

# Gotharman's zaTurn



## Modular Synthesizer

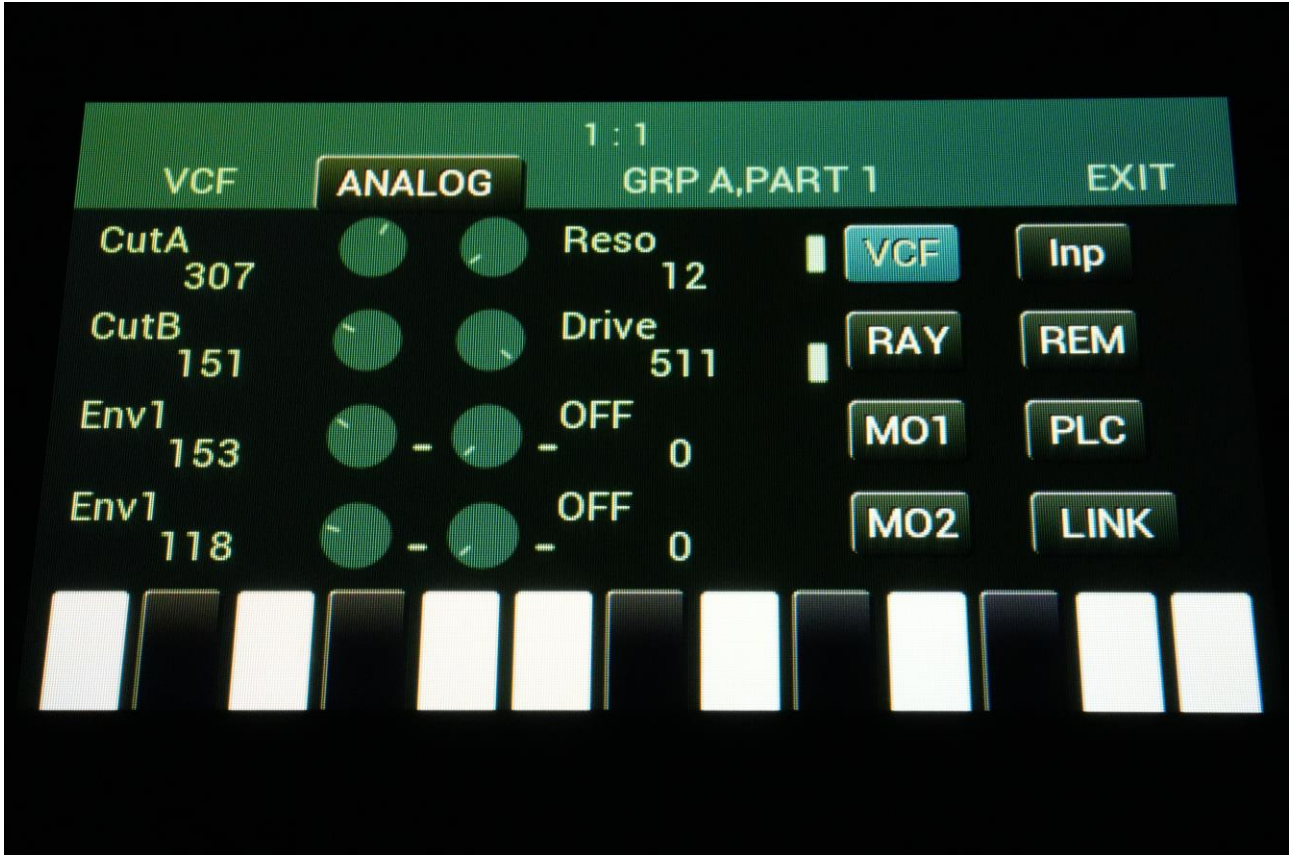
Update Manual 10.96

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## Ladder Filters

Zaturn Analog is now compatible with the new Ladder analog poly filter board.



This filter board adds two analog ladder filters to each Group (8 in total). Classic Ladder filter sound and a bit more. Various filter modes and overdrive is possible via the Drive and Inv parameters.

When Drive is set to zero, both filters are in lowpass mode.

When Drive is turned up to around 100, and Reso is set to 100 or above, both filters will be in bandpass mode.

When Drive is turned further up, low frequency compensation will kick in.

When turned up above 256, the filters will start to distort. Filter A will be in lowpass mode and Filter B will be in bandpass mode.

The filters audio can be inverted to each other, to create other filter types.

