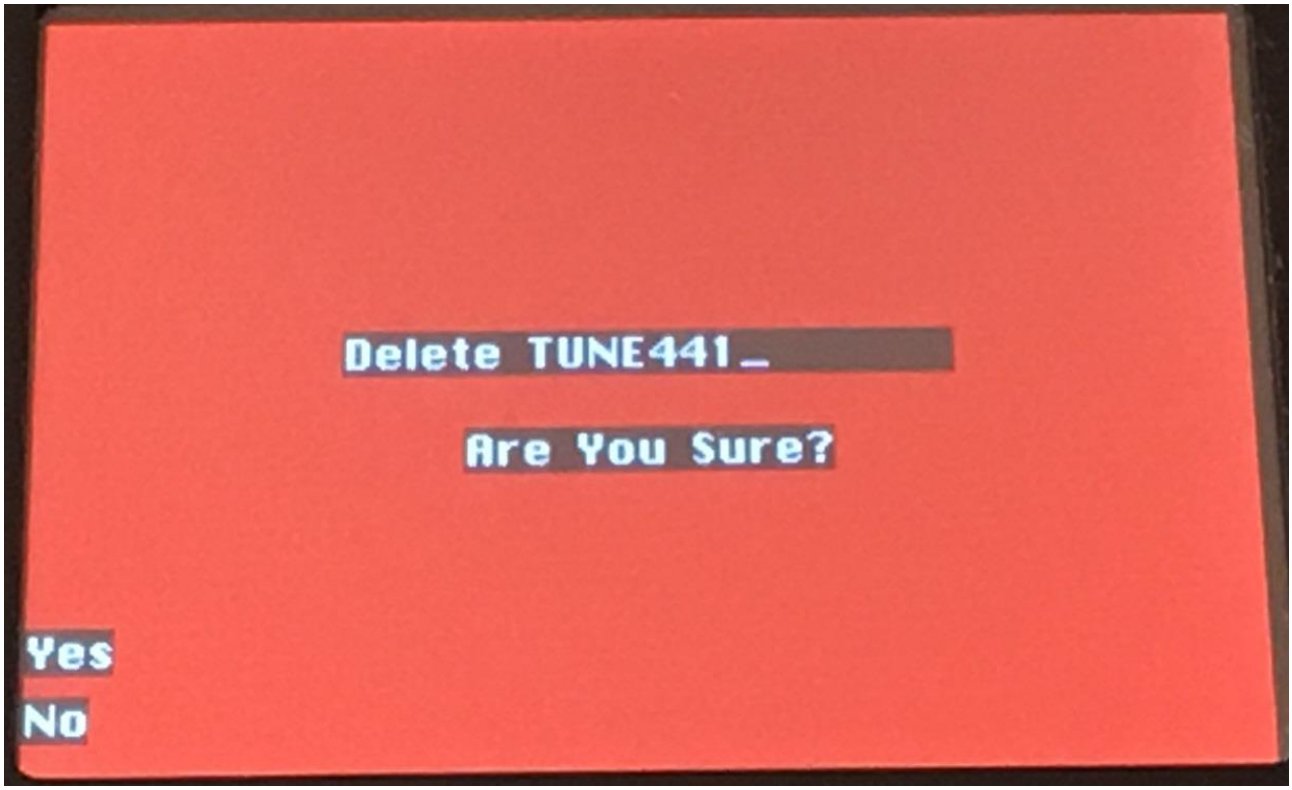
Use edit knob 1 to 8, to select the last 8 characters of the new sample’s name.

When you have done that, push the ”Save” button, to save the new sample, and return to the Sample Rec page.

Deleting a sample

On the Sample Rec page, it is possible to delete the last recorded sampling in sample Bank A or B. Select the sample bank, from which you would like to delete a sampling.

Push the ”Delete” button. Anamono X will now ask, if you are sure:



To delete the sample, push ”Yes”.

If you regret, push ”No”, to return to the Sample Rec page.

Adjusting the start and end points of a sample

If a sample has silence at the start and/or end of it, or if there are parts of a sample you do not intend to use, it might be nescessary to adjust the start and end points of it.

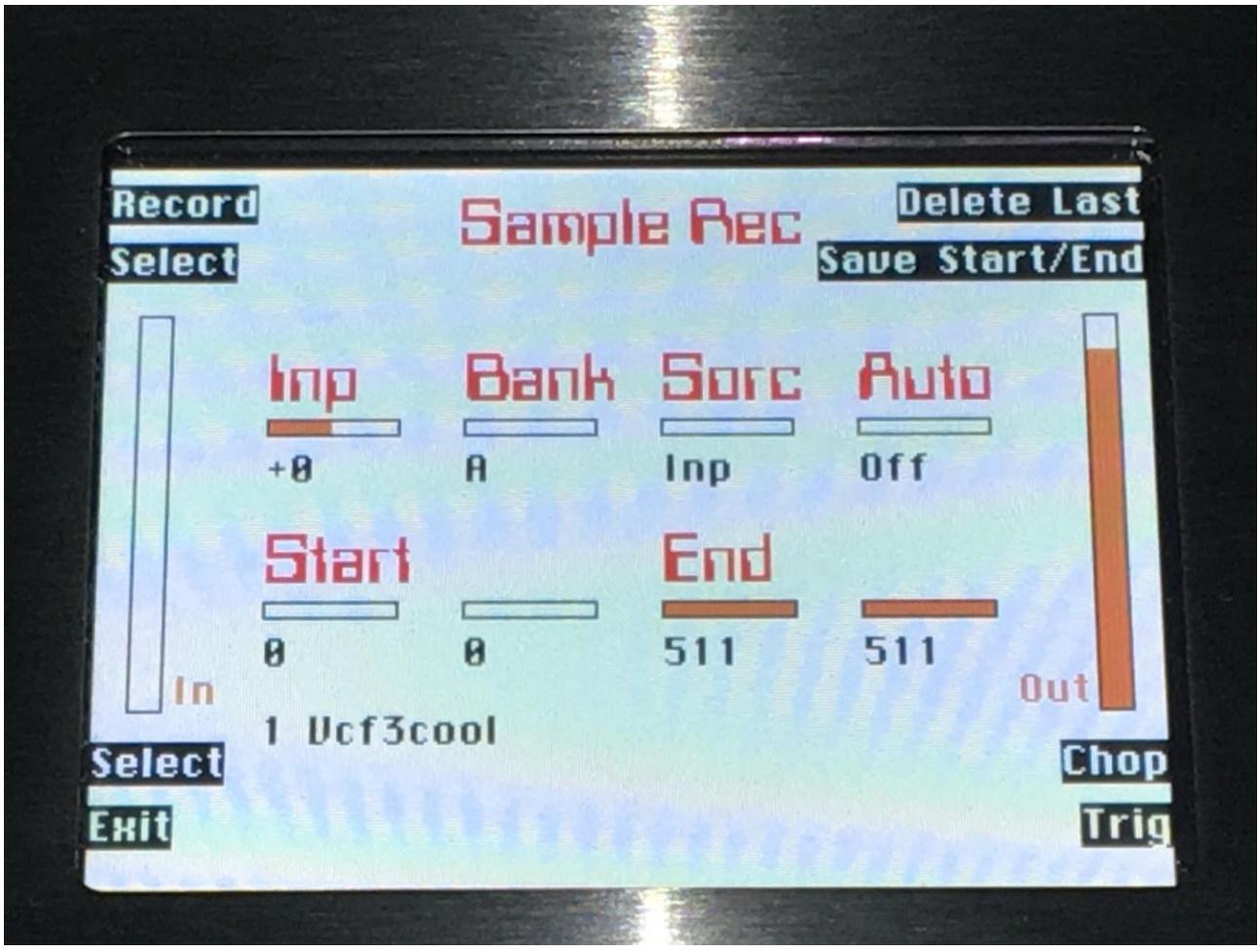
To do this, select the sample you would like to adjust.

Adjust the start point using edit knob 5, fine adjust using edit knob 6.

Adjust the end point using edit knob 7, fine adjust using edit knob 8.

Audition using the ”Trig” button.

When you are satisfied with the result, push the ”Save Start/End” button.



Instead of searching manually for the sample start point, it is possible to use the Chop function for this. This is described in the “Sample Chops” section.

Sample Chops

On Anamono X it is possible to add chop points to a sampling, in order to make it play back a certain portion of the sampling at a time. Sample chops are generated in the Sample Rec section, to be used by the samplers in the Synth section.

This function could be used for the classical separating single drum hits from a beat, or to find the startpoint of a sampling in a fast way, if the chop function is set up for peak detection.

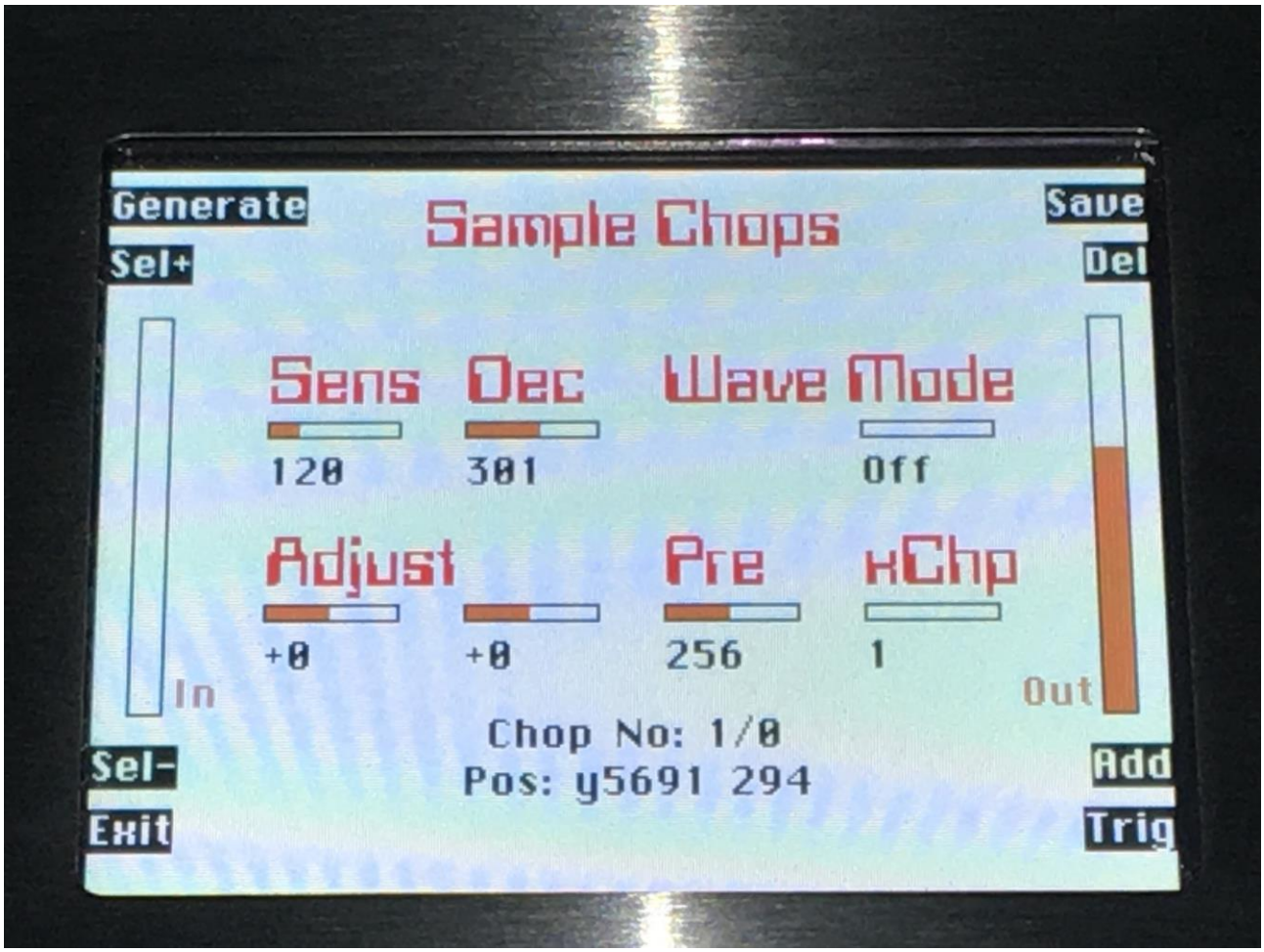
The chop function of Anamono X isn't though limited to this. On Anamono X it is also possible to make the chop function find "wave chops". This function will pick out single wave cycles of the sampling, and create chop points for these. In the samplers of the synth section, it is then possible to select these wave cycles, loop them, and switch between other wave cycles of the sampling.
This can also be used as a super easy way of looping a sampling.

All chop points are non-destructive to the sampling. Only the positions of the chop points are stored, nothing is changed on the sampling itself. Chop points can, at any time, be moved, deleted and inserted.

Up to 64 chop points can be created for each sampling.

Remember to save the chop points. Else they will be lost!

To create and/or edit sample chop points, from the sample rec page, hit the **"Chop"** button, to enter this page:



The parameters of this page:

Sens: Adjust how loud the level of the sample audio should be, before it detects a chop point. If it creates too many chop points, turn this parameter up a bit. If it creates too little or no chop points, lower this parameter.

Dec: Chop envelope decay. This adjusts the decay time of the chop detection envelope in a reverse manner. The lower the value, the slower the decay. If the sounds is recorded with very little or no silence between them, like in a beat, this needs to be set to a high value. If there's a good gap of silence between the sounds, set it to a low value.

Wave Mode: Switches the chop wave cycle mode on and off.

Adjust: (2 parameters). For adjusting the selected chop forward (positive values) or backwards (negative values).

Pre: If there are loud clicks in the start of many of the chop points, especially on low frequency sounds, turning up this parameter will make Anamono X set the chop points a little bit earlier, than it usually would. This will remove these clicks.

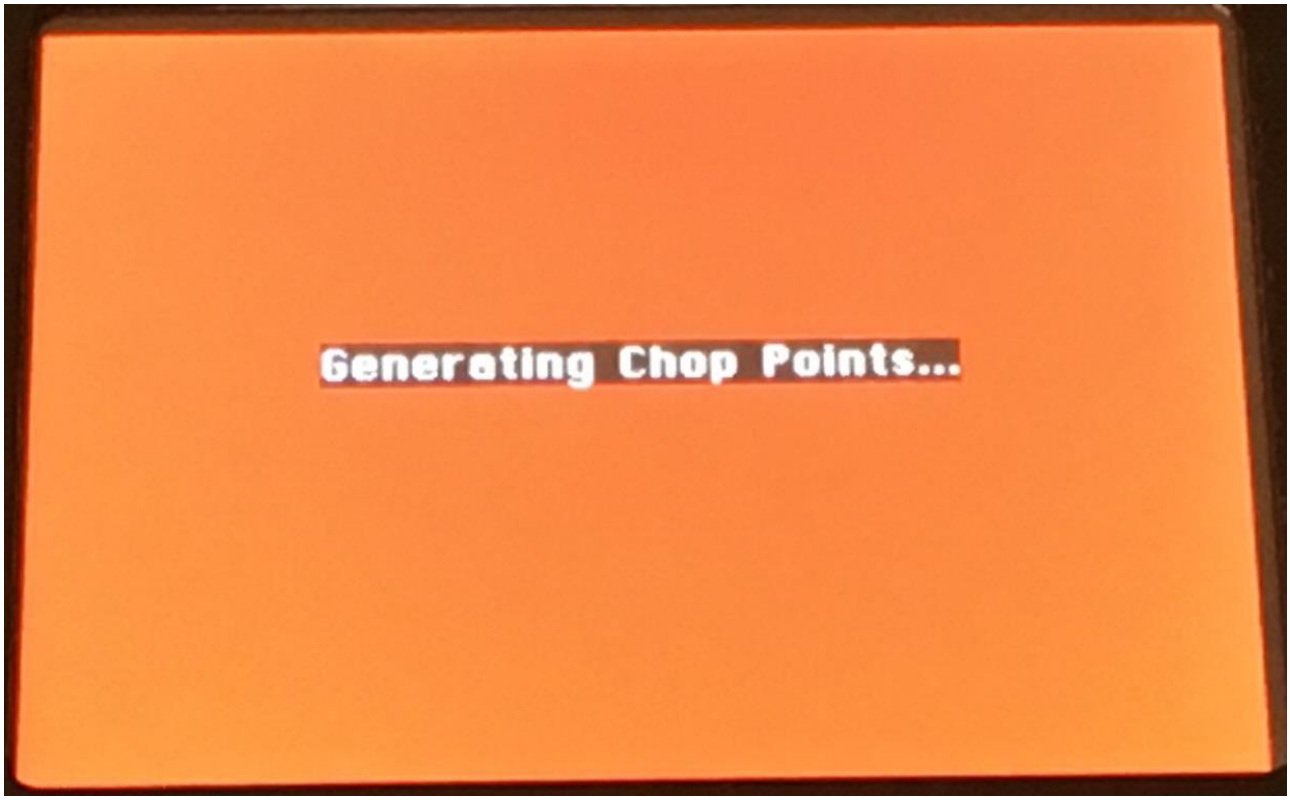
xChp: Number of chops in each chop point. Turning this up, before generating chops, will make each chop contain a number of chops. Especially usefull, when using the wave chop function for making sample loop points.

