Gotharman's PolySpaze B

Polyphonic Synthesizer and Sampler

Update V 0.24

Contents Of This Manual
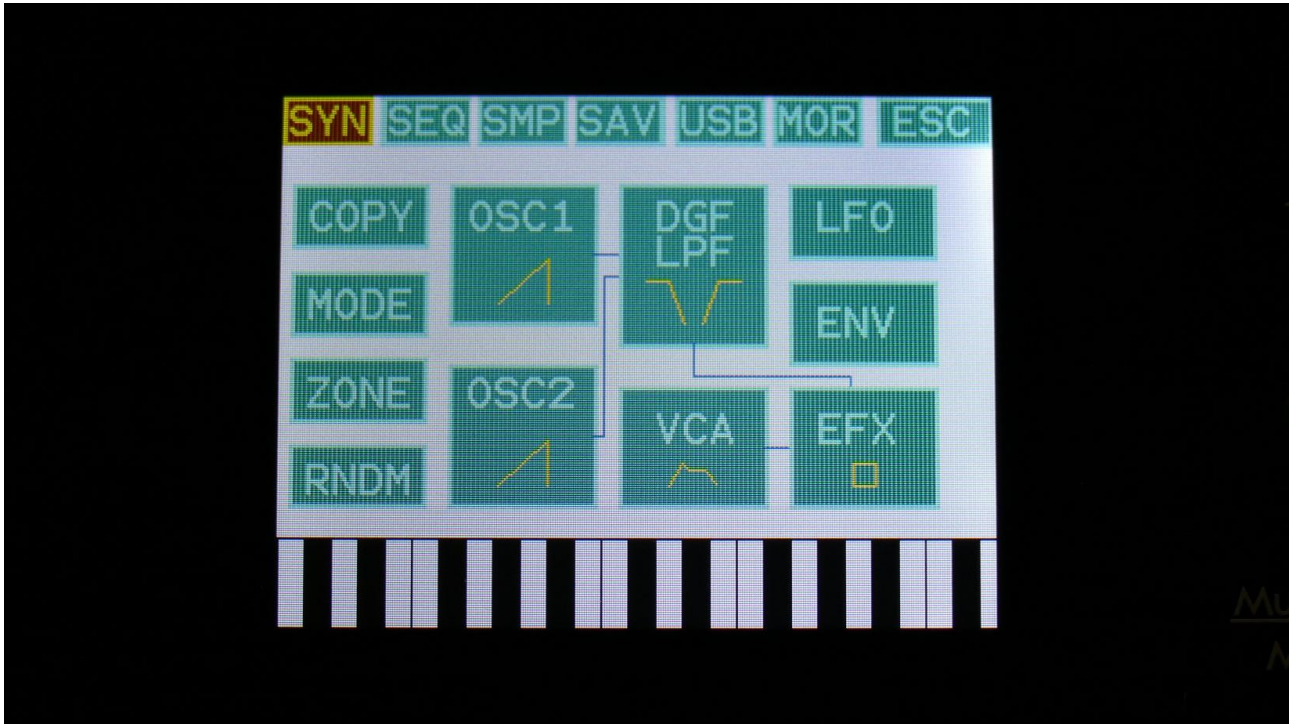
Copy Part

Copy Sequencer Track

Wave Chop System Refined –Including time stretch

LFO Key Sync

**Display Update Rate Tuned A Little Down**

Copy Part

In the upper left corner of the Synth Blocks page, the "Mode" block has now been made smaller, to make room for the new Part Copy function.

With the Part Copy function, you can copy any of the 4 Synth parts, from any preset, Synth/Effects parameters or both, to the current preset.
Like Fuzion's Sound Finder, it is possible to try the sounds from different presets and parts, until you decide what sound to copy.
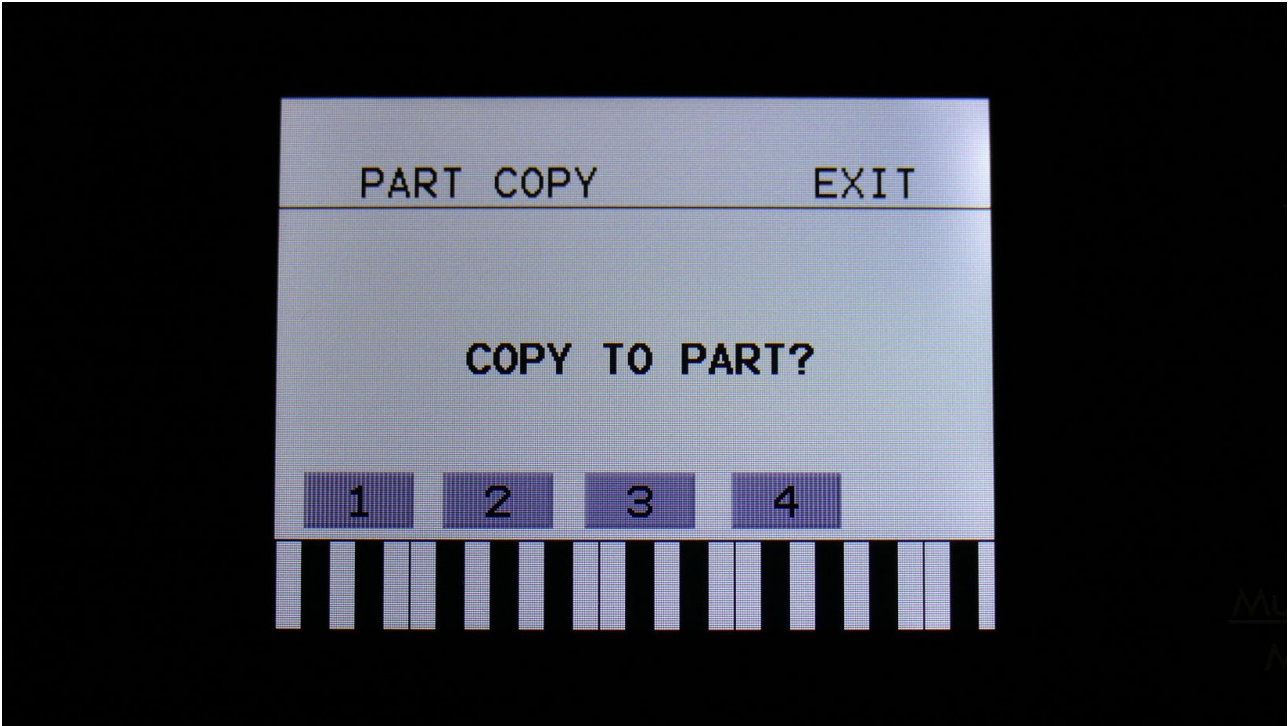
To try out some of the sounds from your other parts/presets, in the current preset, touch the "COPY" block.

