

# SPUTNIK MODULAR

## QUAD FUNCTION & TRIGGER SOURCE MANUAL V.1

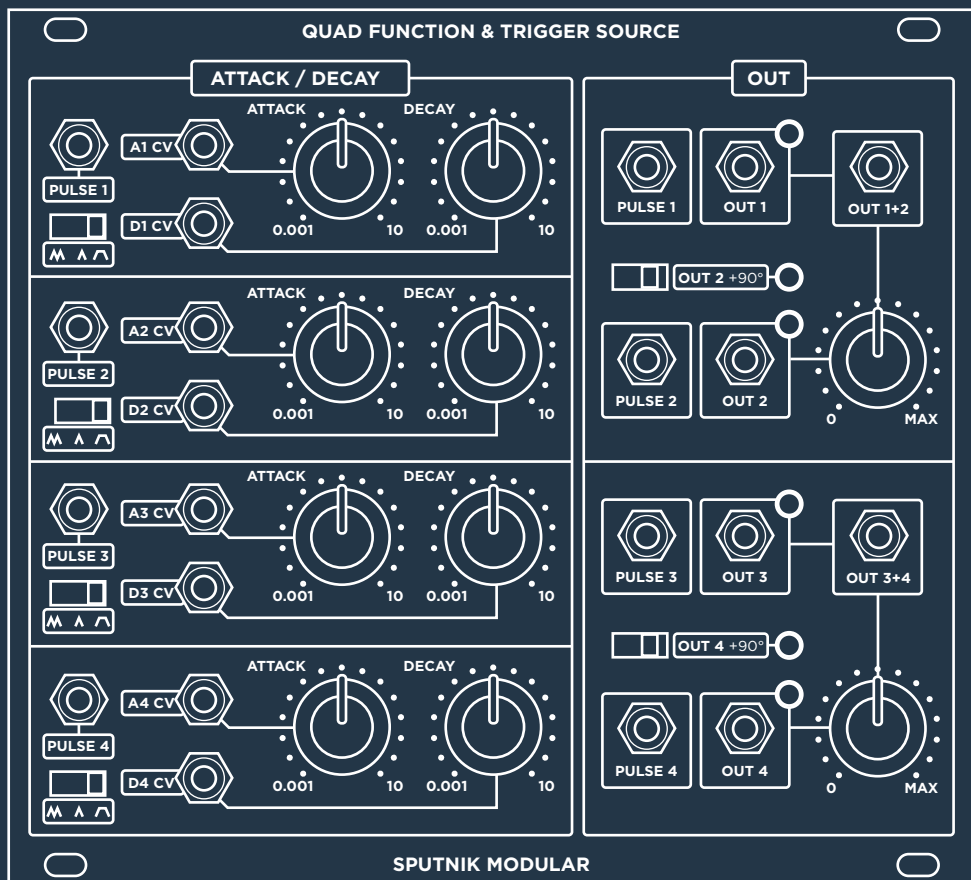


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## SPECIFICATIONS

### FORMAT:

Eurorack

### DIMENSIONS:

28HP, 28mm deep

### INTERNAL AND EXTERNAL SIGNALS (3.5mm Jacks):

CV: 0-5V or 0-8V (selectable by a switch on a back of a module)

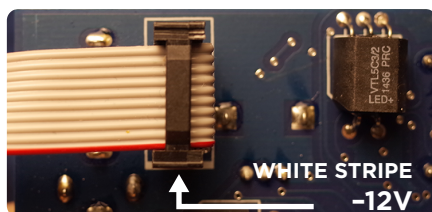
### MAX CURRENT:

+12V: 100mA

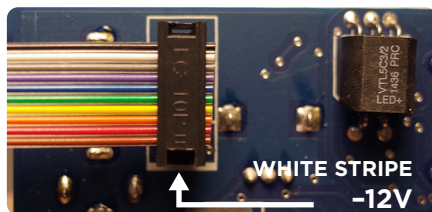
-12V: 60mA

## INSTALLATION

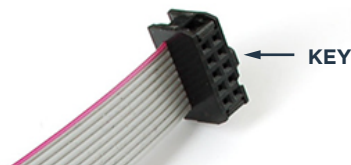
- 1 Remove module from packaging.
- 2 Power down your modular synthesizer and disconnect the power cable from the wall outlet.
- 3 Attach the included power cable to the module's power connector and connect the other end to the power distribution bus in your EuroRack synthesizer case. If you have a bi-colored 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 sixscreen on a pcb.
- 4 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.



