Gotharman's
zaTurn Zero

Modular Synthesizer

Update Manual 1.07

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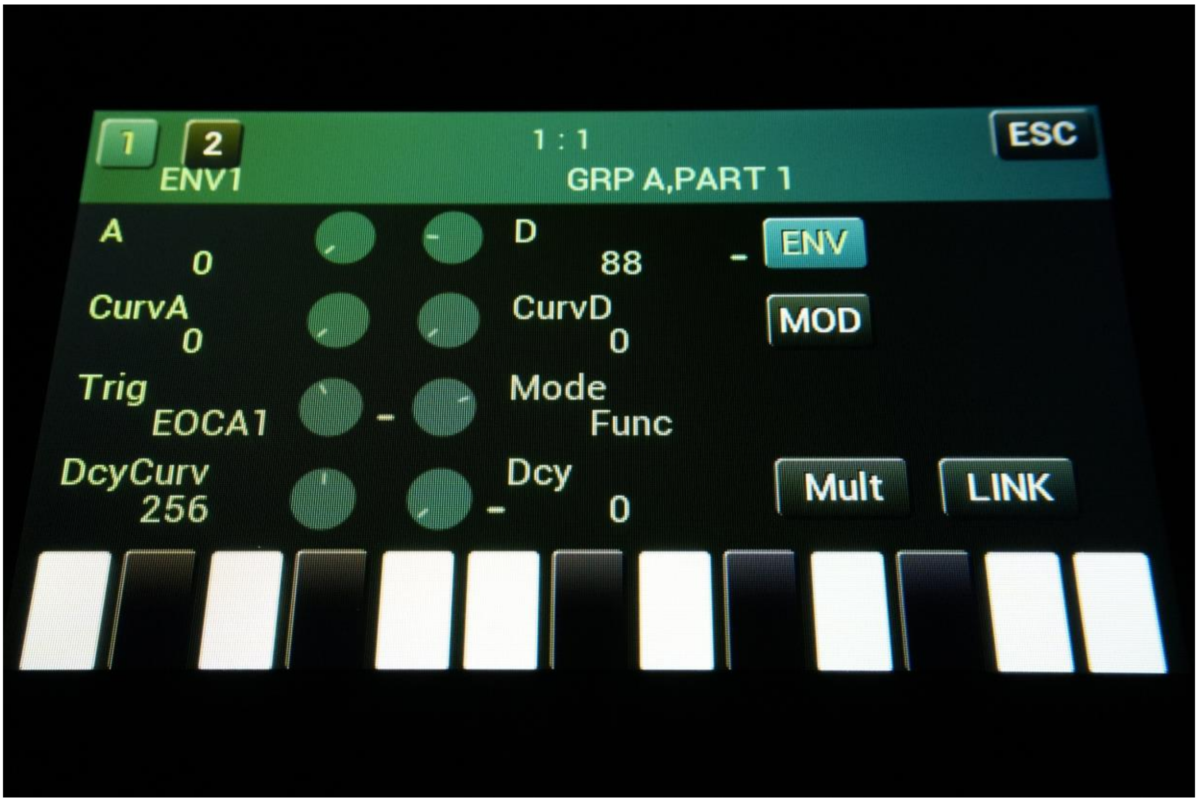
Function Generators EOC

The Function Generators are now sending out an EOC (End Of Cycle) pulse, every time a complete cycle is ending, and their decay portion have reached zero.

These pulses are sent to the modulation bus system, and can be selected as modulation sources and triggers.

The EOC pulses from each Function Generator are available on all groups, so it is possible, for instance, to trigger an envelope in group B by an EOC pulse from a Function Generator in Group A.

The EOC modulation sources are named EOCA1, EOCA2, EOCB1 etc.
The letter (A, B, C or D) is the group and the number (1 or 2) is the envelope (function) generator number.



Global Part Triggers

The triggers from each of the 8 parts are now globally available for all parts, so it is now possible to trigger an oscillator, envelope and function generator from any part, if some extras are needed for a sound!

These triggers are sent to the modulation bus system, and can be selected as modulation sources and triggers.