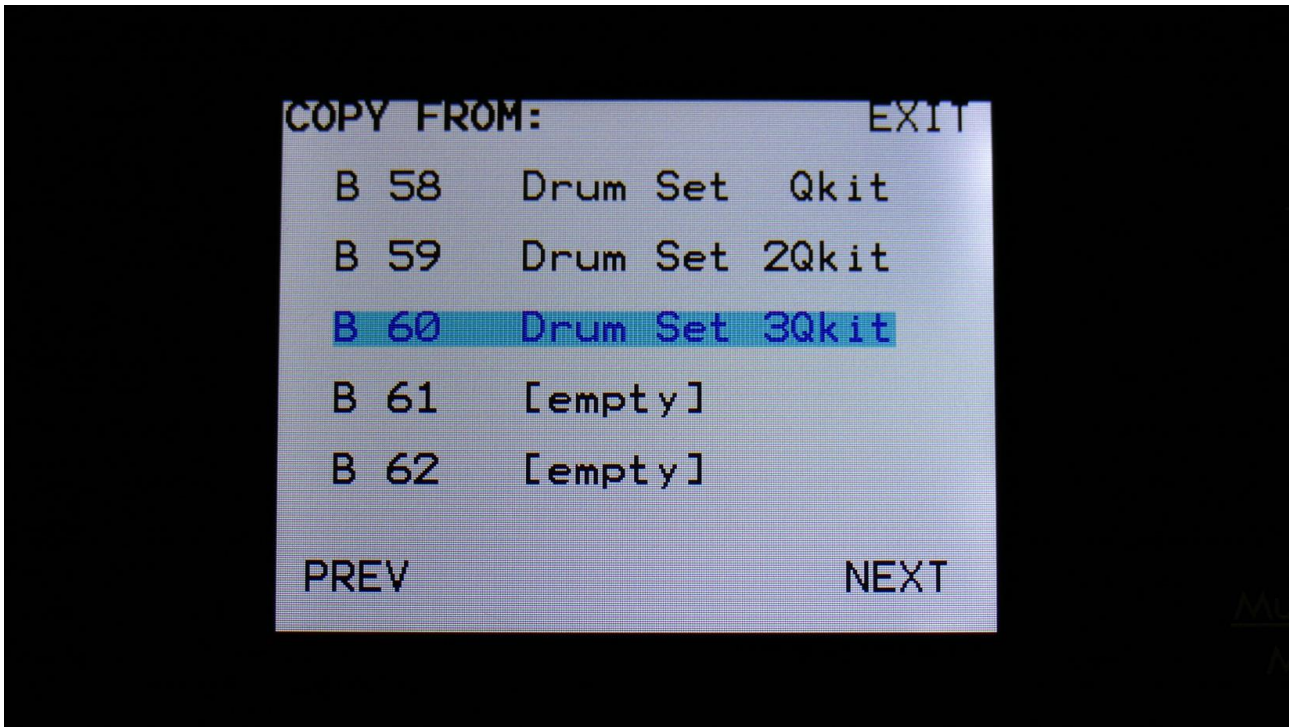You should now enter this page:
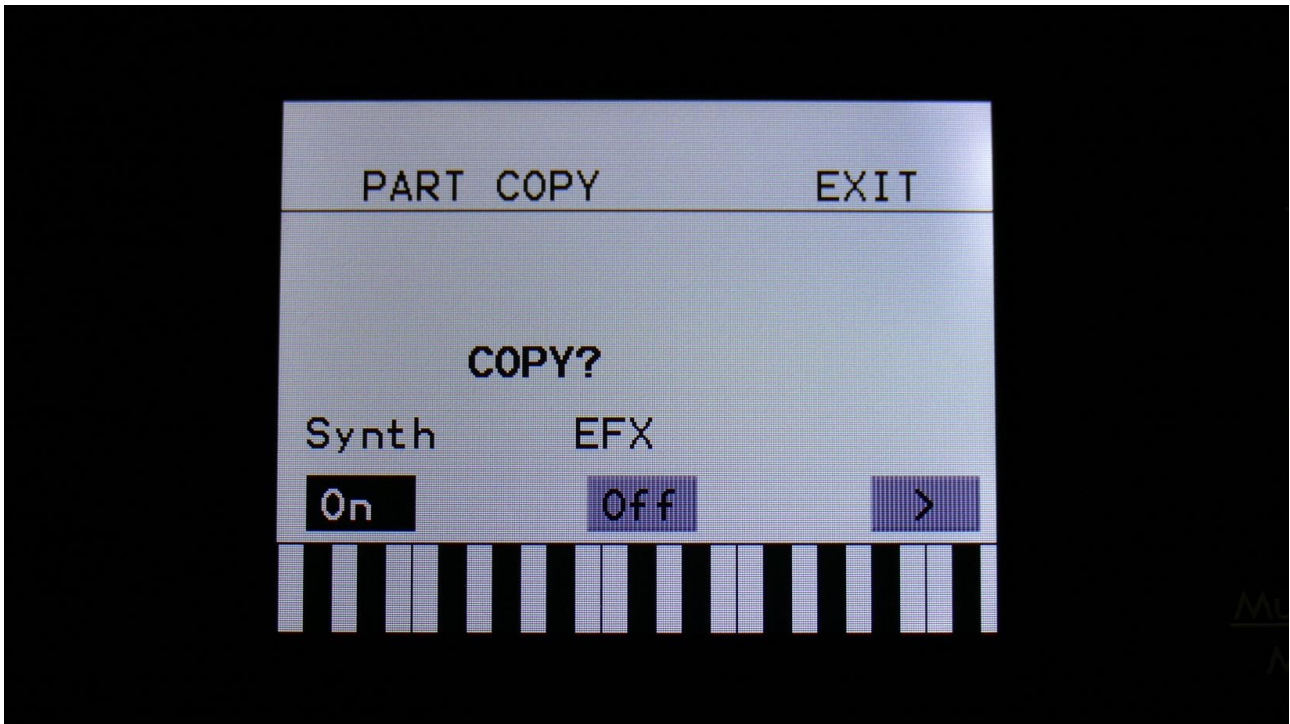
Select if you would like the Synth parameters, the Effects parameter, or both copied, by switching the respective touch buttons on or off.

