Gotharman's Urano

Modular Synthesizer

Update Manual 8.51

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Bug Fixes

-When playing more notes at the same time, and then releasing some notes, not all oscillators would track. This has now been fixed.
-When an envelope was set to single trigger mode, it would loop. This has now been fixed.
-Sequencer transpose via MIDI/TouchScreen keyboard did not work. Now it does.

Draw WaveForms

It is now possible to draw waveforms for use in the Oscillators and the LFO's. For each preset 15 draw waveforms can be stored, and these can be copied/pasted between presets.
When pasting an oscillator or LFO which uses draw waveforms, the draw waveforms are automatically pasted as well.
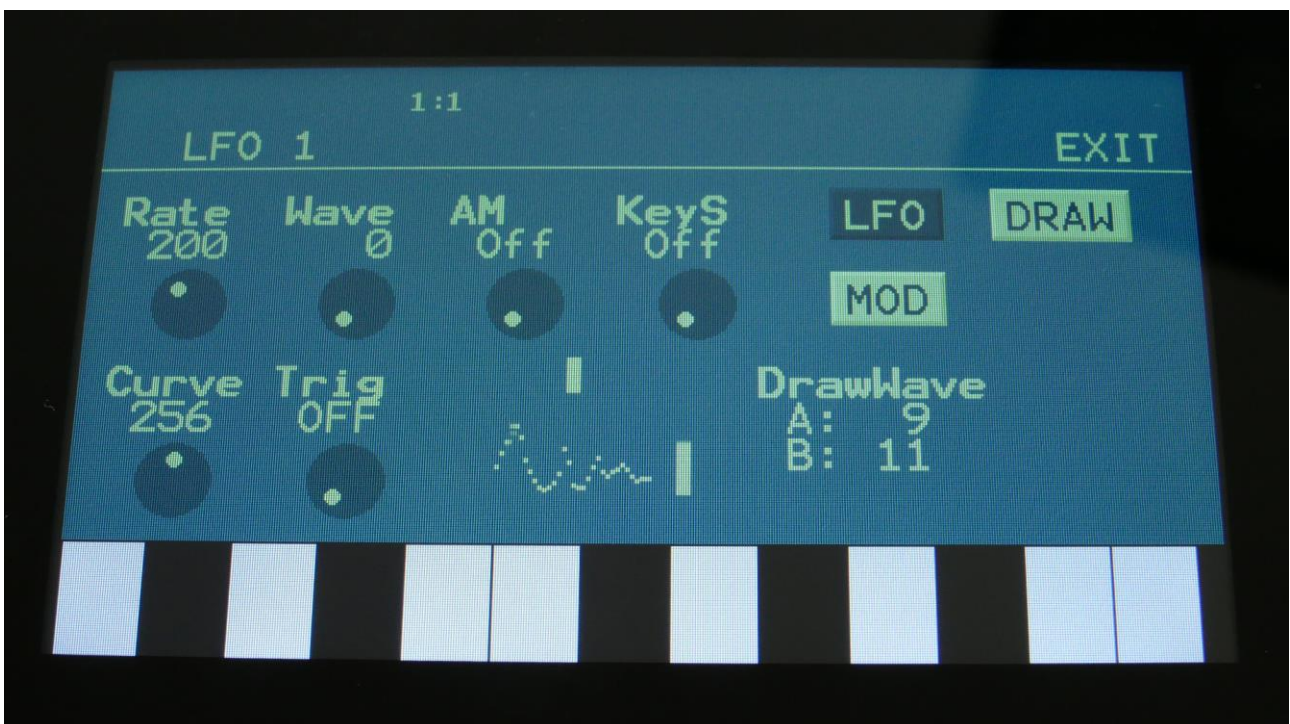
LFO Draw Waves

On the LFO pages, 2 new parameters have been added, and a new touch button.

The DrawWave parameters:
When **A** (Edit Knob 7) is set to **Off**, the LFO is running as a normal LFO, generating the same waveforms as it did before this update. When **A** is set to a number between **1 and 15**, the LFO will generate the draw wave which has the corresponding number, when the Wave parameter is turned fully down, and the Curve parameter is set to its middle position (256).
With the **B** parameter (Edit Knob 8) you can select the draw wave number (1-15), which the LFO will generate, when the Wave parameter is turned fully up, and the Curve parameter is set to its middle position (256).
Turning or modulating the **Wave** parameter, will make the LFO morph between the 2 selected Draw Waves.
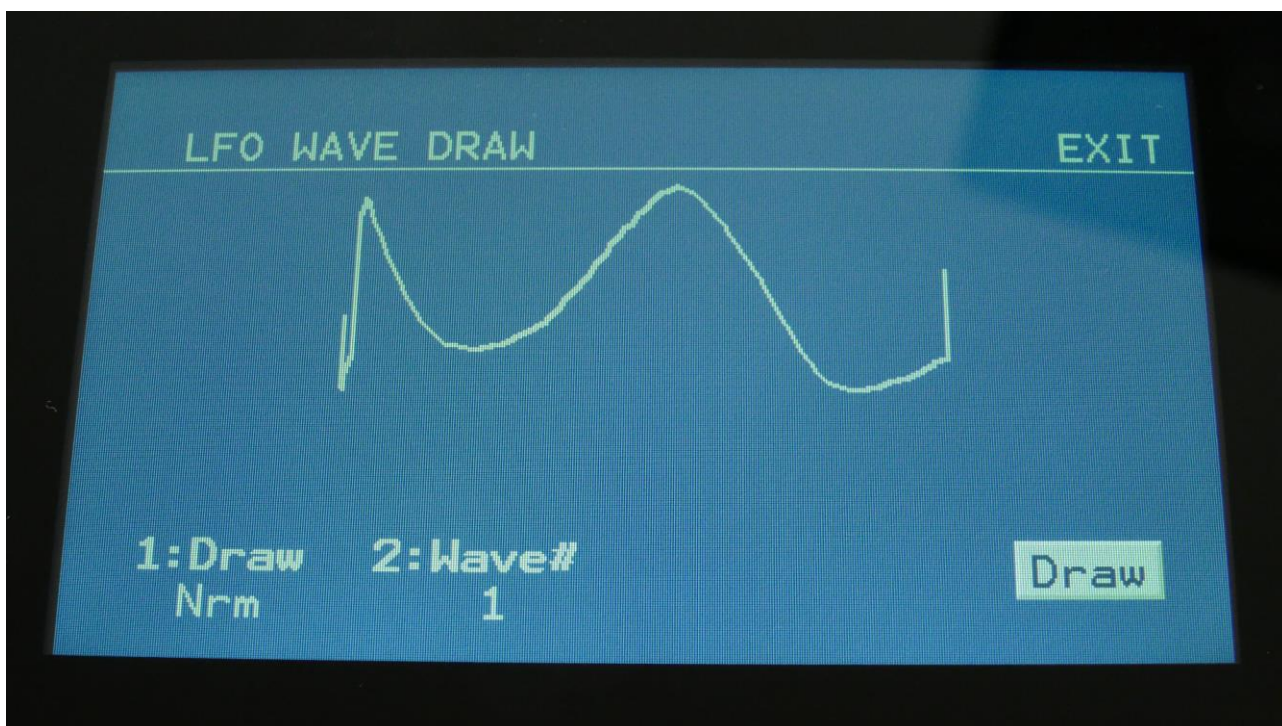
The more the **Curve** parameter is turned down from 256, the more the Draw Wave will be warped leftwards. Turning the **Curve** parameter up, will make the draw wave warp rightwards.

