SPUTNIK MODULAR

VALVE MULTIPLIER
MANUAL V.1

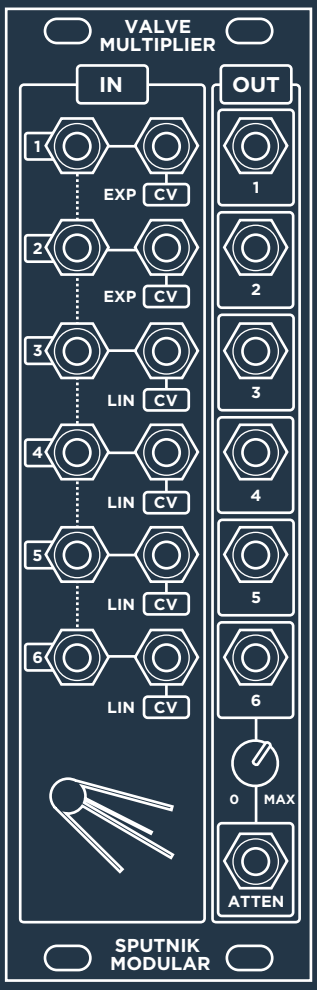


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SPECIFICATIONS

FORMAT:
EURORACK

DIMENSIONS:
8HP, 28mm deep

INTERNAL AND EXTERNAL SIGNALS (3.5mm Jacks):
CV: 0-5V, AUDIO: +/-5V

MAX CURRENT:
+12V: 75mA
-12V: 70mA
+5V: 2mA

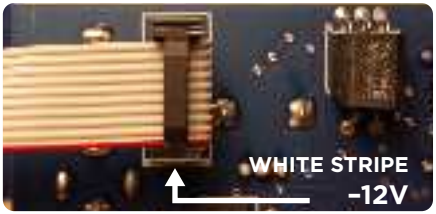
INSTALLATION

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 sikscreen 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 VALVE MULTIPLIER is a bank of six VCAs (voltage controlled amplifiers) for voltage control of audio or CV signal levels. Channels 1 and 2 feature an exponential CV response and channels 3-6 have a linear response. Channel 6 features two inverted outputs, one from the output jack and one with an attenuator. Each input is also sequentially normalized, allowing a single input to be applied to multiple VCAs.

IN

Each VCA includes an inputs for signal and control voltage. All of the VCA channels are DC-coupled and will accept both audio and CV modulation signals. However, we do not recommend using the Valve Multiplier for purposes where an ultra high degree of precision is required, such as processing pitch CV.

CV INPUTS

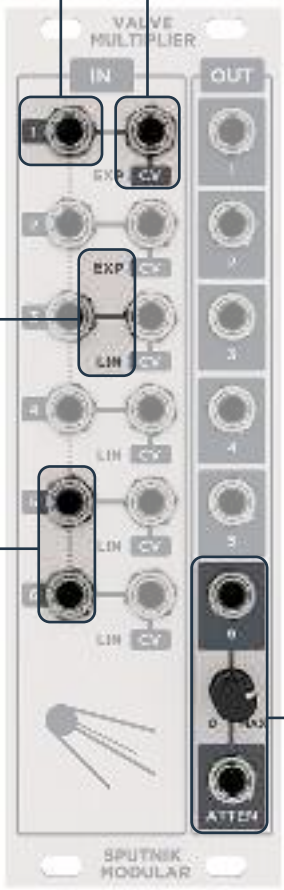
Each channel accepts 0 to +5V CV signals. Unlike most VCAs, the Valve Multiplier's CV inputs are normalized to +5V which will pass 100% of signal if no CV jack is inserted.

EXPONENTIAL AND LINEAR VCAs

Channels 1 and 2 feature VCAs with exponential CV response and channels 3-6 have VCAs with a linear response.

NORMALIZED INPUTS

Signal inputs are sequentially normalized, so one input will pass signal to every VCA channel until interrupted by another connection. For example: If Input A is applied to Channel 1's input and Input B is applied to Channel 4's input then Input A will be able to be processed in parallel by Channels 1-3 and Input B will be able to be processed by the VCAs in Channels 4-6.



OUT

Outputs 1-6 are signal outputs for Channels 1-6. Channel 6's two outputs are inverted and the "ATTEN" jack features an attenuated, inverted output.

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**) for a return authorization.