Using LFO-type modulations

LFOs are so deeply rooted into traditional synthesis systems that users feel they should have the same type of functionality in a sequencer!

Goal

Octopus does provides on-board tools to create modulations that are typically created using LFOs - low frequency oscillators.

Our example shows how to modulate MIDI CC data using LFO type modulations, but the described technique applies equally to using targets such as velocity, pitch, and other attributes.

Basic setup

1. Switch to page mode.
2. In the page, choose a track and set it up to send out MIDI CC data on a chosen CC# and a chosen MIDI channel.
3. Zoom into the CC map of your chosen track, where you will be able to draw or program the desired "shape" of the modulation.
4. Set the appropriate speed relation to other tracks (to get a higher resolution of sending out the data) on the same MIDI channel.
5. Use the remaining tracks of the page to create the musical sequence you would like the modulation applied to.
6. Make sure that you set the note-holding tracks to the same MIDI channel as the modulator track in order to hear the effect.

Once you have succeeded with the above, you may take your modulations to the next level. This means, you can start to modify the amplitude, the period, or both.

Here is a quick reference on the tools you have:

Changes to the modulation amplitude

The amplitude of the modulation can be adjusted by various means:

- By modifying the shape of the modulation map itself
- By adjusting the map factor, manually or by using step events
- By adjusting the map position, using track position events
- By using the Effector to apply dynamic changes to the map
- All of the above combined

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Changes to the modulation period

The period of the modulation can be adjusted by various means:

- By adjusting the length of the host track (skipping some steps towards the end, or anywhere for that matter)
- By modifying the tempo multiplier of the track.
- By chaining tracks to create modulations longer than 16 steps.

Advanced use

On the Octopus you can have up to 9 pages playing concurrently. Try to split note information and modulation sources on separate pages.

This allows you to modify and interact with the modulators as you would with any other track or object.

This also implies the ability to have modulators evolve and change over time, using step events for example.

Finally, you can modify the modulators on the fly, during performance, giving you capabilities at hand which are yet to be matched!

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