

MALEKHO

VARIGATE 4 MANUAL V.1

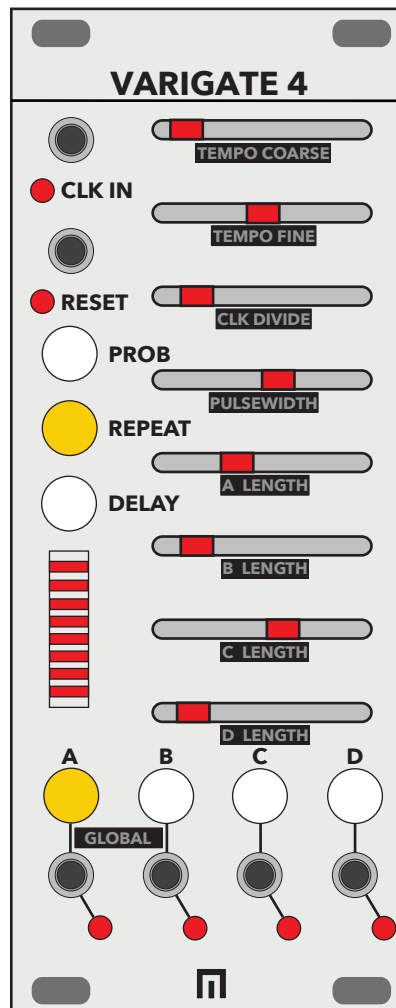




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SPECIFICATIONS

FORMAT:
EURORACK

DIMENSIONS:
10HP, 23mm deep

INTERNAL AND EXTERNAL SIGNALS (3.5mm jacks):
0-5V Logic I/O

MAX CURRENT:
+12V: 50mA
-12V: 10mA
+5V: n/a



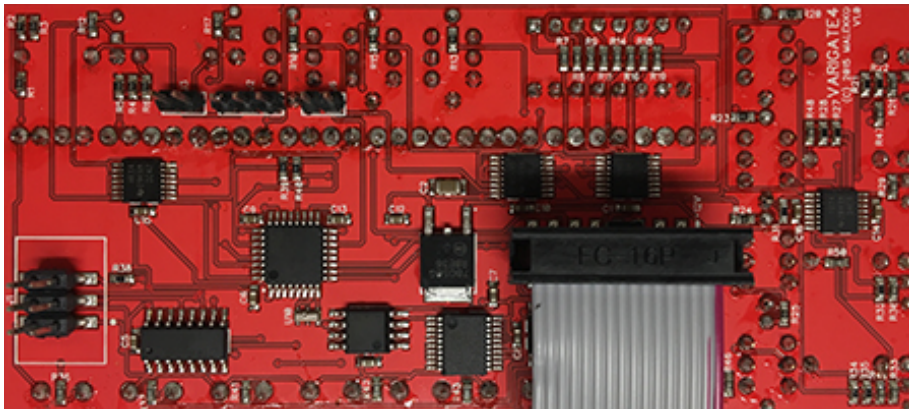
INSTALLATION

Remove module from packaging.

Power down your modular synthesizer and disconnect the power cable from the wall outlet.

Attach the included power cable to the module's power connector and connect the other end to the power distribution bus in your EuroRack synthesizer case. If you have a bi-colored ribbon cable the red stripe should be on a same side with a bold white line on a pcb. In case if you have a rainbow-colored ribbon cable the key is brown. Connector also has a key which should match sickscreen on a pcb.

Position the module on the mounting rails in your EuroRack case and screw down mounting screws. Power up! If your case does not turn on properly then you have installed the module incorrectly. Simply power down and make sure to follow the diagram when reconnecting the module.





DESCRIPTION

The Varigate 4 is a 4-channel, 8-step gate sequencer with parameter per-step control of PROBABILITY, REPEAT AND DELAY as well as GLOBAL parameter controls. CLOCK INPUT allows for external clocking to progress sequences and RESET gate input sets all steps to 1. Varigate 4 also includes RANDOMIZER functions for both REPEAT and DELAY. The additional ability to save presets make this compact module perfect for live performance.