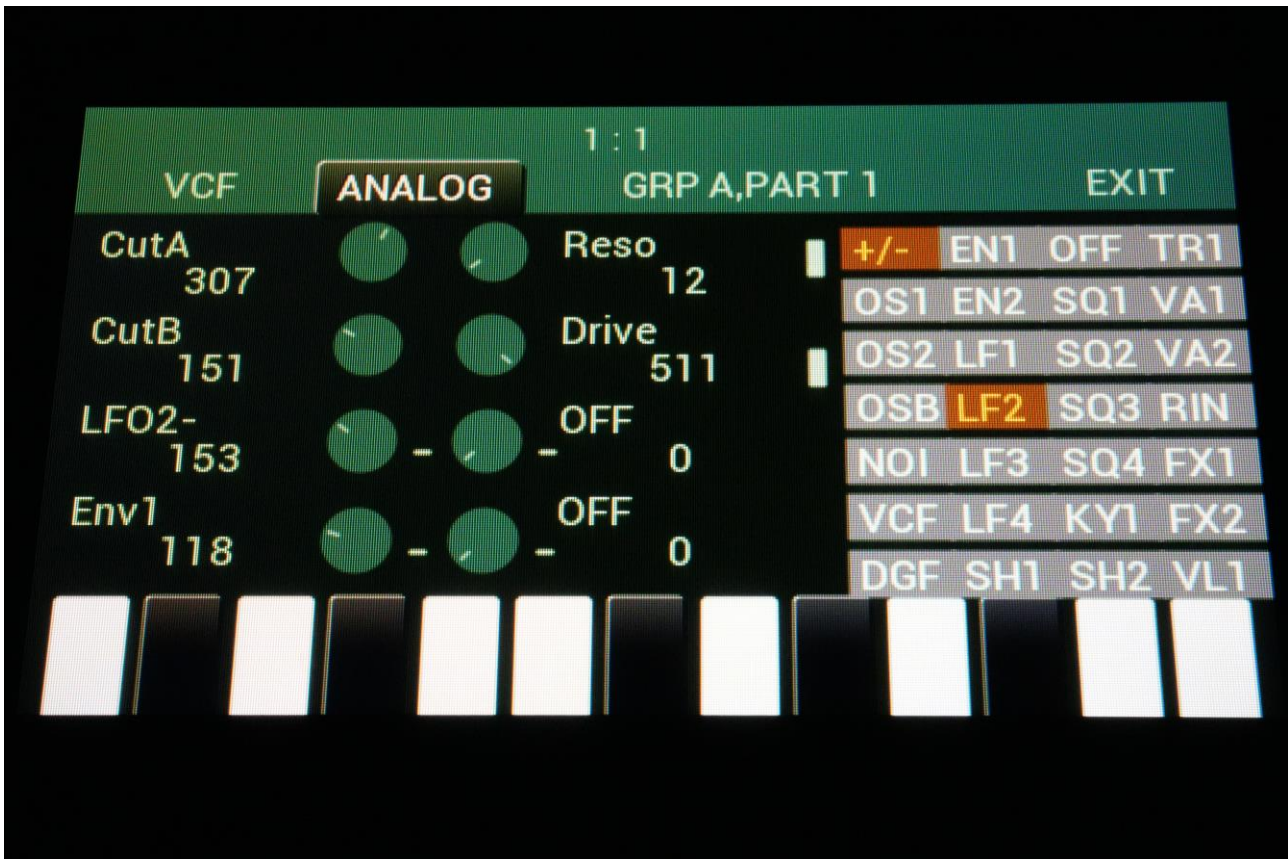
When the input levels are set higher than 80, the filters will start to drive in a nice and fat way.

The cutoff frequency can be adjusted and modulated separately for each filter, while Resonance and Drive is set for both filters at the same time.

## Modulation and Input Sources

In order to make it possible to select modulation and input sources faster and more intuitively, a new system has been designed.

Simply touch the parameter, you would like to select the source for, and a list of most of the available sources will pop up in the right side of the screen:



If the currently selected source is available on the list, it will be highlighted with a brown color. If the source is inverted, the +/- field will be highlighted with a brown color.

Now simply touch the desired source, to select it as the modulation/input source, for the parameter you touched, and touch the +/- field to invert the source, if desired.

The selected source will now be highlighted, and changed on the selected parameter.

