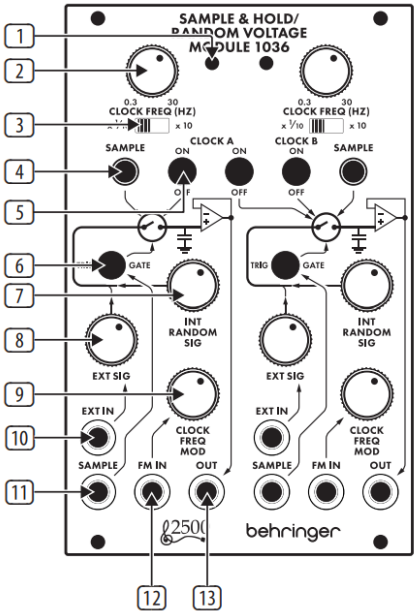
behringer 1036 SAMPLE & HOLD / RANDOM VOLTAGE User Guide

SAMPLE & HOLD / RANDOM VOLTAGE MODULE 1036
Legendary 2500 Series Dual Sample and Hold with Voltage Controlled Clock Module for Eurorack

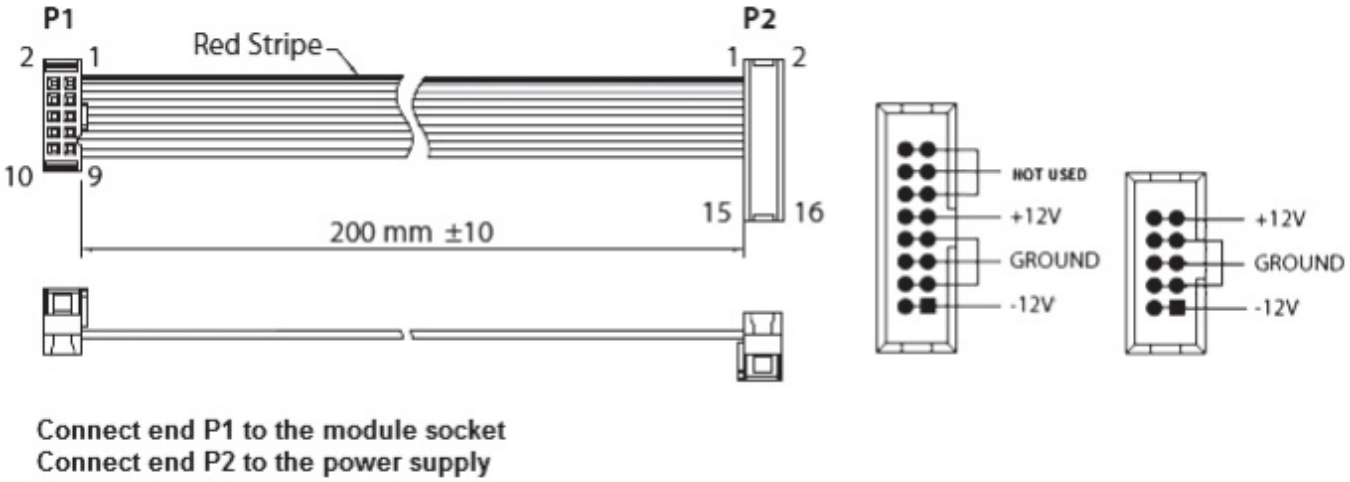
Contents

Controls

(1) **LED** – Indicates that clock A or B is engaged.
(2) **CLOCK FREQ** – Sets the clock frequency value.
(3) **CLOCK RANGE** – Determines whether the value selected with the a ssociated Clock Frequency knob is interpreted by a factor of 1/10th or x 10. For example, a setting of 50 on the knob will either result in 5 Hz or 500 Hz.
(4) **SAMPLE** – Manually generate a sample command pulse.
(5) **CLOCK ON/OFF** – Engage clock A and B pulse generators indepen dently. Clock A can be assigned to both samples and hold sections if de sired.
(6) **TRIG/GATE** – Determines whether a short trigger or longer gate will open the sampler. In the trigger
position, the positive edge of the pulse will open the sampler for about 1 0 ms, whereas the gate position
will hold the output of the sampler open for the entire duration of the pos itive pulse.
(7) **INT RANDOM SIG** – Adjusts the level of the internal random signal generator, which can be used instead of or in addition to an external sig nal.
(8) **EXT SIG** – Attenuates the signal connected to the EXT IN jack.
(9) **CLOCK FREQ MOD** – Attenuates the signal connected to the FM IN jack.
(10) **EXT IN** – Connect an external voltage that will be sampled and ma nipulated.
(11) **SAMPLE** – Connect an external oscillator or keyboard trigger to ge nerate a sample command pulse.
(12) **FM IN** – Connect a voltage to control the clock frequency modulatio n of the pulse generator.
(13) **OUT** – Send the sample to other modules via 3.5 mm TS cable.



Power Connection



The unit comes with the required power cable for connecting to a standard Eurorack power supply system. Follow these steps to connect power to the module. It is easier to make these connections before the module has been mounted into a rack case.