Touch the arrow button, to go to the next page.

Select the part, you would like to copy to, by touching one of the buttons numbered 1 to 4. As soon as you select a part, you will be directed to the next page.

```
COPY FROM:                    EXIT
   B 58    Drum Set   Qkit
   B 59    Drum Set  2Qkit
   B 60    Drum Set  3Qkit
   B 61    [empty]
   B 62    [empty]

PREV                          NEXT
```

Here you can select the preset, that you would like to copy from. Five presets are shown at a time. Touch "PREV" or "NEXT", to view five higher or lower numbered presets.

Touch a preset to select it. As soon as you select a preset, you will be directed to the next page.
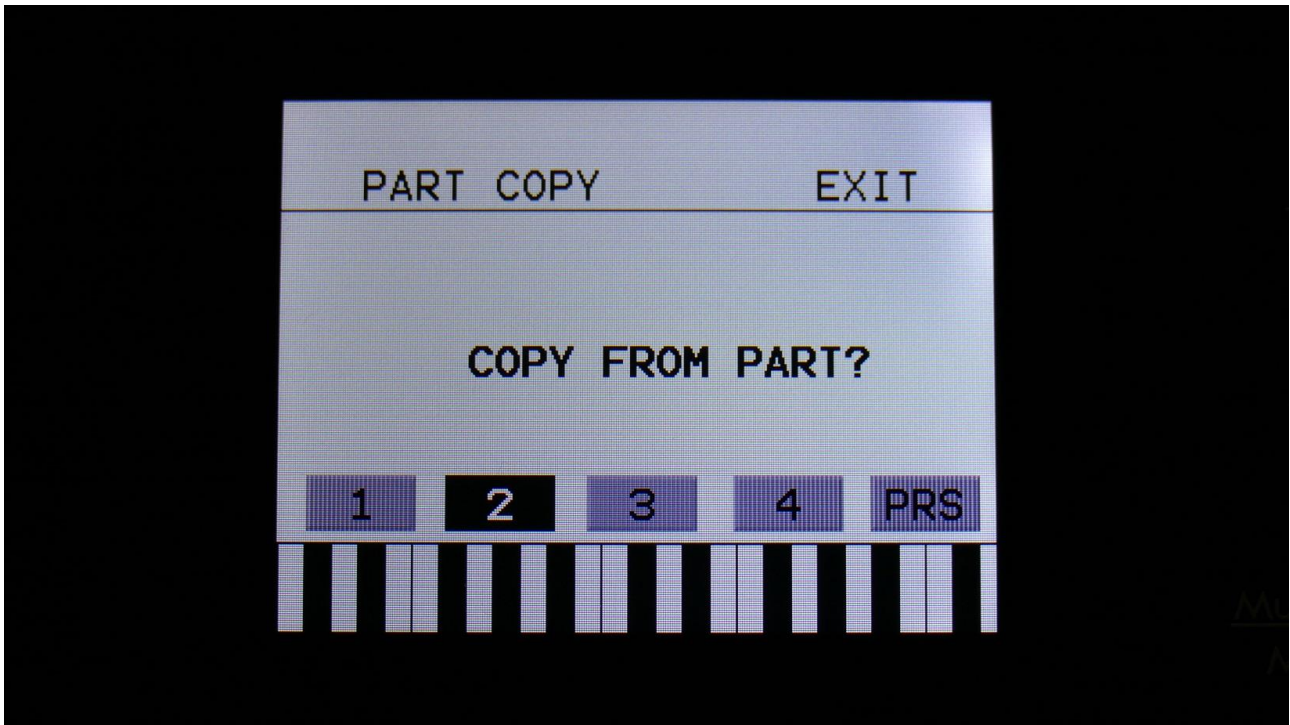
Here you can select the part of the selected preset, that you would like to get the sound from. As soon as you touch one of the buttons numbered 1-4, the touch button will turn black, and the parameters of that part of the selected preset, is copied to the destination part, that you selected on one of the previous pages.

Feel free to try the 4 different parts.

If you would like to try the sounds from another preset, than the selected one, simply touch the "PRS" button, and you will be taken back to the "COPY FROM" preset select screen.

When you have found the desired sound, touch "EXIT" in the upper right of the screen, to exit to the Synth Blocks page.

When you are back on the Synth Blocks page, you can edit all the parameters of the copied sound, just like you would on a sound that you had created from scratch. The part that you copied from, will not be affected.

Remember to save your work. When copying sounds, the result is only held in the preset edit buffer, so it is not permanent. To make it permanent, follow the instructions in the PolySpaze B manual, on how to save a preset.

If you should regret, that you copied a sound, you can either:
-Select another preset, without saving this one, and select this one again.
Or:
-Go back to the copy menu, and select the part you just copied to, as both the source and the destination. Then the sound saved in the FLASH memory will return.