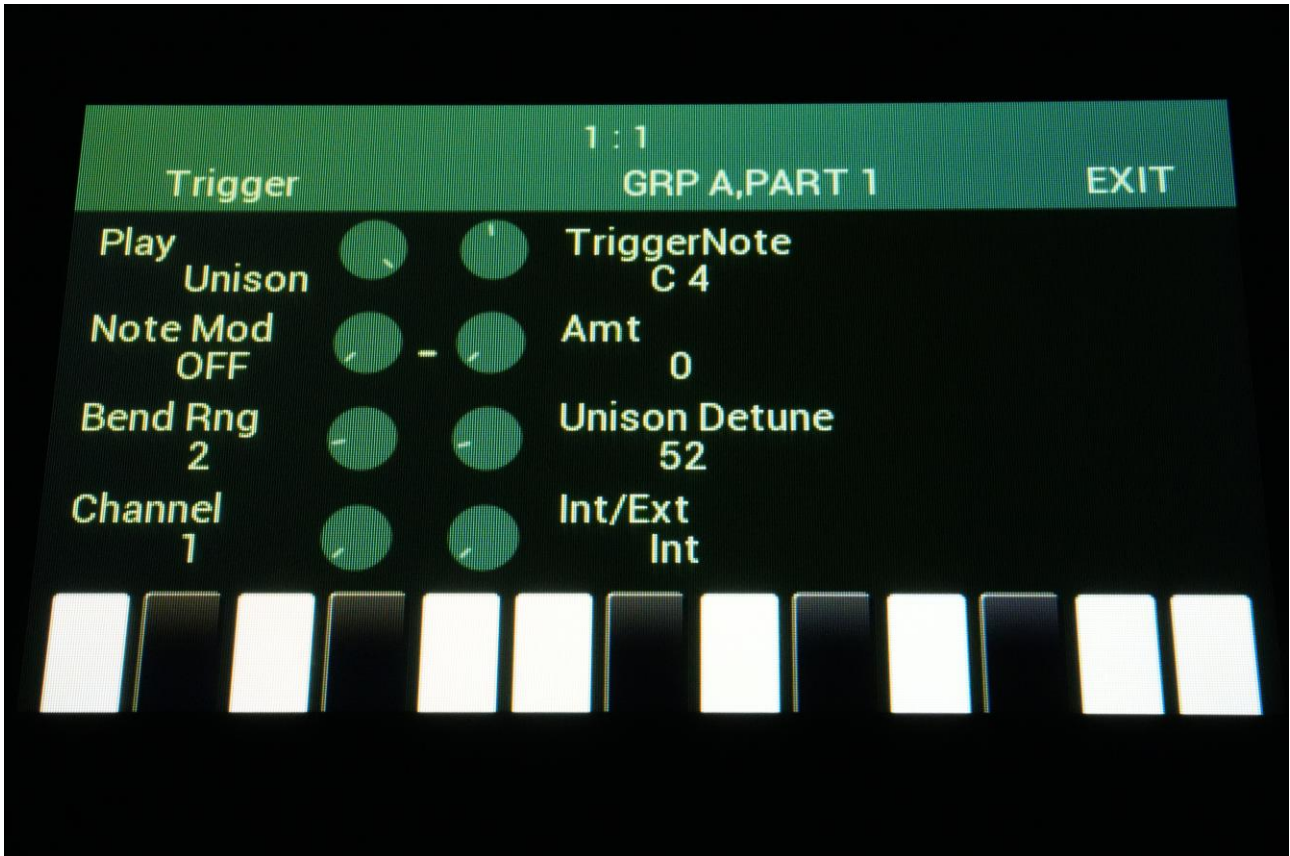
When you are done, touch another parameter, to select the source for this, or touch the same parameter again, or "EXIT" in the top right corner, to make the list disappear.

When part 1 in a group is the selected part, Trigger1, Keyboard1 and Velocity1 are available.

When part 2 in a group is the selected part, Trigger2, Keyboard2 and Velocity2 are available.

## Unison

Unison has been added as a play mode for part 1 and 2 in analog group A. A Unison Detune parameter has also been added.



When Part 1 is set in Unison mode, parts 3, 5 and 7 are triggered, whenever part 1 is triggered. Like in the polyphonic modes, Link has to be set to on, for each of the modules used, in order to get the same sound on each part. Or you can leave Link off, in order