Cotharman's Little deFormer



Update 333

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Bug fixes:

-When the "Assign" button is pushed when on a Sequencer edit page, it is now possible to choose sample slots and audition the samplings, using the step buttons.

-MIDI input performance are improved.

-Parameter snap mode are improved.

Compability with the anAmoNo-Box expansion

After you have updated your LD with this update, it will be fully compatible with the anAmoNo-box. For more information about this expansion box with a complete anAmoNo output stage, containing two analogue filters, analogue distortion and a Gotharman special "g-RAY" circuit, please visit www.gotharman.dk

anAmoNo granulator effect added

The anAmoNo Granulator effect has been added to the Time & Pitch effects section of Little deFormer, under the name "AnaGran". This granulator effect is much simpler than the DoubleGran, and much easier to get results from.

This effect records the input signal and cuts it up into fragments, which sizes depends on both the Time and the Frgm (number of fragments) parameter. It is then possible to rearrange the order of these fragments, and to re-pitch or time-stretch them, using two 16-step granulator sequencers, to get something completely new out of the input signal.

Fusion

Compared to the original anAmoNo granulator, to new play modes has been added: "Pitch Fusion" and "Stretch Fusion". These two modes makes the Granulator fusion with the 2^{nd} effect, which can be either a two-tap delay or a reverb. This can create some really interesting effects.

Notice: Because of the complex nature of these new play modes, the inputting sound might be a bit effected, even if the Mix parameter are at zero, when one of these new playmodes are selected.

Parameters:

Last – Value 1 to 16: Sets how many steps the granulator sequencers should go through, until they starts over again from step one.

Time – Value 0 to 255: Adjust the total size of the Granulator record and play buffer – How long time it will record the input signal, until it starts over again.

Fine – Value 0 to 255: Fine adjustment of the Time parameter.

FrGm – Values 1, 2, 4, 8, 16, 32, 64, 128: Adjusts how many fragments (grains) the recorded input signal should be cutted up in, when played back.

Feed – Value 0 to 255: Adjusts how much of the Granulator output signal should be fed back to its input.

Dir – Values fwd, bwd: Sets the playback direction of the Granulator output, which can either be forwards or backwards.

Mode – Values pitc, strc, FusP, FusS: Sets the playback mode of the second granulator sequencer.

pitc: The second granulator sequencer will re-pitch the playback.

strc: The second granulator sequencer will time stretch the playback.

FusP: The second granulator sequencer will re-pitch the playback and fusionate its output sound with the 2^{nd} effcect.

FusS: The second granulator sequencer will time stretch the playback and fusionate its output sound with the 2^{nd} effcect.

Xfad – Values 0 to 255: Adjusts how much ducking crossfade that will be added between the granulator sequencer steps.

Frm1 to Frm9 and Fr10 to Fr16 – Values 1 to 128: Adjusts which fragment of the sound buffer, that should be played back at each step of the granulator sequencer. Push the 9-16 button, to access steps 9 to 16.

Pit1 to Pit9 and Pi10 to Pi16 – Values -128 to +127: Adjusts how much the fragment of each granulator sequencer step, should be re-pitched or time-stretched. Push the 9-16 button, to access steps 9 to 16.

Parameters added to the "MODULATION" section in the "Time" (Time & Pitch) destination group, when AnaGran is selected as the Time & Pitch effect:

Last – Modulates the Last Step parameter.

Time – Modulates the Time parameter.

Feed – Modulates the FeedBack parameter.

Xfad – Modulates the CrossFade parameter.

Chorus effect added

A simple two-tap Chorus effect has been added to the Time & Pitch effect section. To obtain the classic chorus effect, you must apply LFO modulation to the Time 1 & 2 parameters. This is possible in the "MODULATION" section.

Parameters:

Time1 – Value 0 to 255: Adjusts the Chorus delay time for tap 1.

Feed1 – Value -128 to +127: Adjusts the Chorus feedback amount, which can be negative or positive, for tap 1.

Time2 – Value 0 to 255: Adjusts the Chorus delay time for tap 2.

Feed2 – Value -128 to +127: Adjusts the Chorus feedback amount, which can be negative or positive, for tap 2.

Deep – Value 0 to 255: Adjusts how deep the chorus box should be.

Parameters added to the "MODULATION" section in the "Time" (Time & Pitch) destination group, when Chorus is selected as the Time & Pitch effect:

Time – Modulates the Time1 parameter.

Feed – Modulates the Feed1 parameter.

Tim2 – Modulates the Time2 parameter.

Fed2 – Modulates the Feed2 parameter.

Deep – Modulates the Deep parameter.

Swing Modulation

Many times users and other people has asked me, if the Little deFormer should not have a Swing function. And I have wanted to add this a number of times! I just felt that a Swing on/off button, wouldn't really be "deForming".

