Gotharman's SPAZZboard6 For Little deFormer 3

Granular Analog WorkStation

Update Manual 01.26

-Many parameters can now be hard-assigned to MIDI CC's. These parameters can also be controlled directly from the sequencer controller tracks, and movements of these can be realtime recorded on the controller tracks. Page 3

-CV inputs can now be recorded on the sequencer controller tracks. Page 11

-Smooth parameter added to the CV inputs. Page 12

-The sequencer controller tracks are now selected separately from the parts. Page 13

Bug Fixes:

-When CV input 2 and 4 were set up, and then CV input 1 and 3 were set up after these, CV inputs 2 and 4 would be reset to their initial values. This has now been fixed.

-When changing sampler loop mode, notes would sometimes hang. Now sample playback will be stopped, when loop mode is changed for a part, to avoid this.

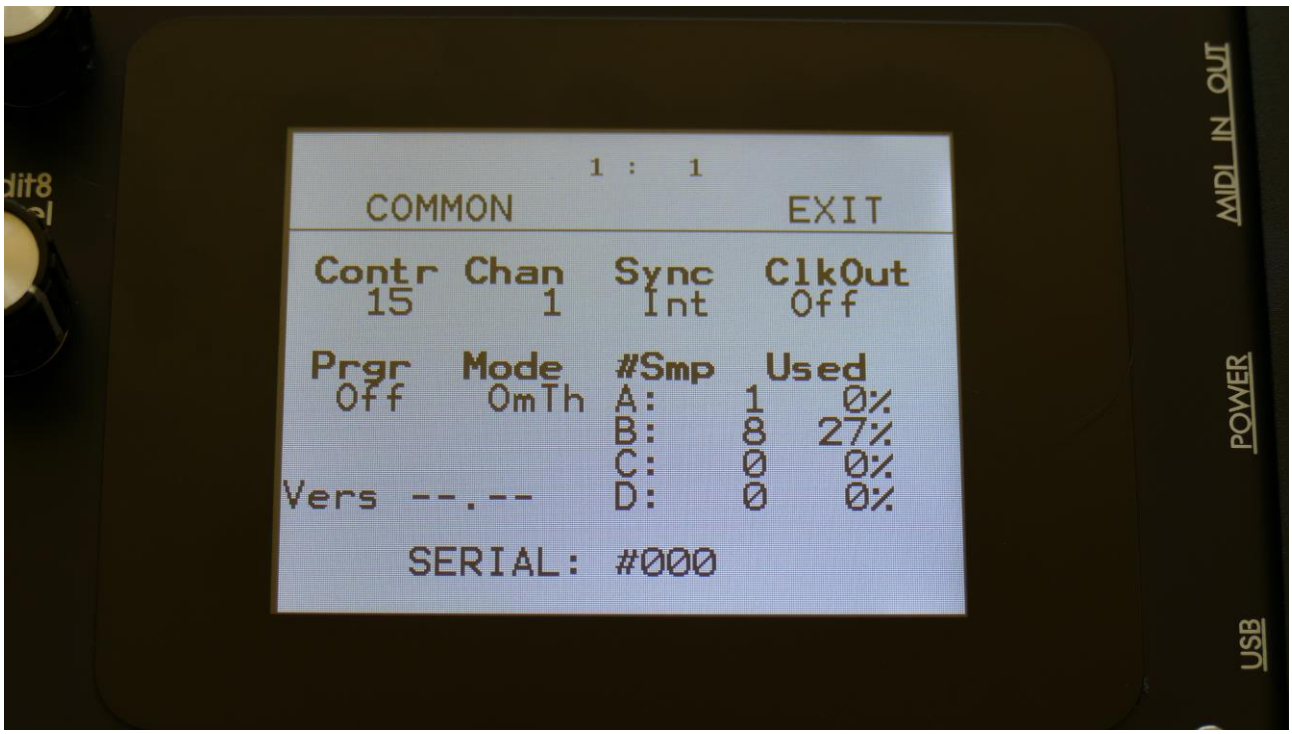
-Sampler Loop Toggle mode would not work, when Xfade or smooth was turned on. This has now been fixed.

