Advanced settings

Unplug all CV inputs and hold the TAP (reset) button for a second to adjust Grids’ settings. Refer to the diagram on the next pages for a list of all available settings. The 3 LEDs indicate the value of the setting being modified. Hold the TAP (reset) button again for a second when you are done.

Online manual and help

The full manual can be found online at mutable-instruments.net/modules/grids/manual. For help and discussions, head to mutable-instruments.net/forum/

Advanced settings diagram

Sequencer mode

Grids can also work as a plain euclidean sequencer:
- Grids is yet another euclidean sequencer
- Grids is back to drumming duties

When euclidean sequencer mode is enabled, the MAP X / Y / CHAOS knobs have alternate functions, (STEPS 1-3) as shown in red on the panel – they control the duration (number of steps) of the sequence, while the FILL knobs control the fill rate.

Clock resolution

- 4ppqn
- 8ppqn
- 24ppqn

Tap button function

- Tap to restart at the beginning of the sequence
- Tap to set the tempo

Chaos knob function

- Pattern randomness amount
- Internal clock swing

Outputs configuration

Grids can output either: three individual accent tracks (one per instrument); or a global accent track, a clock signal (received on the clock input or internal, whichever is used), and a reset trigger sent at the beginning of the pattern.

- ACC 1 / ACC 2 / ACC 3
- ACC / CLK / RST

Topographic drum sequencer

Please refer to the online manual for detailed information regarding compliance with EMC directives.
Concept

Grids is a 3-channel, algorithmic, rhythmic pattern generator based on data and models extracted from actual drum loops. Two steps are involved in the generation of the drum patterns:

Step 1: Synthesizing a pattern from the drum map...

A collection of drum loops has been spatially organized and compressed into a 2-dimensional map. Using interpolation techniques, any pair of X/Y coordinates can be translated into a rhythm, with smooth morphing from one rhythm into the other.

Step 2: ... and sculpting it

Once a rhythmic skeleton is read from the map, variations can be generated by controlling the note density of each of the three channels - gradually morphing the pattern from a sparse backbone to a frantic pattern.

Installation

Grids requires a -12V / +12V power supply (2x5 pin connector). The ribbon cable connector must be aligned so that the red stripe of the ribbon cable [-12V] is on the same side of the module’s power header as the “Red stripe” marking on the board.

The power consumption is as follows:
-12V: 1mA; +12V: 25mA

Front panel

Controls

A. Tempo, from 40 to 240 BPM. When turned fully counter-clockwise, the internal clock stops and the tempo is controlled by clock pulses received on the CLOCK input (1).

B. Tap to set the tempo. Tap just once to revert to the tempo set by A.

C1, C2. Map X and Y coordinates.

D. Pattern humanization amount. Note that this knob can be reassigned to control the swing amount of the internal clock too.

E1, E2, E3. Note density/fill rate for each of the 3 sequencer channels.

Synthesizing

Sculpting

Inputs and Outputs

1. External clock input.
2. Pattern reset input.
3. 4. 5. CV inputs controlling respectively the map X/Y and humanization (or swing) parameters.
6. CV inputs controlling the density/fill rate parameters.
7. 8. Three trigger outputs and three accent outputs.