QUICK OVERVIEW

CLK IN: CLOCK INPUT with LED indicator

RESET: gate input for resetting to step 1 and LED indicator

PROB: select to control the probability of a step outputting a gate.

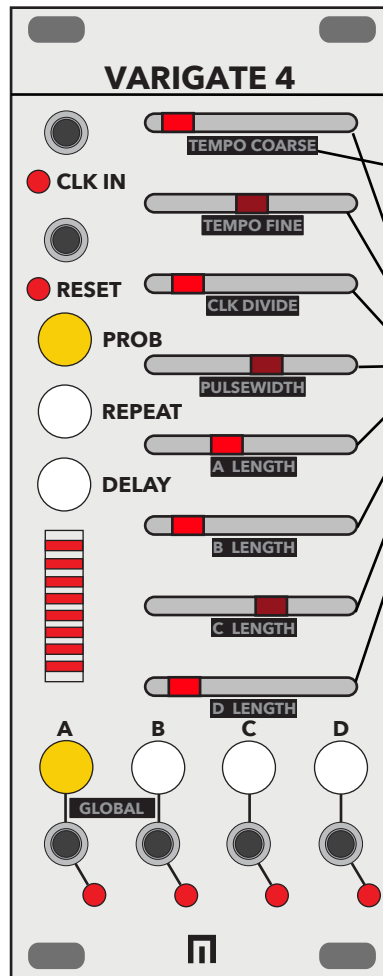
REPEAT: select to control the amount a step repeats

DELAY: select to control the amount of delay per step.

LED BAR GRAPH: displays the step currently being adjusted as well as a final overview of all adjusted steps.

A, B, C and D selectors: select the channel you want to adjust steps for (orange indicates the channel selected)

Red LEDs for A,B,C and D indicate gate outs for each channel.



There are 2 modes, REGULAR and GLOBAL. GLOBAL menu items are outlined in black (see Diagram 5 for more details on GLOBAL MODE).

Steps 1-8: Each step has it's own adjustable slider with an LED indicator that will flash. The sequence moves from top to bottom.

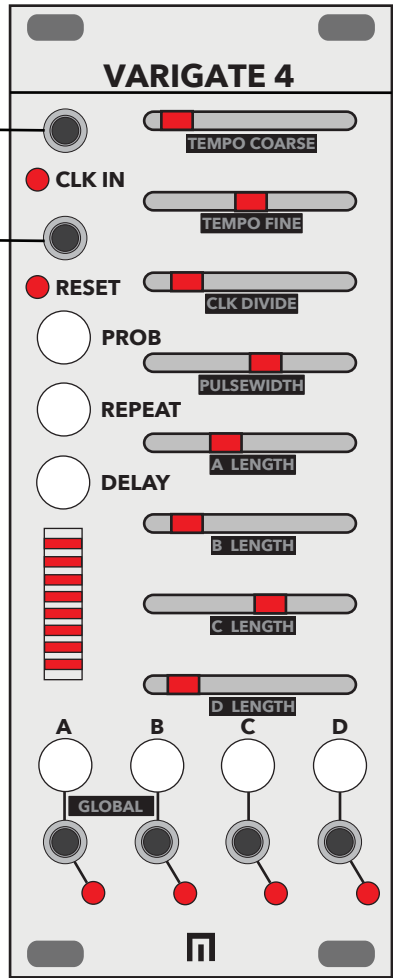


INPUTS AND OUTPUTS

CLOCK INPUT - The sequence is progressed with this input. With nothing plugged in the clock can be normalled to the module's internal clock or gate bus from the busboard (set by jumper on back of module).

RESET INPUT - This gate input will set all channels to step 1.

Channels A-D outputs - Each channel outputs 5V gates.