Parameters CC control

Many of the Spazeboard6 parameters can now be hard-assigned to MIDI CC's, for direct control from an external MIDI controller. The same parameters can now also be controlled directly from the sequencer controller tracks, and movements of these can be realtime recorded to the controller tracks.

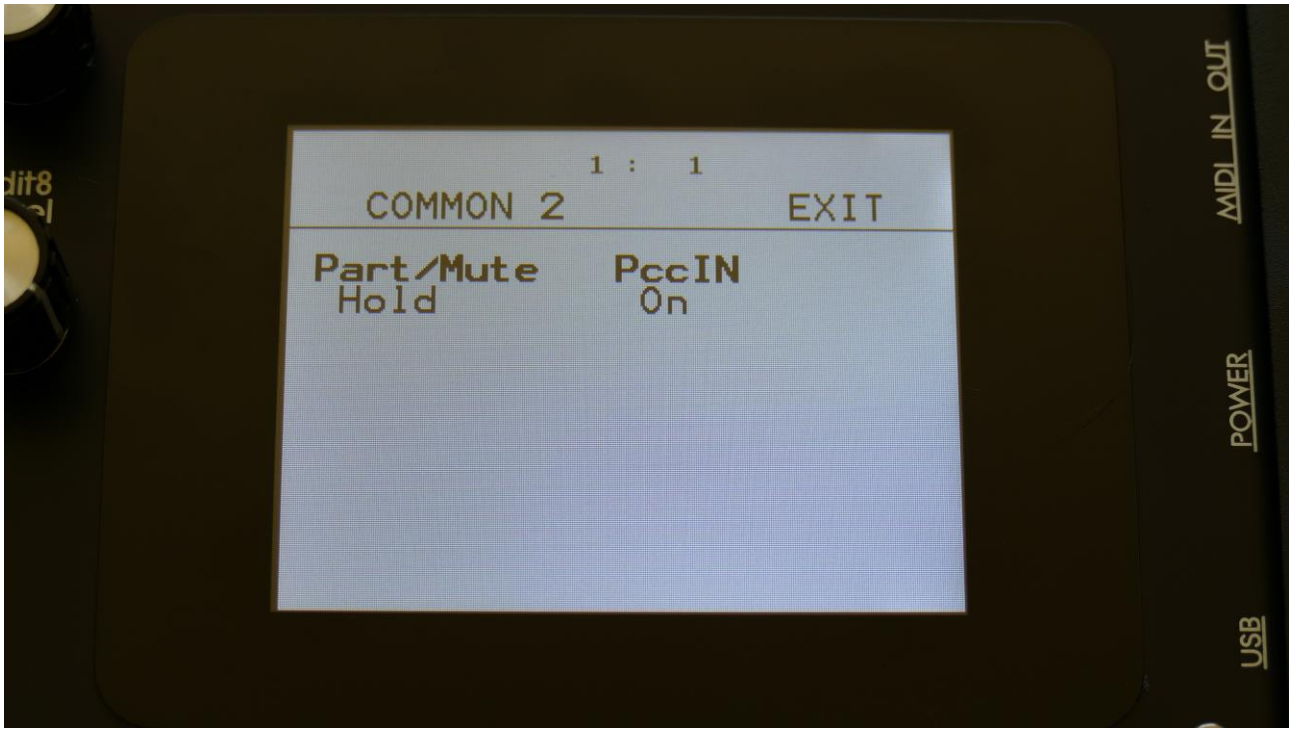
For part parameters, MIDI channel are equal to part number.

To activate the CC control, first enter the MOR>COMMON page:



Here you must set the Mode parameter (MIDI In Mode) to either Omni, OmTh (Omni Thru), Mult (Multi-Timbral) or MuTh (Multi-Timbral/Thru). The CC control will not work properly in Sel (Selected) mode.

Then exit from the COMMON page, and enter the COM2 page:



On this page, switch the PccIN parameter (Parameter CC Input) to On.

Now you will be able to control many of the Spazeboard6 parameters from an external MIDI device, and from the Sequencer Controller Tracks.

On the following pages, you will find a list of the controllable parameters.