to stack different sounds. When Unison Detune is turned up, the different parts will be detuned in respect to each other, to create fat sounds.

When Part 2 is set in Unison mode, parts 4, 6 and 8 are triggered, whenever part 2 is triggered.

## Controller Tracks Mute

An extra parameter “NtTrMute” has been added on the controller tracks CC page.



When this parameter is set to “OFF”, everything will work as it did, before this update.

When it is set to a value between 1 and 8, a mute-link will be created to the Note track with this number. Whenever this Note track is muted, the controller track will stop outputting values.

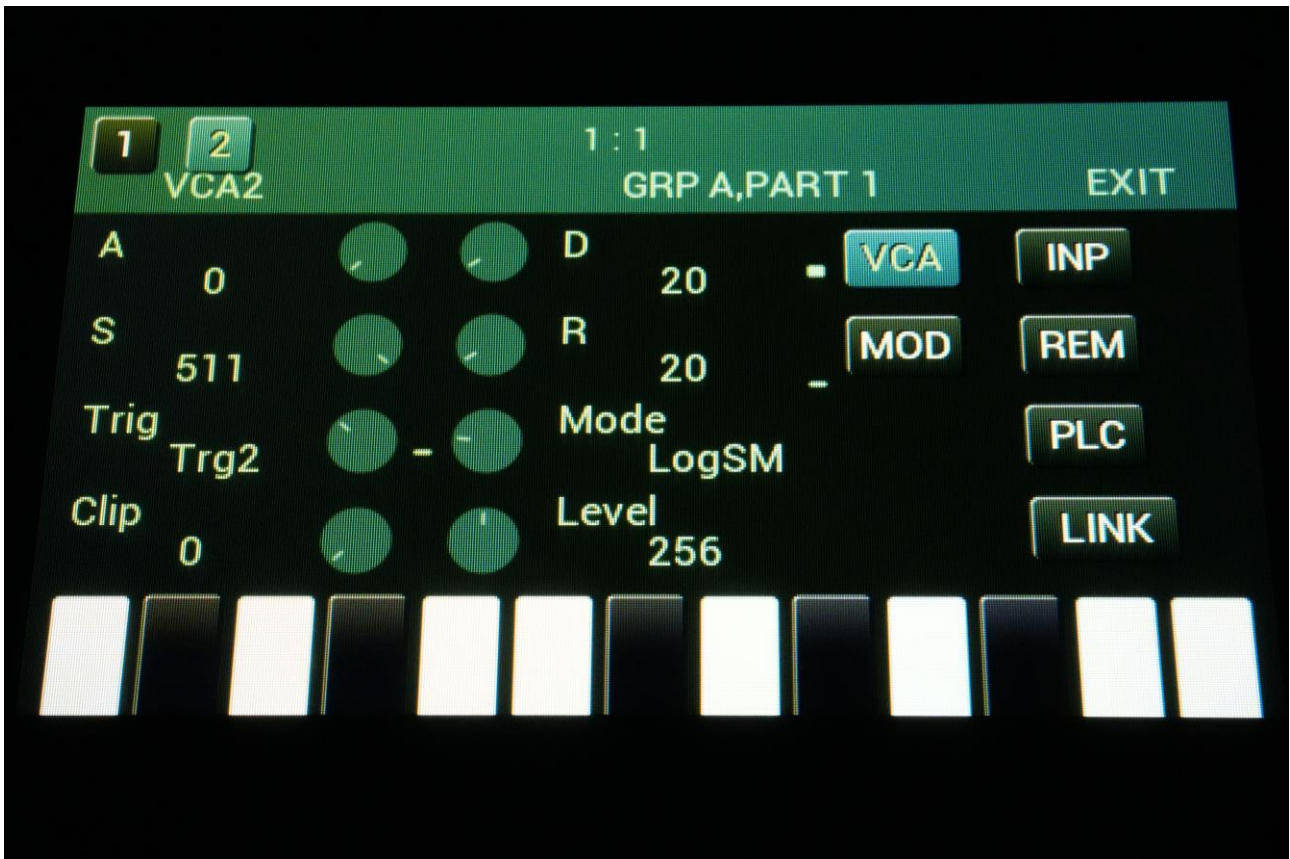
I have been experimenting a lot lately, with controlling DMX lights via MIDI, and this function has been quite helpful ☺