All other controls work as usual. The rate of the draw wave can be set and modulated, it can be key trigged and it can trigger parts. It is also still possible to use the one time key trigger mode, for using the draw waves as envelopes.
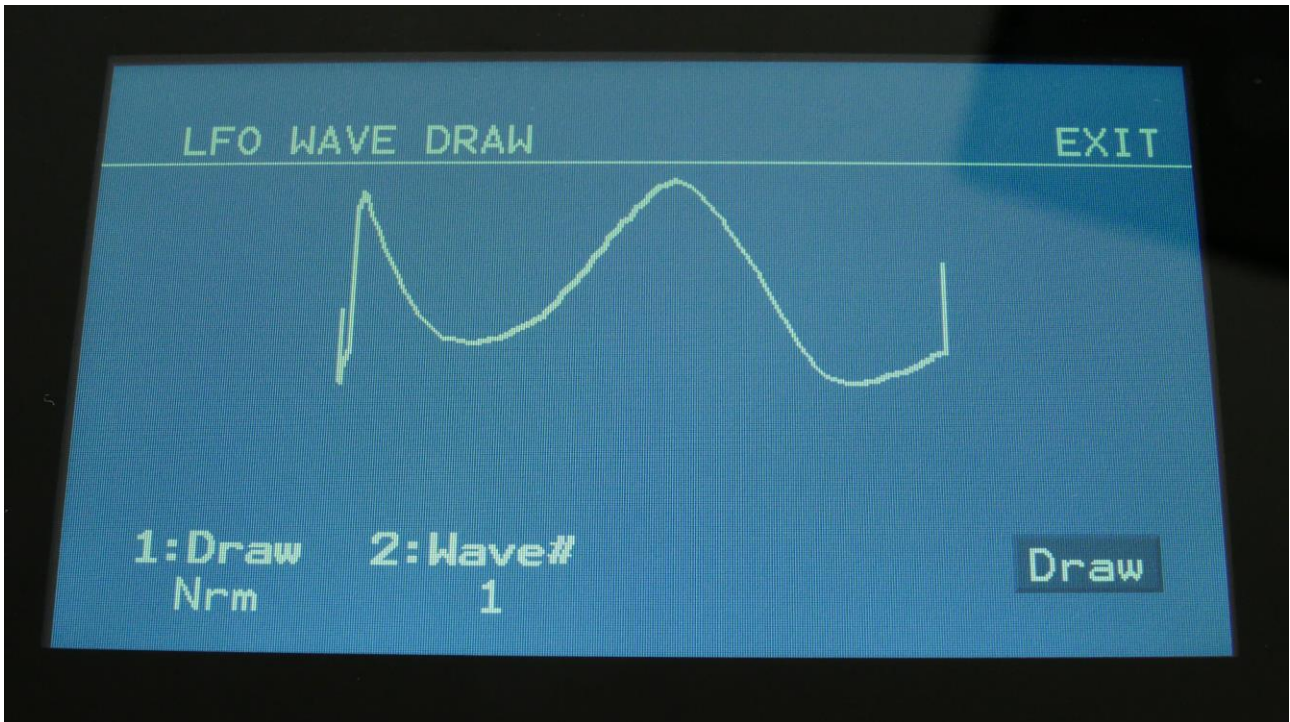
Edit the Draw Waves

To edit the draw waveforms, from the LFO page touch the DRAW button, to enter the draw wave edit page.

Here you can select the draw wave you wish to edit (draw wave 1 to 15), by **Edit Knob 2**. Then simply use your finger to draw a waveform on the display.
By **Edit Knob 1** you can set the draw mode to either **Nrm** (drawing follows your finger) or **Art** (creates random patterns).

If you would like to make sure that you are not hitting the Exit button when drawing, you can activate the Draw touch button.

This will deactivate the Exit touch button. To re-activate the Exit button, simply hit the Draw touch button again, to de-activate this.

Saving the Draw Wave

The draw waves are saved as part of the Preset data, when you save a preset.

Copy Draw Wave

When you copy a preset, and then enter the draw wave edit page, and hit the Paste button, Urano will ask you to select the draw wave to copy from. Select the desired waveform and hit the Paste button again.
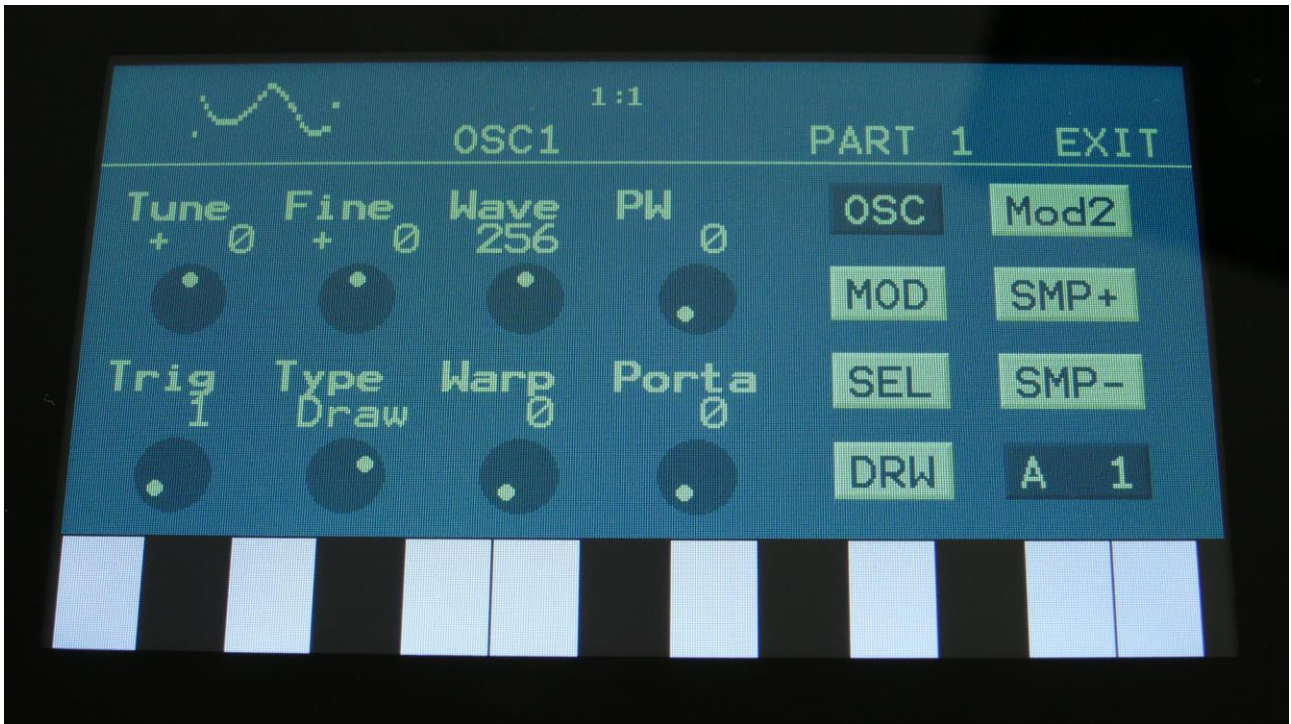

When pasting LFO's or Oscillators which uses draw waves, these are automatically pasted together with the LFO/Oscillator parameters.

Draw Wave Oscillator

A new oscillator type has been added, which is generating sound from the draw waves.

To enter this oscillator mode, set oscillator type to Draw.