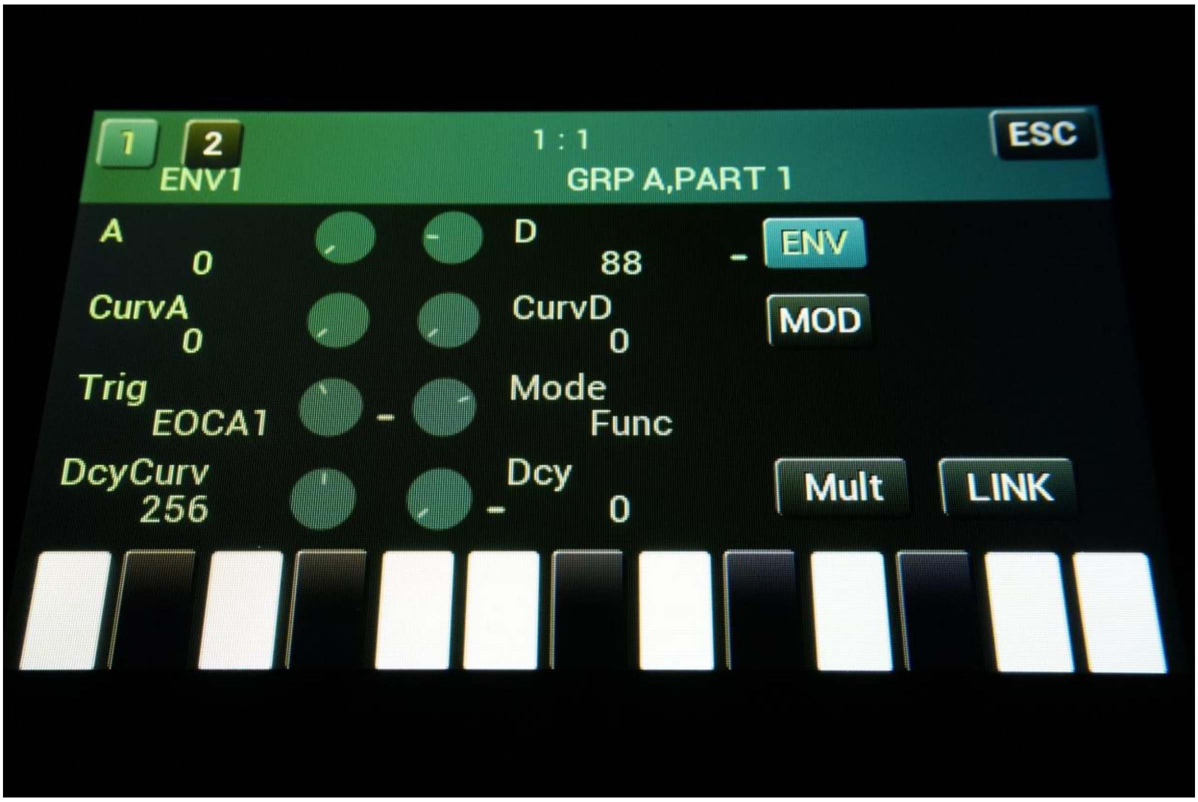
The global trigger modulation sources are named TrgA1, TrgA2, TrgB1 etc.
The letter (A, B, C or D) is the group and the number (1 or 2) is the Group Part number.

These triggers are placed instead of negative EOC pulses.

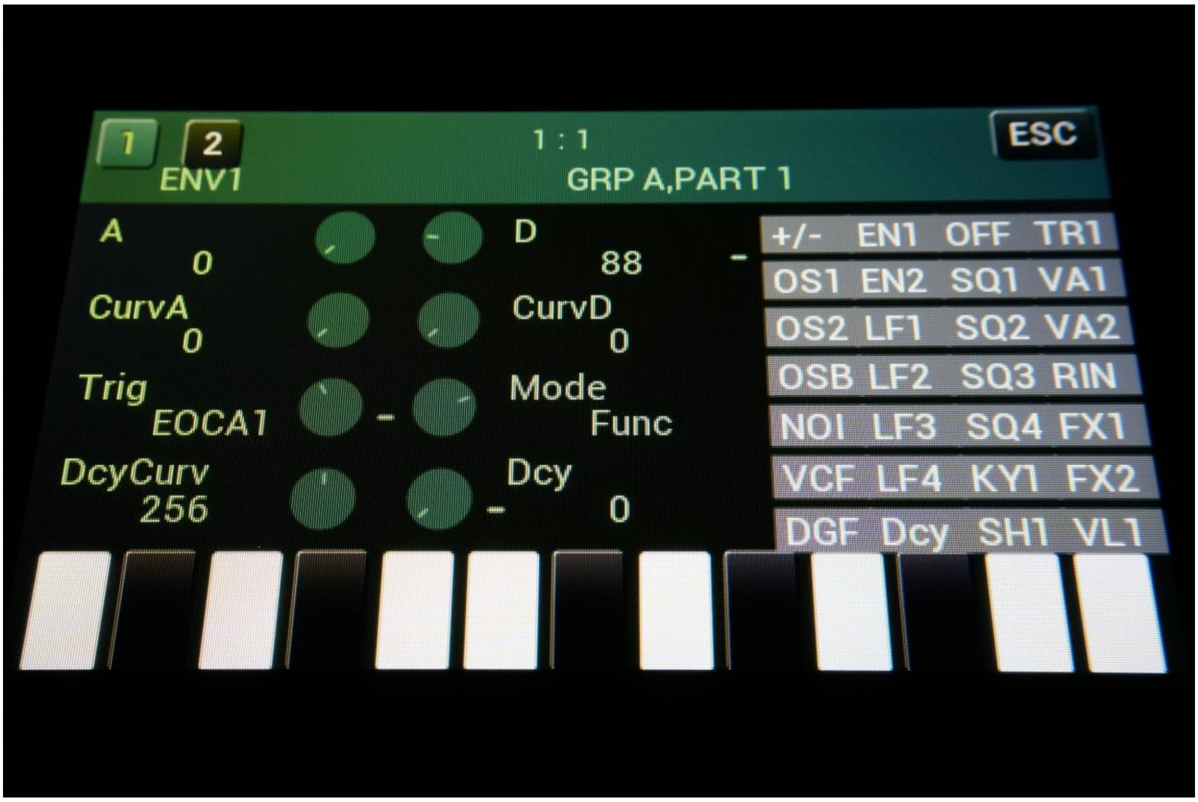
To select a global trigger for an Envelope/VCA:

-Either select an EOC pulse, and use the fine adjust function (hold the Kybd/Bar button), to select a trigger.