Generating Sample Chop Points

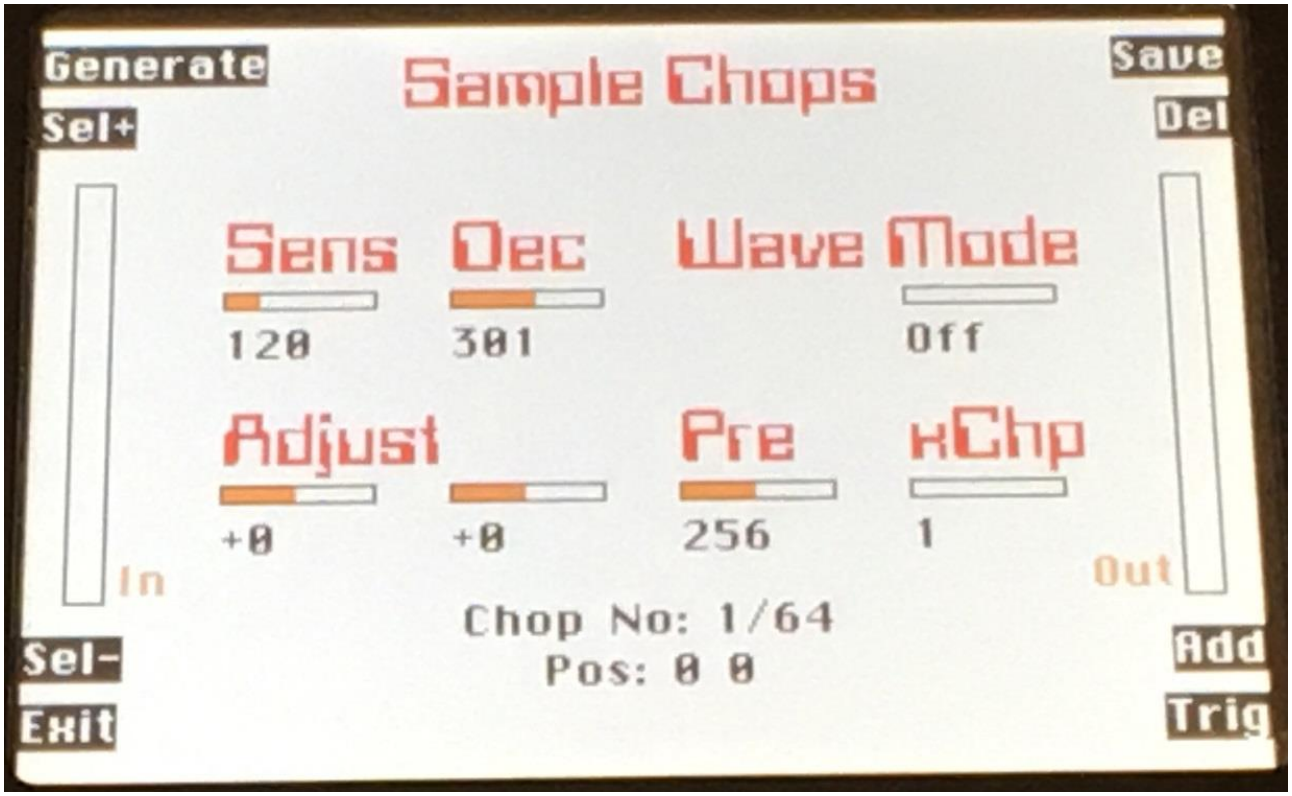
On the Sample Chops page, adjust the Sens, Dec, Pre and xChp parameters as desired, and switch wave mode on if desired.

Push the **“Generate”** button.

Anamono X will now look for chop points, in the selected sampling:



When it is done, it will jump back to the Sample Chops screen:



Using the Sel+ and Sel- buttons, it is now possible to select and audition the chop points that Anamono X has found.

Audition the chop points by hitting the "Trig" button. If some chop points are not exactly where you would like them to be, adjust them using Edit Knob 5 and 6. If some chop points shouldn't be there, delete them by hitting the "Del" button.

To add chop points, first push the "Trig" button, to make the sample/chop point play back. While the sampling is playing back, hit the "Add" button when it is playing back the point, where you would like to add a chop point.

In the bottom of the screen, it shows the currently selected chop number, and the total number of chops that it found.

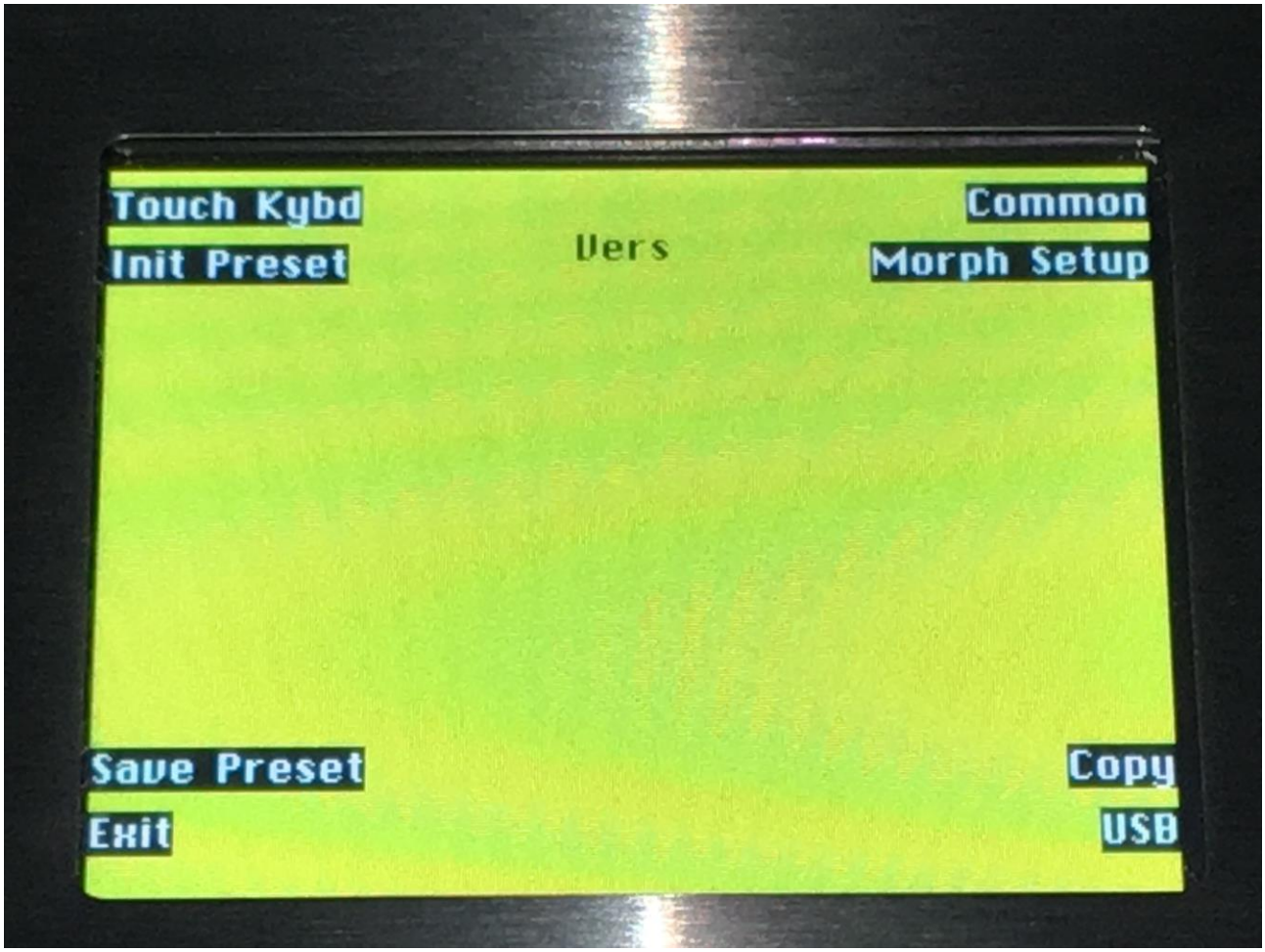
Right below the chop numbers, it shows the position of the selected chop, in the values that the **Sample Start** parameters would have to be adjusted to, to select this point of the sampling. So if you don't want to use the chop points anyway, but just wants the sample playback to start at this point, you can exit to the Sample Rec page, and set the Sample Start point to this value.

When you are satisfied with the chop points, remember to hit the "Save" button to keep them. The chop points are saved together with the sample data, and are also imported/exported via USB.

Common Settings

On this page, you can adjust the display contrast, adjust the MIDI settings, erase the sample banks, and check the sample and FLASH memory.

From the Preset Select screen, push the ”More..” button, to enter this page:



Push the ”Common” button.

The following parameters can be adjusted on this page, using edit knob 1 to 5:

Contrast: Adjusts the display contrast. This setting is automatically saved, and will be remembered after a power off.

MIDI CH: The Anamono X global MIDI channel. All MIDI data to Anamono X will be received on this channel. MIDI CC's from the 8 Edit Knobs and the X and Morph knobs will be transmitted on this channel. This setting is automatically saved, and will be remembered after a power off.

Sync: Sequencer syncronization. This setting is automatically saved, and will be remembered after a power off. Settings:
-Int: Anamono X's sequencer will be clocked internally at the rate set by the "Tempo" parameter in each preset.
-Ext: Anamono X's sequencer will be clocked externally, by MIDI clock events applied to MIDI in. Sequencer play and stop can also be controlled externally.

Sync Out1: Settings: Off, On. Select whether or not you would like Anamono X to transmit MIDI clock and start/stop events to MIDI out. Even if Anamono X is syncing to an external MIDI clock source, it will re-transmit this, if this parameter is on. This setting is automatically saved, and will be remembered after a power off.

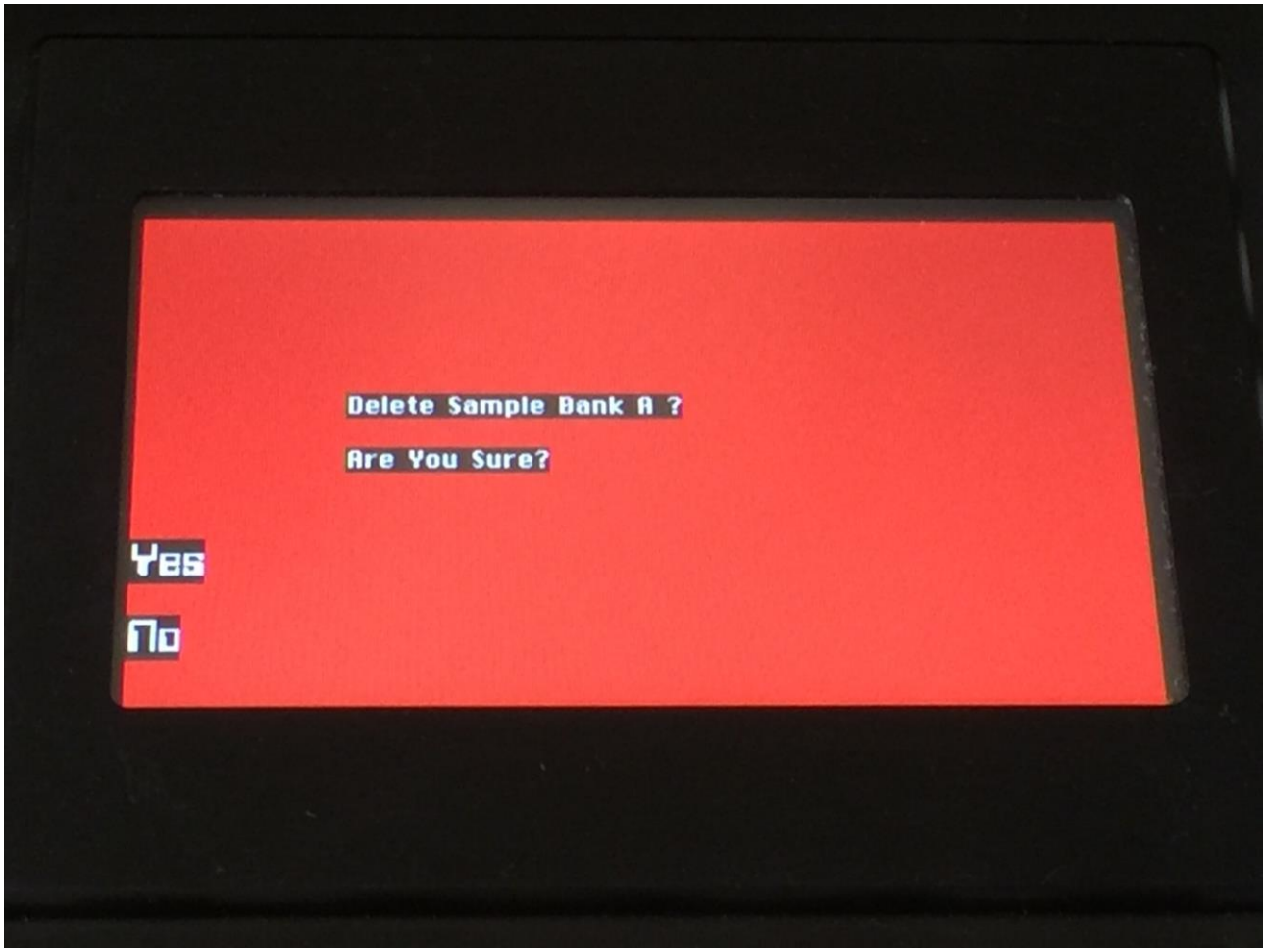
Local: On/Off. For future use.

In the bottom of this screen, you can see how many samples are held in each FLASH memory bank, and how big a percentage that has been used.

Deleting Sample Bank A or B

On the Common page it is also possible to completely erase sample Bank A and B. To do that, if you are really sure, that you would like to, push the ”Del Smp Bnk A” or ”Del Smp Bnk B” button, depending on what sample bank you would like to erase.

Anamono X will now ask:

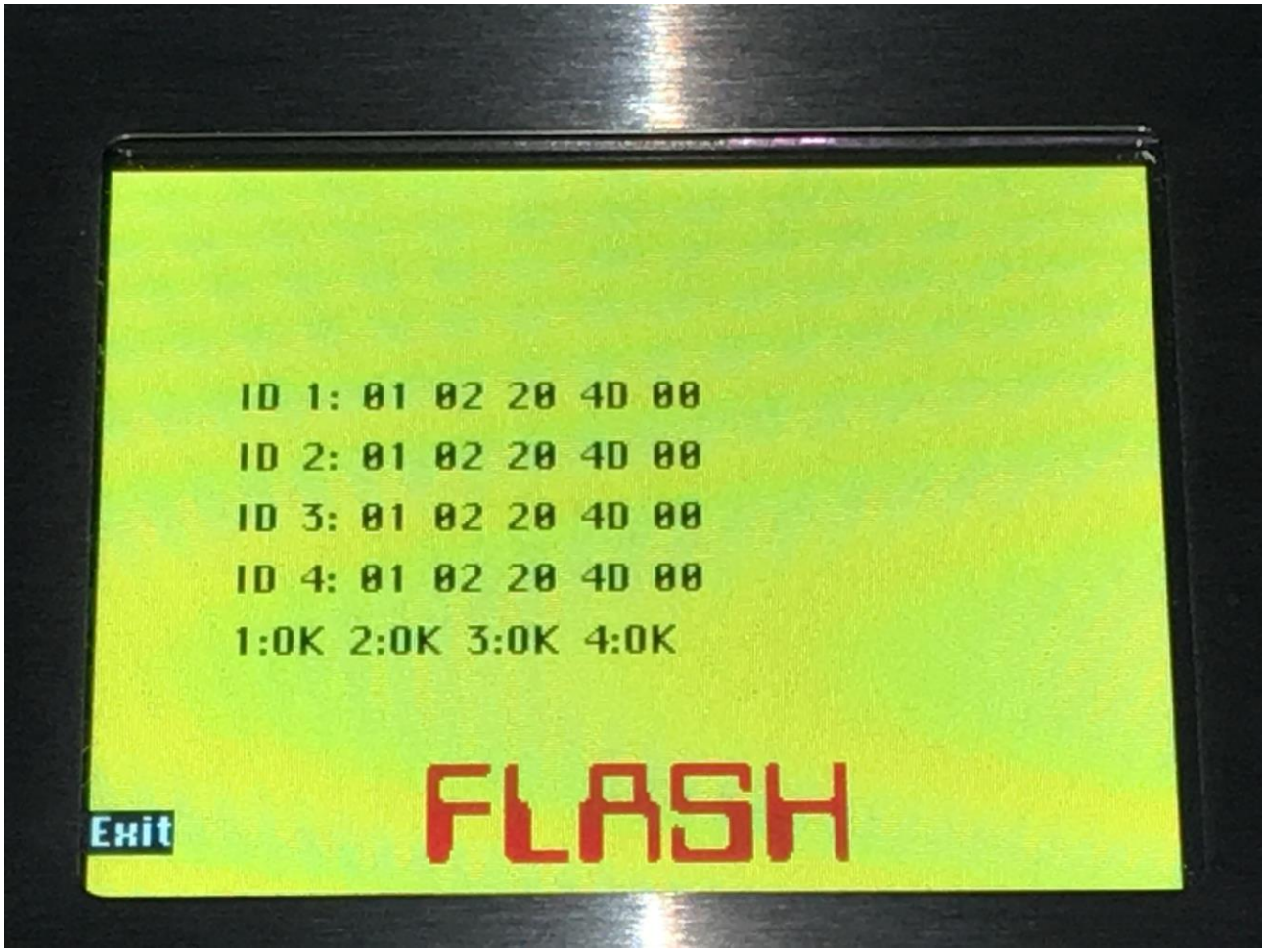


If you are really sure, that you absolutely have to do this, push ”Yes” to start the erase. The sample bank you have chosen, will now be completely wiped out. While it is being erased, the LED close to the button you pressed will light up. When the LED shuts off, the erase has been done, and Anamono X will return to the Common screen.