## Easy Selection System

Now, when entering the Oscillator, VCA or Envelope edit pages, via the buttons or from the Synth main page, Zaturn will check which modules (1 and 2) are triggered by which parts, and will automatically select the module, which is most likely to be used with the selected part.

I have been testing and optimizing this system in the Christmas holidays, and it appear to be working quite well.

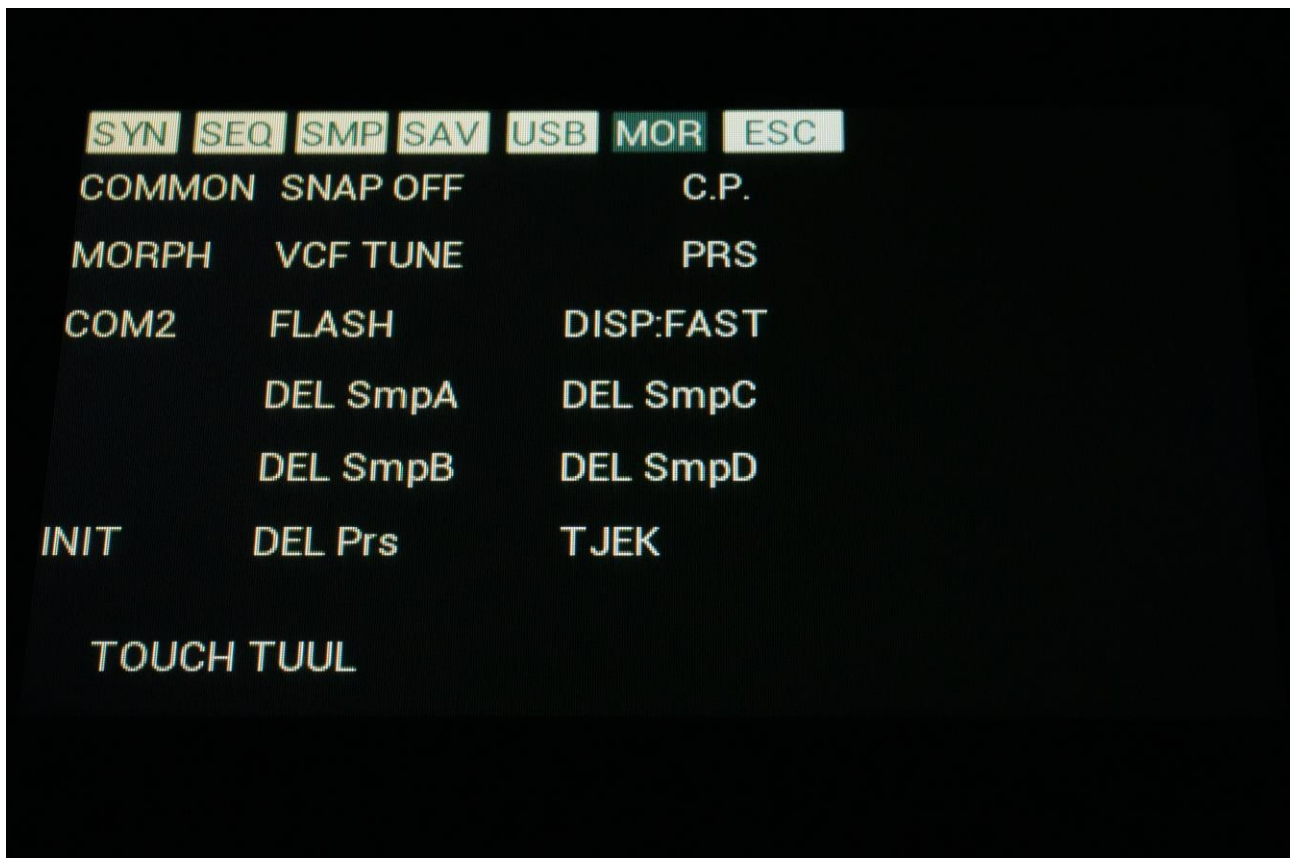


## Send Samplings To Touch TuuL

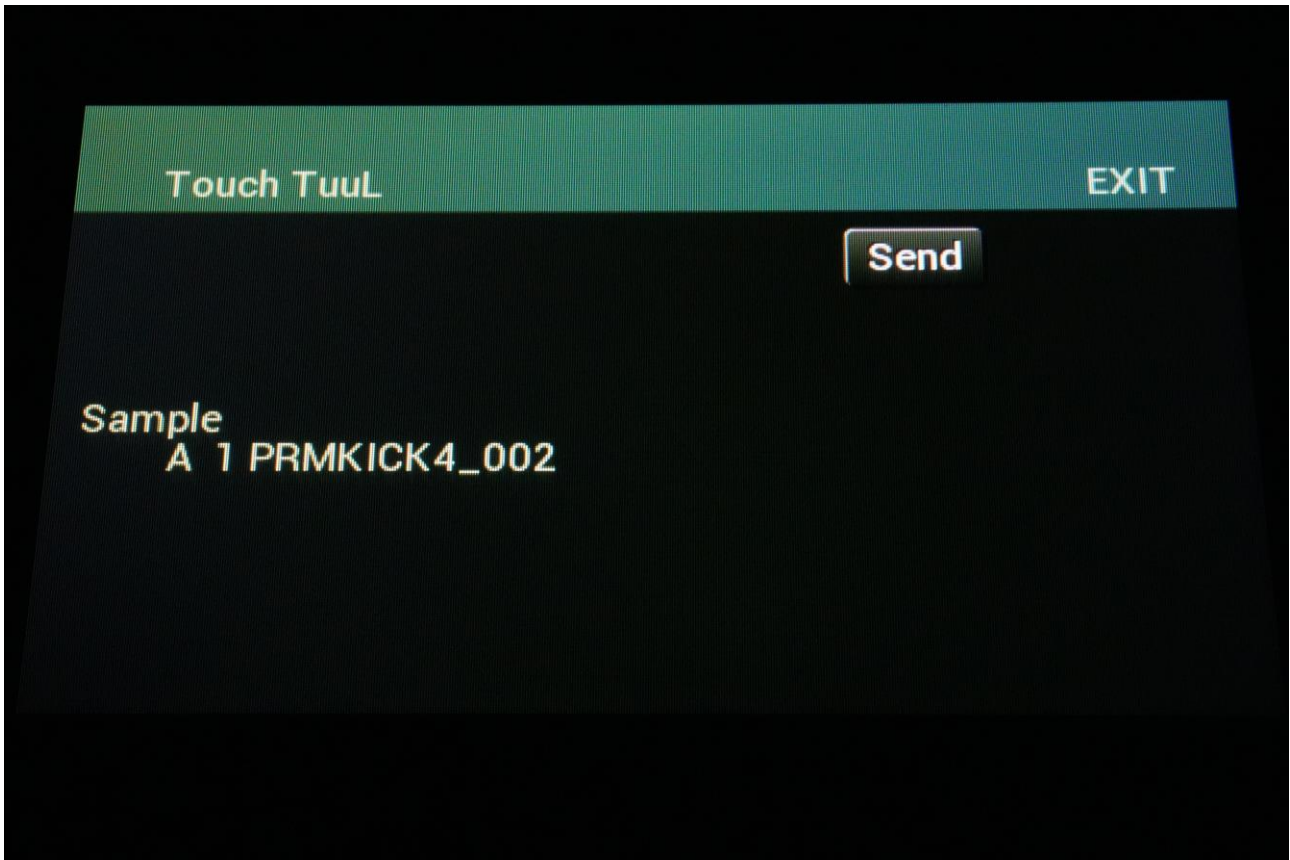
It is now possible to send the samplings stored in your Zaturon to Touch TuuL.

To do this, first connect MIDI out of Zaturon to MIDI in on Touch TuuL. I have been doing the testing with a Befaco MIDI to TRS Type A cable.

Then, on the MOR page, touch "TOUCH TUUL".



You will now enter the Touch TuuL page.



Select the sampling you would like to send, using Edit Knob 1 (group), 2 (100's) and 3 (1's).