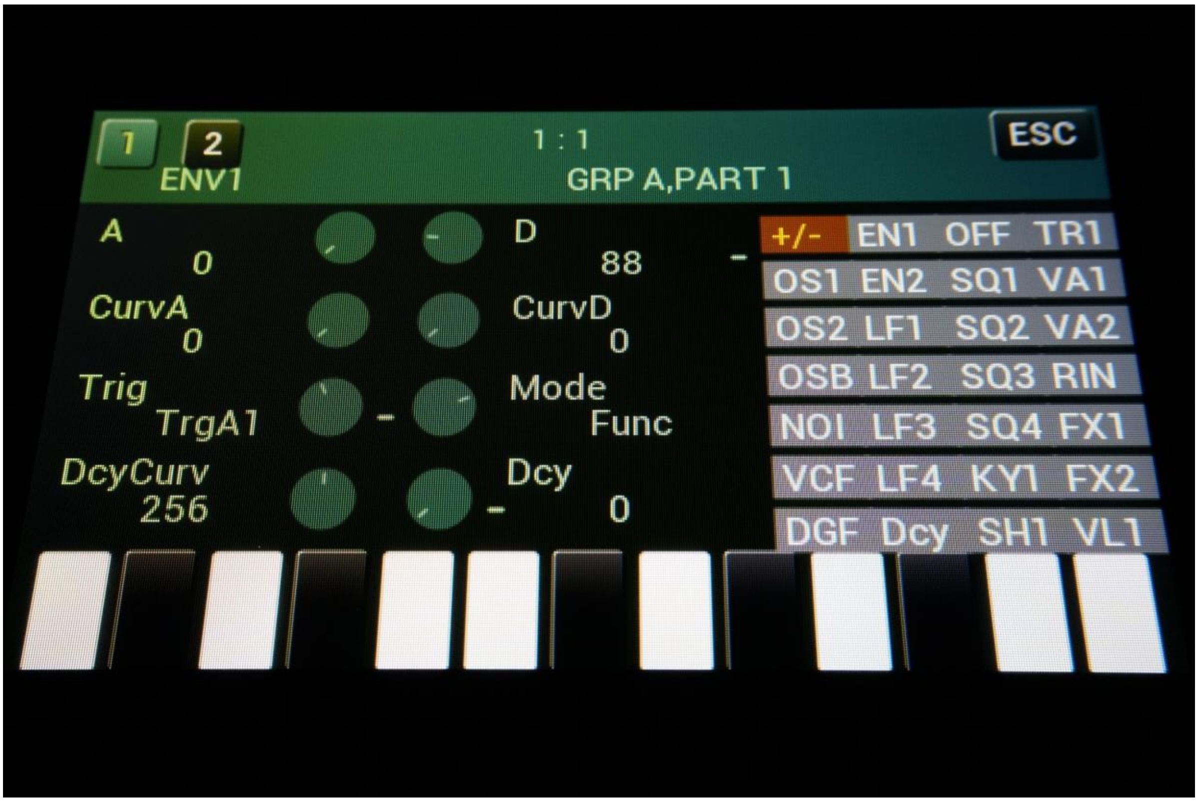
-Or: Select an EOC pulse:



Touch the parameter, to open Touch Modulation Select:



Touch the +/- button:

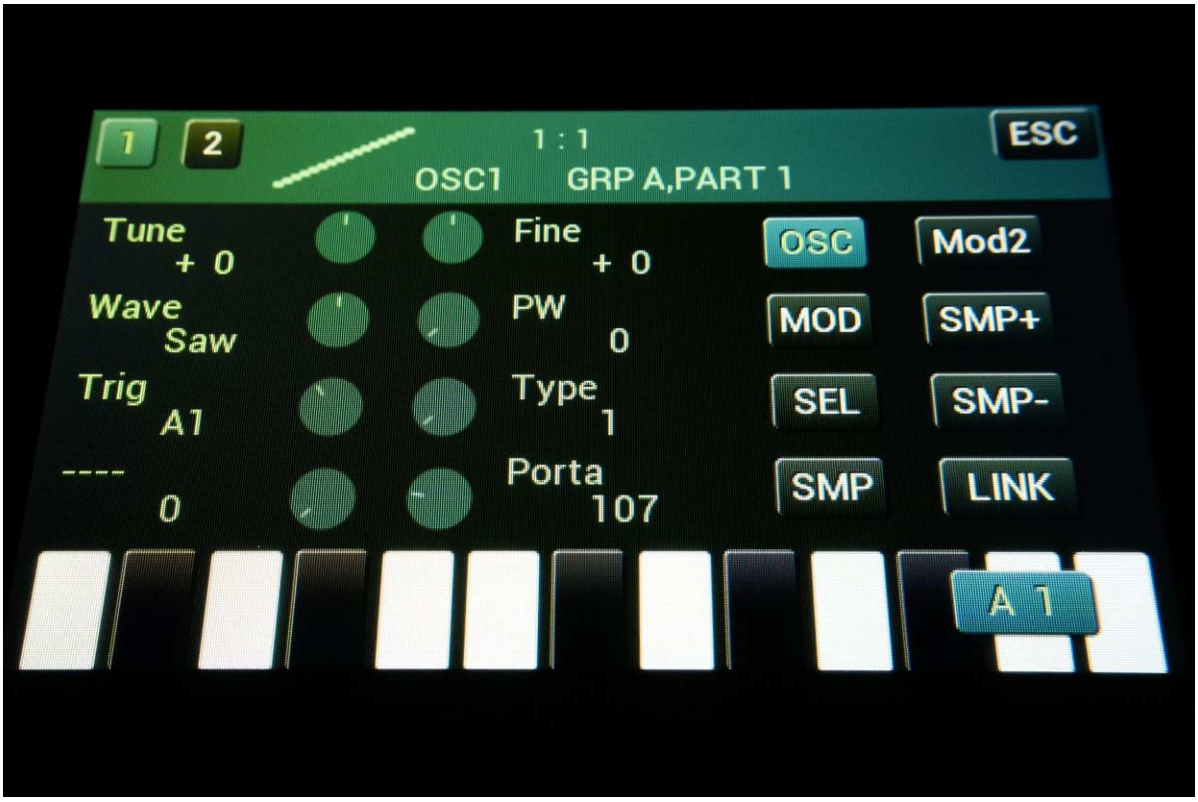


Now a trigger has been selected!

To select a global trigger for an Oscillator:

-Turn Edit Knob 5.

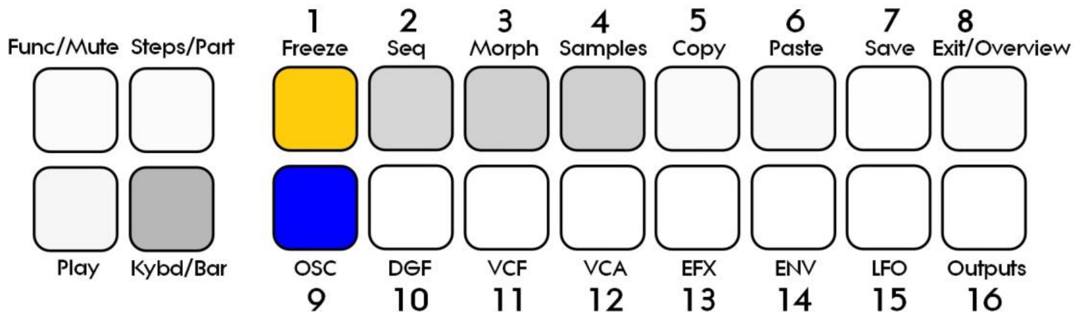
-Here you will now have the internal Group triggers 1 and 2, followed by the global triggers A1, A2, B1, B2, C1, C2, D1 and D2.



Part Soft Select

In order to make it easier to work with the global triggers, a part soft select function has been added.
This lets you select the part parameters, without selecting the part itself. So it is possible to trigger one part, while editing the parameters of another part.

To soft select a part, push and hold the Kybd/Bar button, and push one of the trigger buttons 9 to 16, to soft select part 1 to 8.



CV Inputs and Outputs

The AnaX USB CV inputs and outputs are now no longer tied to the Patch Points. They now have their own separate edit pages.

These pages can be entered from the first column on the MOR page.

CV INPUTS

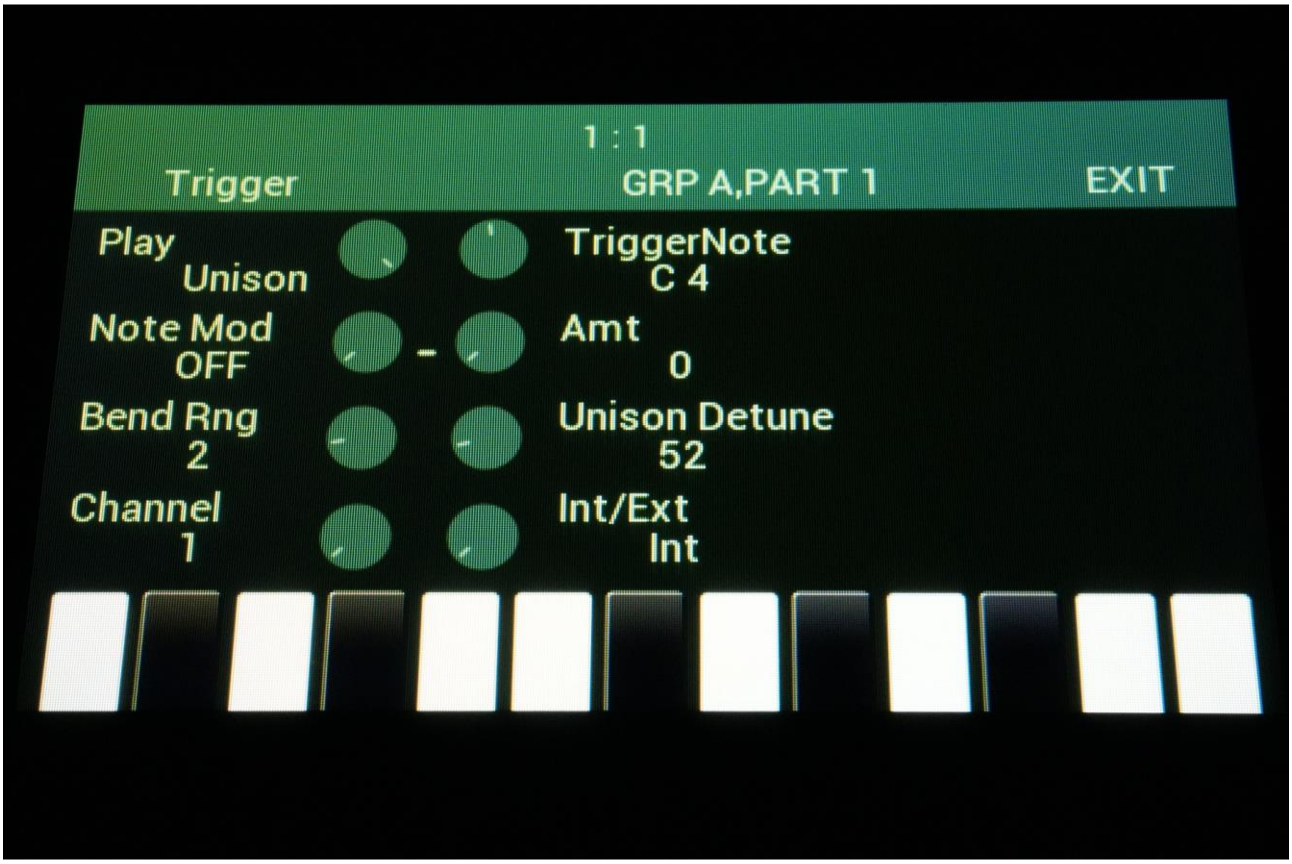
The 4 small VU-meters will monitor the activity on the CV inputs.