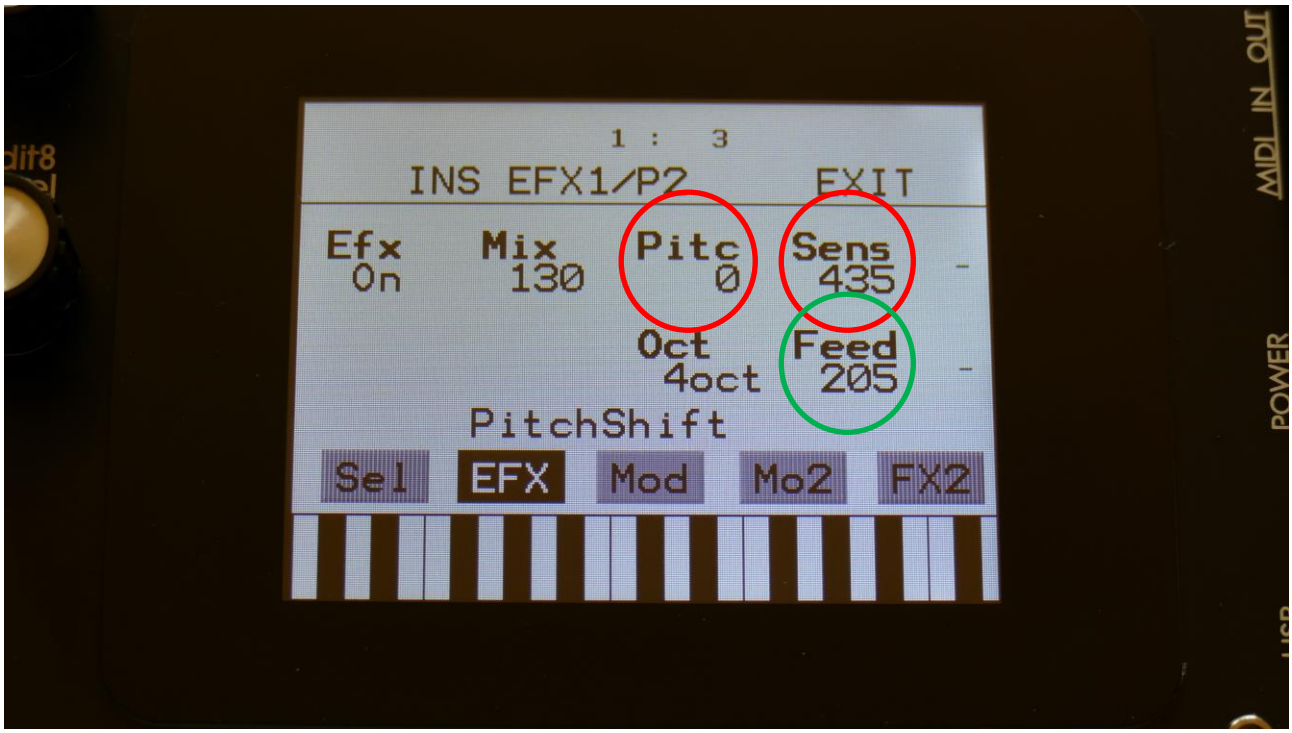
PARAMETER	CC#	PART NUMBER
Oscillator1/Sampler Tune	17	MIDI channel 1-8
Oscillator1/Sampler Fine Tune	18	MIDI channel 1-8
Oscillator1 Wave/Sampler Start	19	MIDI channel 1-8
Oscillator1 PW/Sampler Length	20	MIDI channel 1-8
Oscillator1/Sampler FM	21	MIDI channel 1-8
Oscillator1/Sampler Porta	22	MIDI channel 1-8
Sampler Chop Select	23	MIDI channel 1-8
Oscillator1/Sampler Pitch Mod	24	MIDI channel 1-8
Oscillator1 WaveMod/Sampler ChopMod	25	MIDI channel 1-8
Oscillator1 PWM/Sampler StartMod	26	MIDI channel 1-8
Oscillator1/Sampler FM Mod	27	
Oscillator 2 Tune	28	MIDI channel 1-6
Oscillator 2 Fine Tune	29	MIDI channel 1-6
Oscillator 2 Waveform	30	MIDI channel 1-6
Oscillator 2 PW	31	MIDI channel 1-6
Oscillator 2 PitchMod	33	MIDI channel 1-6
Oscillator 2 PWM	34	MIDI channel 1-6
VCF HPF Cutoff	35	MIDI channel 1-6
VCF HPF Reso	36	MIDI channel 1-6
VCF LPF Cutoff	37	MIDI channel 1-6
VCF LPF Reso	38	MIDI channel 1-6
VCF Osc1 Level	39	MIDI channel 1-6
VCF Osc2 Level	40	MIDI channel 1-6
VCF Ring Modulator Level	41	MIDI channel 1-6
VCF FFM	42	MIDI channel 1-6
VCF G-RAY Feed	43	MIDI channel 1-6
VCF Boost	44	MIDI channel 1-6
VCF HpCutMod1	45	MIDI channel 1-6
VCF HpCutMod2	46	MIDI channel 1-6
VCF LpCutMod1	47	MIDI channel 1-6
VCF LpCutMod2	48	MIDI channel 1-6
VCF HpResoMod	49	MIDI channel 1-6
VCF LpresoMod	50	MIDI channel 1-6
VCF FFM Mod	51	MIDI channel 1-6
VCF G-RAY FeedMod	52	MIDI channel 1-6