2 draw waves can be selected at a time. The **Wave** parameter morphs between the 2 selected waves.
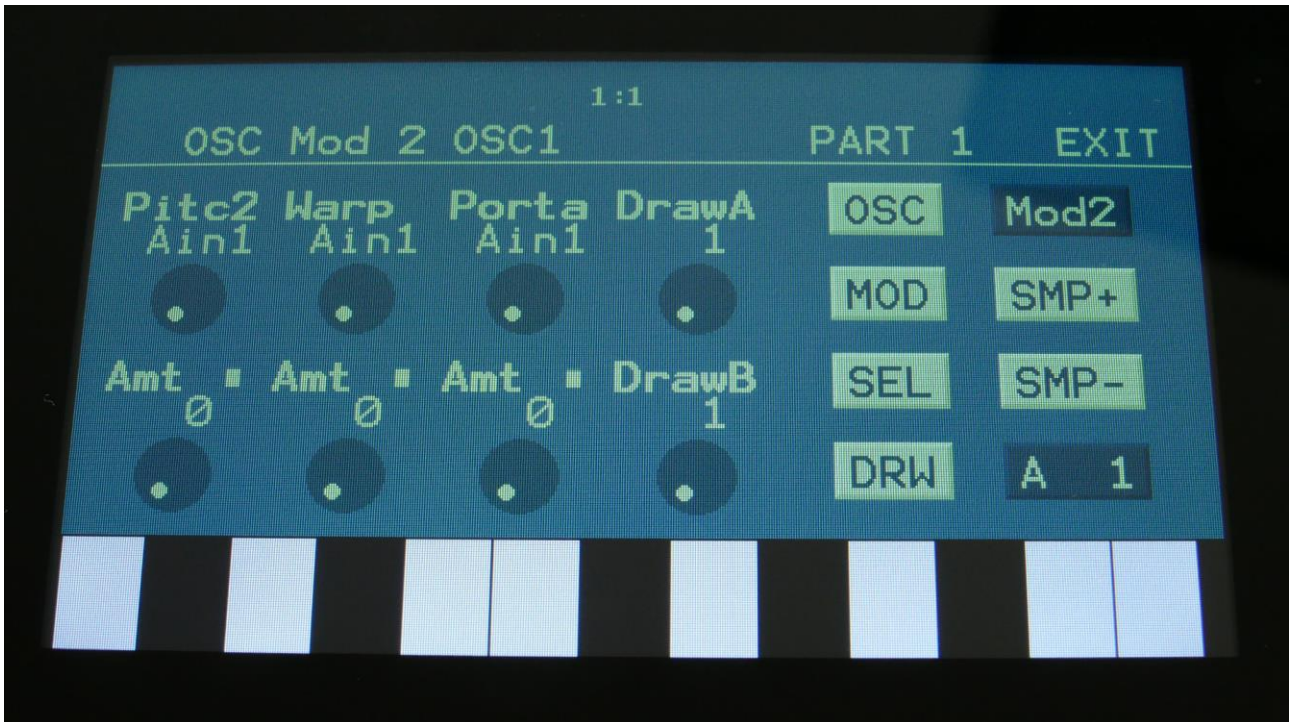
The **PW** parameter will wavefold the positive cycle of the draw wave.

When the **Warp** parameter is turned up, it will warp the draw wave leftwards.

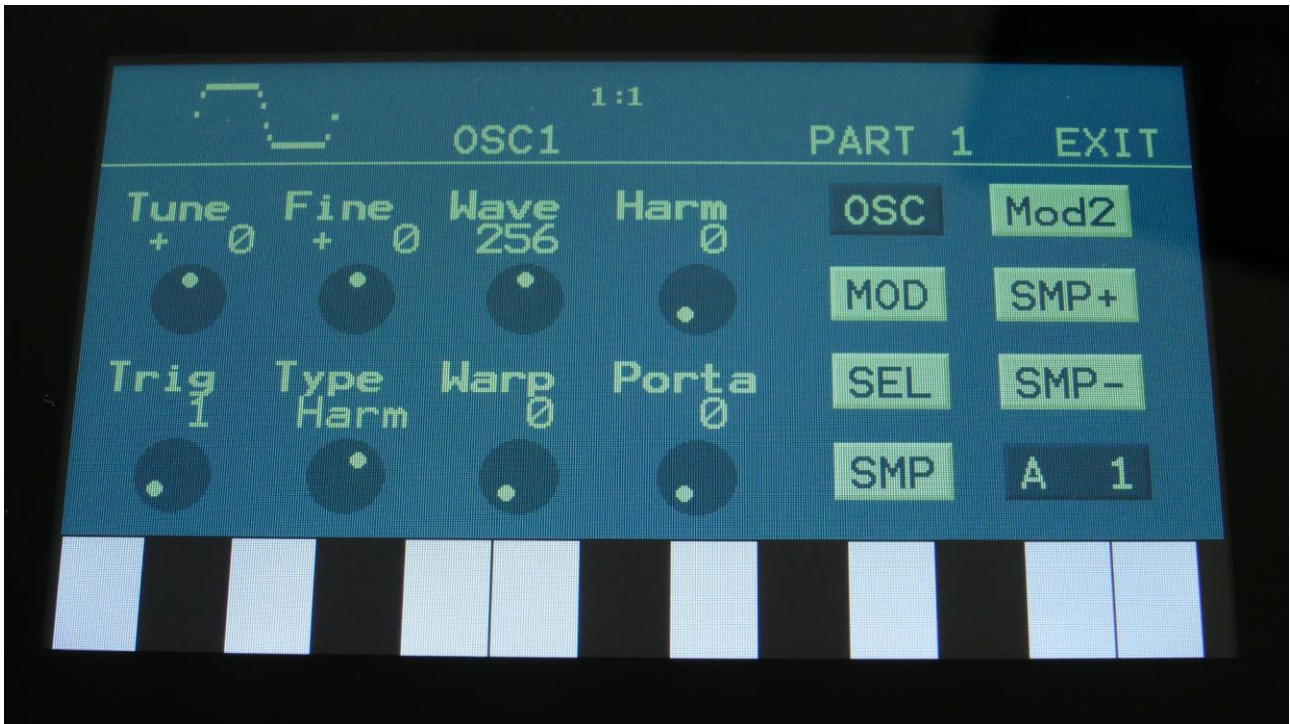The Wave, PW and Warp parameters can be modulated by any source.

The SMP touch button is renamed DRW in Draw Oscillator mode. Touching this will access the LFO Draw Wave edit page.

The 2 draw waves for the oscillator can be selected on the Mod2 page, by setting the DrawA and DrawB parameters to draw wave 1 to 15.

Harmonic Oscillator

A new harmonic oscillator type has been added. This alters the harmonic content of its waveform by shaping a sine wave.

To enter the harmonic oscillator, set the oscillator Type to **Harm**.