If you don’t want to do this anyway, push ”No” to exit

Checking the FLASH memory for malfunction

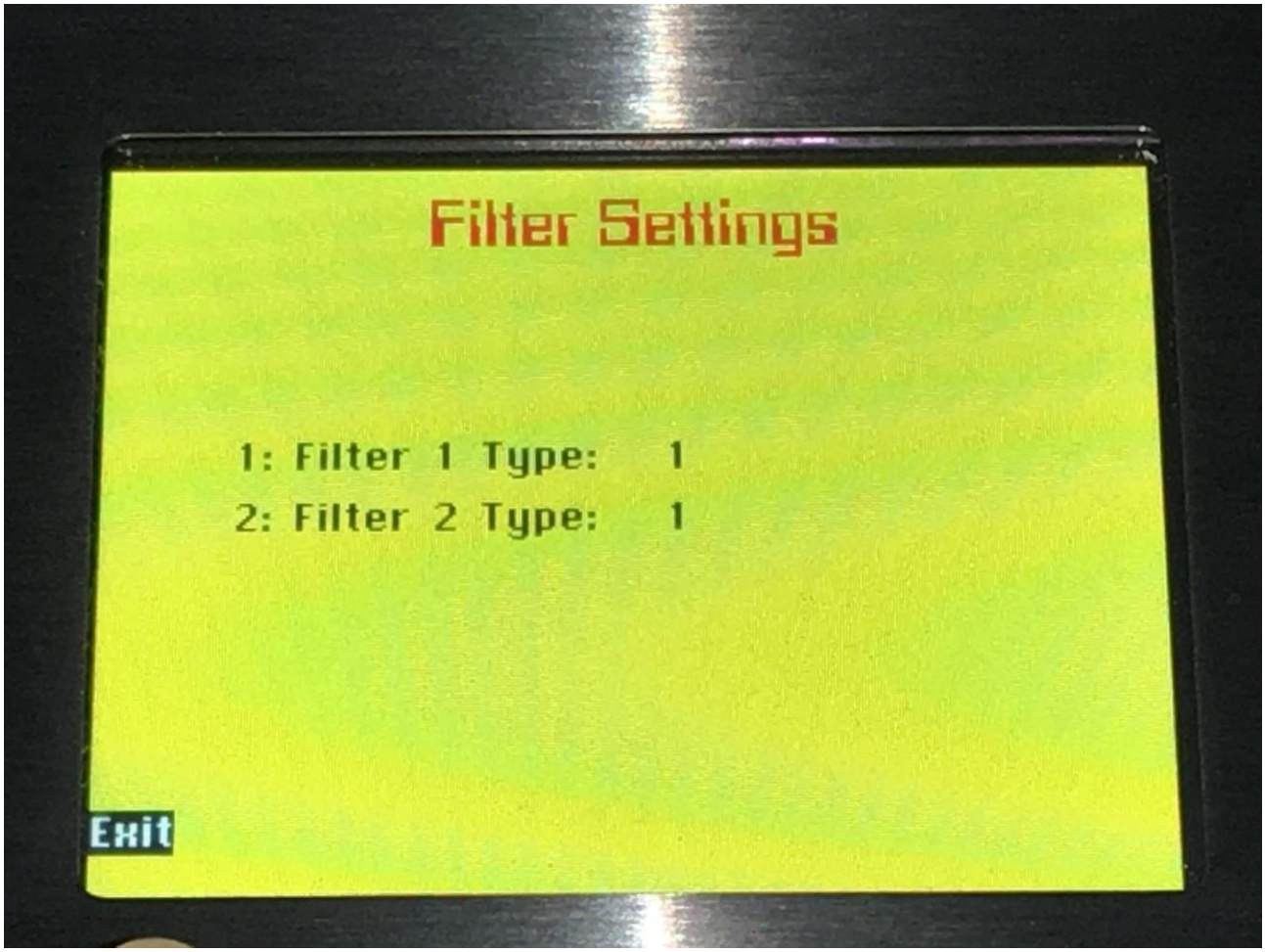
From the Common page, hit the “FLASH” button, to enter this page:



This page should look exactly like on the picture. If it doesn’t, the FLASH memory on your Anamono X is defective, and should be replaced. Get in touch with Gotharman’s regarding this.

Filter Settings

From the Common page, push the “Filter Settings” button, to enter this page:



Here you can set the type of the installed analog filters in your Anamono X. This is only nescessary, if you replace or install new filters.

Explanation of the possible types (more will probably be added later):
1: Most filters.
2: Resonance CV is reversed. For the Curtis Chip filter (VCF5).

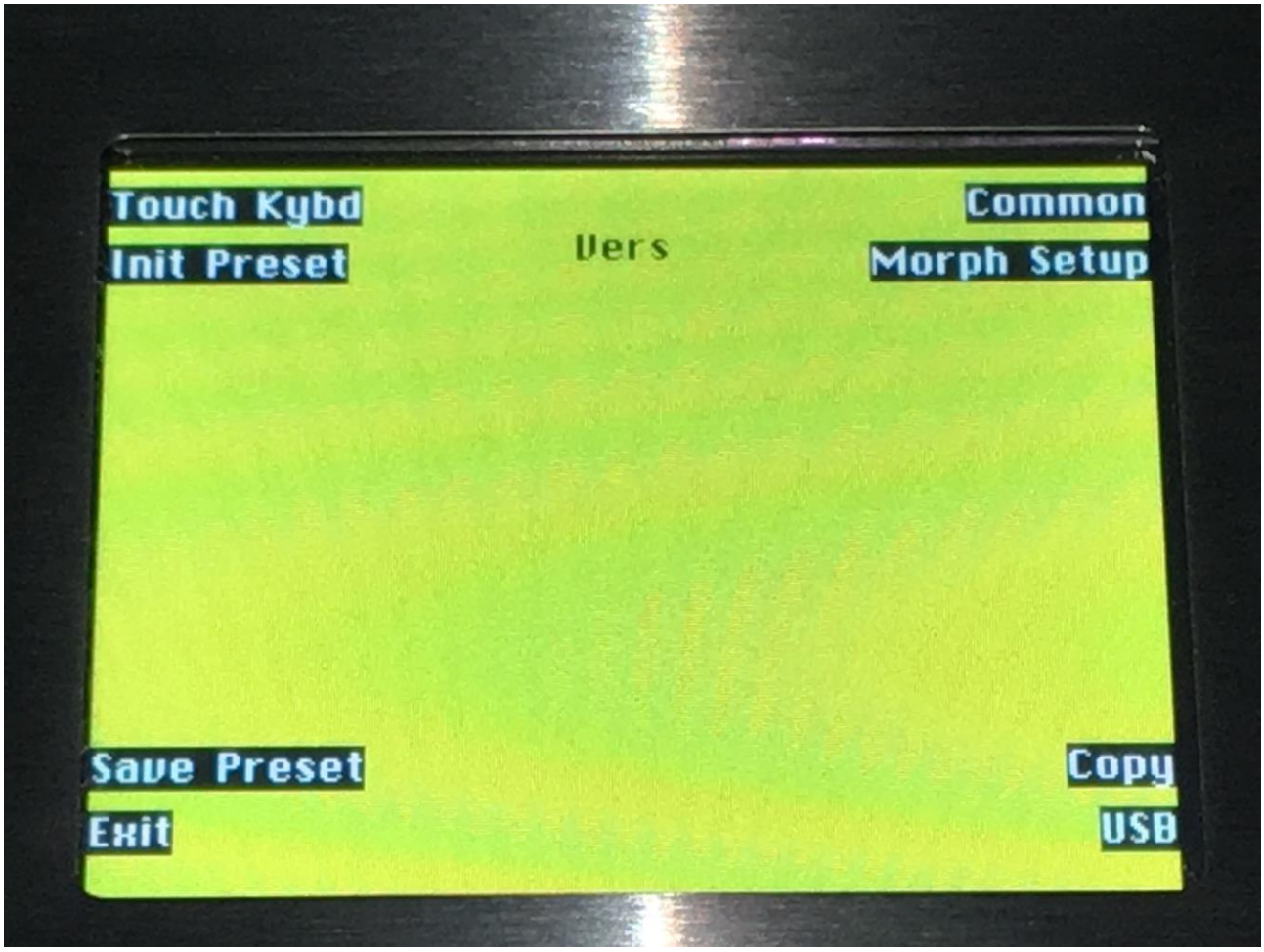
C.P.

Pushing the “C.P.” button on the Common page opens a secret place, that is not really usable for anything. Please don’t tell anybody about it!

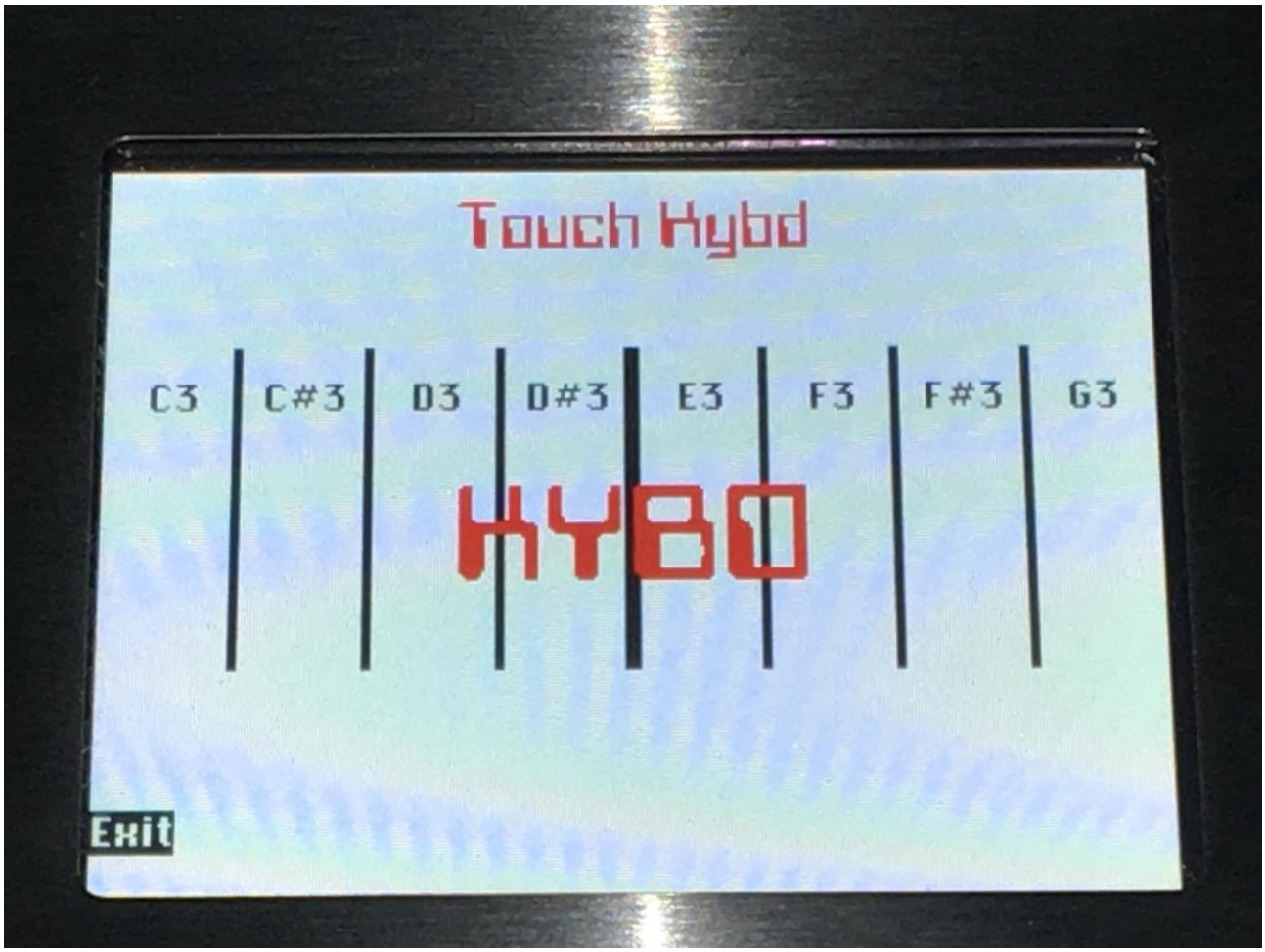
Touch Keyboard Settings

On this page it is possible to adjust which notes you would like the touch keyboard to play. Each note are adjusted separately.

From the Preset Select screen, push the ”More..” button, to enter this page:



Push the ”Touch Kybd” button.

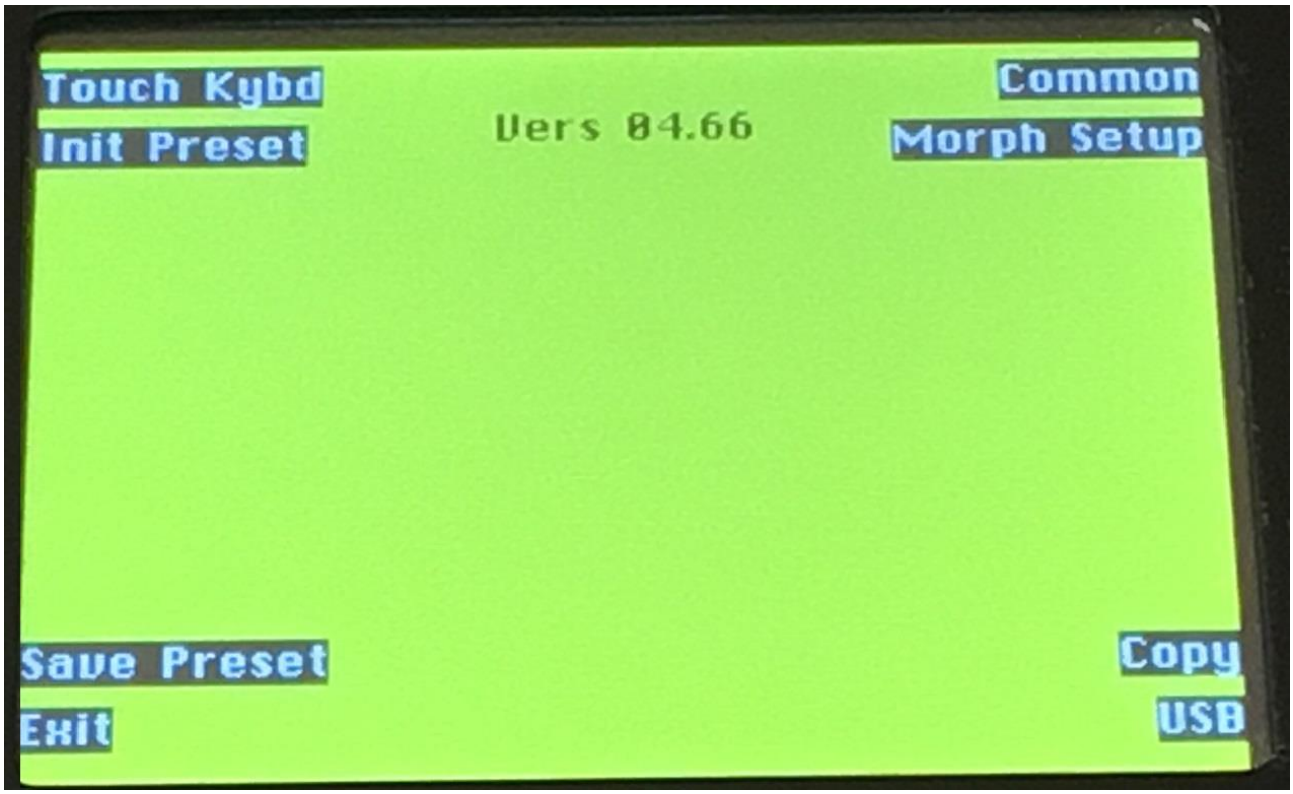


Use edit knob 1 to 8 to adjust the notes for the 8 keys. You can , at any time, touch the display to hear the notes. You can also just push and hold a note while you are adjusting it, to hear the changes.

Push ”Exit” when you are done.

Checking the firmware version

From the Preset Select screen, push the ”More..” button, to enter this page:



In the top of this page, you can see the firmware version number currently running on your Anamono X.