PARAMETER	CC#	PART NUMBER
DGF Cutoff	53	MIDI channel 1-8
DGF reso	54	MIDI channel 1-8
DGF Type	55	MIDI channel 1-8
DGF Narrow	56	MIDI channel 1-8
DGF low	57	MIDI channel 1-8
DGF Boost	58	MIDI channel 1-8
DGF CutMod1	59	MIDI channel 1-8
DGF CutMod2	60	MIDI channel 1-8
DGF ResoMod	61	MIDI channel 1-8
DGF BoostMod	62	MIDI channel 1-8
VCA A	63	MIDI channel 1-8
VCA D	65	MIDI channel 1-8
VCA S	66	MIDI channel 1-8
VCA R	67	MIDI channel 1-8
VCA Drone	68	MIDI channel 1-8
VCA Output Level	69	MIDI channel 1-8
VCA A Mod	70	MIDI channel 1-8
VCA R Mod	71	MIDI channel 1-8
VCA Level Mod	72	MIDI channel 1-8
VCA Pan Mod	73	MIDI channel 1-8
ENV1 A	74	MIDI channel 1-8
ENV1 D	75	MIDI channel 1-8
ENV1 S	76	MIDI channel 1-8
ENV1 R	77	MIDI channel 1-8
ENV2 D	78	MIDI channel 1-8
ENV1 A Mod	79	MIDI channel 1-8
ENV1 D Mod	80	MIDI channel 1-8
ENV1 R Mod	81	MIDI channel 1-8
ENV1 Amount Mod	82	MIDI channel 1-8

PARAMETER	CC#	PART NUMBER
Insert EFX1 Mix	83	MIDI channel 1-6
Insert EFX1 Parameter 1	84	MIDI channel 1-6
Insert EFX1 Parameter 2	85	MIDI channel 1-6
Insert EFX1 Parameter 3	86	MIDI channel 1-6
Insert EFX1 Parameter 1 Mod1	87	MIDI channel 1-6
Insert EFX1 Parameter 1 Mod2	88	MIDI channel 1-6
Insert EFX1 Parameter 2 Mod	89	MIDI channel 1-6
Insert EFX1 Parameter 3 Mod	90	MIDI channel 1-6
Insert EFX2 Mix	91	MIDI channel 1-6
Insert EFX2 Parameter 1	92	MIDI channel 1-6
Insert EFX2 Parameter 2	93	MIDI channel 1-6
Insert EFX2 Parameter 3	94	MIDI channel 1-6
Insert EFX2 Parameter 1 Mod1	95	MIDI channel 1-6
Insert EFX2 Parameter 1 Mod2	96	MIDI channel 1-6
Insert EFX2 Parameter 2 Mod	97	MIDI channel 1-6
Insert EFX2 Parameter 3 Mod	98	MIDI channel 1-6
LFO Rate	99	MIDI channel 1-16
LFO Wave	100	MIDI channel 1-16
LFO RateMod	101	MIDI channel 1-16
LFO WaveMod	102	MIDI channel 1-16
Output EFX1 Mix	103	-
Output EFX1 Parameter 1	104	-
Output EFX1 Parameter 2	105	-
Output EFX1 Parameter 3	106	-
Output EFX1 Parameter 1 Mod1	107	-
Output EFX1 Parameter 1 Mod2	108	-
Output EFX1 Parameter 2 Mod	109	-
Output EFX1 Parameter 3 Mod	110	-
Output EFX2 Mix	111	-
Output EFX2 Parameter 1	112	-
Output EFX2 Parameter 2	113	-
Output EFX2 Parameter 3	114	-
Output EFX2 Parameter 1 Mod1	115	-
Output EFX2 Parameter 1 Mod2	116	-
Output EFX2 Parameter 2 Mod	117	-
Output EFX2 Parameter 3 Mod	118	-