PER-STEP PARAMETERS

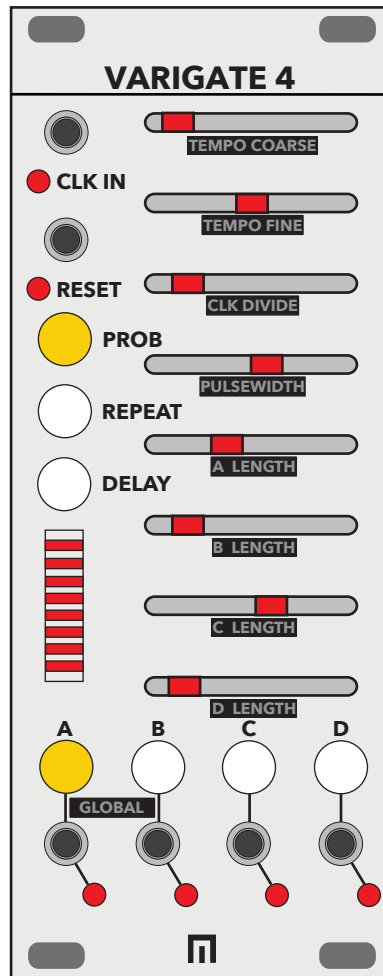
The following parameters are set on a per-step level: PROBABILITY, REPEAT, and DELAY.

PROBABILITY - This parameter controls the chance of a step being active.

EXAMPLE: (make sure you have connected a cable from Channel A to a sound source like a drum module, "trigger input"). Select button for Channel A, then select button PROBABILITY, then adjust the fader for Step 1. You will now notice that Step 1 rate of probability that the gate will trigger has increased according the amount that the fader is moved either left or right. Now move the faders for Step 2-8.

Repeat the above example for Channel B, C, and D with other modules/trigger inputs.

If you want the probability behavior to act like a standard gate sequencer (always sending a gate on step), simply move the fader for the corresponding step all the way to the left or to the right.



REPEAT - This parameter controls the amount of pulses per step. This can be adjusted from 1-8 pulses.

EXAMPLE: Follow the same instructions for PROBABILITY, but select REPEAT instead.

DELAY - This parameter introduces delay on the selected step much like adding shuffle. It will always fall within the step being adjusted. The delay amount is based on the clock rate so tempo changes will not alter the pattern.

EXAMPLE: Follow the same instructions for PROBABILITY, or REPEAT but select the DELAY instead.

To erase any of the above settings, simply hold the buttons for PROB, REPEAT and DELAY for 1 second.



RANDOMIZER

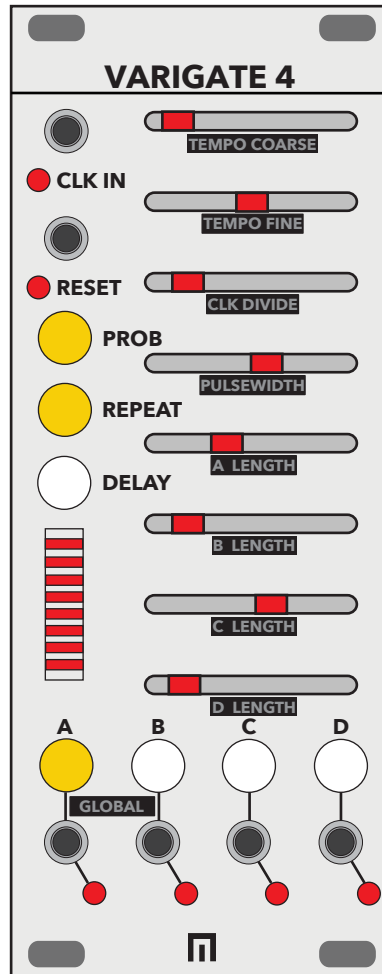
Pressing the PROBABILITY and REPEAT buttons at the same time will enter the randomizer setting for repeats.

Pressing the PROBABILITY and DELAY buttons at the same time will enter the randomizer setting for delay.

When in the randomizer setting, the button's LED will flash.

EXAMPLE 1:

Select Channel A button, hold the PROBABILITY and REPEAT buttons at the same time until they are blinking, and then adjust Step 1 fader to the left or right (left being minimum and right being maximum). You will notice that the amount of repeats will become more or less random depending on the position of Step 1 fader. Now move Step 2-8 faders and notice each Step adopting more or less random repeats.



EXAMPLE 2:

Select Channel A, hold the PROBABILITY and DELAY buttons at the same time until they are blinking, and then adjust Step 1 fader to the left or right (left being minimum and right being maximum). You will notice that the amount of delay added to Step 1 becomes more or less random depending on the position of Step 1 fader. Now move Step 2-8 faders and notice each Step adopting more or less random repeats.