CV1, CV2, CV3, CV4: Sets the input voltage range of the CV inputs. Can be set to 0-5V, +/-5V, 0-10V and +/-10V.

Trg1, Trg2, Trg3, Trg4: Sets up each CV input as triggers. Possible triggers are:
-Off: Nothing is trigged by the CV input.
-Trg1 to Trg8: Part 1 to 8 are trigged by the CV input.
-1/32, 1/24, 1/16, 1/12, 1/8, 1/6: The sequencer is clocked by the CV input. Every time a clock is received, the sequencer playback is incremented by the selected time division. The sequencer must be started, for this to happen.
-s/s: Sequencer start/stop.
-Rst: Sequencer reset.

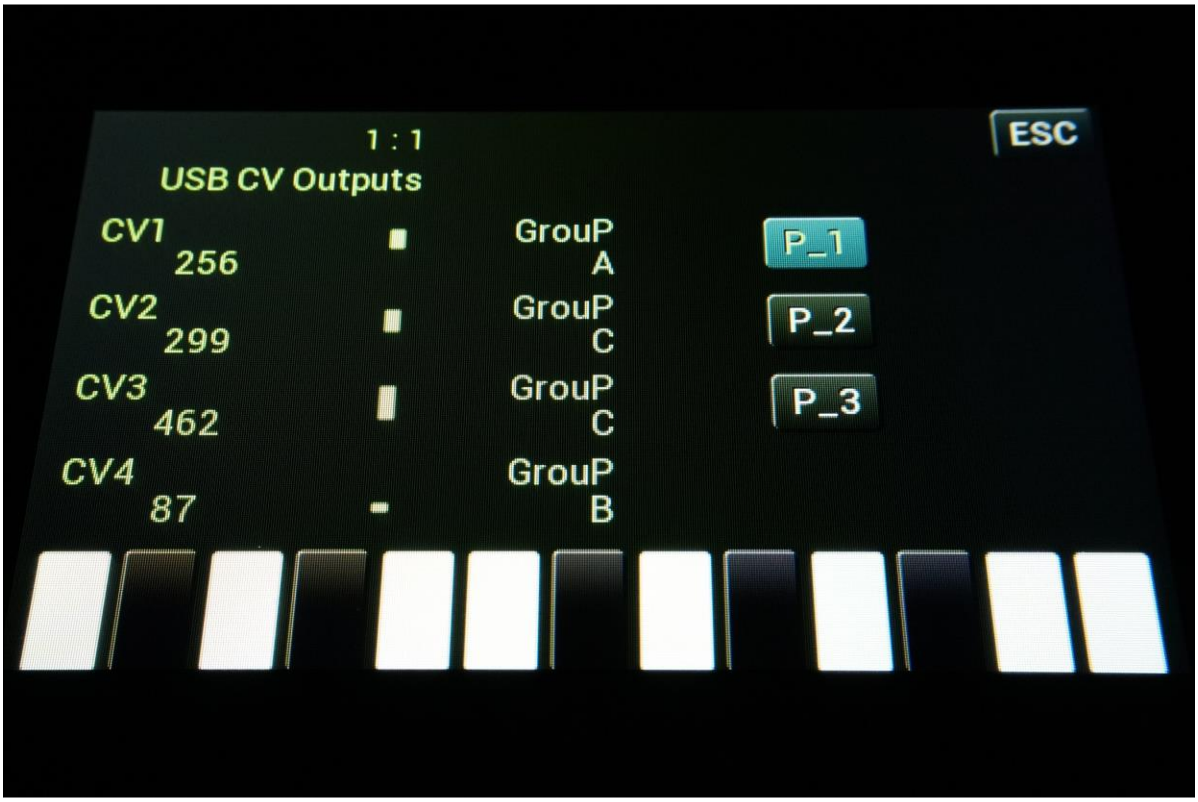
CV Inputs Note Quantization

If one of the CV inputs has been selected as the modulation source for the Note Mod parameter on the Trigger page, the CV input will be quantized to 1V/Oct.