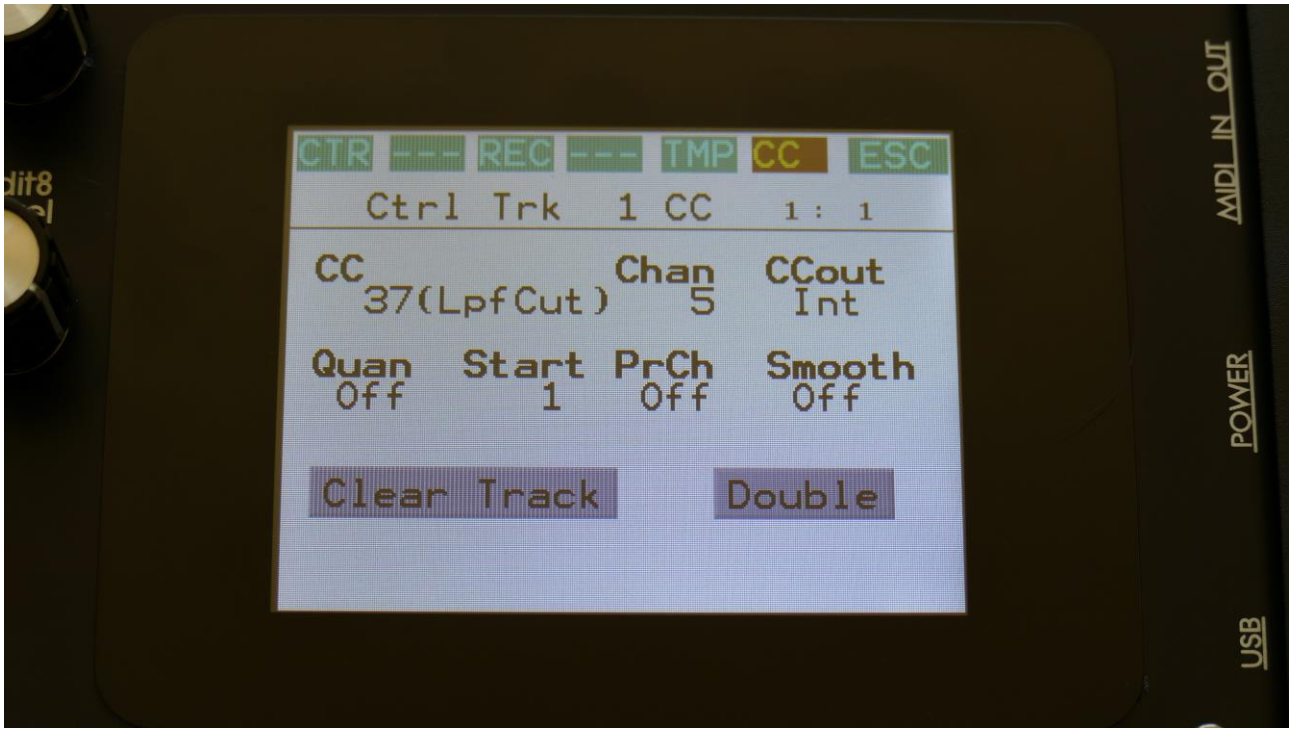
Effects Parameters 1, 2 and 3

The effects parameters 1 and 2, are the 2 parameters located to the right of the Mix parameter, on the effects main pages. Parameter 3 are the lower rightmost parameter:



Controlling the CC parameters from the Sequencer Controller Tracks

Enter a sequencer controller track, and go to the CC sub page:



Set the CC parameter, to the parameter, that you want to control with the controller track. A shorted version of the parameter name, will be written in parenthesis.