In this mode, the **Wave** parameter saturates the basic sine wave. When turned fully up, the waveform becomes almost a square wave.
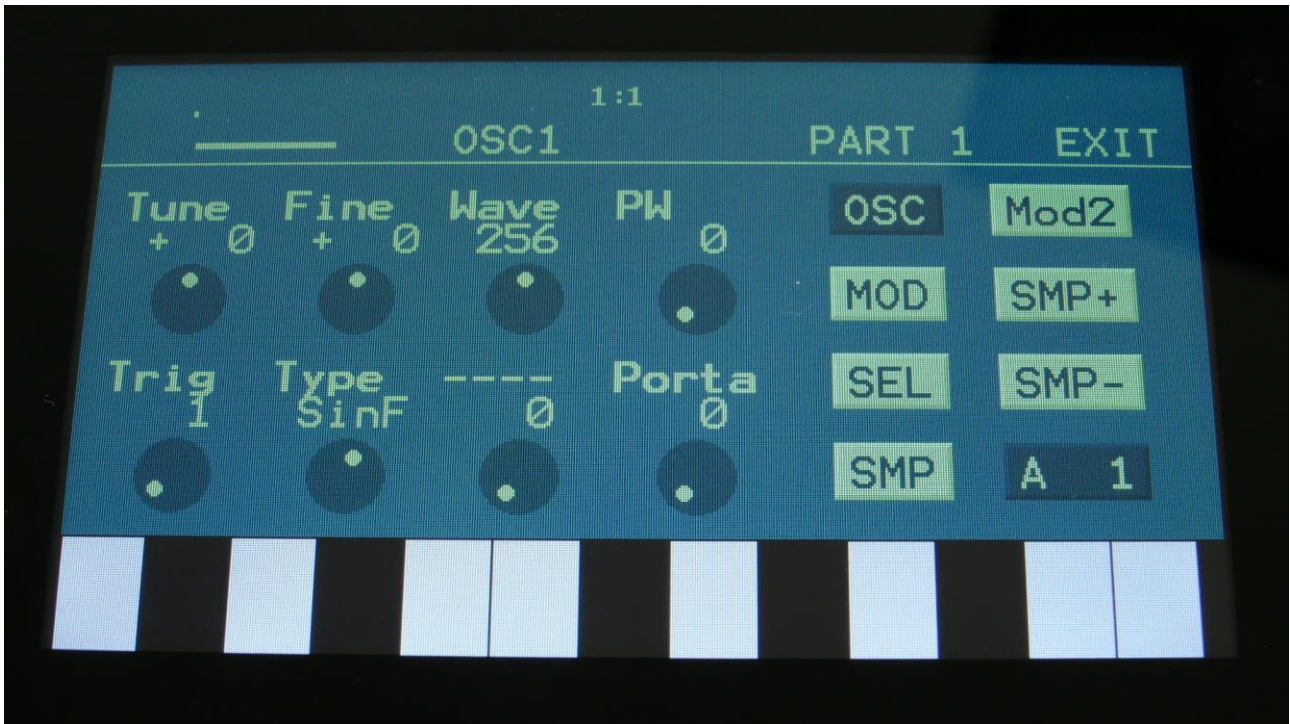
The **Harm** parameter generates different harmonic spectras as it is turned, by altering the shape of the basic sine wave.

The **Warp** parameter will warp the waveform leftwards, which will also generate some interesting harmonics.

The Wave, Harm and Warp parameters can be modulated by any source.

SinF microGothar Oscillator

A new oscillator type has been added, which is inspired by the microGothar SiF (Sine Function) oscillators. This digital oscillator sounds quite unusual, and at many settings, it even sounds different on each key!

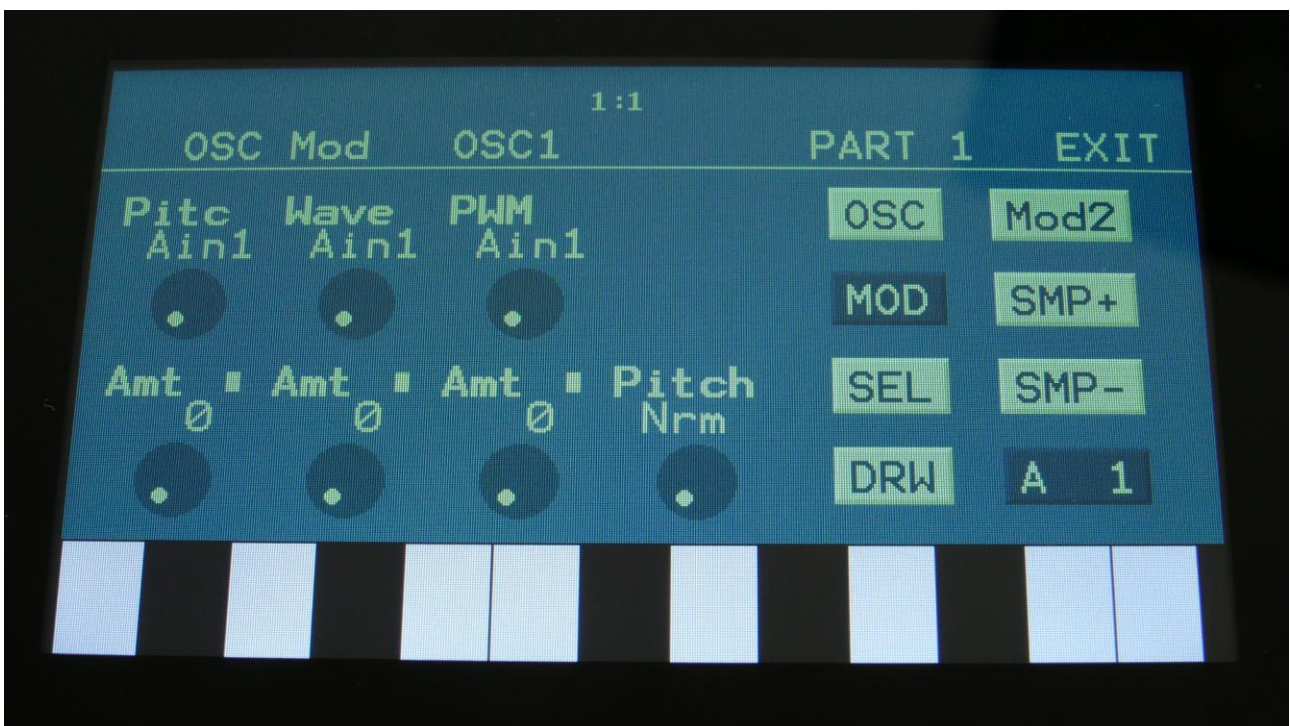The **Wave** parameter morphs through different variations of the Sine Function waveforms.

The **PW** parameter **a**dds harmonics to the waveform.

Linear FM and Phase Modulation!

On Oscillator Type1, Type2, Reso, SinF, Harm, Draw, WaveTable and noise it is now possible to set the pitch modulation mode to either Nrm (normal – as before), FM (Linear Frequency Modulation) or PM (Phase Modulation).

Linear FM is a much more powerful modulation option, than the "normal" cross modulation. In PM mode, the Pitch1 modulation parameter is still in FM mode, but the Pitch2 modulation parameter is in Phase Modulation mode. Urano's PM modulates the phase of the oscillator, without modulating the pitch. This fattens the sound.
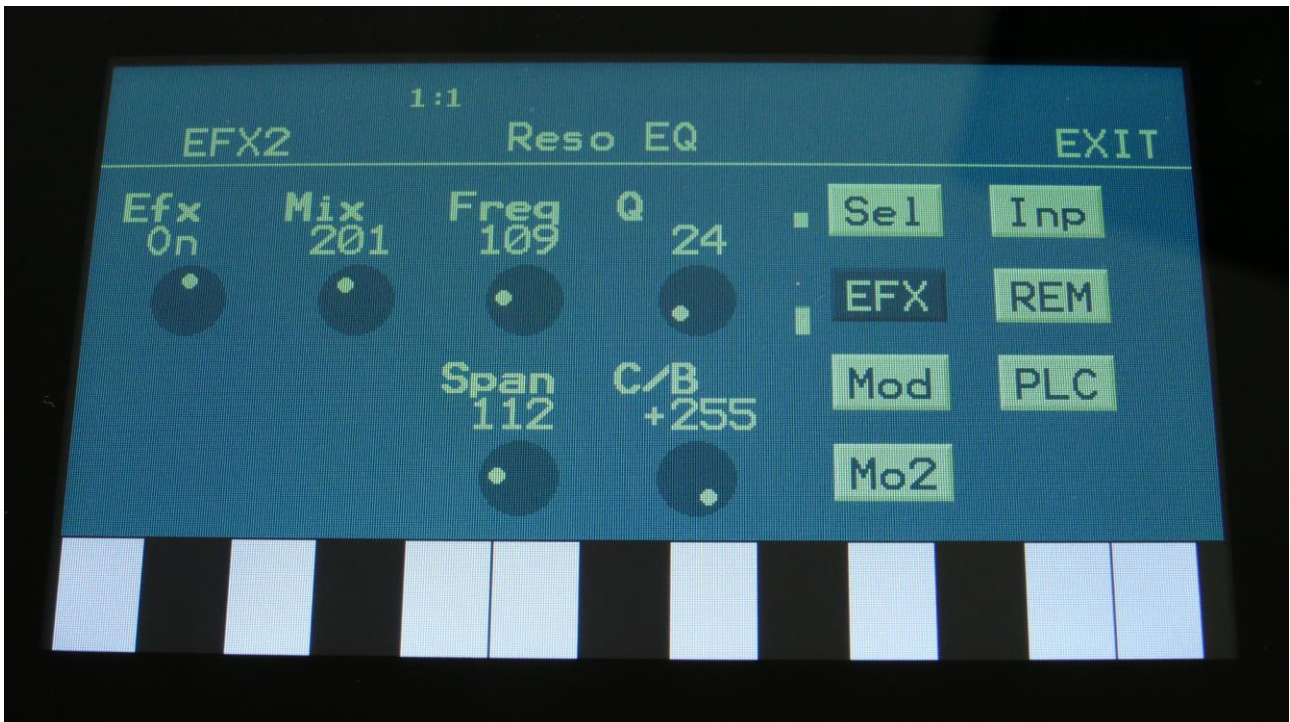
The pitch modulation mode parameter, named "Pitch", is located on the Oscillator MOD page.