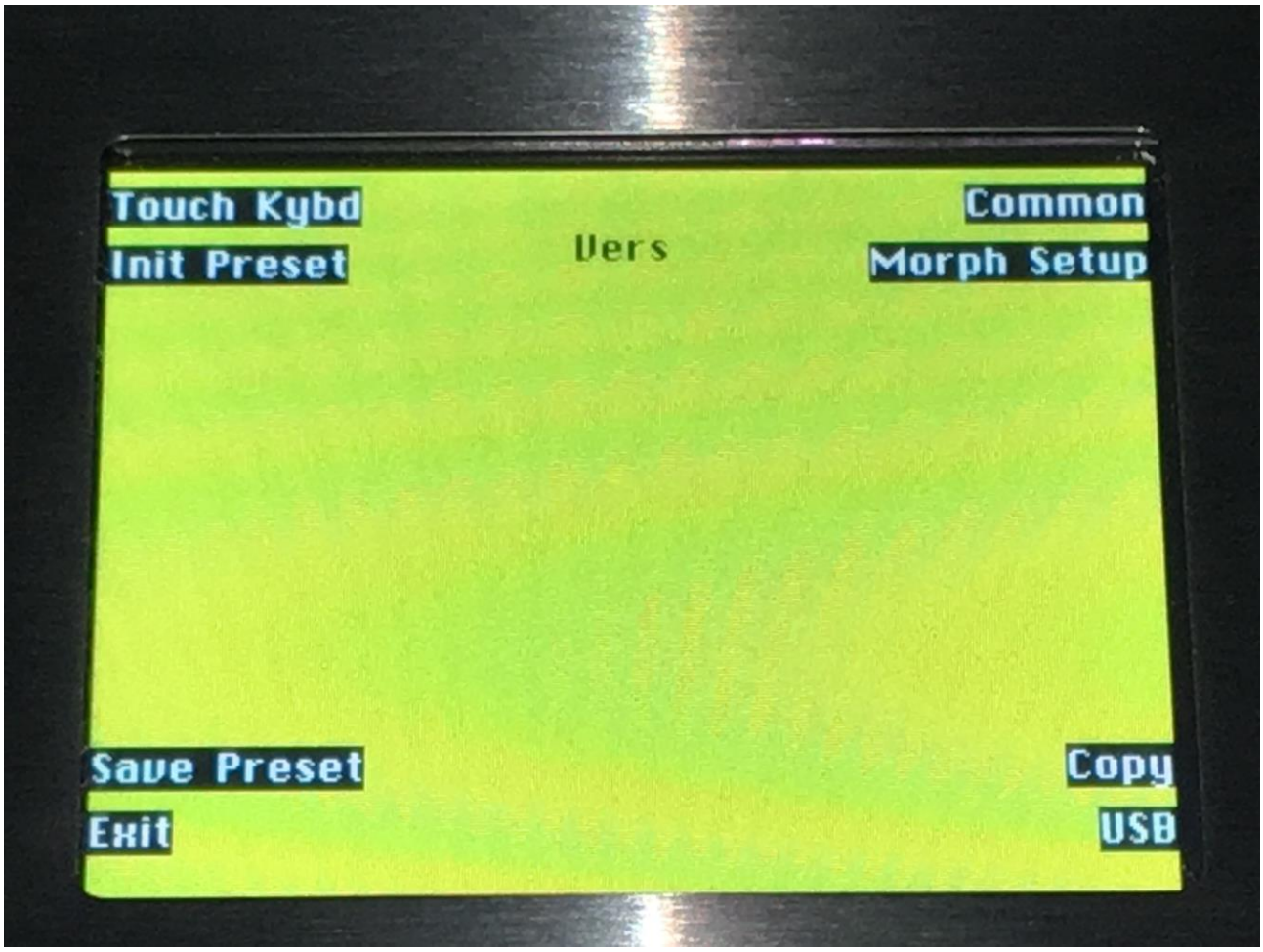
USB

The USB pages lets you access the files and directories of a USB drive, attached to Anamono X's USB connector.

You can import and export samples as .wav files, import and export presets and songs, update the Anamono X firmware, and make new directories.

USB drives used with Anamono X should be:
-Maximum 32 GB
-FAT formatted

From the Preset Select screen, push the "More.." button, to enter this page:



Push the "USB" button.

On this first page that you will enter, the root directory of the connected drive is shown. You can see that it is the root directory, by the ”D:” in the upper left corner. If you have accessed a directory, the name of this will replace ”D:”.

If you do not see the root directory of the drive, make sure that it is connected properly, and that it is has the right specs, as described in the start of this section.

The names you see in the middle of the screen, are the names of the files and directories on the drive. File names are labelled with black, and directory names are labelled with blue. The file in the top, that has its colours inverted, are the currently selected file. To select any file or directory, use the 2 arrow buttons.

In the upper right corner, you can see how many files/directories the currently opened diretory holds. Anamono X will only show 7 files/directories at a time. When you have the 7th file selected, and then push the arrow down, it will show the names of the next 7 files, which then can be selected.

Importing files

File that can be imported to Anamono X are:
-Samplings with the ending .WAV
-Little deFormer samplings with the ending .LDS
-Presets with the ending .AXP
-Songs with the ending .AXO

Files that are shown, but can't be imported directly are:
-Update files with the ending .hex

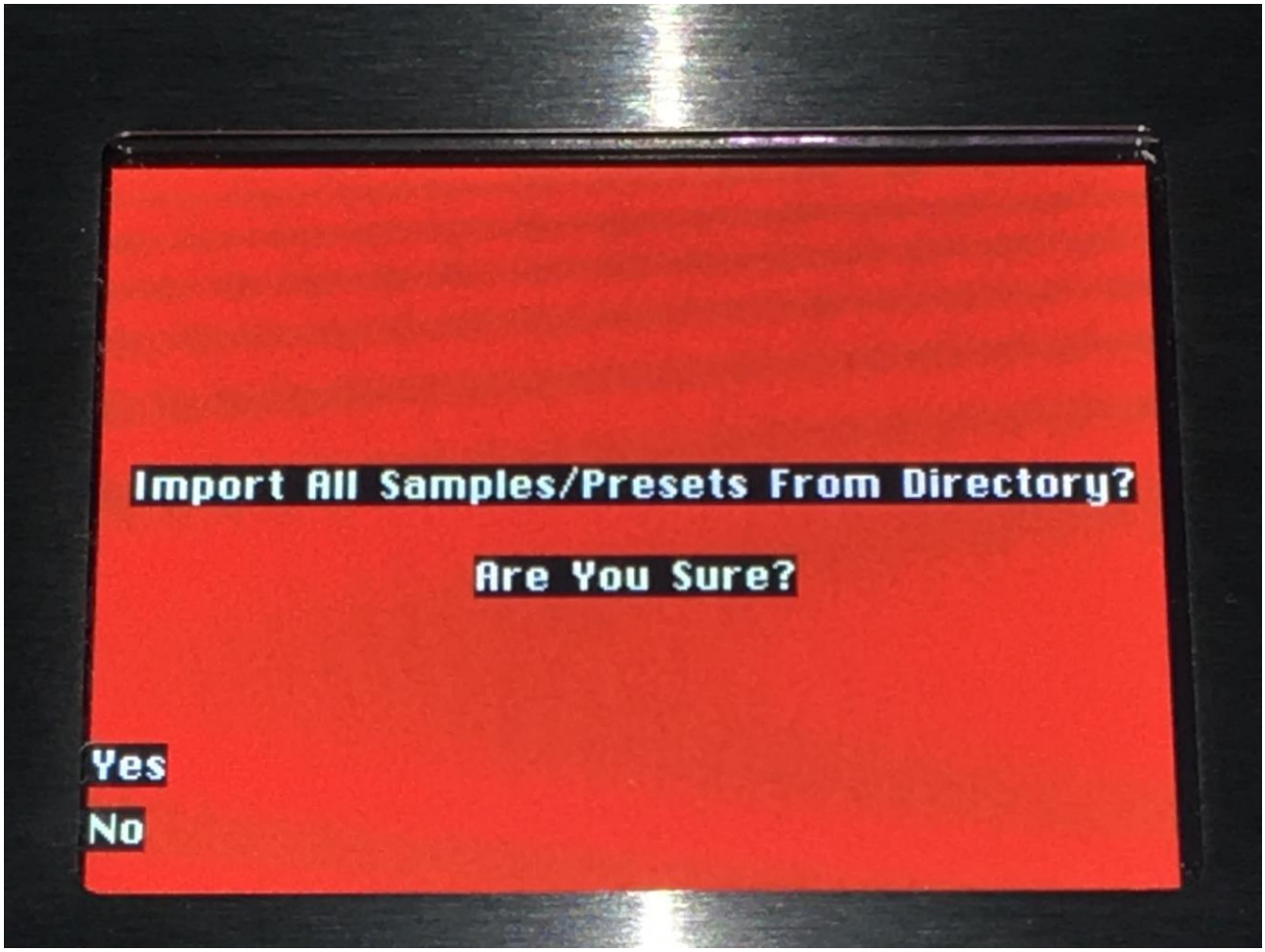
Files with any other ending will not be shown on Anamono X's screen, regardless of if they are present on the drive.

To import a single sampling or preset/song, select the .WAV/.LDS/.AXP/.AXO file you would like to import, using the arrow buttons.
Samples are imported to the sample bank selected on the Sample Rec page.
When importing a single preset or song, it is only loaded to the preset/song buffer, and you will have to save it manually, to keep it.

Push the ”Import” button. Anamono X will now import the selected file, and show the progress on a progress bar:

Importing multiple files

To import multiple files at one time, select a directory, using the arrow buttons. Push the ”Import” button. Anamono X will now ask:



Push ”Yes” to continue, or ”No” to exit.

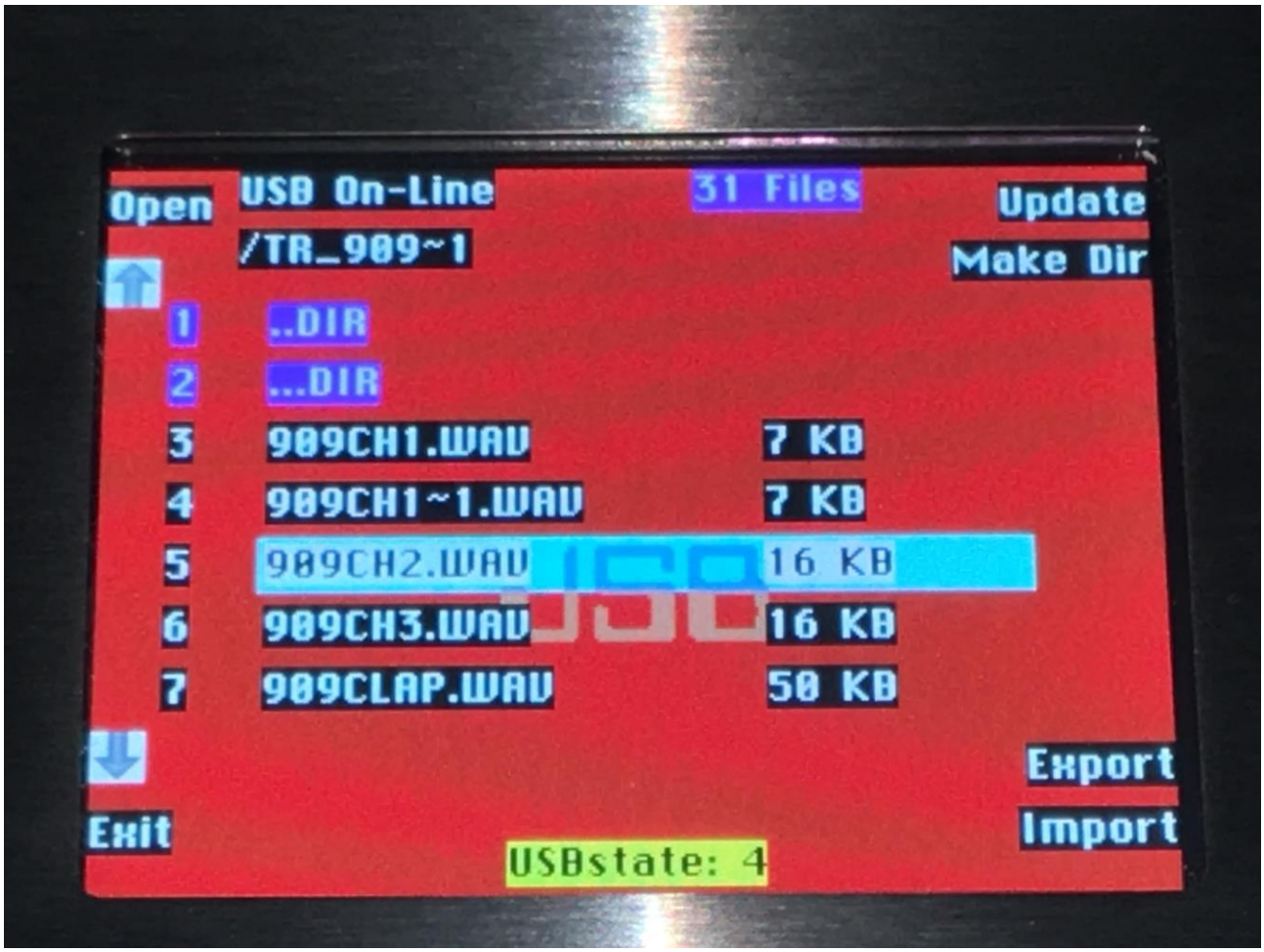
If you pushed yes, Anamono X will now import all samples, presets and songs, that the selected directory holds. It will though not import files from any sub-directories.

Samples are imported to the sample bank selected on the Sample Rec page. Presets are imported to the selected preset and forwards, so make sure that you have not selected a preset that you planned to keep, before using this function. Songs are also imported to the selected song and forwards, so make sure that you have not selected a song that you planned to keep, before using this function.

Open a directory (or folder)

To open a directory, to see what's inside, or to import single files or sub-directories, simply select the directory you would like to open, using the arrow buttons, and then push the ”Open” button.

Anamono X will now open the directory, and show the first 7 files in it. The ”D:” in the upper left corner, will now be replaced by the opened directory's name.



Make a new directory

A new directory can be created in the root directory, or inside another directory.

To do this, push the ”Make Dir” button.

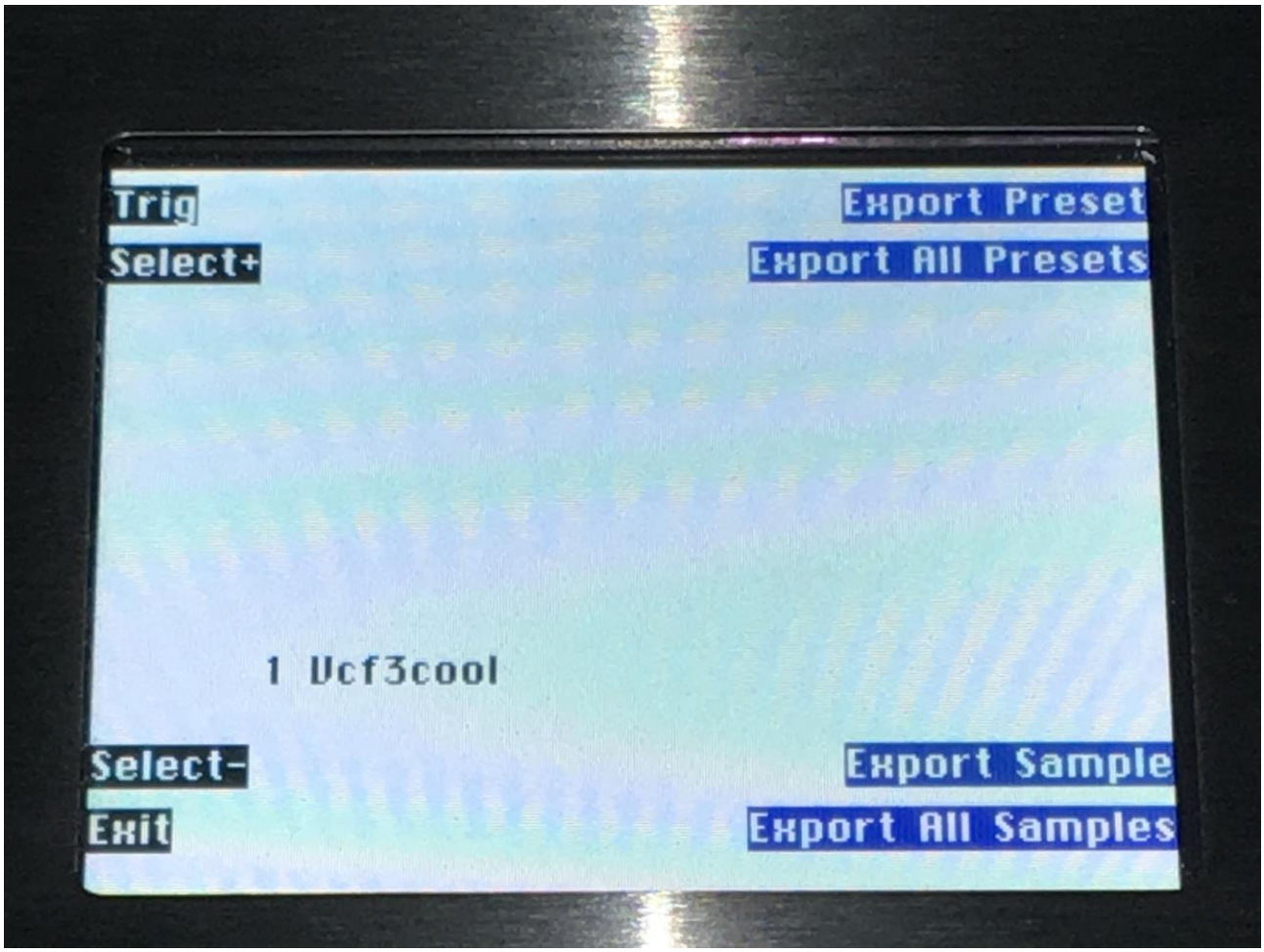
The 8 edit knobs can now be used to select an 8 character name for the new directory. When you are done with this, push the ”Make” button. The new directory will now be created.

You can, of course, also just push ”Exit”, if you do not want to make a directory anyway.

Export samples, presets and songs to a USB drive

The samples, presets and songs held in Anamono X's FLASH memory can be exported to a USB drive, for back-up, or for use with other gear or computers. Anamono X exports samples as standard 16 bit, 44.1 KHz, native PCM .wav files, so they can be used with any other gear, that supports this format. Anamono X exports presets and songs in its own .axp/.axo format, so these can at writing moment only be used by Anamono X itself.

