



BEAST-TEK
INSTRUMENTS

MICROBE USER MANUAL

TEMPO Selects the rate of the internal clock generator.

DENSITY In the centre position the density of the generated beats will be normal/neutral. Moving the density control to the left (CCW) will reduce the density/frequency of triggers across all channels. Moving the density control to right (CW) will increase the density/frequency of triggers across all channels.

MODE selects the current mode of operation

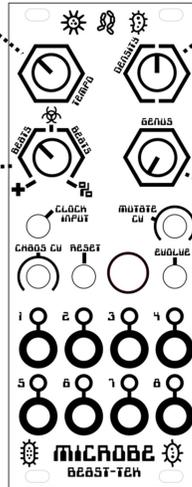
+ Clock Counter Mode

BEATS Regular Beat Mode

☠ Cellular Automation Beat Mode

BEATS Glitchy/Irregular Beat Mode

⏸ Clock Divider Mode



GENUS In Beat modes GENUS will select of of 32 beats within the current bank. In Cellular Automation mode GENUS changes the shape used to select cells within the cellular grid. In Counter and Divider modes GENUS is used to select different counter intervals or divisions.

CLOCK INPUT 8 (or 16) TPQN clock input to sync with other modules.

CHAOS CV Bi-polar (-5 to +5v) CV input

RESET Active high trigger input. When a trigger occurs on the reset input the pattern and evolution is reset to the beginning on the rising edge of the next clock input.

MUTATE CV Bi-polar (-5v to +5v) CV Input

EVOLVE Active high trigger input.

TRIGGER OUTPUTS

5v trigger outputs. In "Beat" modes, the outputs are mapped as follows:

- 1 = Bass Drum
- 2 = Snare
- 3 = Low Tom
- 4 = High Tom
- 5 = Ride/Crash/Open Hi Hat
- 6 = Cow Bell
- 7 = Clap
- 8 = Closed Hi Hat

Note: Mappings are suggested only, experiment with different types of percussion on different outputs

Mode is used to select the current mode of operation:



(Rotating) **Clock Counter Mode** can be used to count 1/4 notes, full beats and measures. In this mode, the Mutate control can be used to rotate the allocation of the counter stages and Genus is used to select 1 of 16 different counting programs.



With the Genus control to the left of the center position (12 o'clock) this will select one of 8 active high counting programs.



With the Genus control to the right of the center position (12 o'clock) will select one of 8 active low counting programs.



Regular Beat Mode There are 12 different "banks" or "branches" available between Clock Counter Mode and Cellular Automation Mode.



Cellular Automation Mode enables a special cellular automation mode which uses a cellular automation algorithm derived from Conway's game of life. In cellular automation mode Genus is used to select the sampling shape that is used to obtain the 8 trigger outputs from the cell grid (think Tetris shapes). Mutate selects the starting row from the cell grid from which the sampling is performed.



Glitch/Irregular Beat Mode There are 12 different "banks" or "branches" available between Cellular Automation Mode and Clock Divider Mode.



(Rotating) **Clock Divider Mode** can be used to get many different 1/4 note clock divisions. In this mode, the Mutate control can be used to rotate the allocation of the counter stages and Genus is used to select 1 of 16 different banks of clock divisions.

EVOLVE is a 0-5v active high trigger input. In Beat(s) Mode every time a trigger is received a "destructive" evolution in the beat pattern is triggered. The evolution is "destructive" in the sense that there is no way to return to the original beat unless a trigger signal is sent to the reset input. In Cellular Automation Mode every time a trigger is received, the shape used sample the cell grid to obtain the 8 trigger signals is changed/morphed which can have a dramatic effect on the trigger pattern.

Clock Input Takes a 8 tpqn clock if you want 16th notes or 16 tpqn clock if you want some 32nd note action