New Reso EQ Effect!

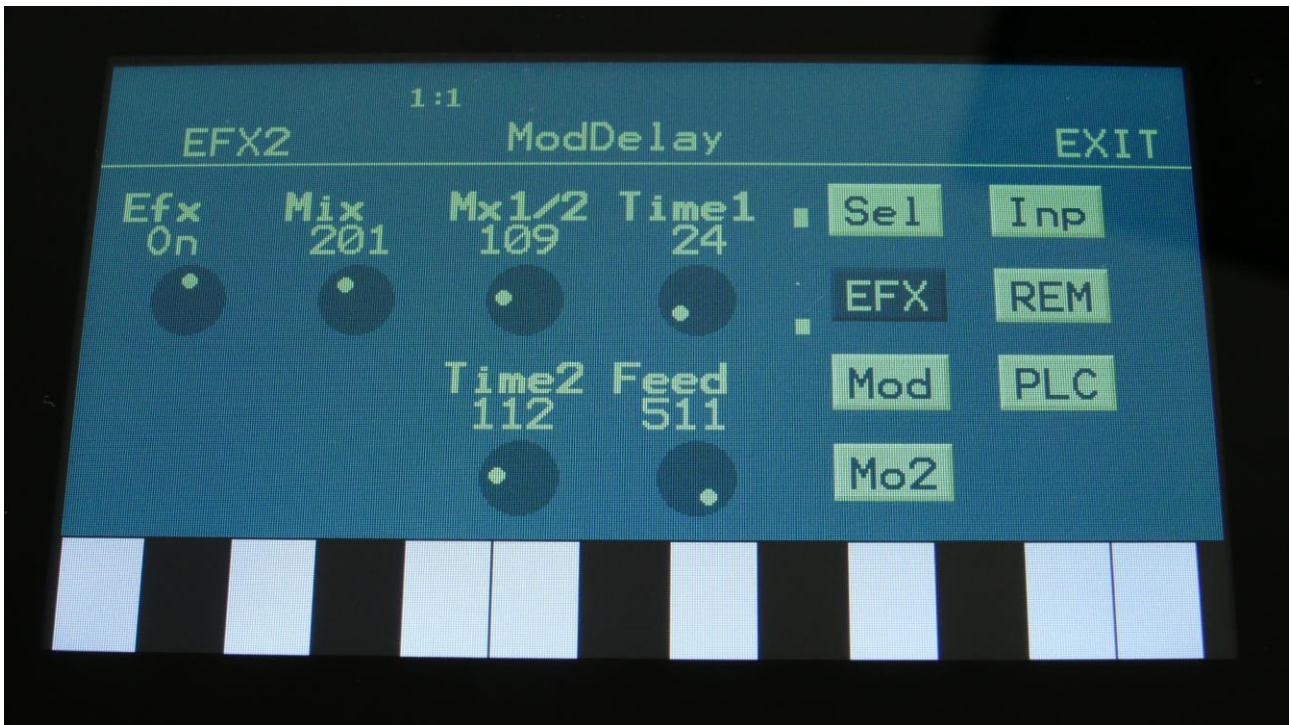A resonant EQ has been added to the effects.

It is a parametric EQ where frequency, cut/boost, frequency span and resonance (Q) can be set. Since the frequency span and Q can be set as 2 different parameters, this EQ has 2 peaks or dips at higher Q settings.

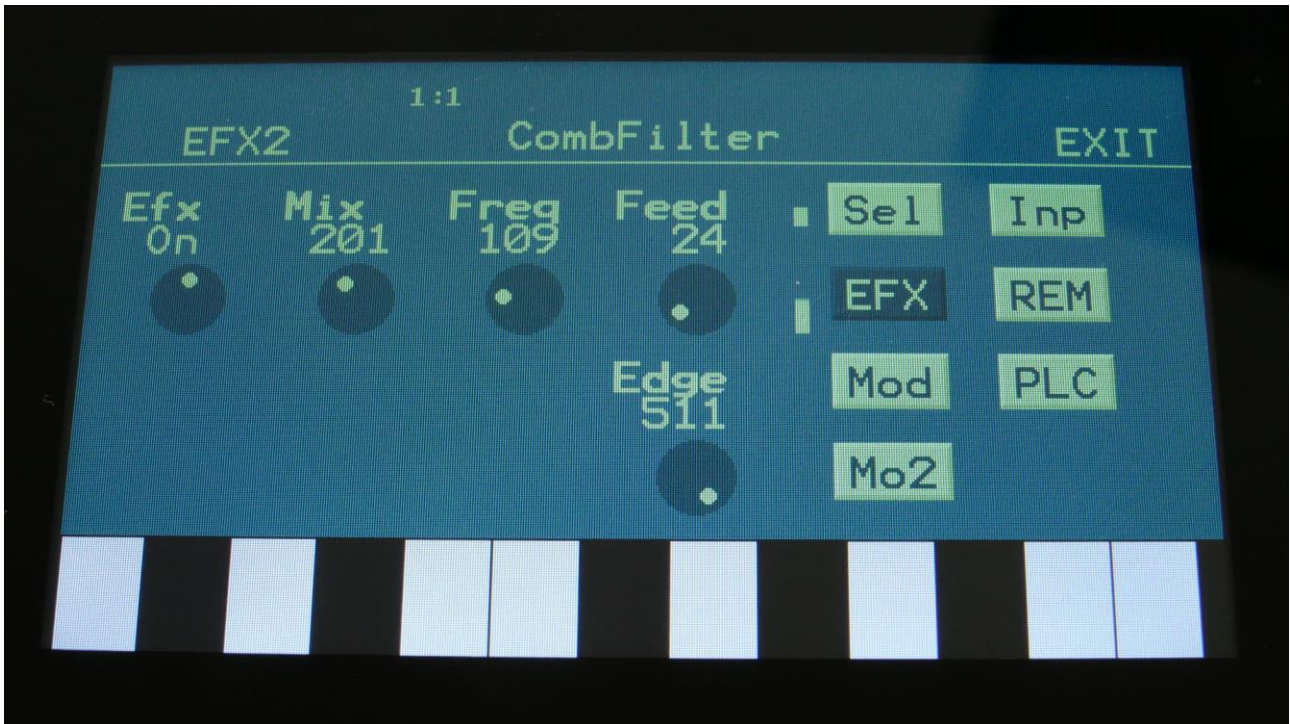## New Smooth Dual Tap Mod Delay Effect!

A new dual tap delay effect has been added. When you change or modulate the delay times on this, the transition is smooth, and do not generate any clicks.

