

# Gotharman's zaTurn



## Modular Synthesizer

## Update Manual 7.71

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## Bug Fixes

-Sometimes the SamplePitch 2 Large effect would not reset correctly at preset change. This has now been fixed.

## New “Zaturn Digital” model!

A new more affordable Zaturn synthesizer is now available. This can't get any analog filters installed. Instead it is using the new digital filters, which are explained later in this manual. Each of these new filters has one 12db low pass filter and one 12db band pass filter.

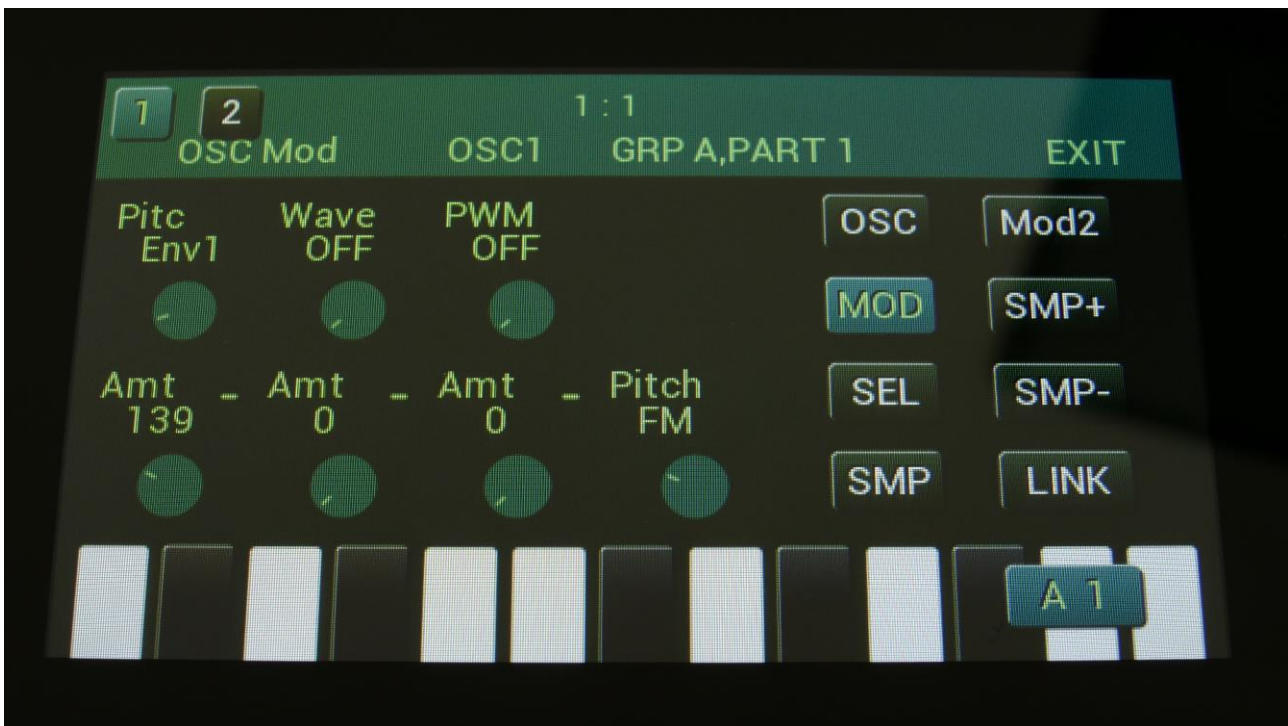