Then one great day, I came up with the idea of the "Swing Modulation" system. Instead of having one or a number of pre-defined patterns, that defined the swing, it should be possible to add swing to a pattern, using any modulator, and thereby making the swing completely user definable.

By using a Sequencer Controller track as the modulation source, it is possible to make any swing pattern you like. And by adjusting the modulation amount, you can adjust how much swing should be added.

It is possible to have different swing sources for each of the 16 sampler/synth tracks, and it is also possible to add swing modulation to all 16 tracks at one time.

Parameters added to the "MODULATION" section in the "Seq" (Sequencer) destination group:

Swi1 to Swi9 and Sw10 to Sw16: Selects sampler/syth track 1 to 16 as the destination for Swing Modulation.

SwAl: Selects all 16 sampler/synth tracks as the destination for Swing Modulation.

The FilterBank can now sync to the sequencer

- The FilterBank "Trig" parameter now has the following choices available:
- Sq/1: The filter frames shifts in sync with the sequencer steps.
- Sq/2: The filter frames shifts for every 2 sequencer steps.
- Sq/2: The filter frames shifts for every 2 sequencer steps.
- **Sq/4** : The filter frames shifts for every 4 sequencer steps.
- ${\bf Sq/8}$: The filter frames shifts for every 8 sequencer steps.
- S/16 : The filter frames shifts for every 16 sequencer steps.
- S/32 : The filter frames shifts for every 32 sequencer steps.

It is now possible to choose if Mute should mute all or just the sequencer

In the "COMMON" section a new parameter "Mute" has been added. With this it is now possible to select, if the Mute function (Selected by pushing the Assign button two times, so it is flashing), should mute "All" (samplings and sequences) or just "Seq" (just sequencer tracks). This setting is global, and works for all presets.

It is now possible to make LD clear its effect buffer, when changing preset, effect and when changing the effect times

A new parameter "EfxC" has been added to the Mix menu of the Time & Pitch effect. When this is set to "On", the memory buffer of the Time & Pitch effect will be cleared every time you change preset, change Time & Pitch effect and every time you adjust the Time parameter in a Time & Pitch effect.

When it is set to "Off", LD will work as usual, and keep its Time & Pitch memory buffer at any time.

You will have to switch this on for every preset where you want the effect buffer to be cleared.

<u>Samplers/Oscillators play triggers has been added as</u> <u>modulation destinations</u>

In the "MODULATION" section it is now possible to select "Play" as the modulation destination for each of the 16 samplers/synths. This will have the best effect, if modulation value is set to 255. When this is selected as a modulation destination, every time the modulator goes above its middle value, it will trigger the playback of the modulated sampler/synth.

It is now possible to use LFO's, random generators and the CV inputs of AnaX to trigger sample playback.

Freeze has been added as a modulation destination

For all of the Time & Pitch effects, "Frez" has been added as a modulation destination, in the "MODULATION" section.

This will have the best effect, if modulation value is set to 255. When this is selected as a modulation destination, every time the modulator are above its middle value, it will turn freeze on, and when it is below its middle value, freeze will be turned off.

Even when freeze is modulated, it is still possible to hit the freeze button, to keep freeze constantly on. It has to be turned constantly on, if you want the content of the freeze buffer to be saved as a sampling, together with a preset. The freeze modulation does not affect this.

<u>Tune Quantize has been added as a modulation</u> <u>destination, for making tonal sequences quantized to</u> <u>half-tones</u>

In the "MODULATION" section it is now possible to select "TunQ" as the modulation destination for each of the 16 samplers/synths. This will quantize the modulation of a sampler/synth, to fit the notes into the half-tone scale (12 notes per octave), and makes it possible to fit LD's sequenced tones to the tuning of other gear.

Sequencer tracks output amount can now be modulated

By selecting "AMc1" to "AMc4" as modulation destinations in the "MODULATION" section, in the Seq destination group, it is now possible to modulate the output amount of the sequencer controller tracks.

Random generators output amount can now be modulated

By selecting "AMr1" to "Amr9" or "Ar10" to "Ar16" as modulation destinations in the "MODULATION" section, in the LFO1 destination group, it is now possible to modulate the output amount of the 16 random generators.

AnaX mkI and mkII updates

The CV outputs can now be quantized as 1V/oct or as 1.2V/oct for compability with Buchla gear, by selecting "1v" or "1.2v" for the Nqa1 and Nqa2 parameters.

It is now also possible to select if the CV inputs should act as positive/negative modulation or only positive, by selecting "+/-" or "+" for the new "CVin" parameter.

Sequencer extra tracks 17 to 27 can now send triggers via AnaX, for triggering external gear without using up any polyphony. These can now be selected by the trigger output selection parameters.

SotharMusic

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