To enter the export page, push the "Export" button:



All exports are done to the currently open directory. There are 4 different possibilities for exporting:

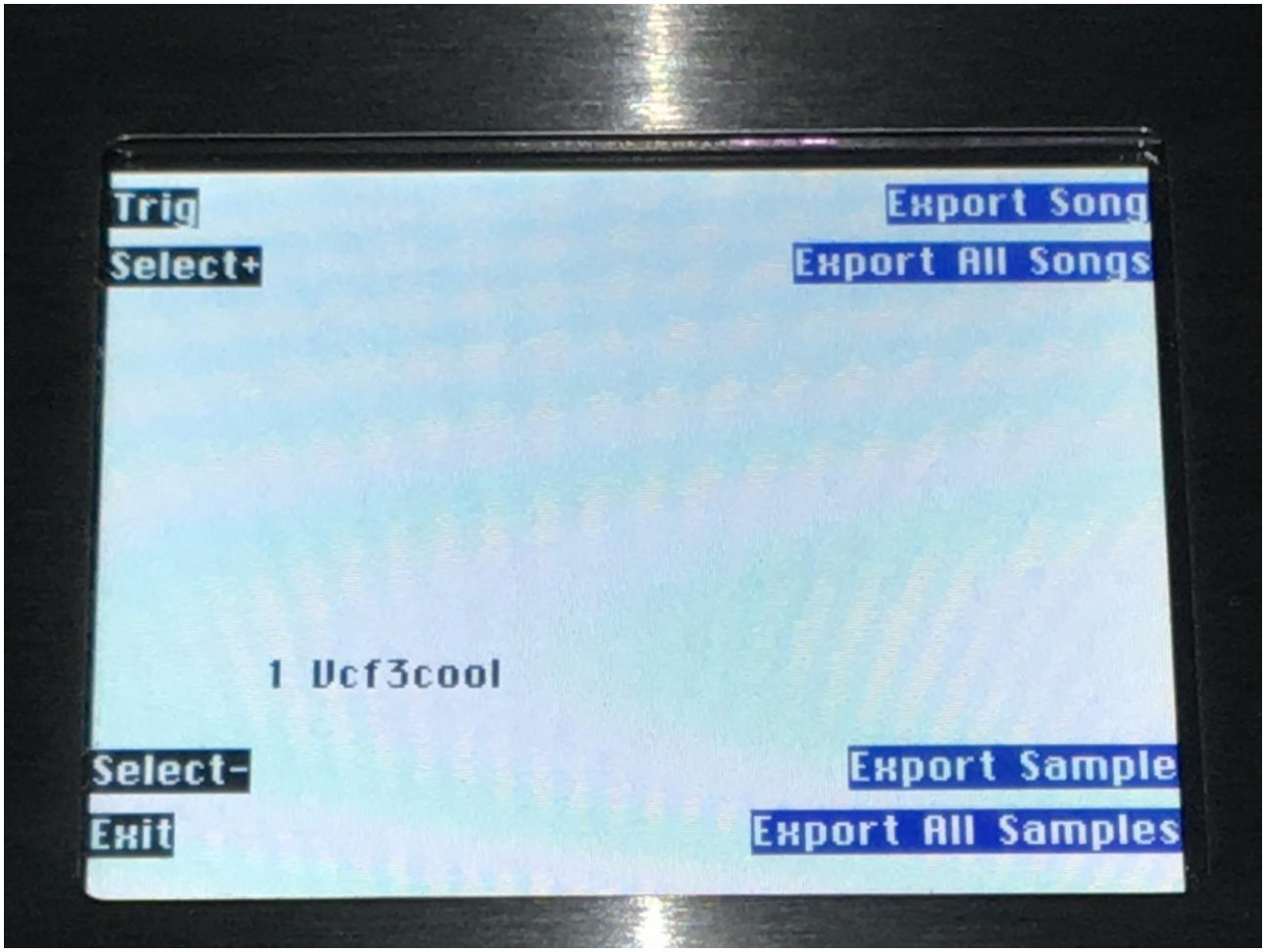
"Export Preset/Song"
Pushing this button will export the currently selected preset. If Anamono X are in song mode, it will export the selected song.

"Export All Presets/Songs"
Pushing this button will export all programmed presets. If Anamono X are in song mode, it will export all programmed songs.

”Export Sample”
Pushing this button will export the selected sample. Use the 2 ”Select” buttons to select the sample to be exported. Sample Bank must be selected on the “Sample Rec” page. Push the ”Trig” button to audition the sample before export.

”Export All Samples”
Pushing this button will export all samples of the selected sample bank. The Sample Bank must be selected on the “Sample Rec” page.

When in song mode, the Export screen looks like this:



Updating the Anamono X firmware

Now and then updates will be available for Anamono X, that adds new functionality and fixes bugs. These will always be available for download here:
http://www.gotharman.dk/anamonoxupdates.htm

To update Anamono X, you must have a computer with an internet connection, and an Anamono X compatible USB drive ready. See the start of this section, for what USB drives are Anamono X compatible.

Then you should follow these steps:

1. Download the update file of the latest update, from the Anamono X Updates site, to your computer.

2. Connect the USB drive to your computer.

3. Make sure that the USB drive is FAT formatted.

4. Create a directory in the root directory of this USB drive, that is named "UPDATE".
If the USB drive already contains a directory called UPDATE, please delete all files inside this.

5. Copy the update file from your computer to the USB drive UPDATE directory. Make sure that no other files are present in this folder, and please don't rename the files.

6. Eject and remove the USB drive from your computer, and connect it to Anamono X's USB connector.

7. Turn Anamono X on, if it isn't already turned on.

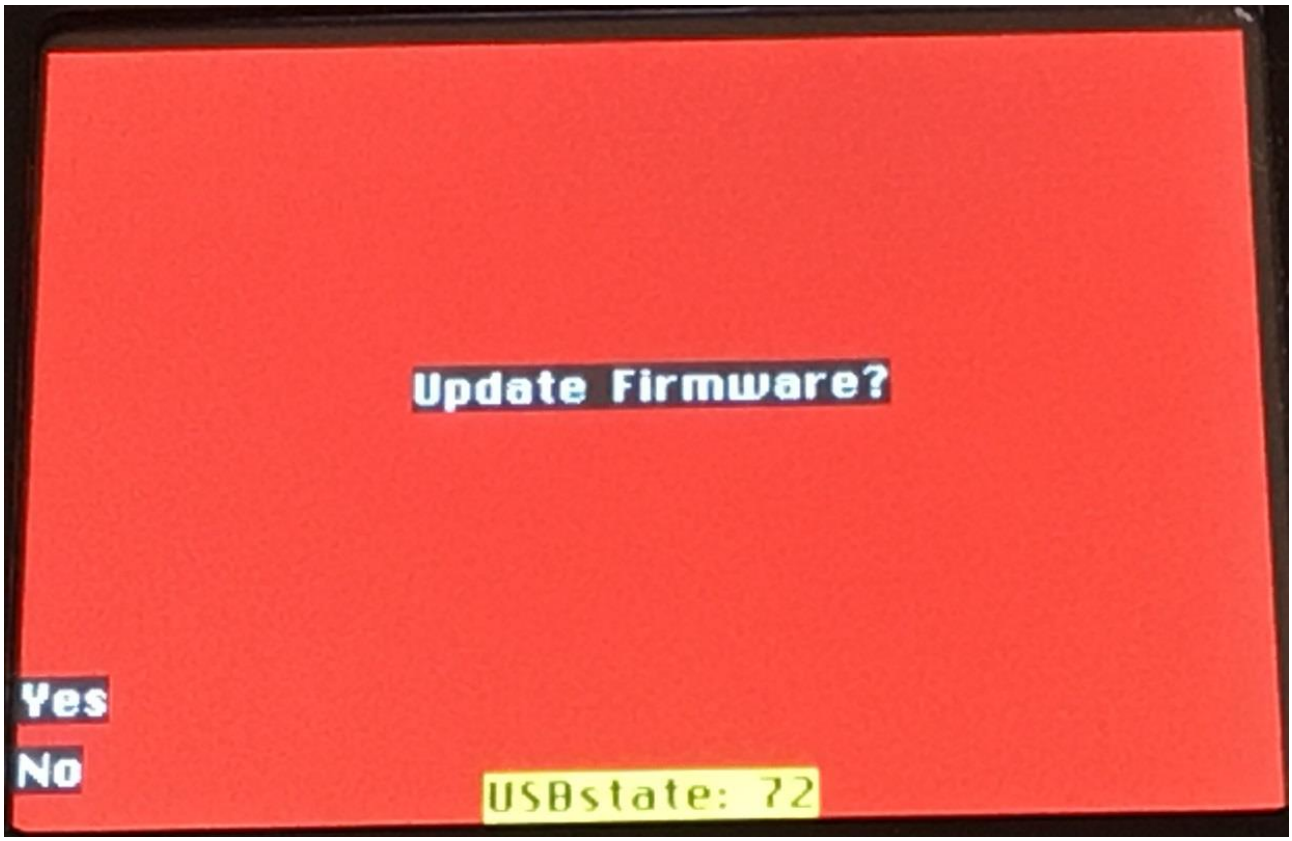
8. From the preset select screen, push the "More.." button.

9. Push the "USB" button.

10. Wait for Anamono X to register the USB drive, so all files and folders are presented on the screen.

11. Push the "Update" button.

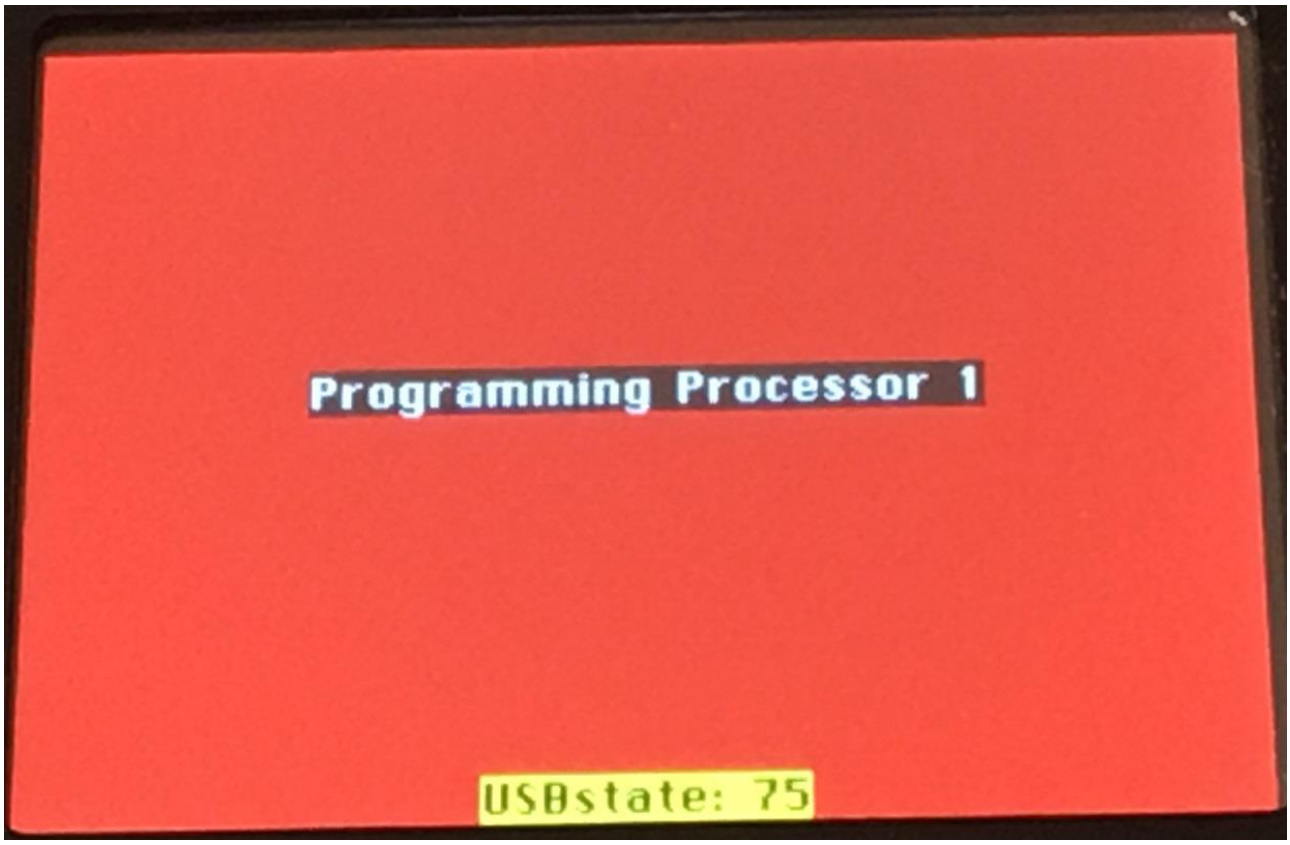
12. Anamono X will now search for the "UPDATE" folder and valid update files. If it finds both, it will ask: "Update Firmware?"



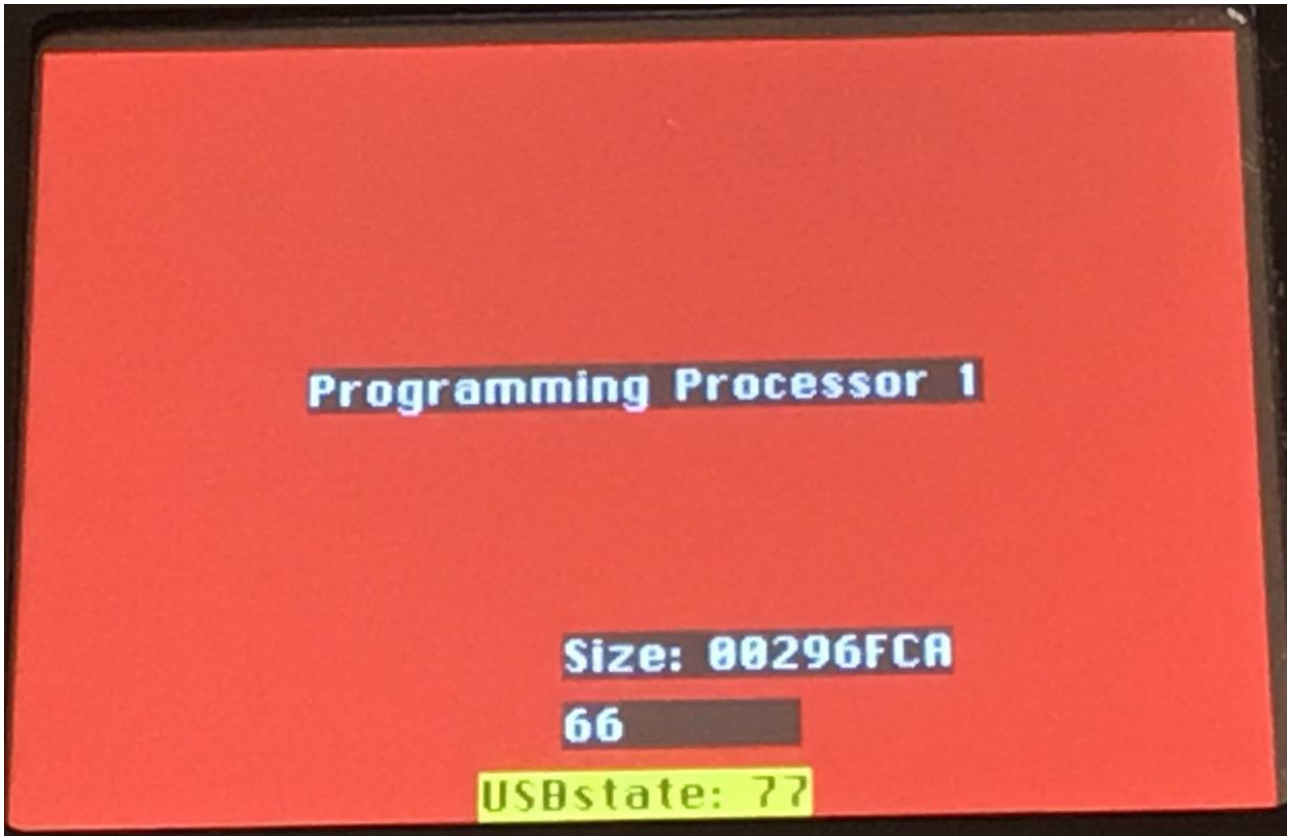
13. Push "Yes" to proceed with updating, or "No" if you regret.

14. If you pushed Yes in step 13, Anamono X will now start to get the update file, and program its processor.
When it starts to program the processor, it will look like it halts for a couple of minutes. This is because it does halt, when erasing the program memory of a processor.