**BI-COLORED RIBBON**



**RAINBOW RIBBON**



## DESCRIPTION

The SPUTNIK QUAD FUNCTION & TRIGGER SOURCE provides four independent or paired (quadrature mode) CV function generators for creating complex envelopes. Each generator can be triggered by an external pulse, a sustained gate (for ASR response), and is also able to self-cycle (for looping AD/AR or LFO-like shapes). Attack and decay times are controllable via CV or control knobs and each stage ranges in length from 0.05 to 10 seconds.

Each section has a CV output and an end-of-cycle pulse output. Each pair of channels (1+2, 3+4) also features an output jack for an OR logic gate that allows for complex envelope combinations with the help of a control knob. Finally, quadrature mode allows each channel pair to be synchronized 90° out of phase with the duty cycle of its pair (i.e. channel 2 will begin its cycle when channel 1 starts its attack phase).

Two slide switches (A/B and C/D) on a back on a module give a possibility to select the maximum envelope voltage level 0-5V or 0-8V.

ATTACK / DECAY

Pulse input to trigger an envelope response.

Attack and Decay CV inputs are summed with control knobs for independent control of each stage's cycle time.

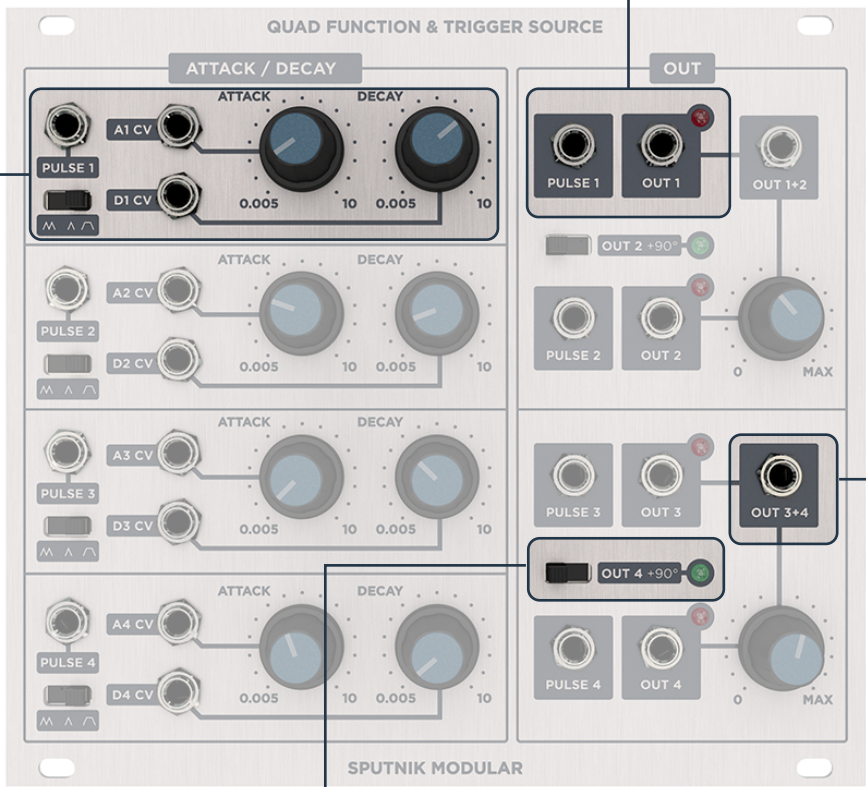
Mode selector switch to choose between self-cycling mode (looping AD/AR or LFO), triggered mode (AD/AR envelope), and sustained trigger mode (ASR envelope).

OUT

Pulse output at every end-of-cycle.

Unipolar envelope output (switchable between 0V-+5V or 0V-+8V on rear of module).

Output LED indicator.



QUADRATURE MODE SWITCH

The quadrature mode switch enables channels 2 and 4 to be triggered when channels 1 and 3 reach 1/4 of the way through their duty cycle. Especially useful for quadraphonic panning.

OUTS 1+2 AND 3+4

Outs 1+2 and 3+4 are OR logic gates outs that output whichever voltage in that channel pair is higher. The control knob attenuates the output of channels 2 and 4 into the input of the logic gate.

## WARRANTY

This product is covered by the Sputnik Modular 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 Sputnik Modular. Please contact customer service via our website ([www.sputnik-modular.com](http://www.sputnik-modular.com)) for a return authorization.