Copy Sequencer Track

On the Note Tracks "Mod" page, and on the Controller Tracks "CC" page, a "Copy" touch button has now been added:
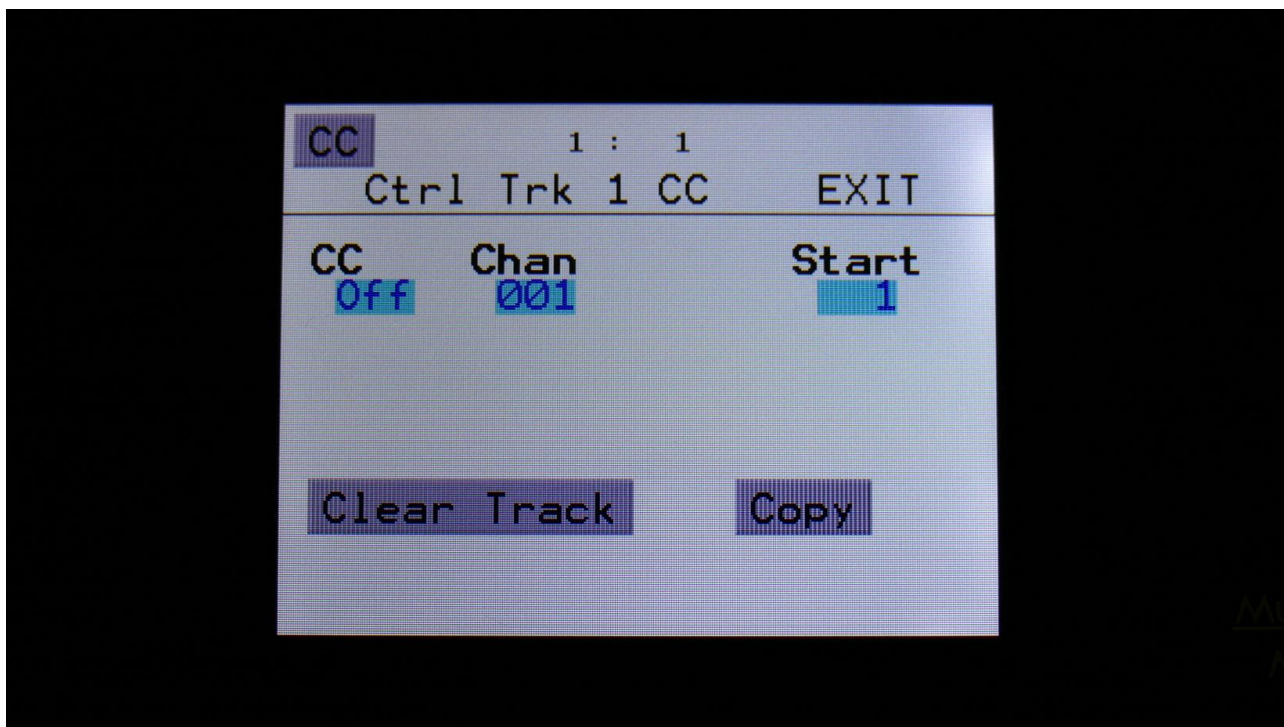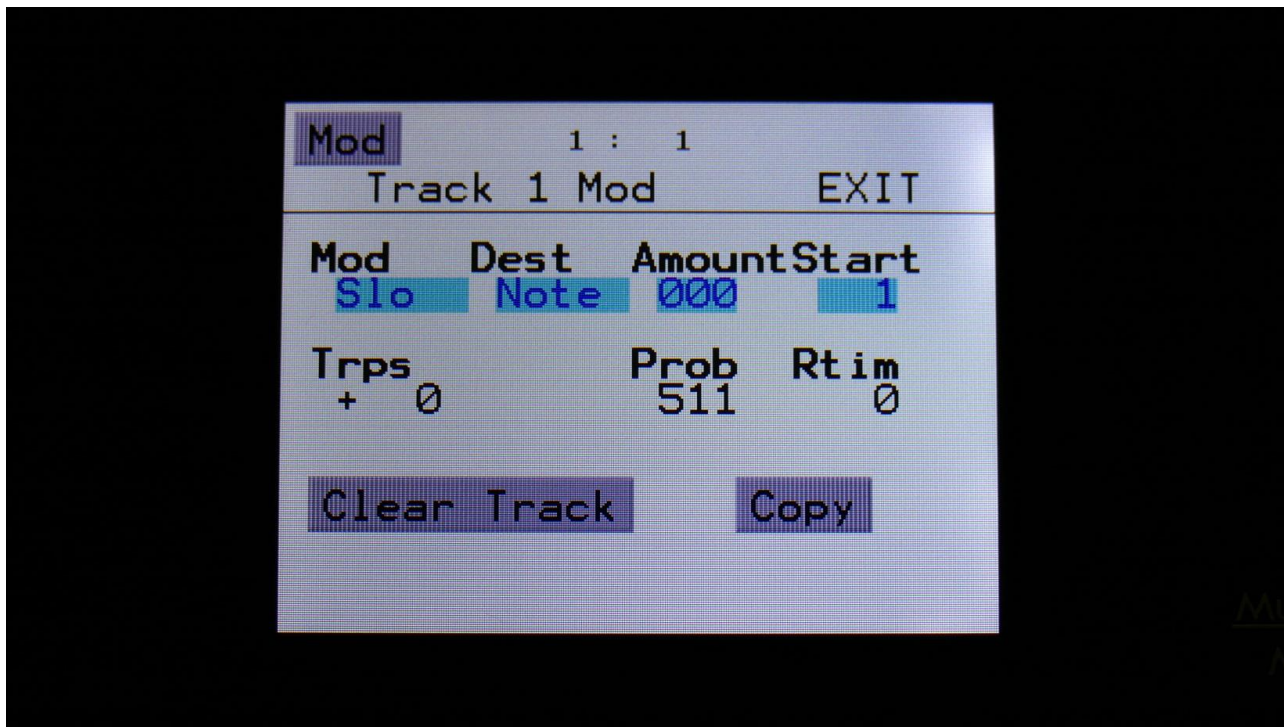
With the track copy function, it is possible to copy any note/controller track, from any preset, to the currently selected note/controller track.

It is only possible to copy a note track to a note track, and a controller track to a controller track.

To do so, hit the "Copy" touch button.

You should now enter this page:

Select the preset, that you would like to copy from. Five presets are shown at a time. Touch "PREV" or "NEXT", to view five higher or lower numbered presets.

Touch a preset to select it. As soon as you select a preset, you will be directed to the next page.

If you copy a note track, the next page will look like this:

Touch the track number, you would like to copy from. As soon as you do that, the track will be copied, and you will return to the note Mod page.

If you copy a controller track, the page after the Copy From Preset page, will look like this:

If you would like to copy from track 1 to 4, simply touch the track number, you would like to copy from. As soon as you do that, the track will be copied, and you will return to the note Mod page.

If you would like to copy from any of the tracks 5 to 8, hit the "5-8" touch button first, and then touch the track number.

Wave Chop System Refined

In this update, the wave chop system has been refined, so it is now working very well and smooth.

This system can take any of the samplings held in your PolySpaze B, and chop it up in, up to 64, single cycle waves.

If you already have a library of single cycle waves in .wav format, you can use the "Import Samples From Dir As Chops" funtion, to import the single cycle waves into one sampling with wave-chops.