CV Outputs

Page P_1

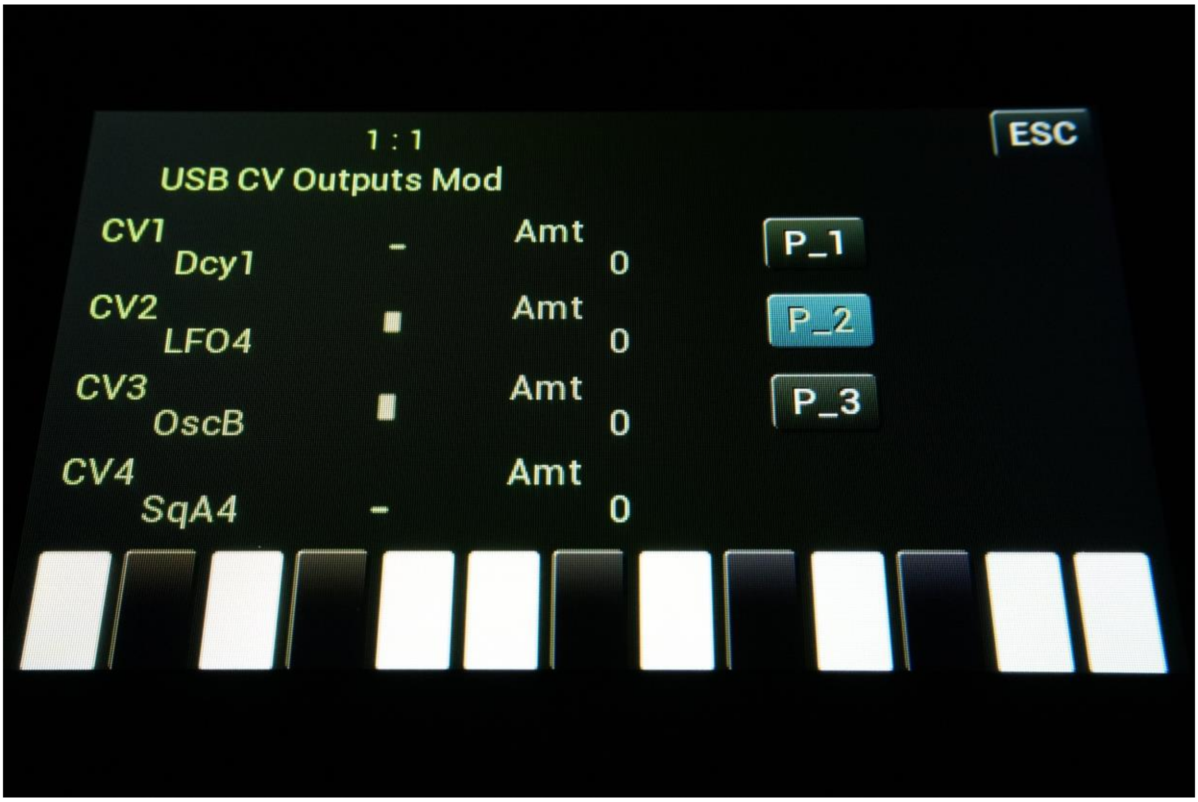


The 4 small VU-meters will monitor the activity on the CV outputs.

CV1, CV2, CV3, CV4: Sets a static level on the CV outputs. To get the most out of a modulation output, these should be set to 256 (the middle value).

GrouP: Sets the groups, from which the modulation sources on page P_2 will be taken.

Page P_2



The 4 small VU-meters will monitor the selected modulation sources.

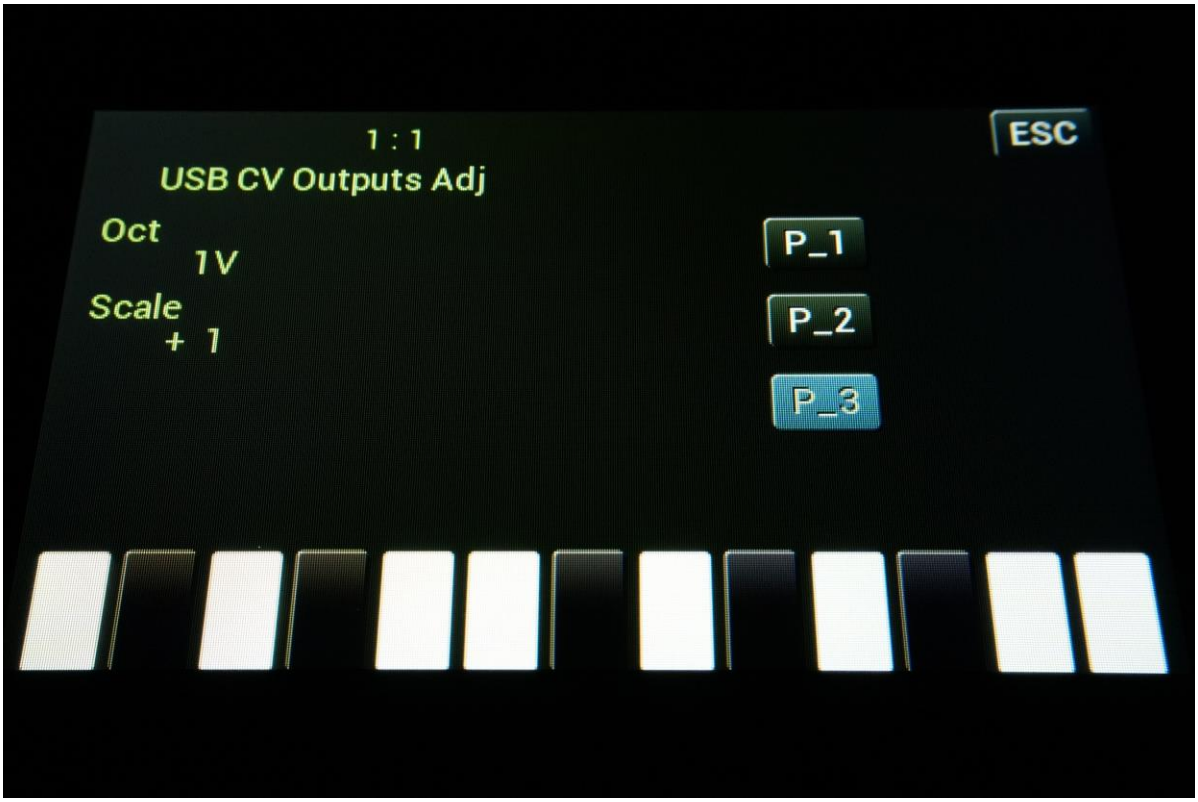
CV1, CV2, CV3, CV4: Sets the modulation source, which will be output on each CV output. Any modulation source can be selected. Modulation source group is selected on page P_1.