## Linear FM and Phase Modulation!

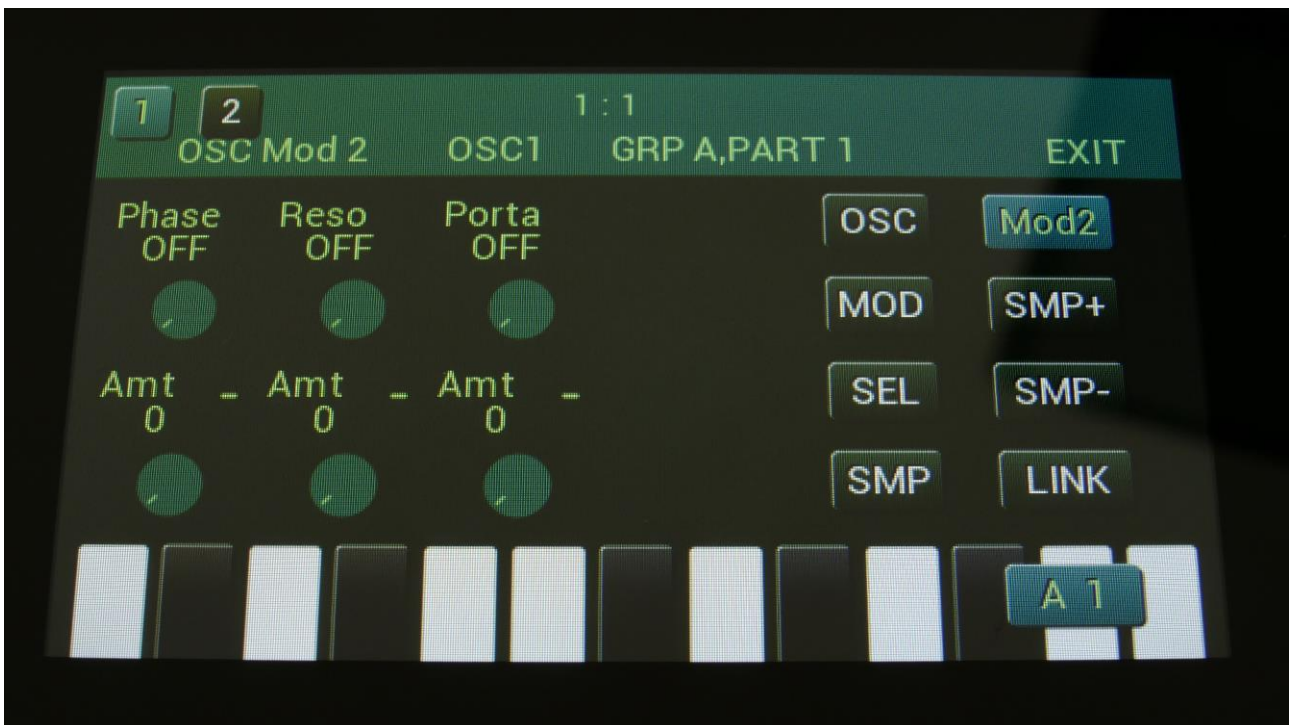
On Oscillator Type1, Type2, Reso, SinF, WaveTable and noise it is now possible to set the pitch modulation mode to either Nrm (normal – as before), FM (Linear Frequency Modulation) or PM (Phase Modulation).

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. Zatrurns PM modulated 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.



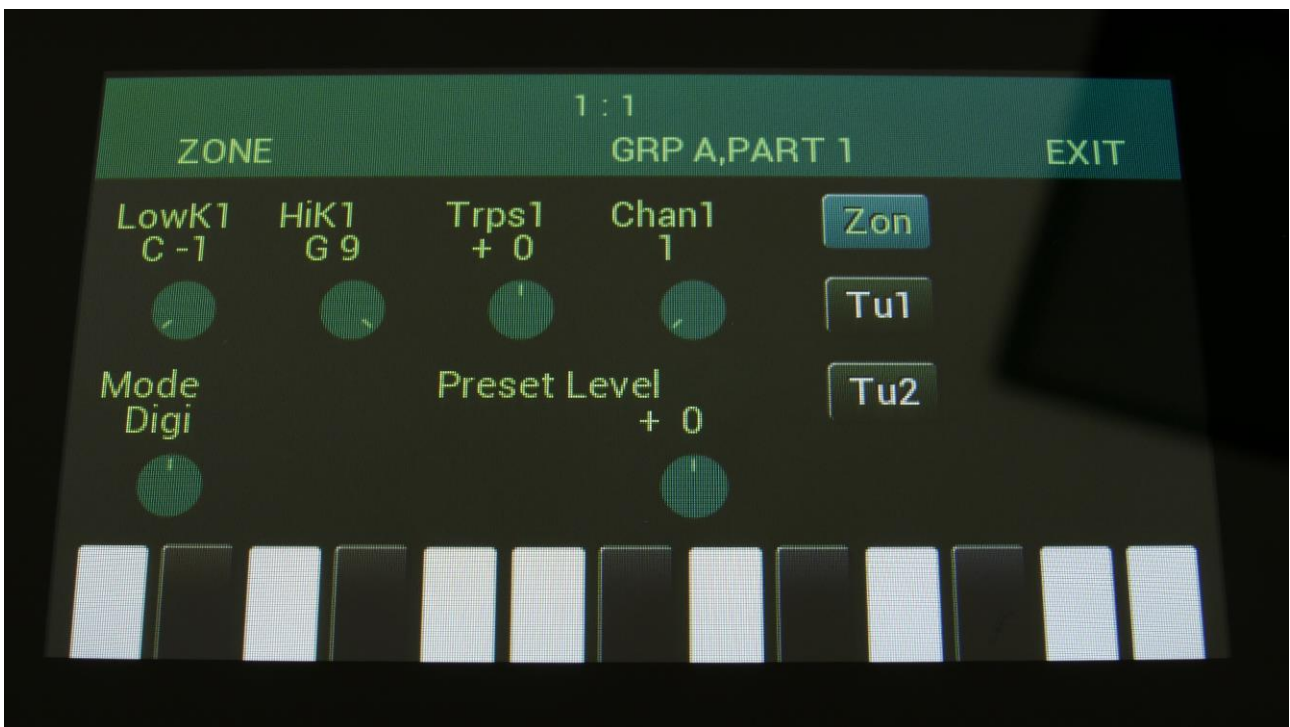
When an Oscillator pitch modulation mode is set to PM, the Pitc2 parameters name is changed to Phase.