When you have a sampling with the wavechops added, it is possible, in real time, to select which single cycle should play back, in the samplers in the synth section, using the "Chop" parameter.
It is also possible to select single cycle waves, using any modulation source.
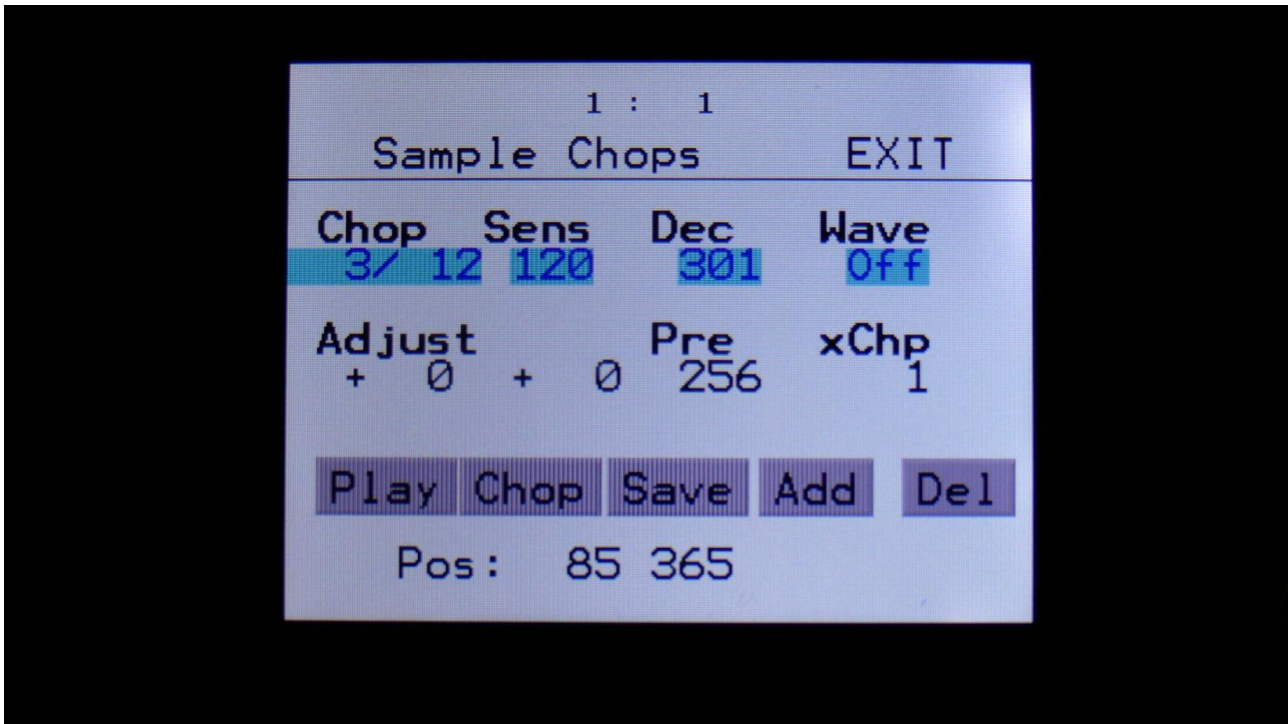
This gives some really cool possilities, like wave sequencing, wave tables and time stretch.

How to wave chop a sampling:
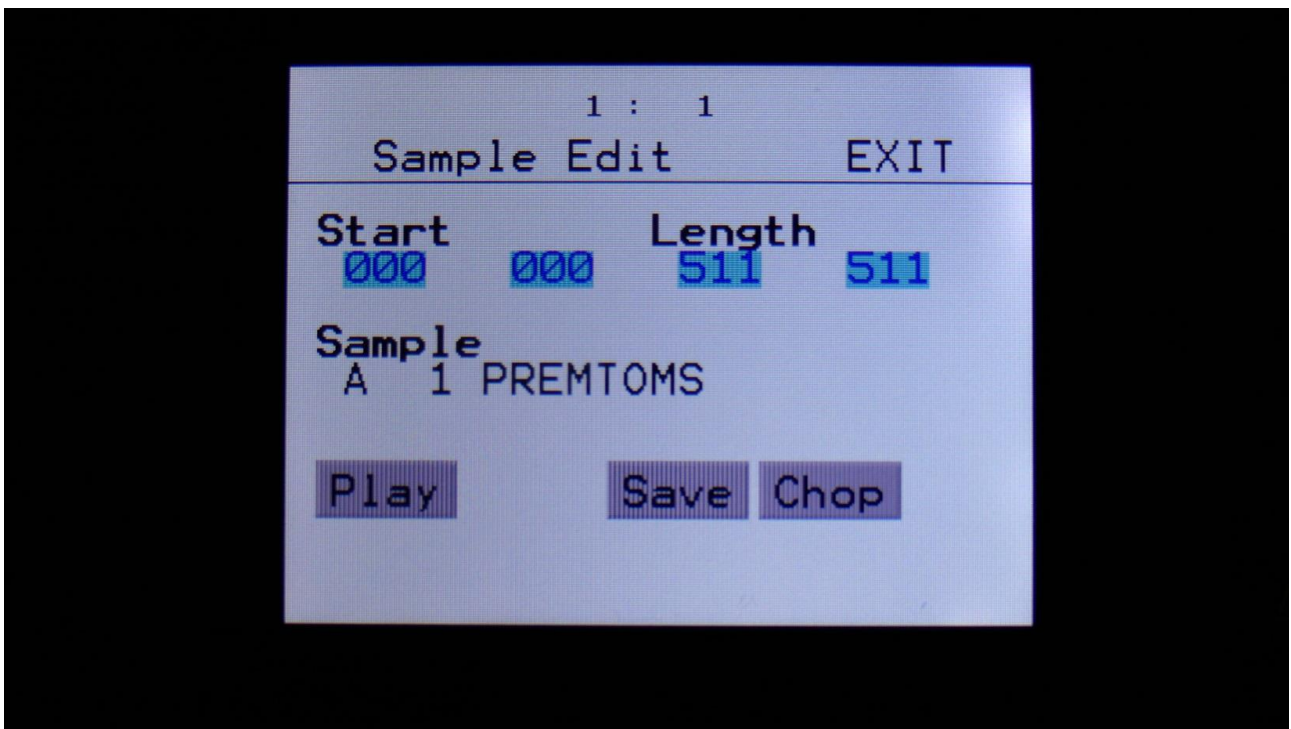
On the sample Edit page, select the sampling, you would like to wave chop, and touch "Chop".

That will get you to the Chop page:

Set the Wave parameter to On.

When in Wave chop mode, the Dec parameter functions in the opposite way, as when in normal chop mode. The lower the value, the faster the decay.