Amt: Sets the amount of modulation applied to each CV output.

CV Outputs Note Quantization

When Kyb1 or Kyb2 is selected as the output modulation source, the static CV value and the modulation amount are ignored.
Instead the values of Kyb1 and Kyb2 are quantized to 1V/oct or 1.2V/oct on the CV outputs.
Settings for this can be found on page P_3.

Page P_3

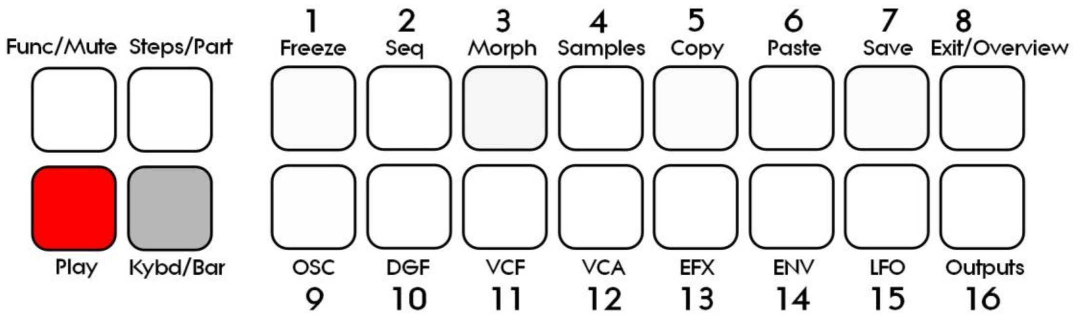


Oct: Sets if the Kyb1 and Kyb2 modulation sources should be quantized to 1V/oct or 1.2V/oct.

Scale: Adjusts the scaling of the Kyb1 and Kyb2 modulation sources quantization.

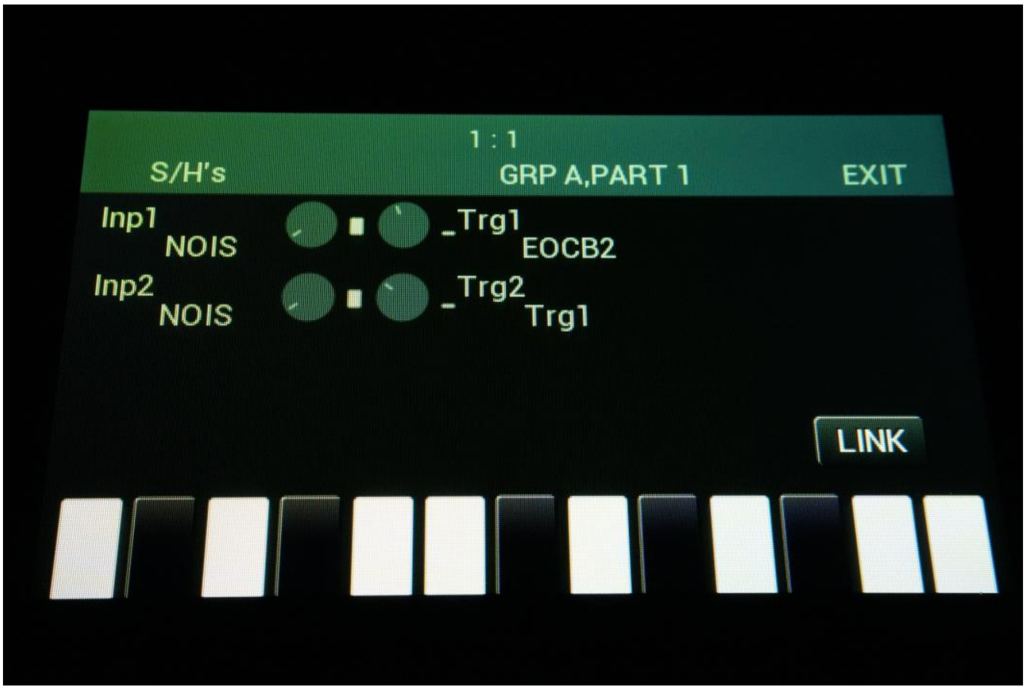
Quick Track Erase

When the sequencer are in recording mode, and the “Re-Load” button combination is pushed (Kybd/Bar + Play), the currently selected note track will be erased.