It is also possible to set different delay times on the 2 taps, and mix between them, manually or via modulation.
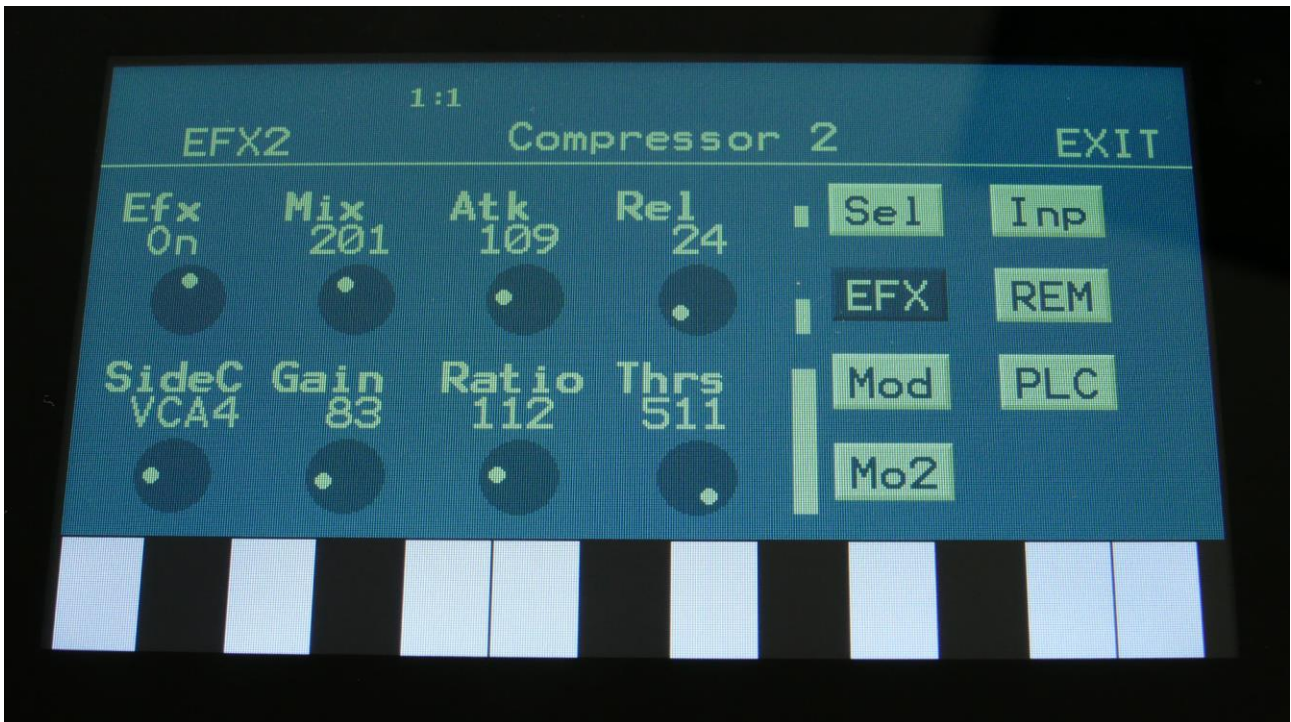
New Comb Filter!

A comb filter has been added to the effects section. A traditional comb filter with frequency and feedback settings, plus an Edge setting, which will add some character and crunchy distortion.
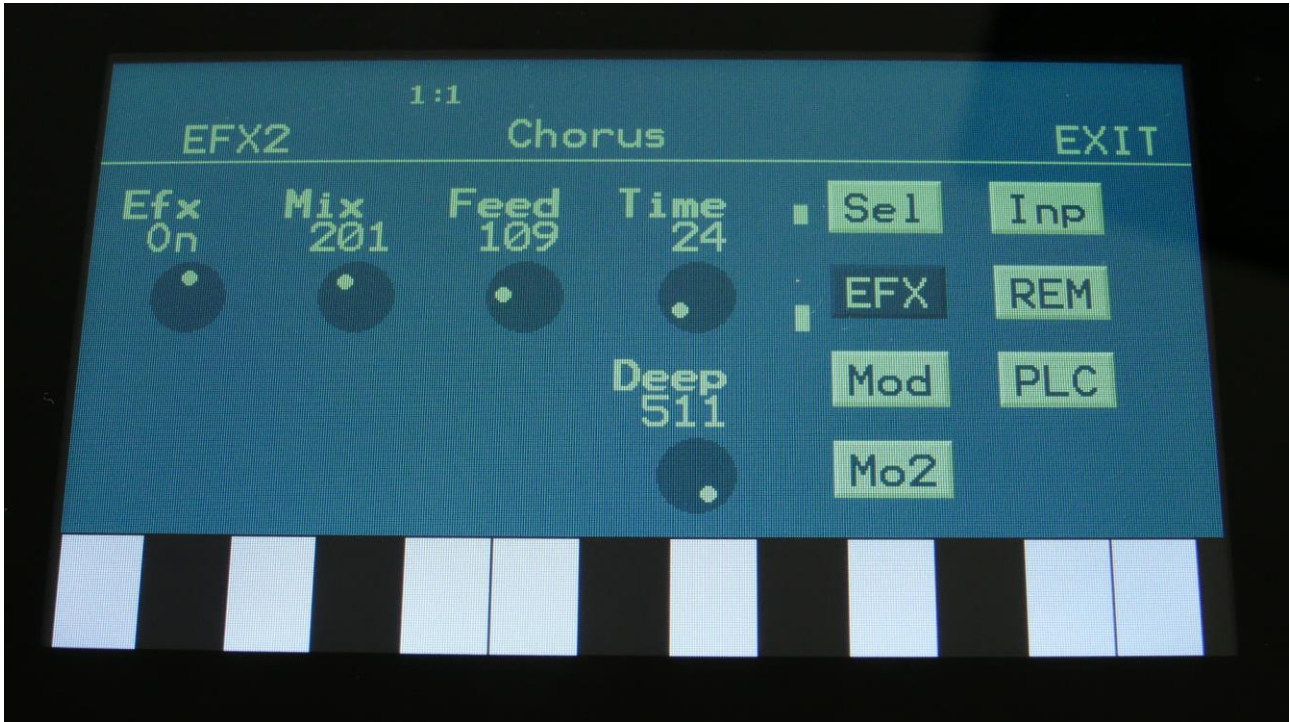
New Compressor With Side Chain!

A new compressor effect has been added, which is easier to use than the first one, and which can be side chained to any audio/modulation source.