A good startpoint for wave chopping is to set Dec to 1 and Sens to 128. If the wave chops gets too long (very few chop points), try first to adjust Sens down. If this makes things worse, adjust it up. On simple waveforrms, Sens should, in most cases, have a low value. On more complex waveforms, Sens should have a higher value.

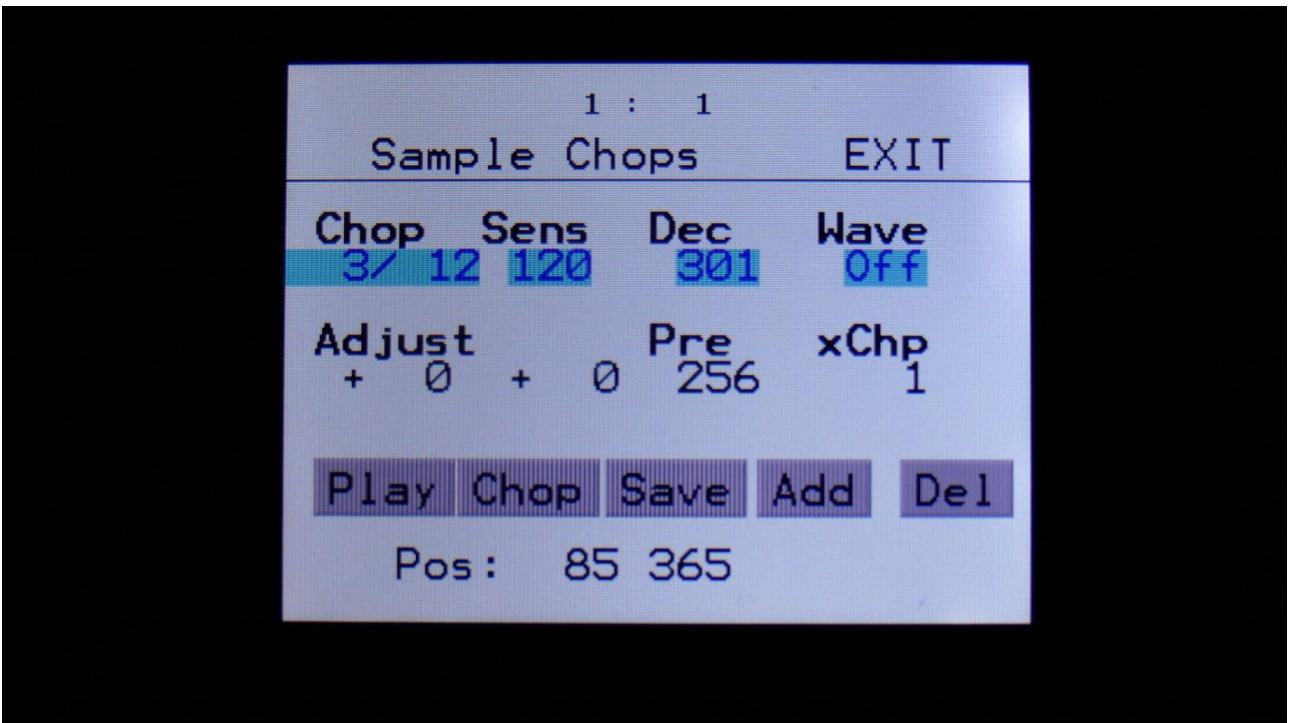If you wish your wavechops to be larger than single cycles, you can either turn Dec or xChp up.

The Pre parameter should be kept at zero.

When you have switched Wave on, and adjusted the settings, touch the "Chop" button.

PolySpaze B will now show:
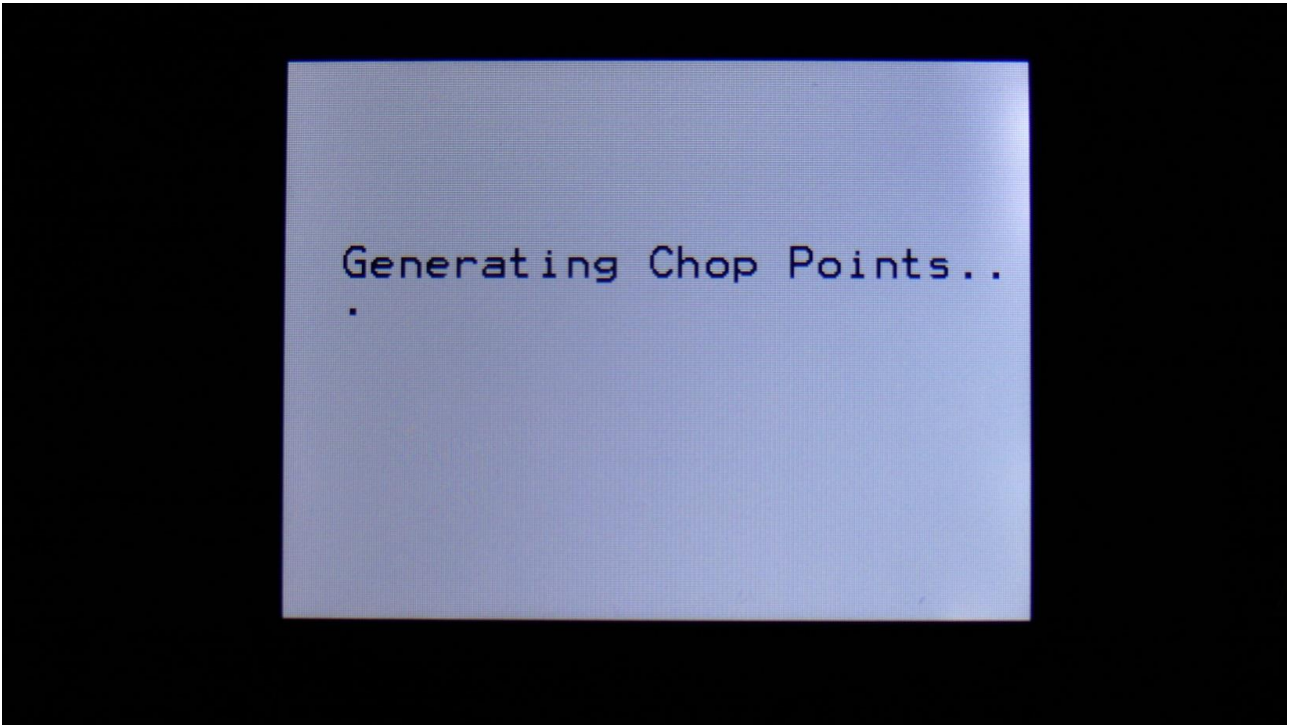
When it has found some chop points, it will return to the Chop page:

Now touch the play button, and select chops by adjusting the Chop parameter, to audition the result.