Now apply these instructions to Channels B, C and D as well.



GLOBAL MODE

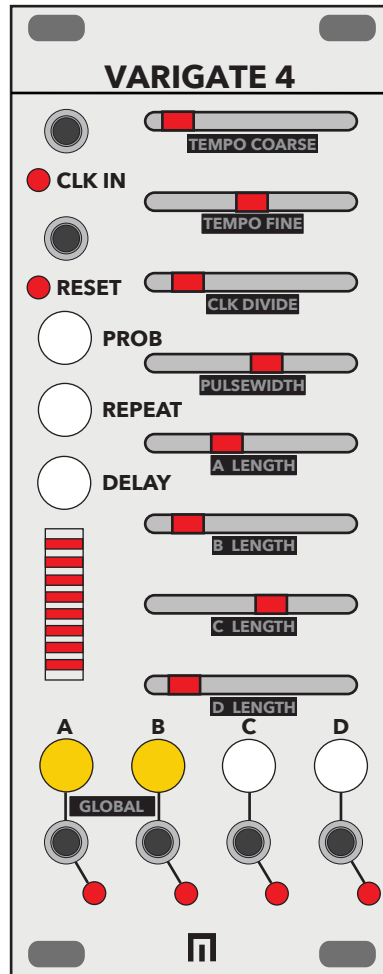
To enter the GLOBAL MODE and access the GLOBAL MENU, press Channel A and Channel B buttons at the same time. Pressing these buttons again exits the global menu. Global parameters are listed under each slider on the front panel and are as follows.

TEMPO COARSE - This parameter adjusts the internal clock between 30 and 255 BPM

TEMPO FINE - This parameter adjusts the clock +/- 25 BPM

CLOCK DIVIDE - This parameter divides the internal or external clock by a factor of 1 to 8

PULSEWIDTH - This parameters adjusts the length of gates on the output between a pulsewidth of 20% and 80%



A LENGTH - Sequence length of Channel A (1-8)

B Length - Sequence length of Channel B (1-8)

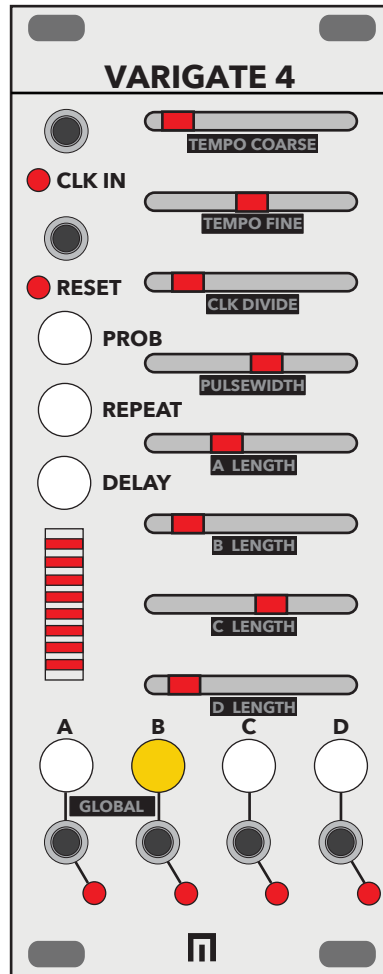
C Length - Sequence length of Channel C (1-8)

D Length - Sequence length of Channel D (1-8)



SAVING PRESETS

To save a preset hold one of the 4 channel buttons (A-D) for a second to save to that preset slot. To recall double tap the channel button to recall the preset. The active preset is shown by the blinking channel light.





WARRANTY

This product is covered by the Malekko Heavy Industry warranty, for one year following the date of purchase. This warranty covers any defect in the manufacturing of this product. This warranty does not cover any damage or malfunction caused by incorrect use – such as, but not limited to, power cables connected backwards, excessive voltage levels, or exposure to extreme temperature or moisture levels. The warranty covers replacement or repair, as decided by Malekko Heavy Industry. Please visit our website **malekkoheavyindustry.com** to obtain full warranty information and to register your product for coverage.