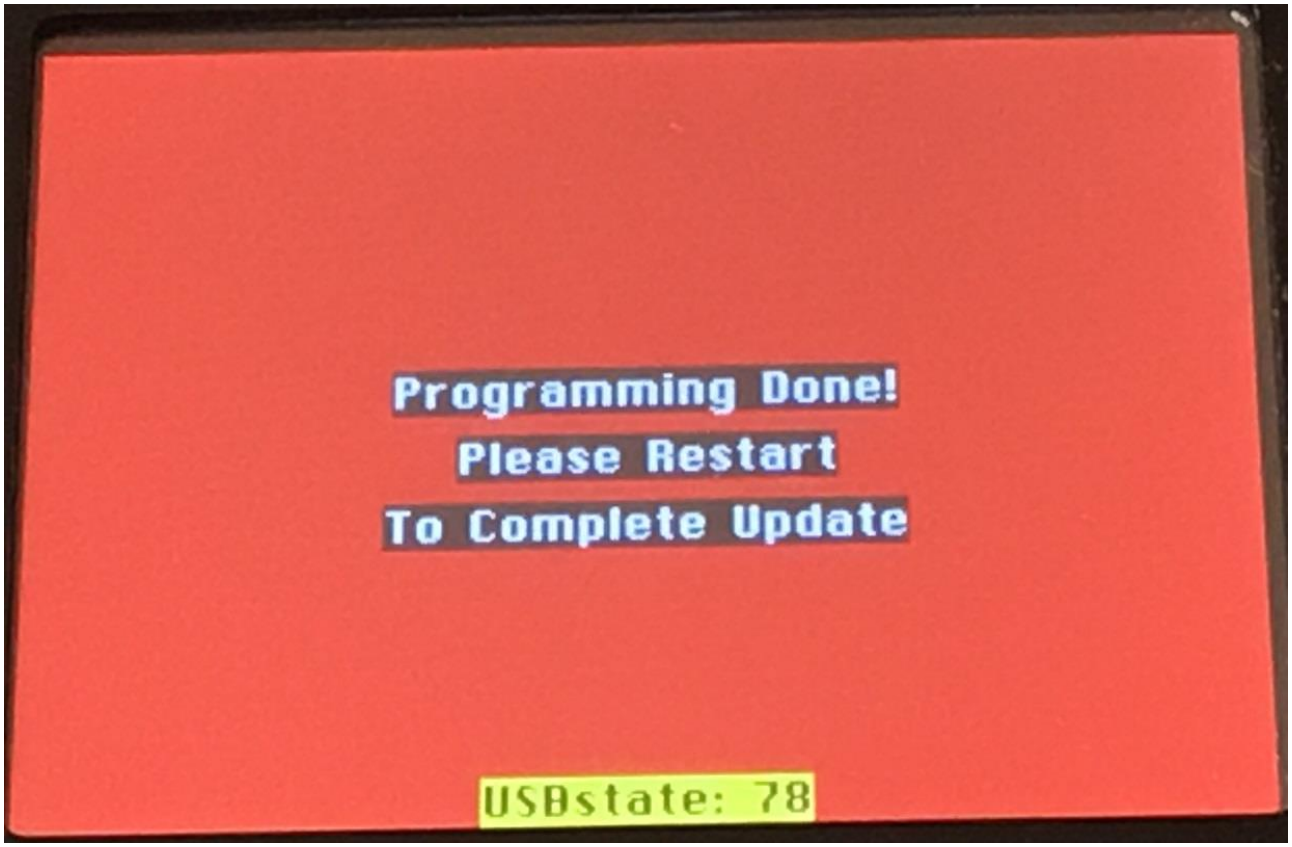
Erasing the program memory of the processor:



Programming processor (counter in the bottom counts up):



15. When programming is done, Anamono X will ask you to restart it. Please turn Anamono X off and then on.



16. When you turn on Anamono X after an update, it will need to finalize this. It will show this by turning the 3 LED’s on the upper right LED row on and off sequentially, one by one. After it has done this for a little while, it will start normally and are ready to use.

Sometimes Anamono X might not start up normally, right after an update. If anything on the display looks incorrect, if Anamono X outputs sound without any reason, or if you experience any other abnormal behavior right after an update, please turn Anamono X off and on again.

If something goes wrong:
-If the power should go off, while Anamono X is getting the update from the USB drive, and programming the processors, simply start over again from step 7.
-If the power should go off, while Anamono X is finalizing the update (3 LED's turn on and off), simply turn Anamono X on again, and it will now finalize the update.

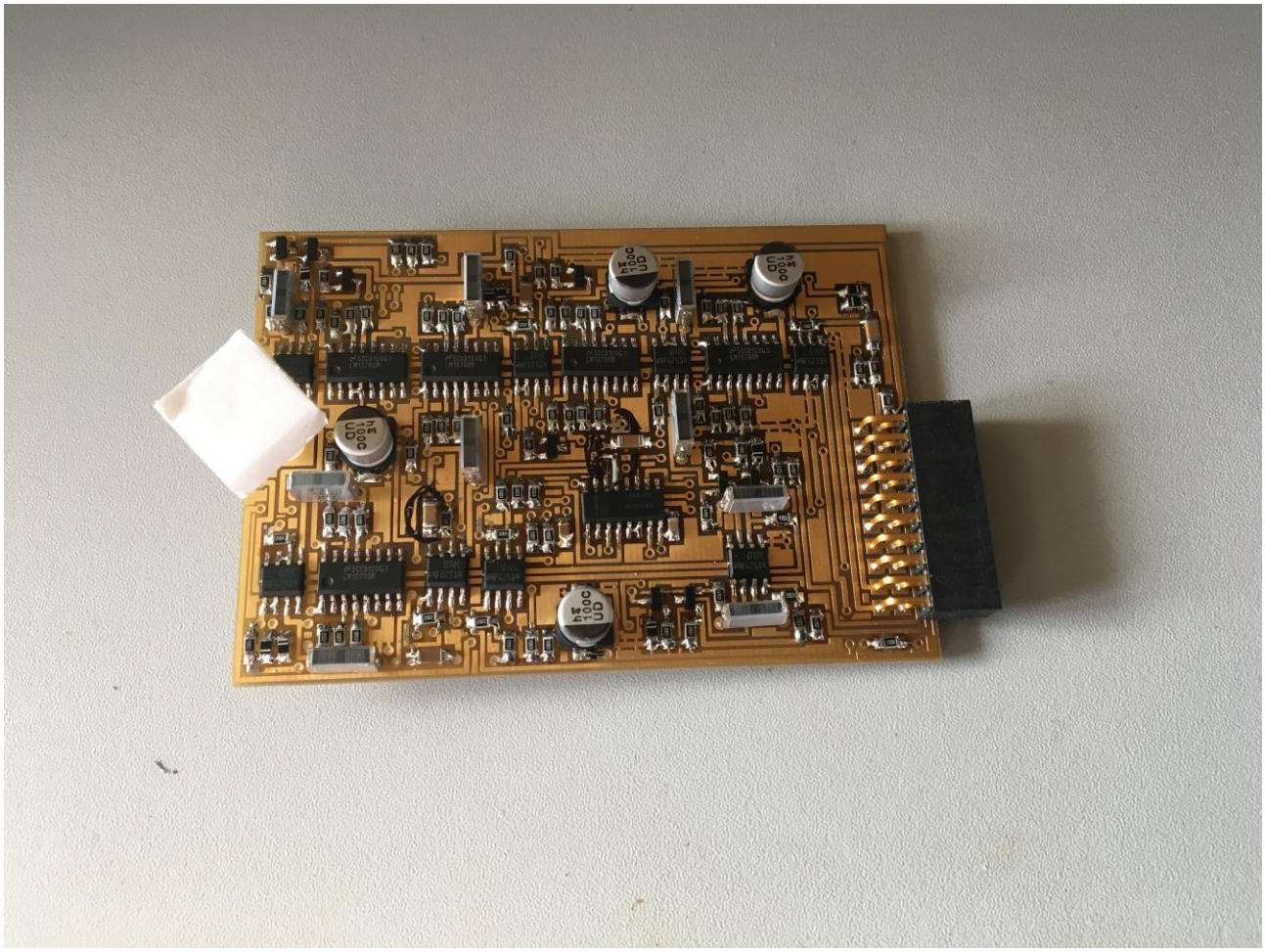
Analog Filters Install/Replace

If you should ever get in the need for new sounds and inspiration, you might not need to purchase a completely new synth. The 2 analog filters of your Anamono X can be replaced, to enter a new sound universe!

This section of the manual will describe how to do that.

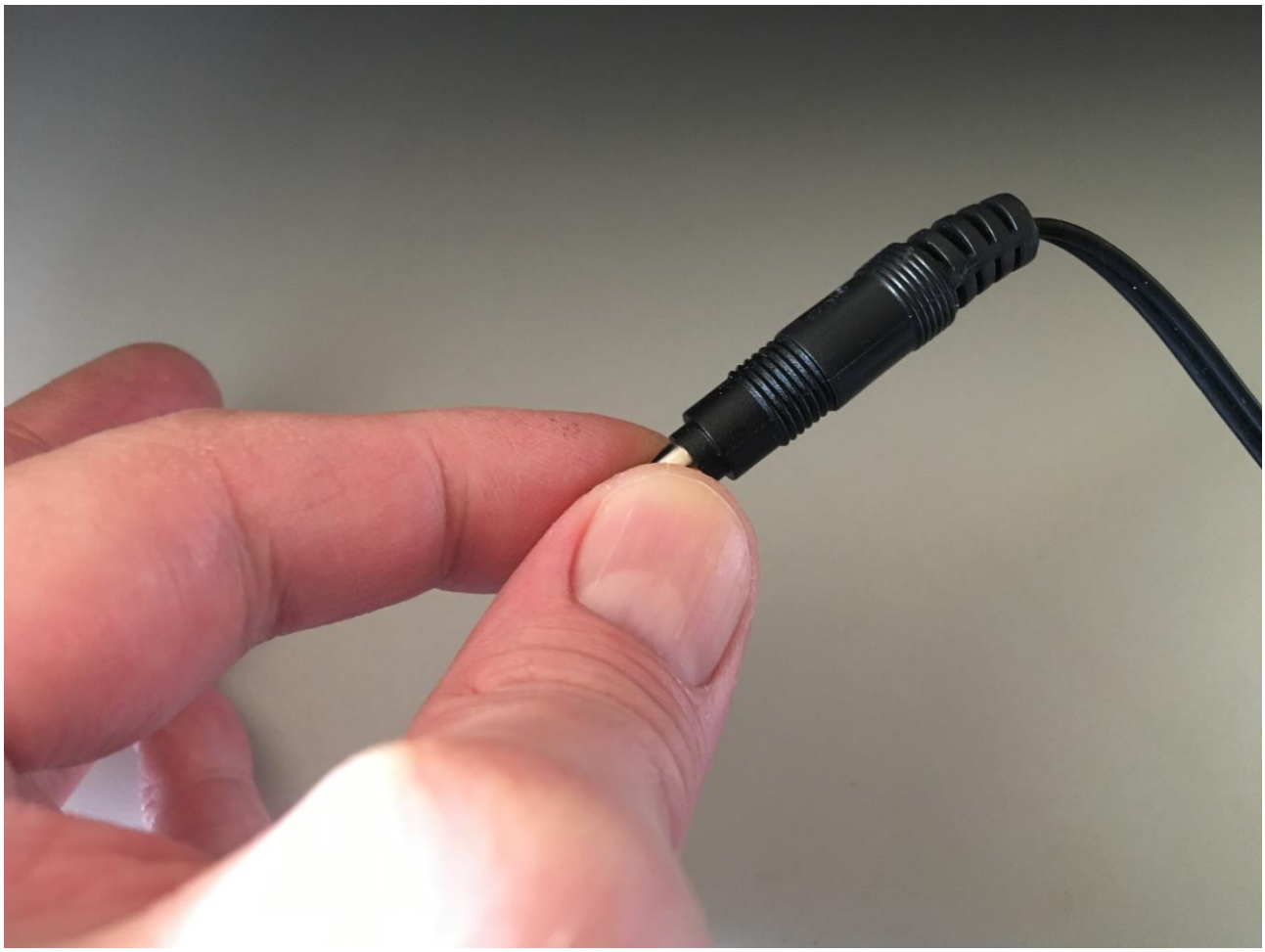
You will need a phillips screwdriver, and a screwdriver with a flat head, or a knife:

…And a filter board:

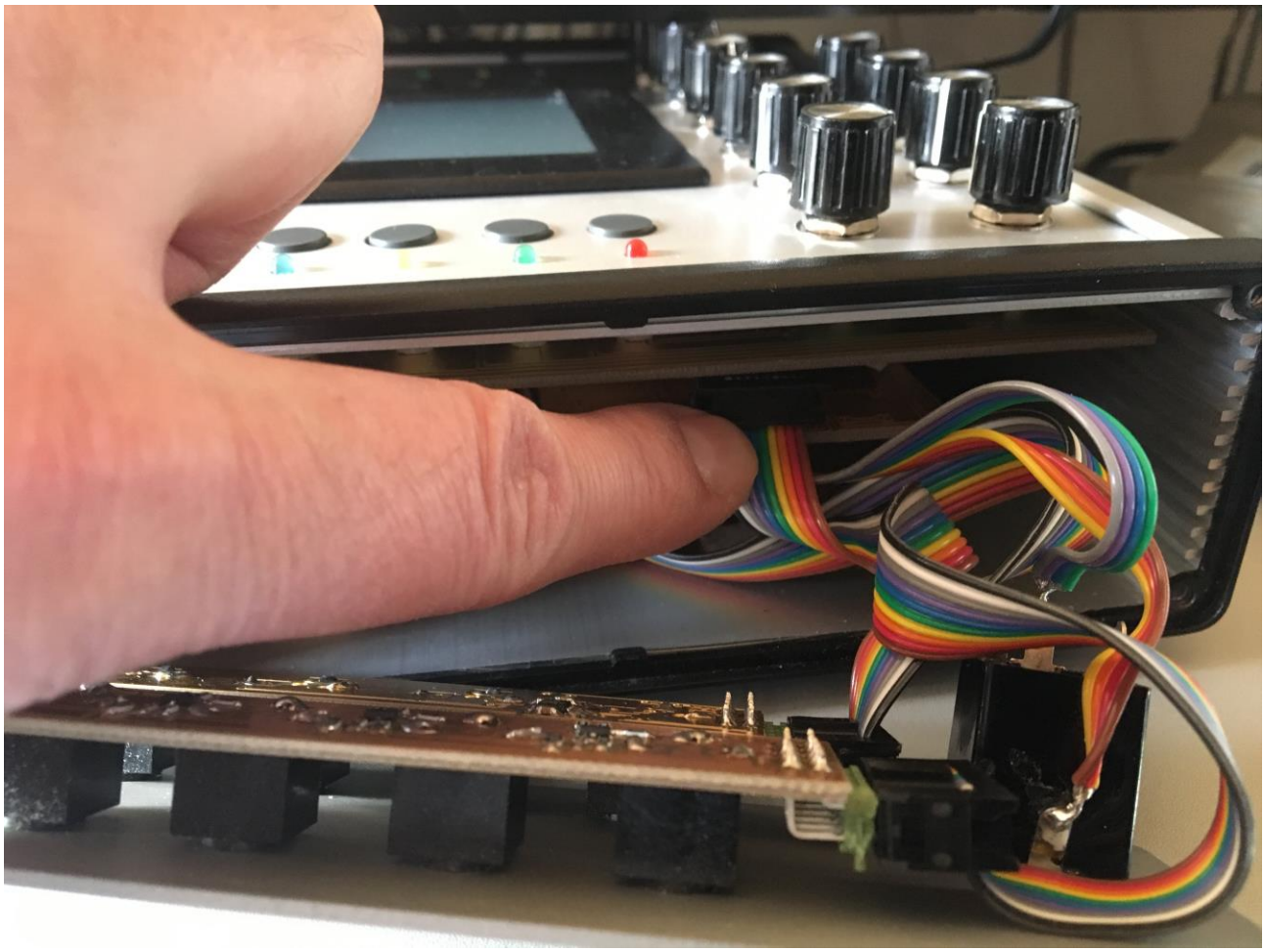


Make sure that your Anamono X is turned off, and remove the power connector cable from its connector.
Remove the 4 screws in the corners of the left endplate, using the Phillips screwdriver.

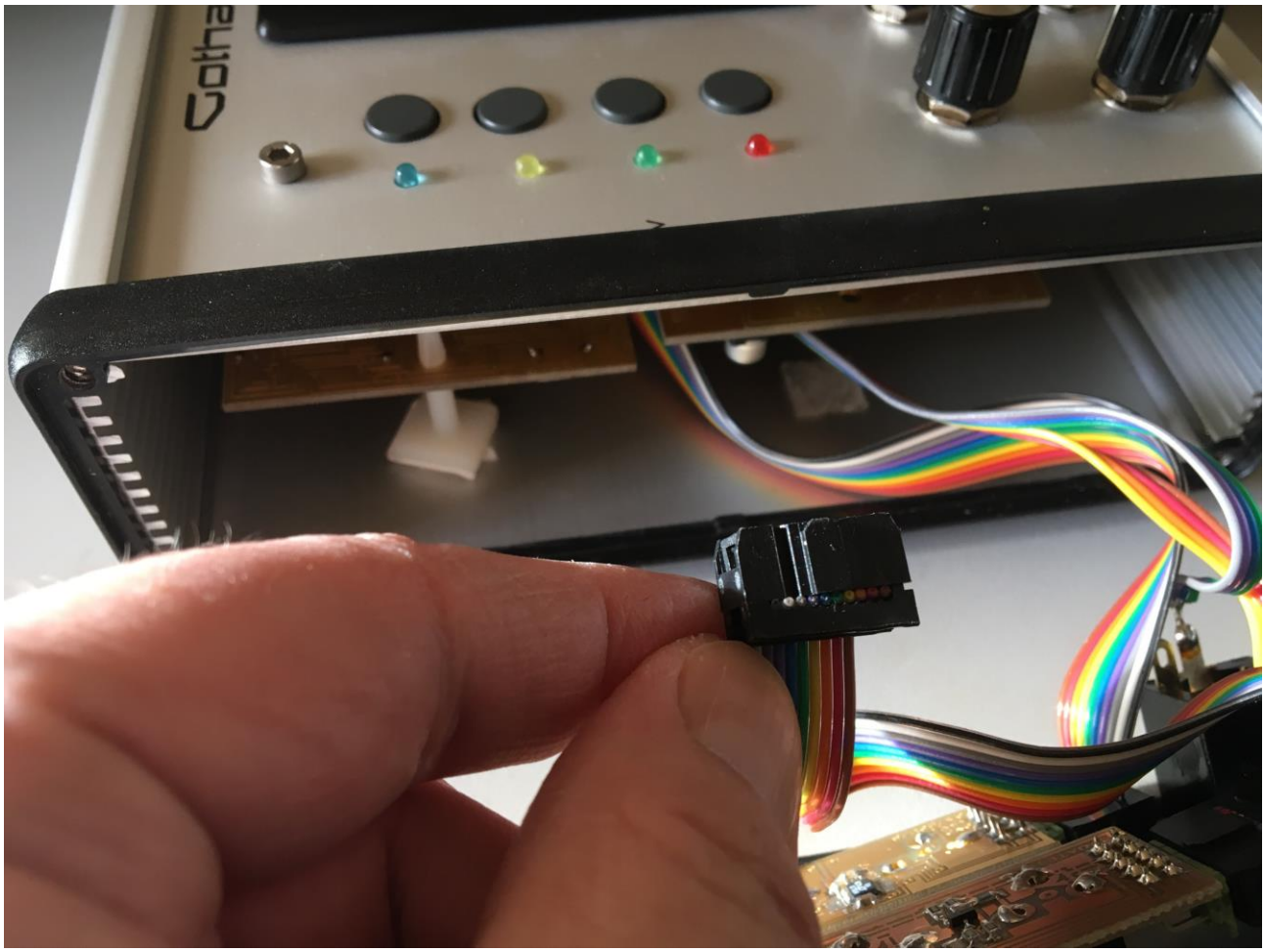
Pull the endplate downwards.