Chorus Effect Has Been Optimized

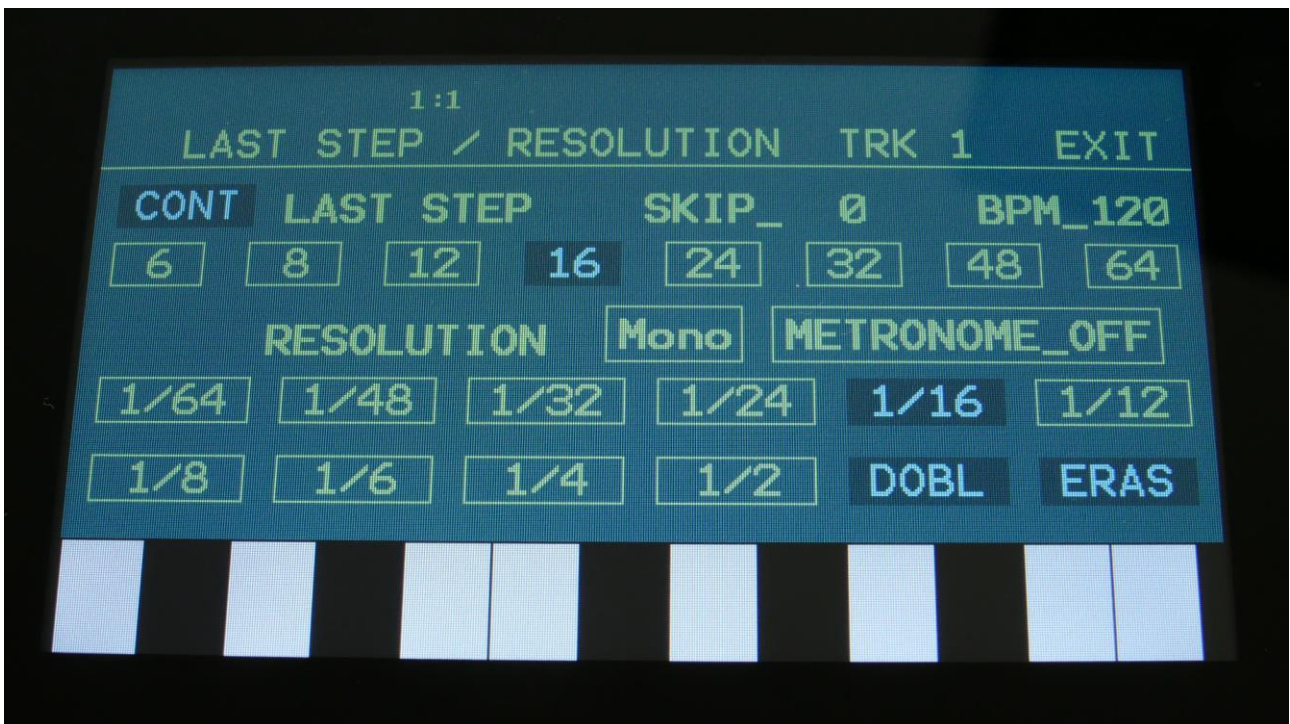The Chorus effect has been optimized a bit, so that it is now less clicky.

Immediate Preset Change!

When, on the Preset Select Page, you have selected a new preset, which is shown as "Next" on the display, and the Play button is flashing, it is now possible to immediately shift to the next preset, by pushing the Play button.

Sequencer Continue/Restart function

Usually when you press the play button, to start the playback of a sequence, Urano will start playing back the sequence from the start step.

It is now also possible to make it continue from where it was stopped. To make this happen, touch the new "CONT" button on the Sequencer Main/Last Step page, so that this turns dark blue. Touch again, so that it turns light blue, to make the playback start at the start step again.

Metronome now only at playback

The metronome is now only audible, when the sequencer is playing back.
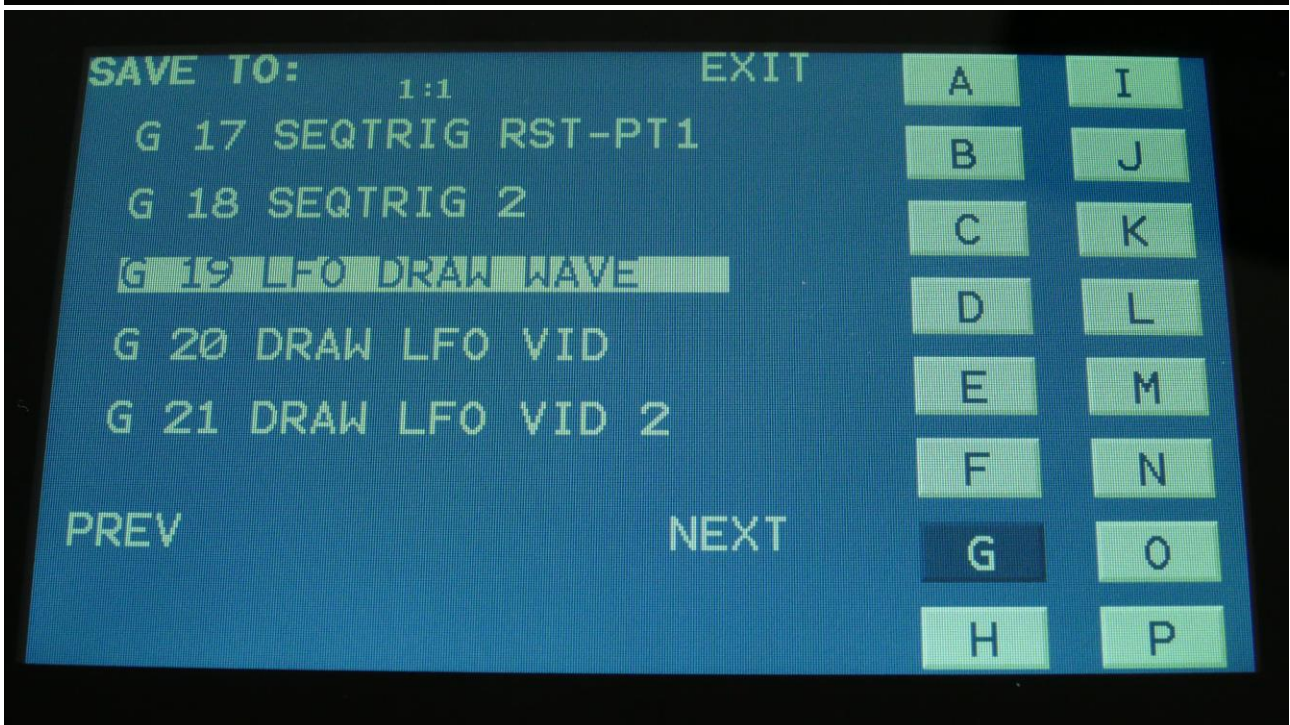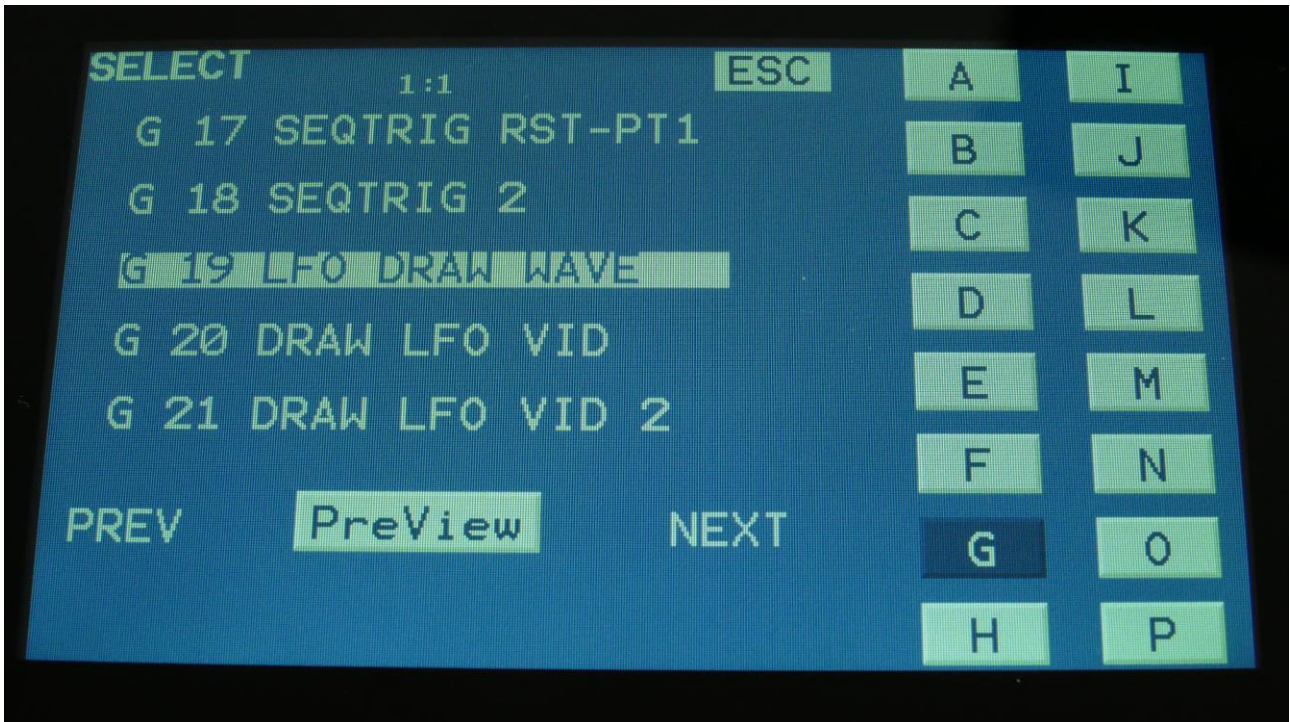
Sequencer Count-In

The 2 bars sequencer count-in is now only active, when the metronome is on. When the metronome is off, the sequencer will now start recording without any count-in.