Then set the Chan parameter to the part number, that you would like to control, if it is a part related parameter.

At last, set the CCout to internal.

It is **important** to set the parameters up, using this sequence. If you set the CCout parameter to internal first, and then set the CC parameter, all the parameters that you pass, will be affected by the controller track.

Now go to the CTR page, and control the parameter.

Recording parameter tweaks to a controller track

First, set up the controller track, as described on the previous page of this manual.

Stop the sequencer, if it is running.

Touch REC in the upper menu bar. Activate recording for the selected controller track.

Go to the CTR page, and set the controller track length.

Now, go to the Synth section page and select the part, where the parameter is located.

Put Spazeboard6 in realtime recording mode, by holding down the Part/Mute button, while pressing the Start/Stop button.

Press the Start/Stop button, to start the sequencer.

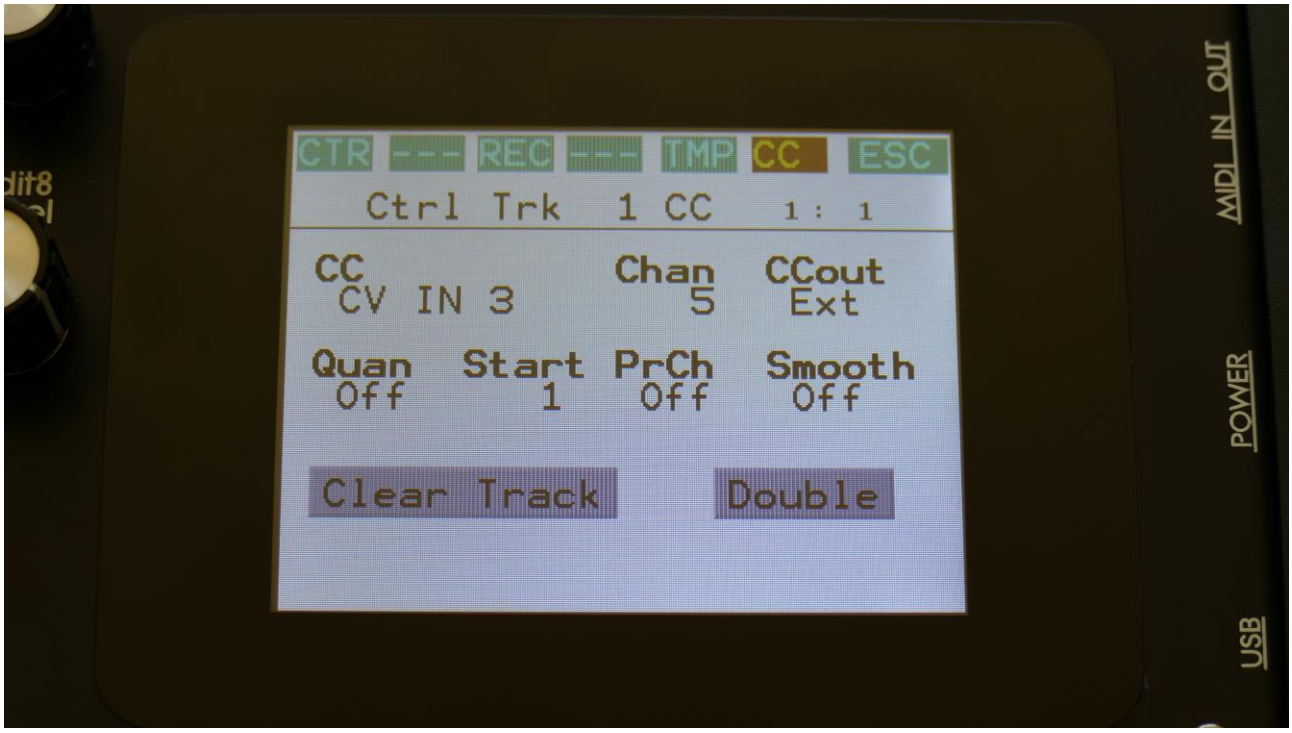
It will now count in for 2 bars, and the start to record. Tweak the parameter.