On Touch TuuL:

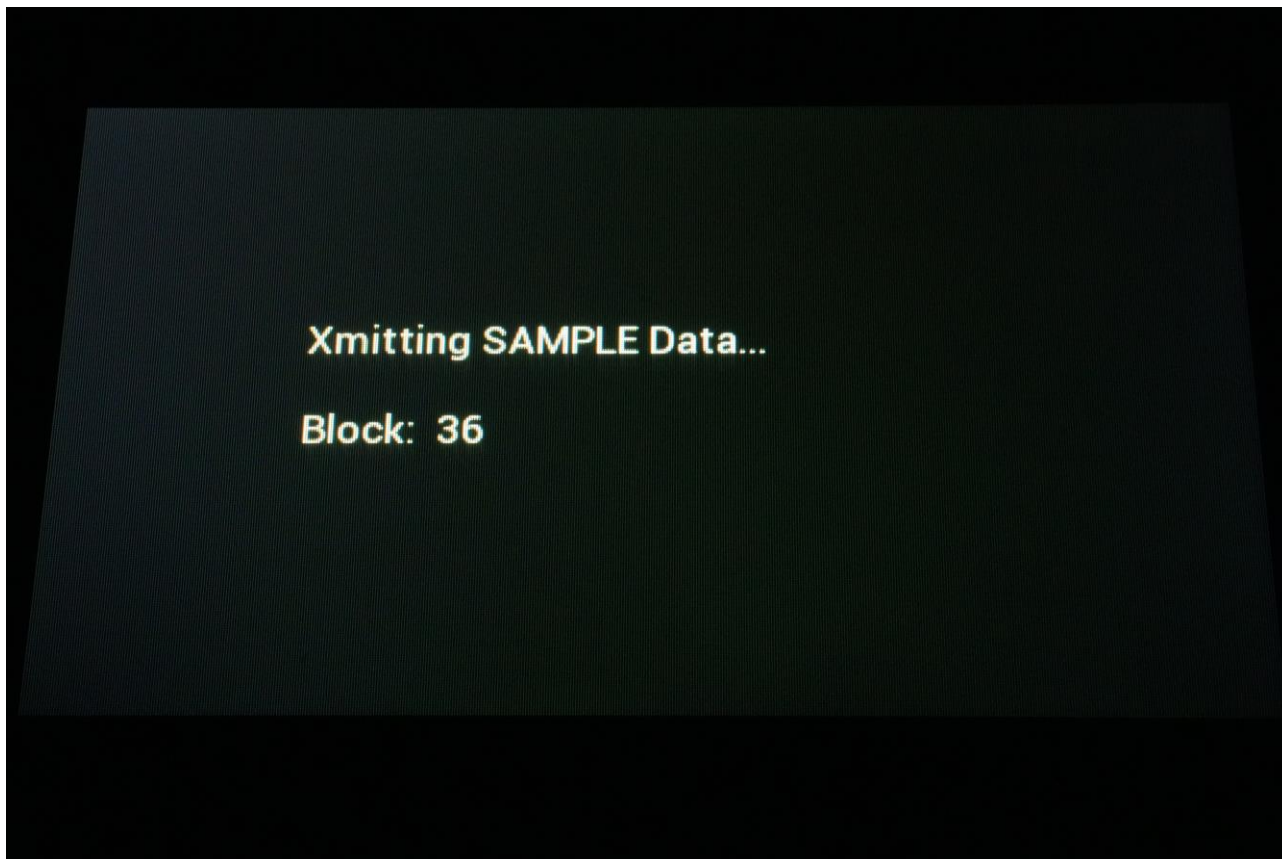
Enter the Sample Edit>MIDI page and touch "RECV SMP".

Touch TuuL will now show: "Waiting For MIDI Data..."

On Zatur:

Touch the Send button.

Zaturn will now be transmitting the sampling.



When finished, Touch TuuL will jump to the sample audition/save page, where you will be able to audition the sampling and name and save it, if desired.

## Analog Filter Tuning Profiles

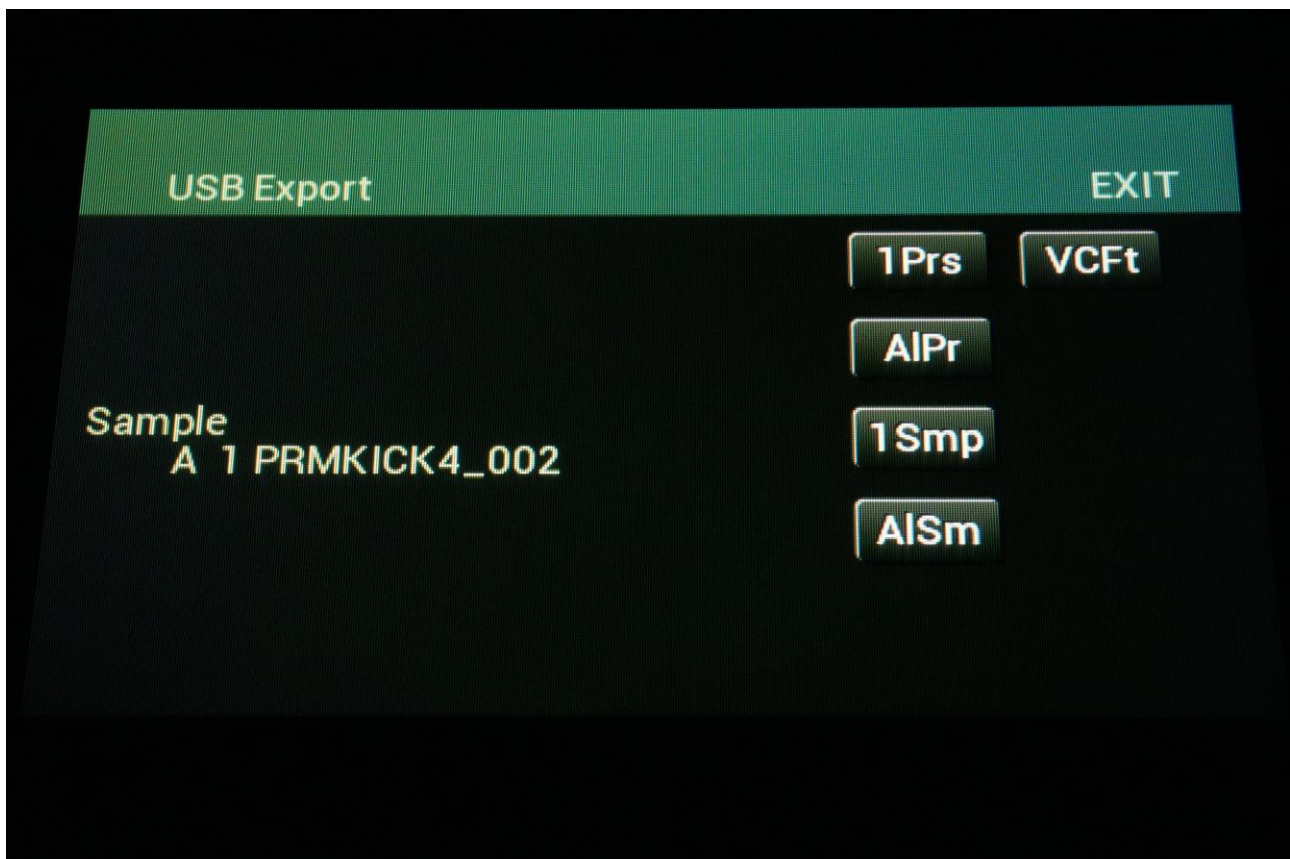
Every time you tune an analog filter board on your Zaturm, it stores a profile for this specific filter board.