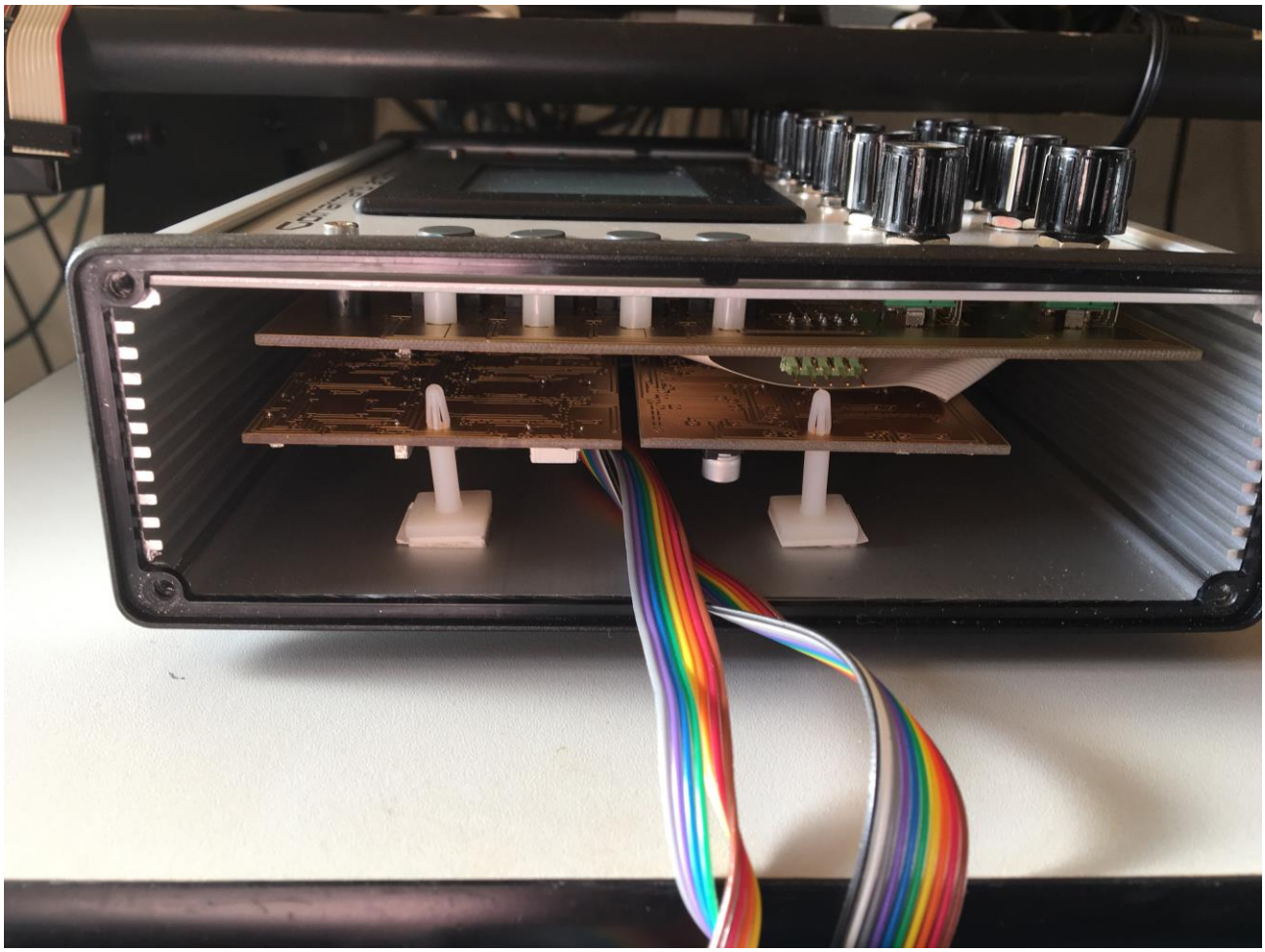


Now, before you touch anything electronic, with the Anamono X power supply connected to the wall socket, touch the metal on the connector. This will unload you from any static electricity, that might damage the electronics.

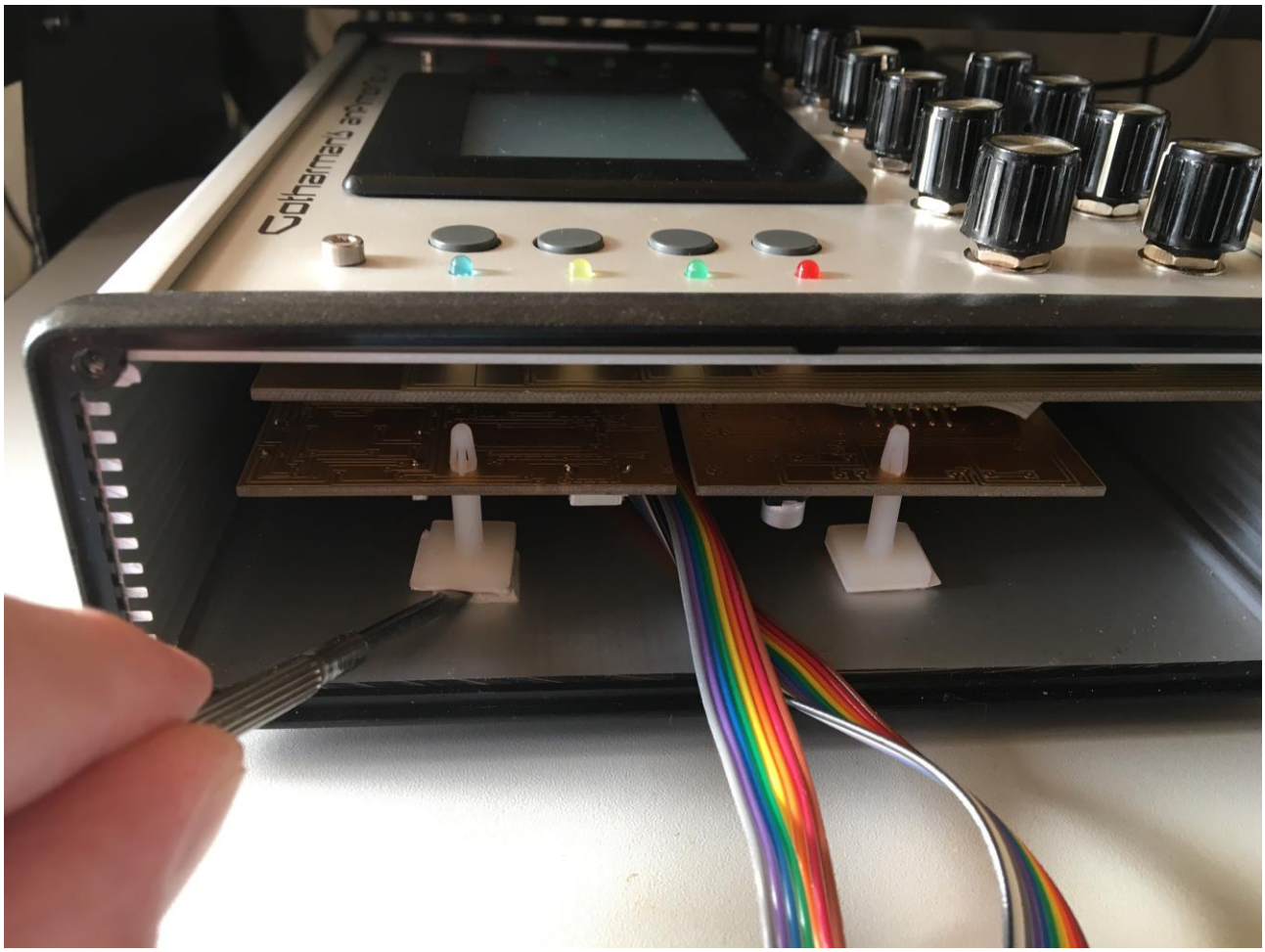


This CV inputs connector must be removed.

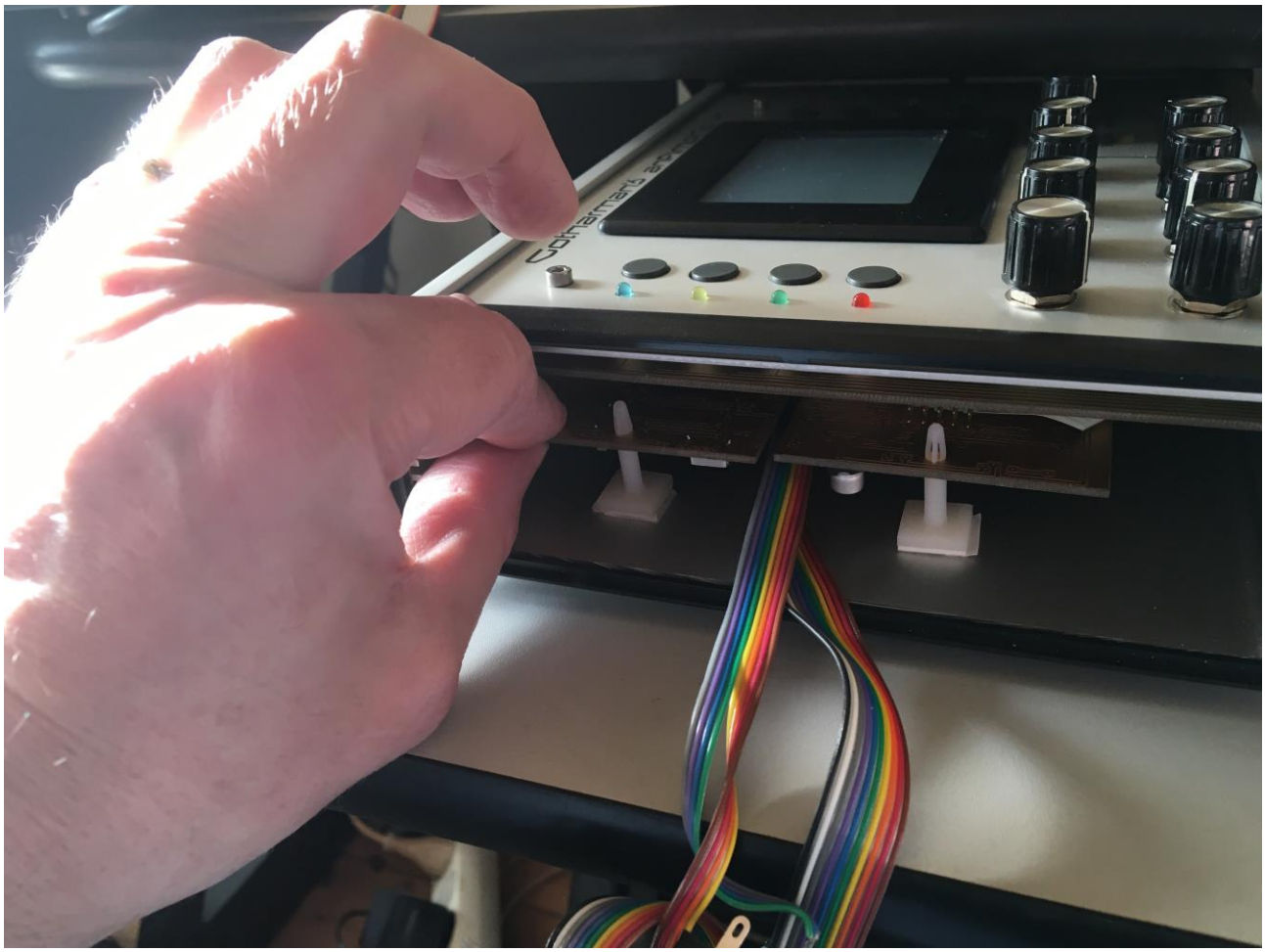




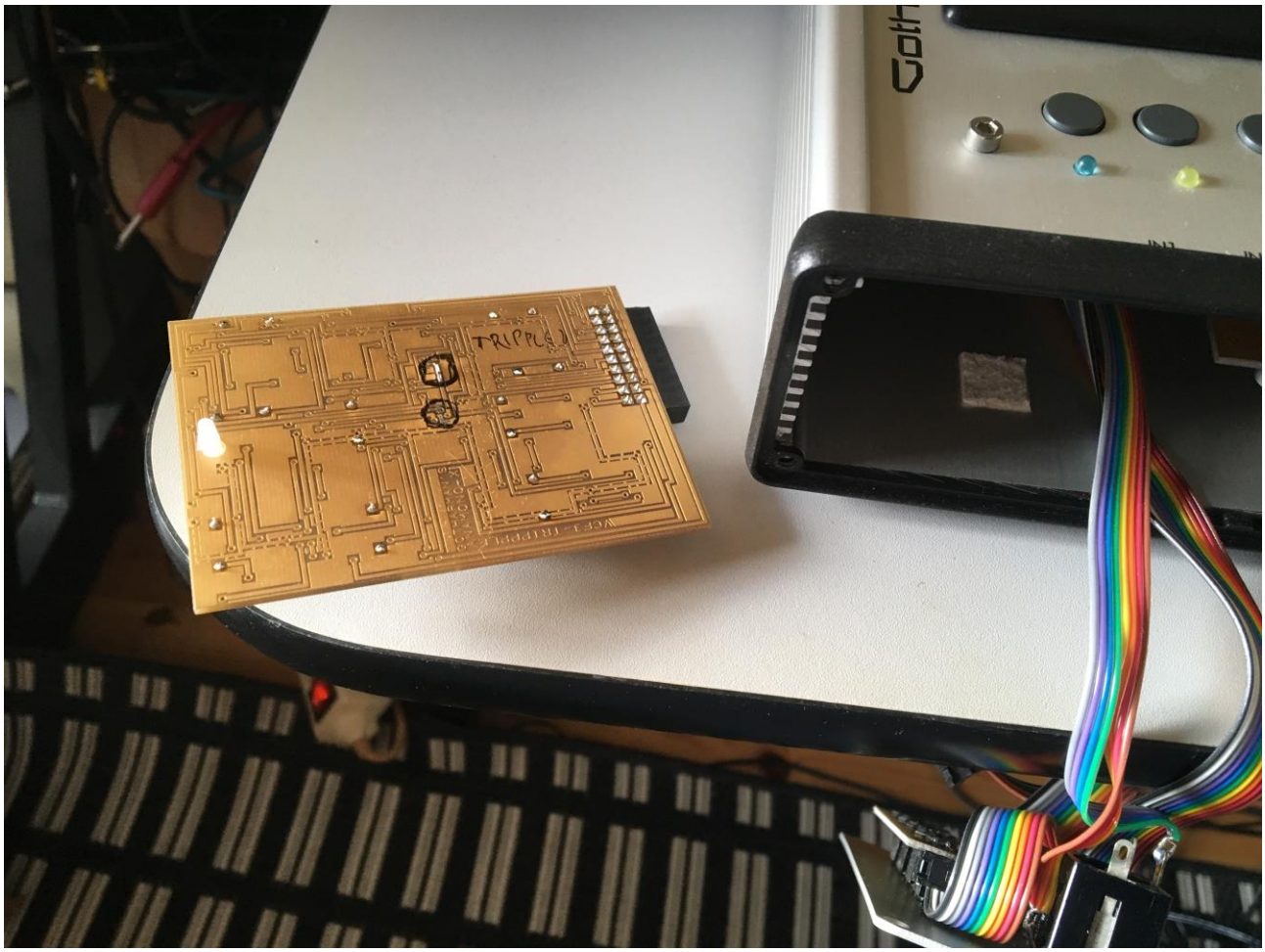
Now you can take the endplate further away from the Anamono X box. You can now also see the 2 analog filterboards. The one to the left is filter 1, and the one to the right is filter 2.