Sequencer Realtime Recording Timing

The timing when recording in real time on the sequencer, has been improved, so that it is better to "snap" tones, that is played a little bit too early.
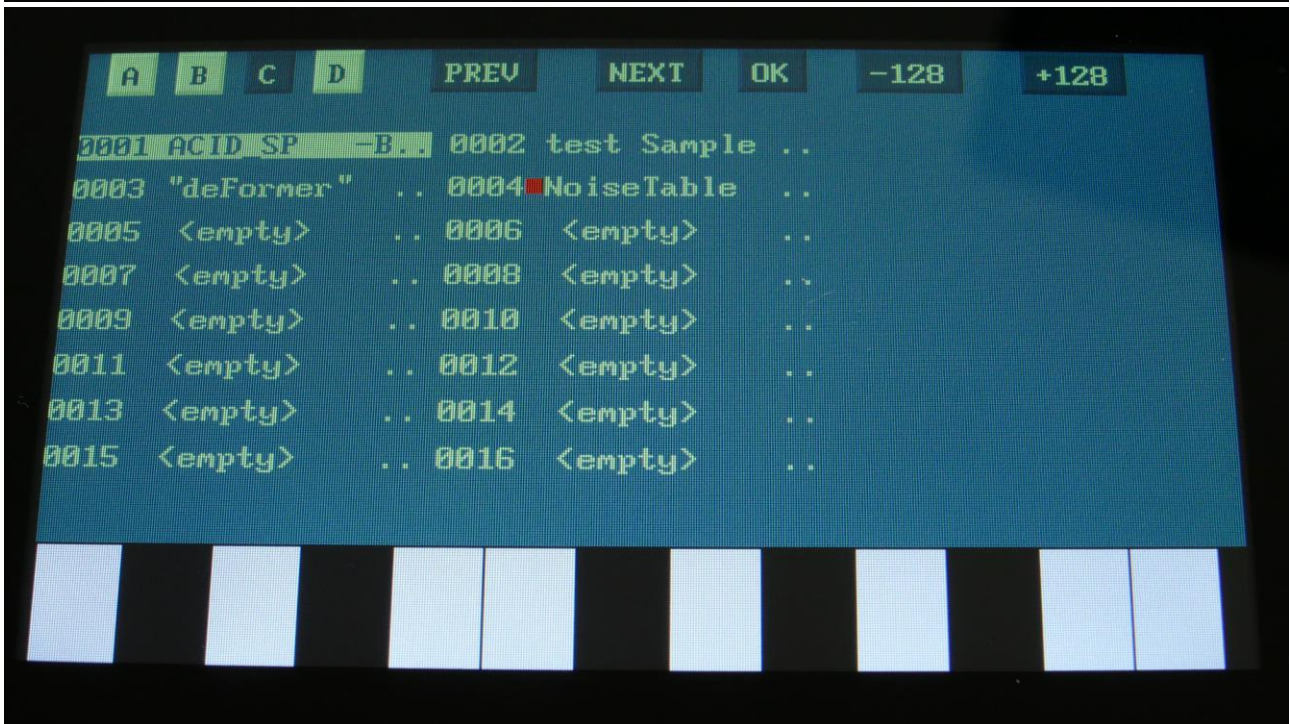
Bank Select Touch Buttons

Bank select buttons have been added to the preset select, preset save, song select and song save pages, for faster navigation.

Sample Select Page Jumps

Some extra touch buttons have been added on the sample select pages, so it is now possible to skip 8 pages (128 samplings) at a time, when using the +/-128 buttons.
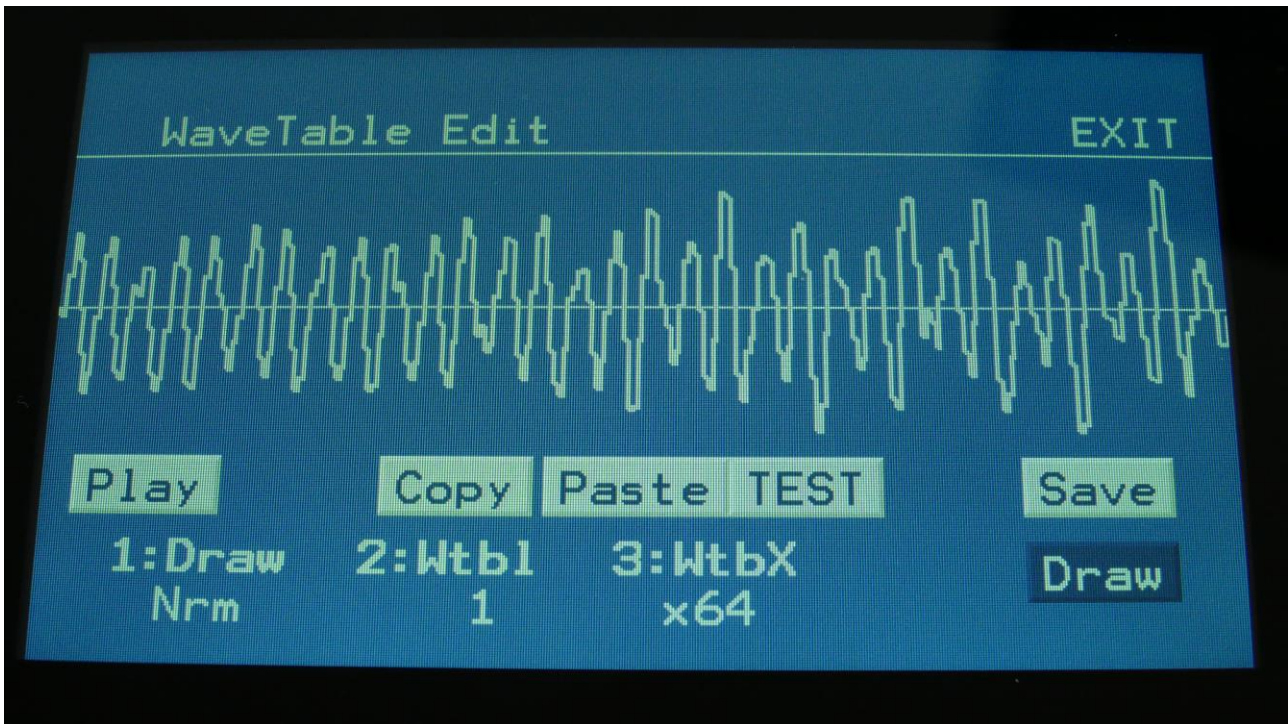
Parameter Fine Adjust

A parameter fine adjust function has been added. First, adjust the parameter, as you would normally do, with a knob. Then push and hold the Modules/Bar Sel button, while adjusting the parameter again, using the knob. The parameter will now be adjusted inside a narrow range, and it will be easier to set it to a specific value.

Draw Button

A new "Draw" touch button has been added to the WaveTable edit page and the LFO/OSC draw page.
When this is activated, all other touch buttons are de-activated, which will prevent you from accidentally hitting Exit or other touch buttons, while you are drawing your waveforms.

Written by
Flemming Christensen
In 2023