When the controller track reaches its end step, recording will stop, and the controller track will start to play back. You will now see the parameter value move by itself!

CV Inputs Recording

The 4 (optional) CV inputs can now be recorded to the sequencer controller tracks, just like MIDI CC's and knob movements.

To do this, simply select CV In 1 to 4 to be the CC on a controller track, and follow the procedure for controller track realtime recording:

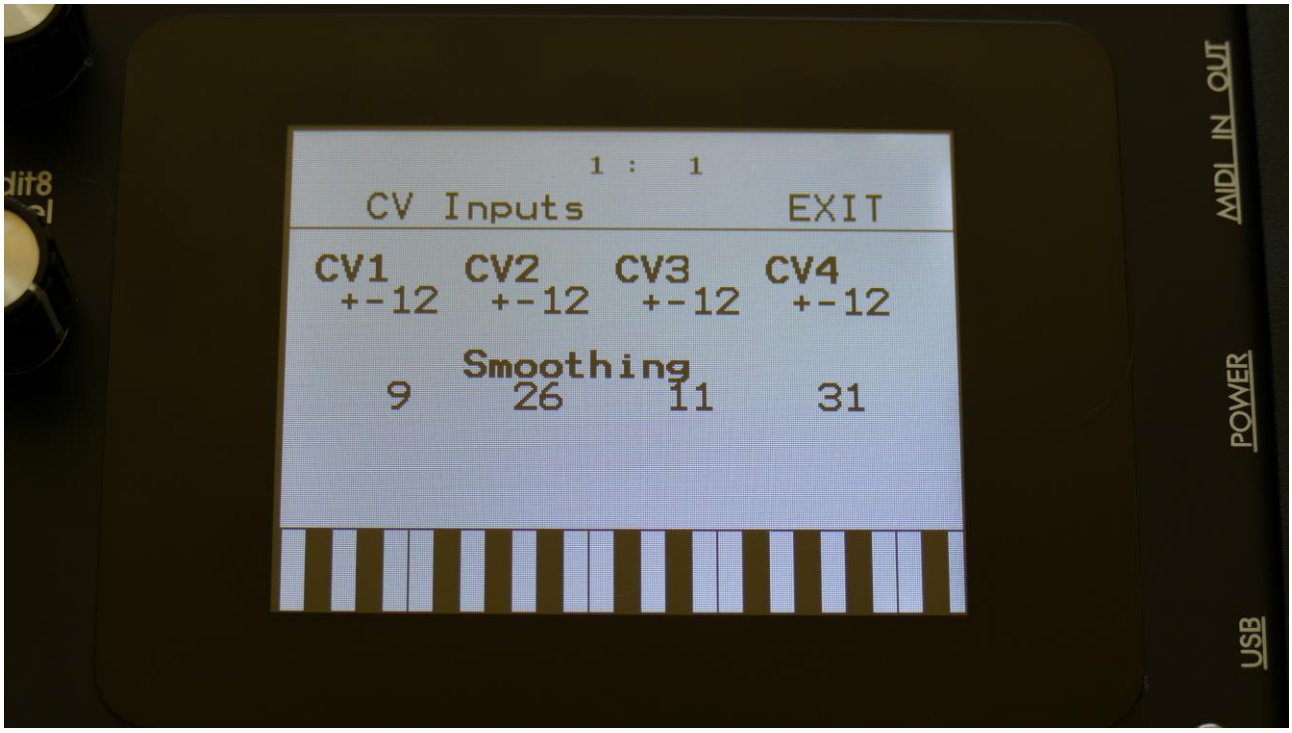


You will, most probably, like to switch the Smooth parameter On, to get smooth transitions between the recorded CV values.