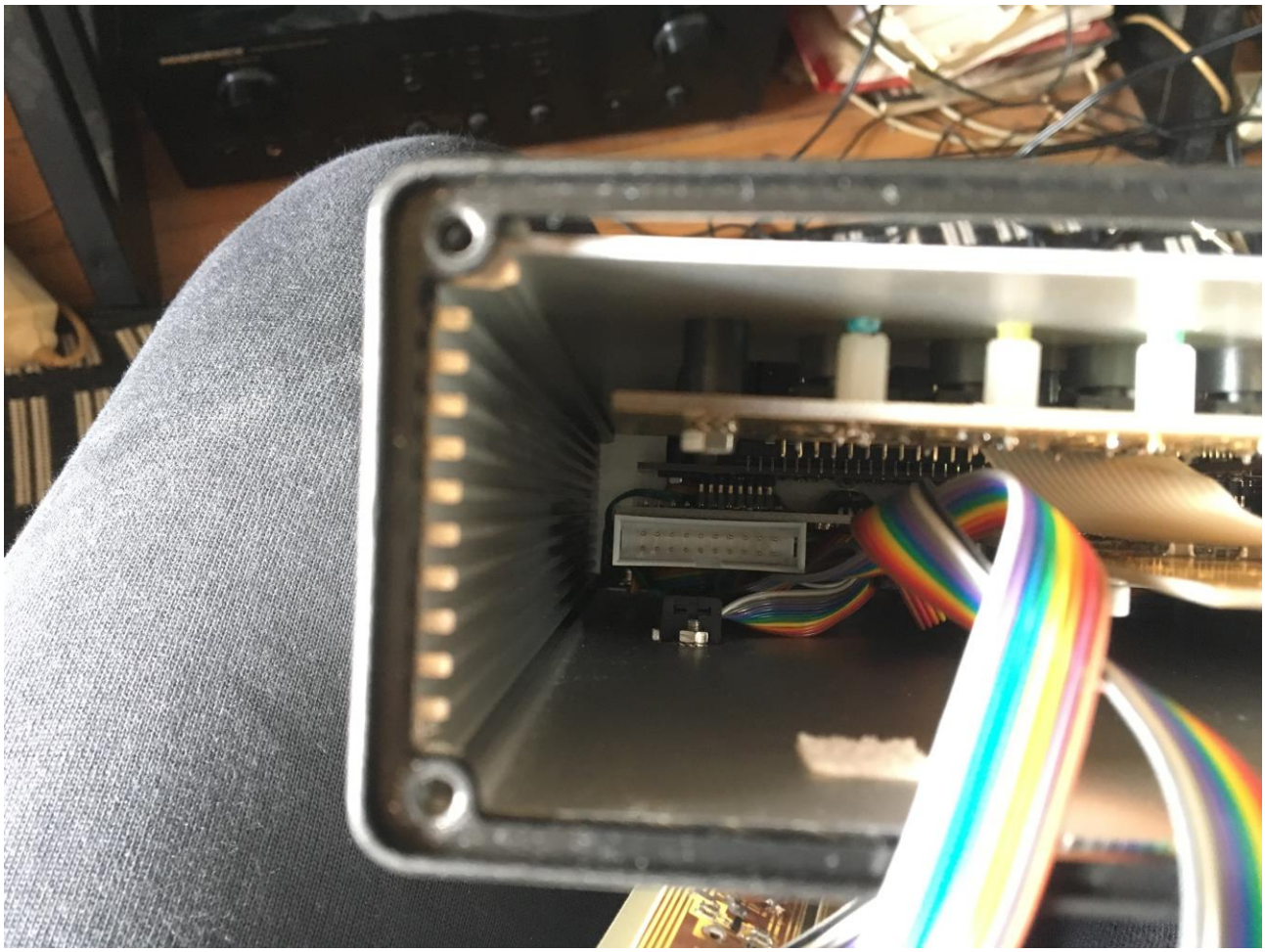
We will now replace filter 1. The plastic feet that helps holding the filter in place, might be glued. Use the screwdriver with flat head or a knife, to loosen it from the Anamono box.



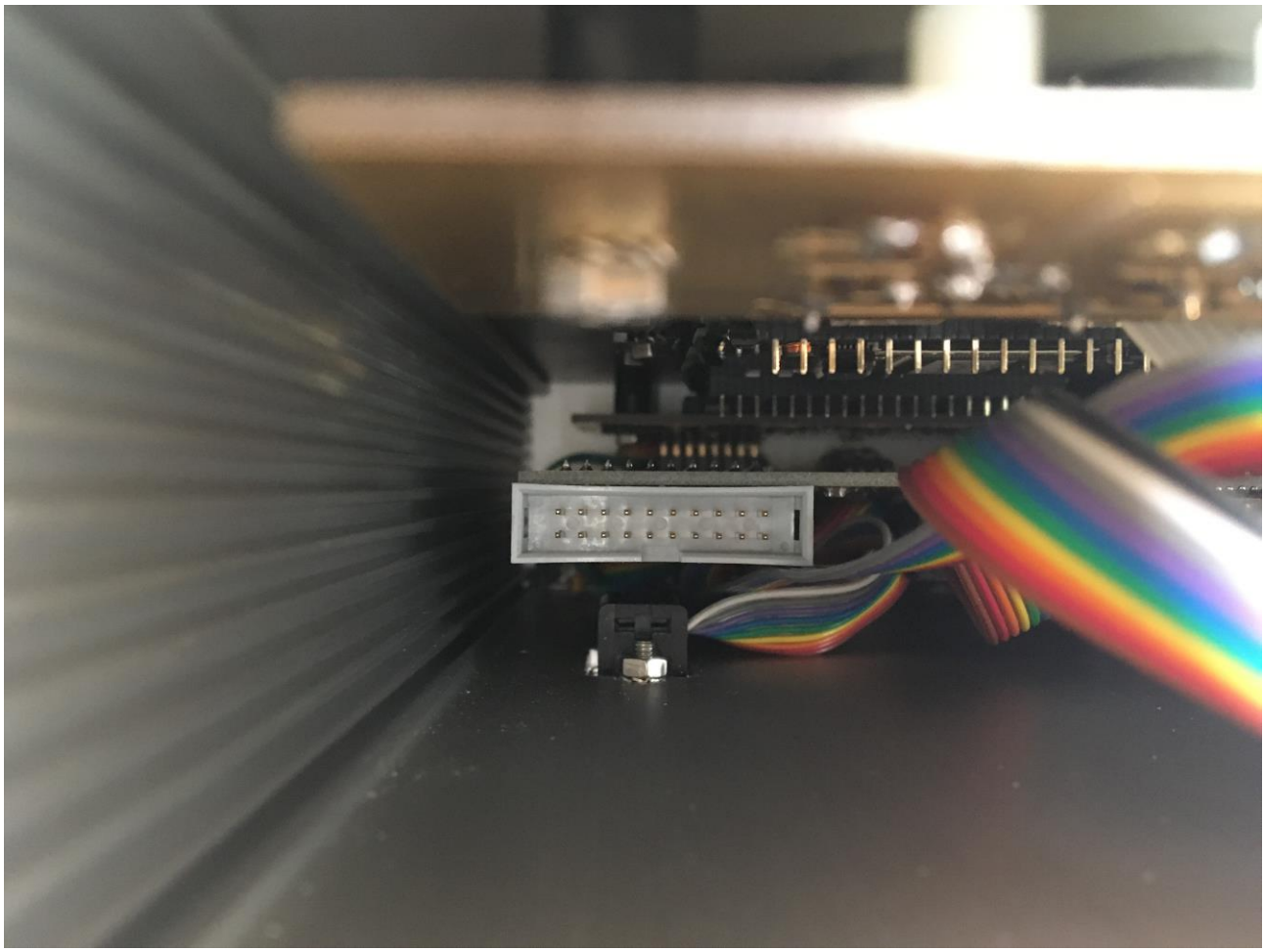
Grab the filterboard with 2 fingers as shown. You will need to wristle it out of the filter connector. Take it all the way out.



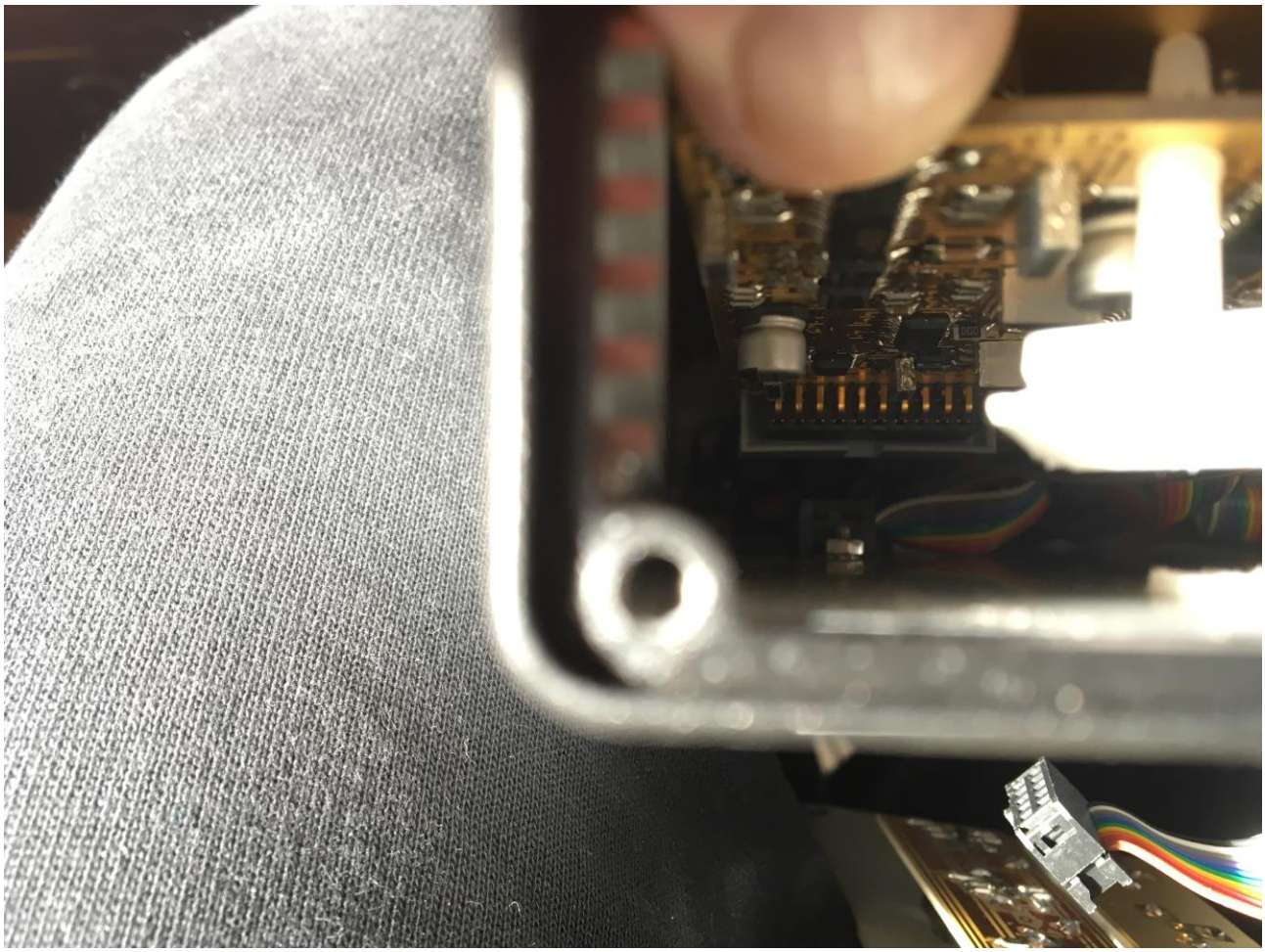
Old filterboard is out.



When you now look inside the box, you will see the filterboard connector. The new filter has to be connected in the middle of that.



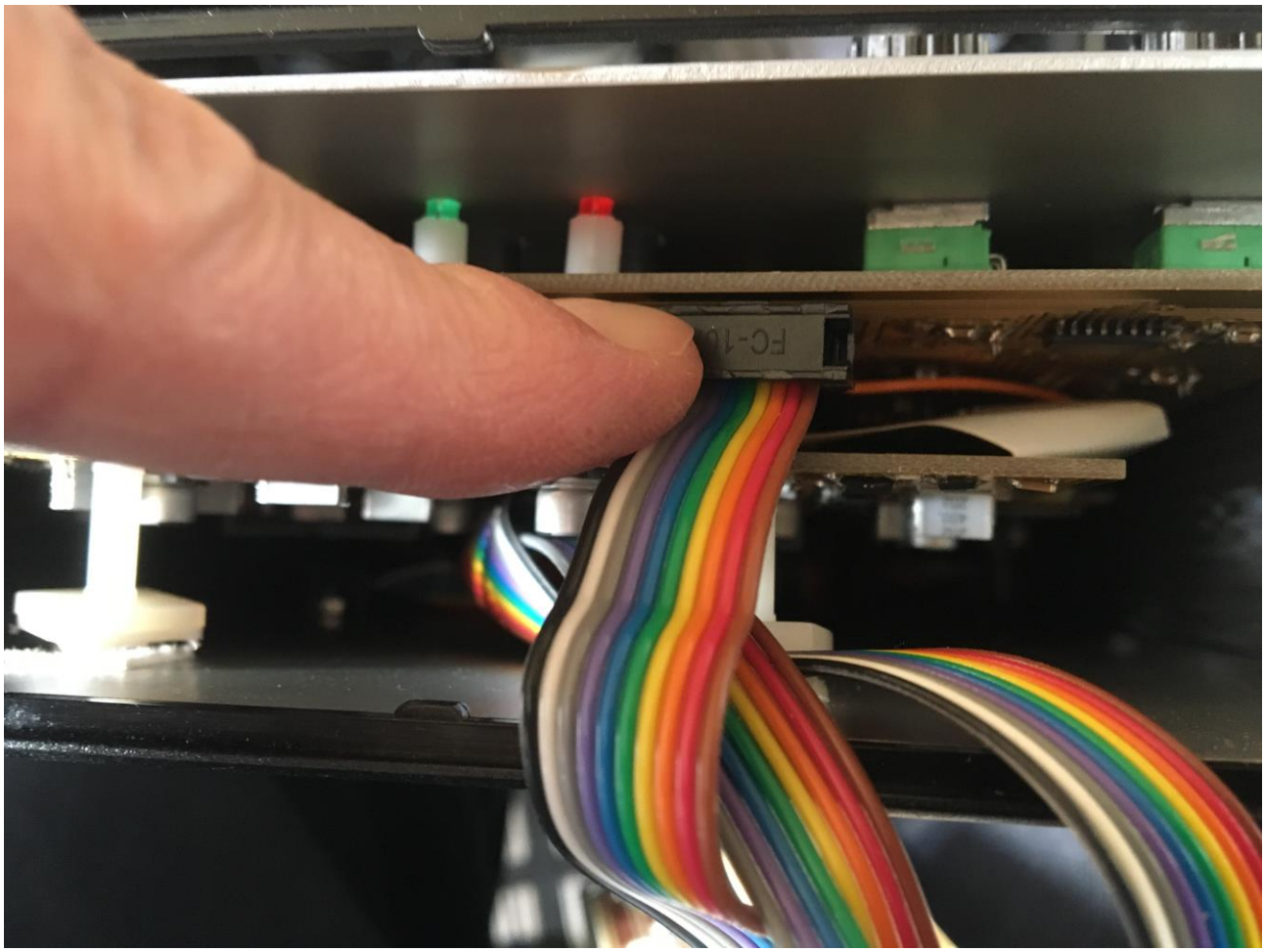
A closer look at the filter connector.



Now mount the new filter in the filterboard connector. On filters produced by Gotharman’s, the electronic parts and the plastic feet must point down.

MAKE SURE THAT IT GOES IN EXACTLY IN THE MIDDLE OF THE SOCKET. UNFORTUNATELY I HAVE NOT BEEN LUCKY TO FIND A SOCKET THAT FITTED 100%, SO THERE ARE A LITTLE AIR ON BOTH THE LEFT AND THE RIGHT SIDE.

If you like, you can now remove the paper slip below the plastic feet, to get it glued to the box.



Put the CV input connector back. The brown cable should be to the right. Make sure to allign the connectors exact.

Stuff the cables inside the box, and mount the left endplate again.

Turn your Anamono X on, and enjoy the new filter.

MIDI Specs

Receives:

-Note on/offs on the Anamono X global MIDI channel. These can control the trigger system and be recorded by the sequencer, when it is in reatime rec mode.

-MIDI CC 1 to 5 and 7 to 9 on the Anamono X global MIDI channel. All parameters that are set up to be controlled by Edit Knob 1 to 8, are also controlled by these MIDI CC's. Edit Knob 1 to 5 equals MIDI CC 1 to 5, Edit Knob 6 to 8 equals MIDI CC 7 to 9.

-MIDI CC 10 and 11 on the Anamono X global MIDI channel controls the X and the MORPH knobs.

-Pitch Bend messages on the Anamono X global MIDI channel. Controls ocillator/Sampler 1 to 5.

-Mono Aftertouch messages on the Anamono X global MIDI channel. Modulates parameters, that has been set up to be modulated by this.

-MIDI clock and start/stop messages are received if the sequencer are in external sync mode.

-(Program Change will, very soon, be added in an update).

Transmits:

-MIDI CC 1 to 5 on the Anamono X global MIDI channel, from Edit Knob 1 to 5 on the Preset/Song Select screen.

-MIDI CC 7 to 9 on the Anamono X global MIDI channel, from Edit Knob 6 to 8 on the Preset/Song Select screen.

-MIDI CC 10 and 11 on the Anamono X global MIDI channel, from the X and Morph Knobs.

-Note on/off's on any MIDI channels from the sequencer/trigger system.

-MIDI CC's on any MIDI channel from the sequencer controller tracks.

Written by
Flemming Christensen
”Gotharman”
2016

www.gotharman.dk