S & H Trigger Inputs

Like the Envelopes, the Sample and Holds are now trigged directly by the internal triggers, so when using the internal sequencer, and notes are overlapped, the Sample and Holds will still be trigged by every note on, when the Trg1/2 parameters is set to an internal trigger.



Button Keyboard Lock

In order to avoid unintentionally switching the button keyboard off or transposing it, a keyboard locking system has been added.

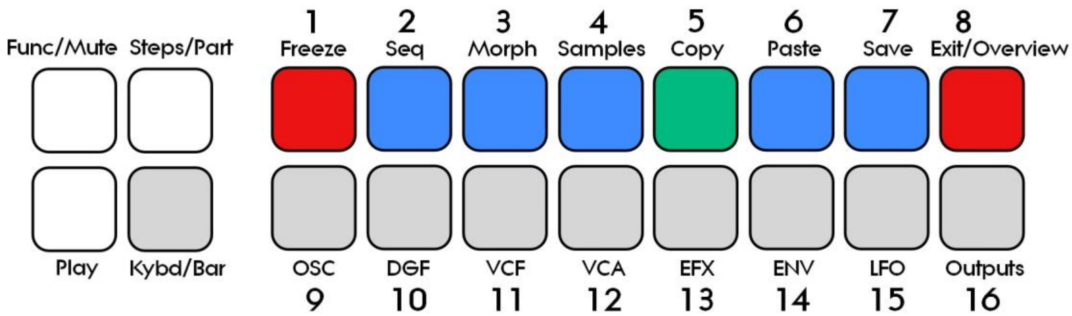
To activate the keyboard lock, when the buttons are in keyboard mode, push and hold the unused middle button (button 5), and push the Kybd/Bar button.

The middle button will now light up in green, and the Kybd/Bar button will turn white.

The Kybd/Bar button will now function as an extra note.

To switch off the Keyboard mode, push and hold the middle button and press the Kybd/Bar button.

To transpose the keyboard, push and hold the middle button and press one of the transpose buttons.

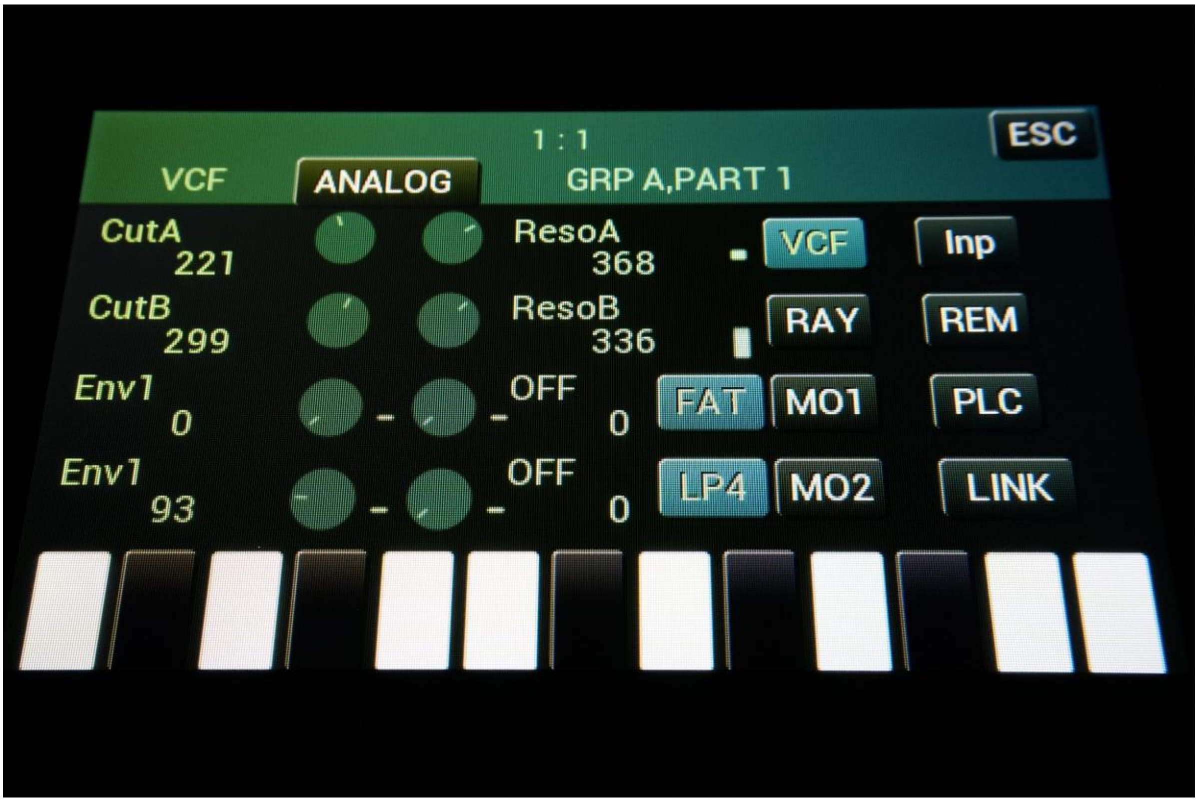


Compare Mode Auto-Exit

When Zaturn Zero are in preset compare mode, it will now automatically jump out of this mode, when a parameter is edited.

VCF Type Switches

An extra set of VCF type touch button switches have been added to the VCF Main page.



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2025