CV Inputs Smoothing

Sometimes, especially when controlling very sensitive parameters, like the pitch of an oscillator via a CV input, even very small changes on the CV input will affect the pitch, making it sound unstable.

Therefore a Smoothing parameter for each of the 4 CV inputs has now been added:

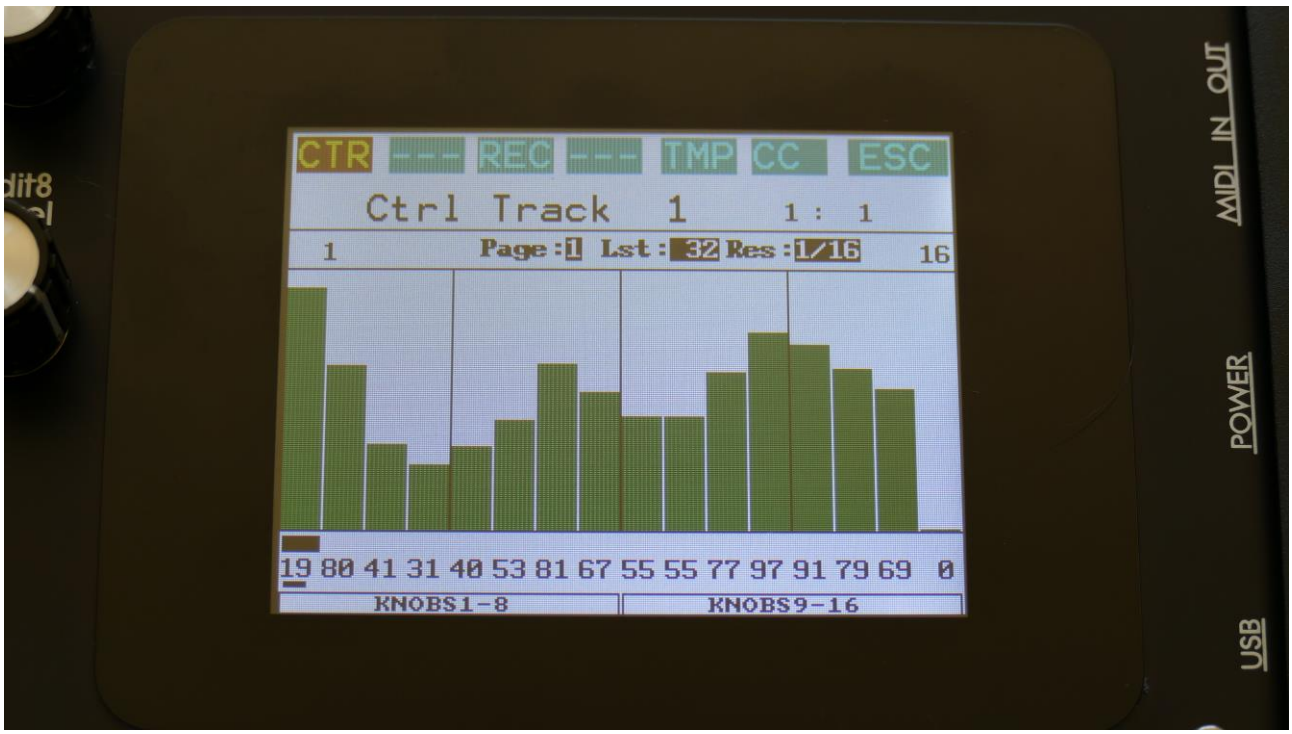


The Smoothings can be set from 0 (no smoothing) to 31 (maximum smoothing).

Sequencer Controller Tracks Selection

Especially after the new parameter tweaking features has been added to the controller tracks, it was a bit annoying, that when going back and forth between a parameter to be tweaked on a specific part, and the controller track to control it, you would have to re-select both the part and the controller track every time.

Therefore the controller tracks are now selected separately from the parts. The procedure is still the same: Push and hold the Steps/Part button, while pressing any of the step buttons, to select a specific controller track. The only difference is, that you will now need to enter the controller track pages, to select a controller track.



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