If you are not satisfied with the result, re-adjust Sens, and hit Chop again.

When you have found a result, that you are satisfied with, please remember to touch the "Save" button.

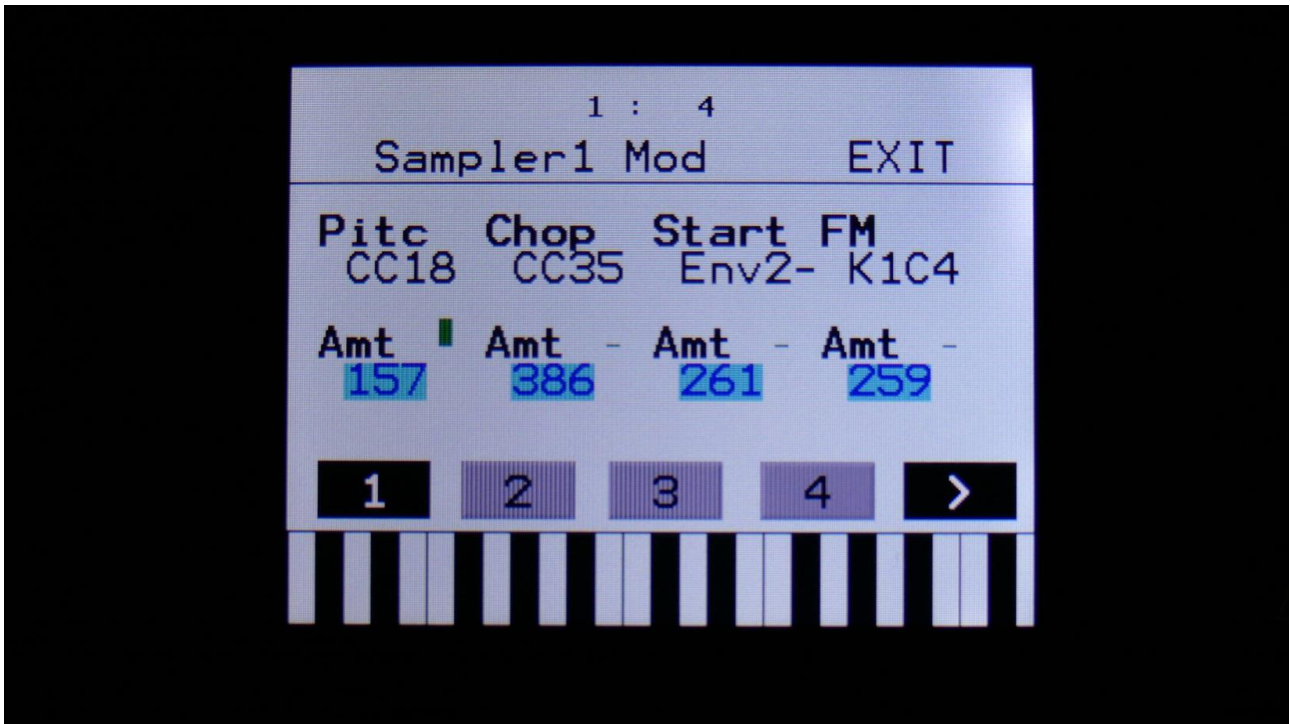To use the wave chops for something, now exit Sample Edit, and go to the Osc1 page.
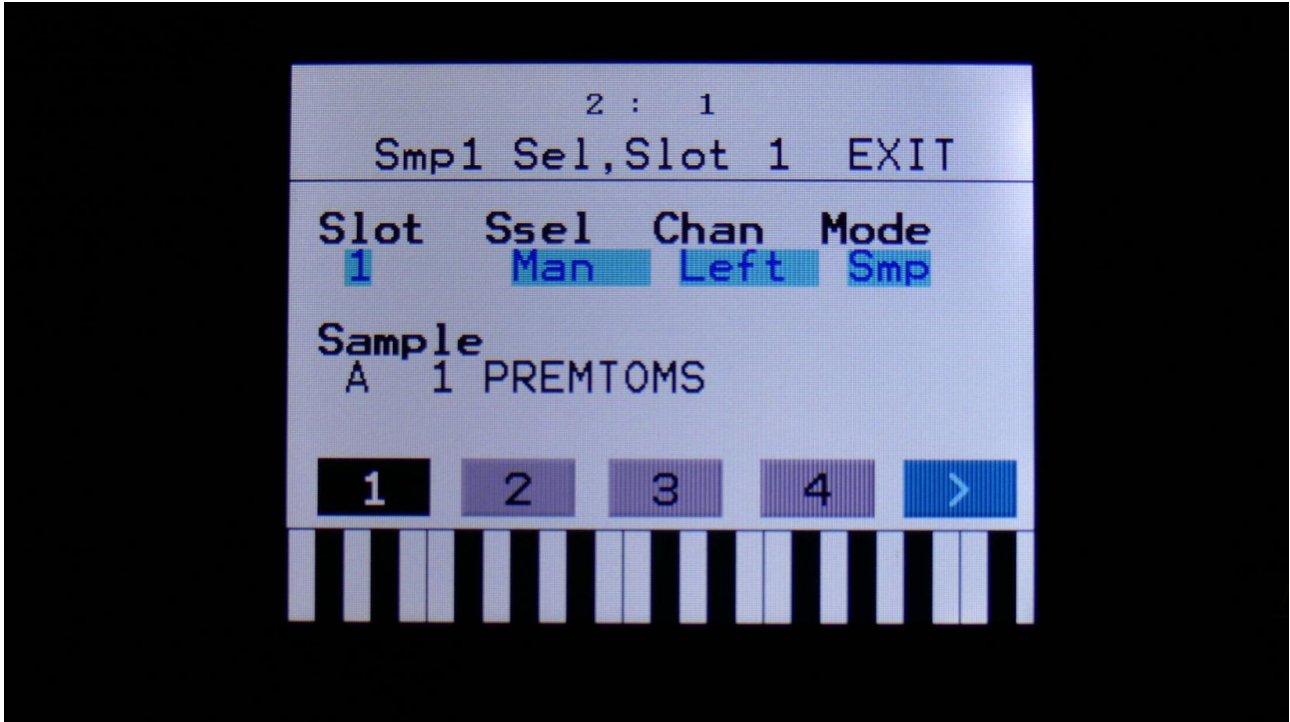
Set Osc1 in sampler mode, and select the sampling, that you just wave chopped (or any other sampling that you have wave chopped).
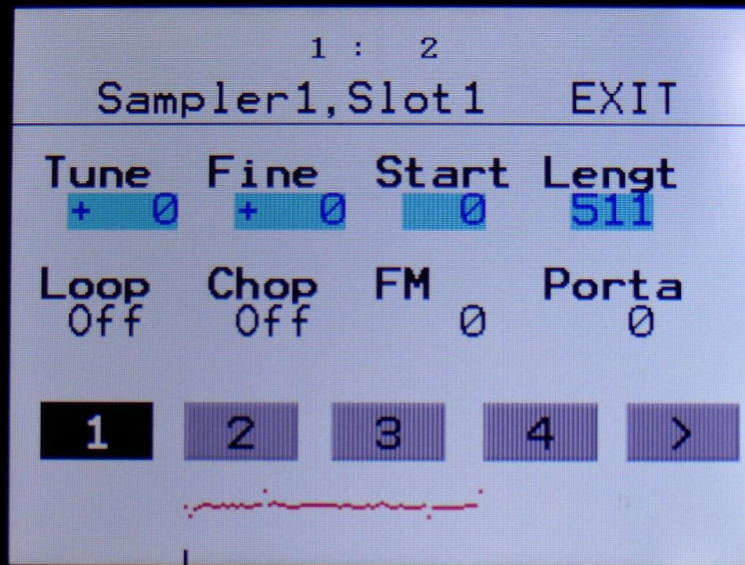
Set Loop mode to On or Free, and adjust the Chop parameter, to select the single cycle waves.