Zaturm can hold up to four of these profiles in its internal memory.

Since there are, at the moment of writing this update manual, six analog filter boards to choose from, it has been made possible to export these profiles to a USB stick, and import them back again, if you would like to experiment with various filter boards.

This functionality can also be used, if you have multiple Zaturms, and want to put a filter, which has already been tuned in one Zaturm, into another Zaturm.

A “VCft” touch button has been added to the USB Export section. Touch this to export the currently selected filters tuning profile.



On the USB file pages, the filter tuning profiles shows as .ZTU files, and can be imported in the same way as any other files.

Please notice that when importing a filter tuning profile, it will be imported to the currently selected analog filter board, so make sure to select the correct filter board in the “VCF TUNE” section.

The files are named after the filter board type:

ZAT: Original Zatern filters

SPZ: Spaze filters

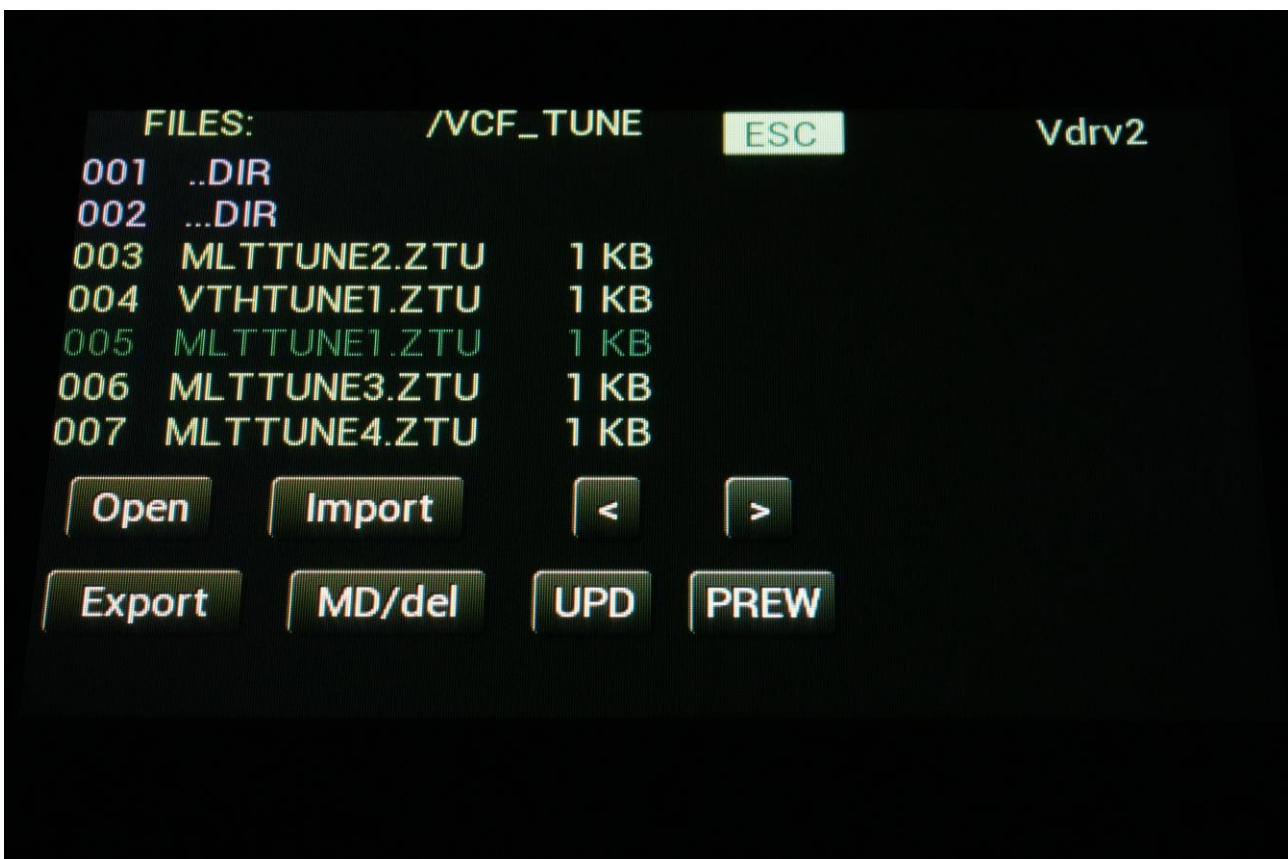
VTH: Vothar8 filters

MLT: Multi filters

VF5: VCF5 filters

LAD: Ladder filters

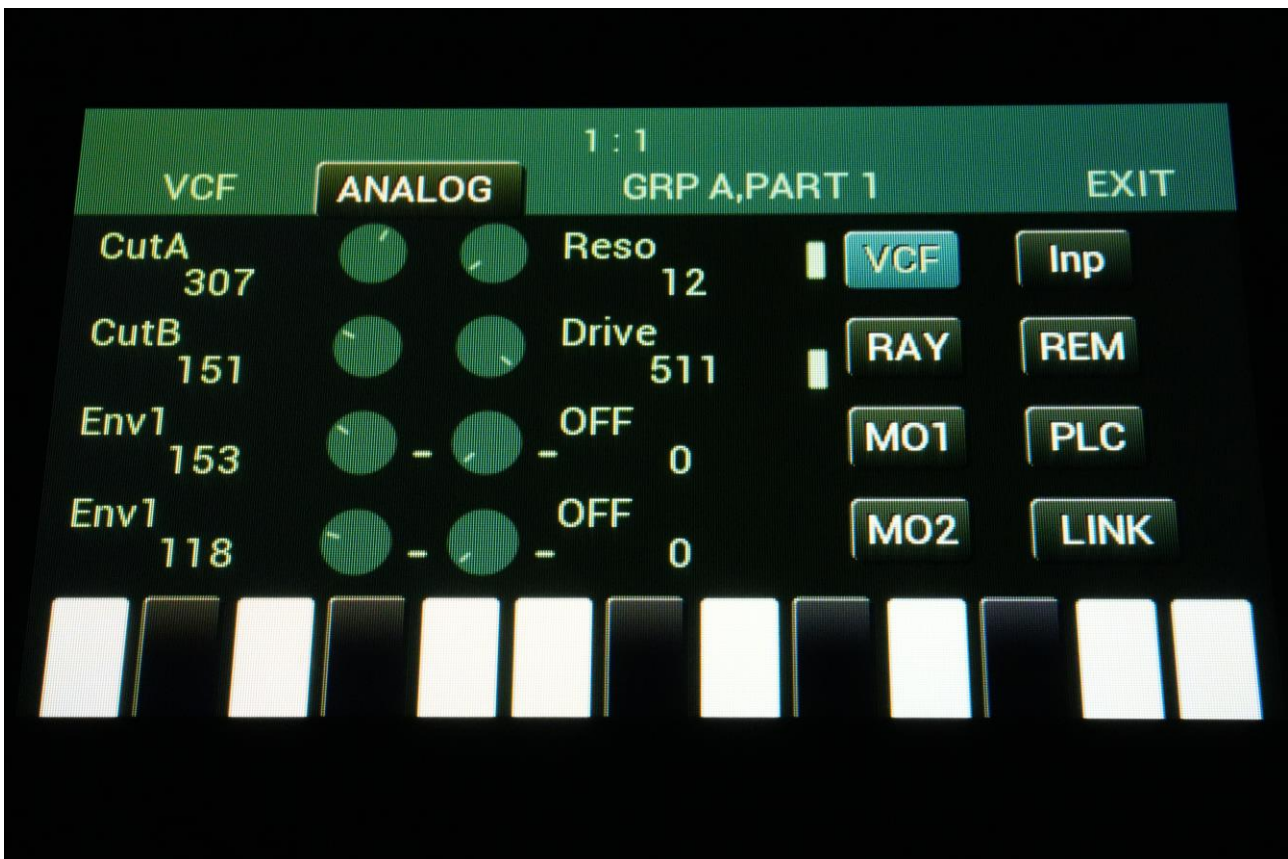
Up to nine profiles of the same filter can be exported to each folder. These files will automatically be numbered 1 to 9.



## Parameter Layout

The “old” horizontal parameter layout is no longer supported, and can no longer be selected on the COM2 page, since it didn’t fit with the Edit Knob locations anyway.

From now on, only the vertical parameter layout will be supported on Zaturm.



## Bug Fixes

-The VCF's input VU-meters were showing too low values. This has now been fixed.

-Since the vertical parameter mode were implemented, the modulation source select on the Overview page did not function properly. This has now been fixed.



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2025