## New Digital Filters!

Zaturn is now able to work without the analog filters. If a single of all of the VCF's is set in Digital mode, the VCF(s) is replaced by a digital filter. Each digital filter has one 12db low pass filter and one 12db band pass filter.

Zaturn Digital does not have any analog interfacing built in, so its filters will always be in digital mode. On Zaturn Analog it is possible to switch between the analog and digital filters on the Zone page, by setting the Mode parameter to either Ana (analog) or Digi (digital). This parameter sets all 4 VCF's at once.





It is also possible to set either VCF in analog or digital mode, by touching the button in the top of the first VCF page.





## New Favorite Sound Functions!

The favorite sound bank is now selected, using Edit Knob 1, instead of the touch display.

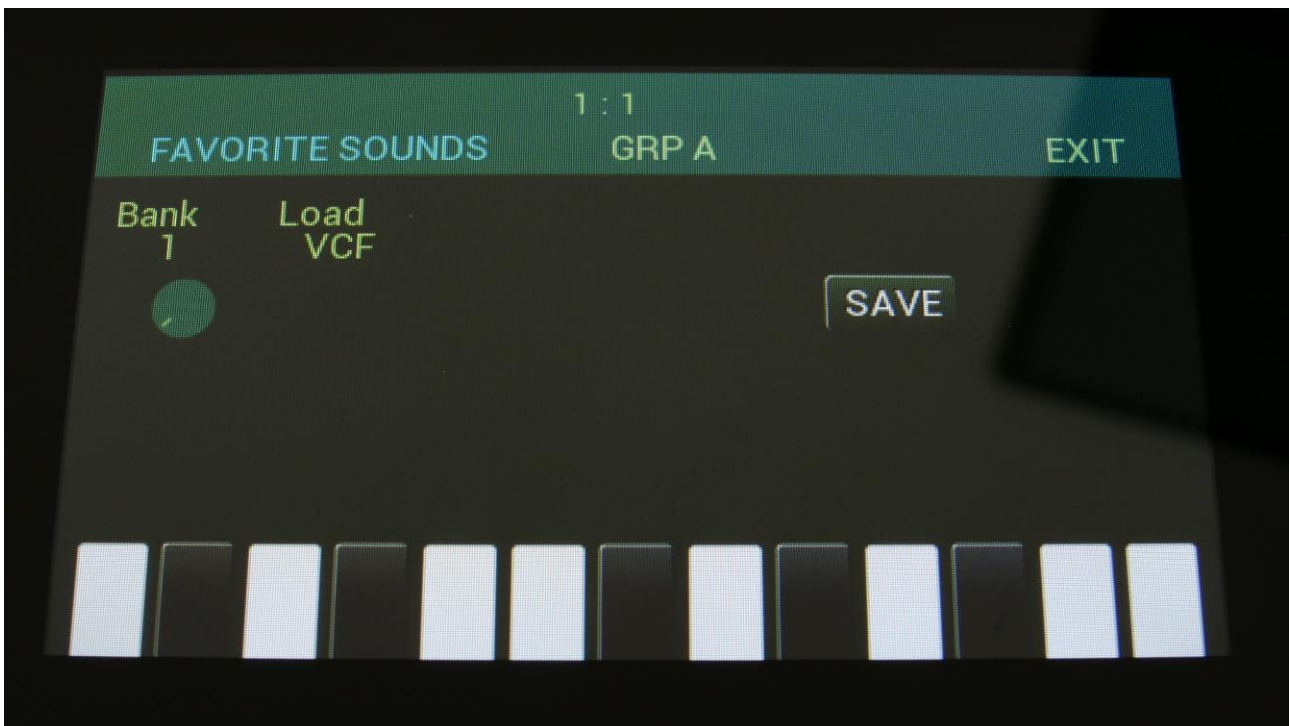
It is now also possible to select which elements should be loaded from the selected favorite sound.

The following elements can be selected via the Load parameter:

**-Part:** Will analyze the preset, and only load the modules, which are used by the part. If the other part in the group is using any of the same modules, these will be overwritten, so the sound in this part might be changed, or make no sound at all. So it is best to use this function, on groups that has not yet been programmed.

**-Group:** Same as before. All modules in the selected group will be loaded.

**-OSC1, OSC2, OSCB, VCF, DGF, VCA1, VCA2, EFX1, EFX2, ENV1, ENV2, LFO1, LFO2, LFO3, LFO4, S/H1, S/H2, RING, OUTP:** Will load a single module at a time, from the selected favorite sound.



## **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 at a specific value.

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