Modulating the Chop parameter

Unlike most other parameters on PolySpaze B, only positive modulation are applied to the Chop parameter.
So the Chop parameter selects the lowest possible chop to be played back. If Chop is set to Off, no modulation will be applied at all.

Time Stretch
To time stretch a wave chopped sampling:
-Set the Chop parameter to 1.
-Set up Envelope 1- (Envelope 1 inverted) to modulate the Chop parameter, and turn the modulation amount up. You can obtain different effects, with different values of the modulation amount.
-Adjust the Envelope decay, to make the playback of the sampling faster (low decay values) or slower (high decay values).
-Adjust the attack parameter, to obtain a reverse playback effect, in the start of the sample playback.
-Modulate the envelope parameters, to have dynamic sample lengths.
-The sampling will play back at the exact same speed, over the entire keyboard range, regardsless of the sample pitch.

LFO Key Sync
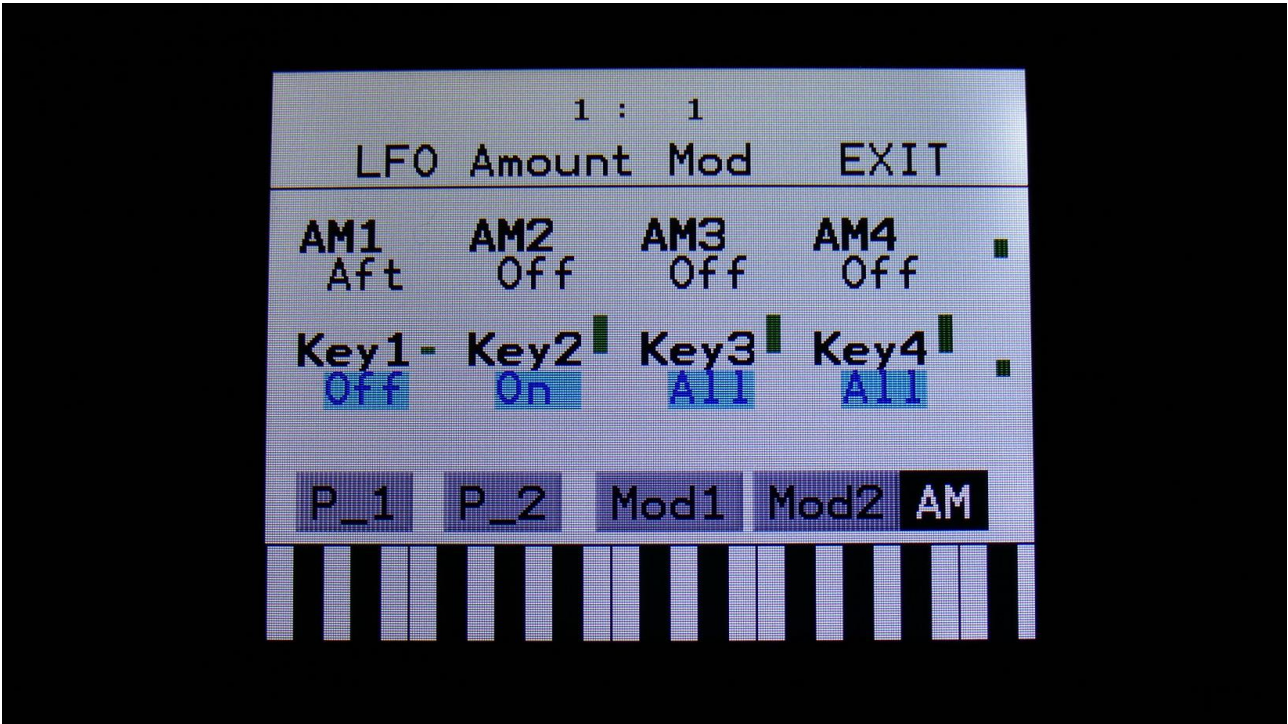
Key Sync has now been added to the LFO's. The parameters for this, can be found on the LFO AM page.

Parameters:
Key1, Key2, Key3, Key4: LFO 1 to 4 key sync.
Settings:
Off: The LFO is free running.
On: Every time the Synth part with the same number as the LFO is trigged, the LFO will reset to its initial value, and start over.
All: Every time any of the Synth parts is trigged, the LFO will reset to its initial value, and start over.

Display Update Rate Tuned A Little Down

It appears, that I was a bit too optimistic, regarding the display update speed in the last update. This caused the display to freeze, when too many things were going on at the same time. I apologize for that.

The display update rate has now been set a tiny bit down, to prevent the freezings.

Written by
Flemming Christensen
"Gotharman"
2017

www.gotharman.dk