1. Turn the power supply or rack case power off and disconnect the power cable.
2. Insert the 16-pin connector on the power cable into the socket on the power supply or rack case. The connector

has a tab that will align with the gap in the socket, so it cannot be inserted incorrectly. If the power supply does not have a keyed socket, be sure to orient pin 1 (-12 V) with the red stripe on the cable.

3. Insert the 10-pin connector into the socket on the back of the module. The connector has a tab that will align with the socket for correct orientation.
4. After both ends of the power cable have been securely attached, you may mount the module in a case and turn on the power supply.

Installation

The necessary screws are included with the module for mounting in a Eurorack case. Connect the power cable before mounting.
Depending on the rack case, there may be a series of fixed holes spaced 2 HP apart along the length of the case, or a track that allows individual threaded plates to slide along the length of the case. The free-moving threaded plates allow precise positioning of the module, but each plate should be positioned in approximate relation to the mounting holes in your module before attaching the screws.
Hold the module against the Eurorack rails so that each of the mounting holes are aligned with a threaded rail or threaded plate. Attach the screws partway to start, which will allow small adjustments to the positioning while you get them all aligned. After the final position has been established, tighten the screws down.

Specifications

Inputs	
FM in	
Type	2 x 3.5 mm TS jacks
Impedance	50 kΩ, unbalanced
CV range	0-10 V
Sample	
Type	2 x 3.5 mm TS jacks
Impedance	10 kΩ, unbalanced
Max input level	5 V
Ext in	
Type	2 x 3.5 mm TS jacks
Impedance	25 kΩ, unbalanced
Max input level	10 V
Outputs	
Out	
Type	2 x 3.5 mm TS jacks
Impedance	1 kΩ, unbalanced
Max output level	10 V
Controls	

Clock freq	0.3-30 Hz
Clock range	Clock value factor of x0.1 or x10
The clock on/off	Engage pulse generators
Sample	Generate sample command
Trig/gate	Selects sample (trig) or continues sample (gate)
Int random sig	0 to ±7 V
Ext sig	-∞ to unity gain
Clock freq mod	-∞ to unity gain
Power	
Power supply	Eurorack
Current draw	40 mA (+12 V), 40 mA (-12 V)
Physical	
Dimensions	43 x 81 x 129 mm (1.7 x 3.2 x 5.1″)
Rack units	16 HP
Weight	0.18 kg (0.4 lbs)

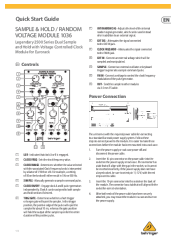
LEGAL DISCLAIMER

LIMITED WARRANTY

For the applicable warranty terms and conditions and additional information regarding Music Tribe's Limited Warranty, please see complete details online at **musictribe.com/warranty**.

Hereby, Music Tribe declares that this product is in compliance with Directive 2014/30/EU, Directive 2011/65/EU and Amendment 2015/863/EU, Directive 2012/19/EU, Regulation 519/2012 REACH SVHC and Directive 1907/2006/EC.
Full text of EU DoC is available at **https://community.musictribe.com/**
EU Representative: Music Tribe Brands DK A/S
Address: Ib Spang Olsens Gade 17, DK – 8200 Aarhus N, Denmark

Documents / Resources


Quick Start Guide

SAMPLE & HOLD / RANDOM VOLTAGE MODULE 1036

Legendary 2500 Series Dual Sample & Hold / Random Voltage Generator Eurorack Module

Controls

Patch Ideas

[1]	**CLK** – Clock rate knob. Sets the CLK frequency.
[2]	**CLOCK/GATE** – Clock input. Accepts a clock or gate signal.
[3]	**CLOCK/GATE** – Clock input. Accepts a clock or gate signal.
[4]	**TRIG/GATE** – Manually generates a trigger or gate signal.
[5]	**TRIG/GATE** – Manually generates a trigger or gate signal.
[6]	**TRIG/GATE** – Trigger or gate output. Sends a trigger or gate signal when the sample & hold or random voltage is updated.
[7]	**CLK** – Clock rate knob. Sets the CLK frequency.
[8]	**ATTENUVERTER** – Adjusts the amount the CV signal affects the CLK frequency.
[9]	**CV IN** – CV input for the CLK frequency.
[10]	**SLEW RATE** – Adjusts the slew rate of the CV signal.
[11]	**SLEW** – Slew rate control. Adjusts the slew rate of the CV signal.
[12]	**SAMPLE** – Sample & hold CV output.
[13]	**RANDOM** – Random CV output.
[14]	**OUT** – Audio output. Sends the audio signal.

Power Consumption

1. Turn the power to your rack system off and disconnect it from the mains.
2. Connect the module to your rack power cable observing the 10-pin keying slot and red stripe. The red stripe has to be connected to the -12V rail on your power supply. Please refer to the documentation of your rack system for the pinout of the power connector.
3. Turn the power back on.

References

- Music Tribe

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