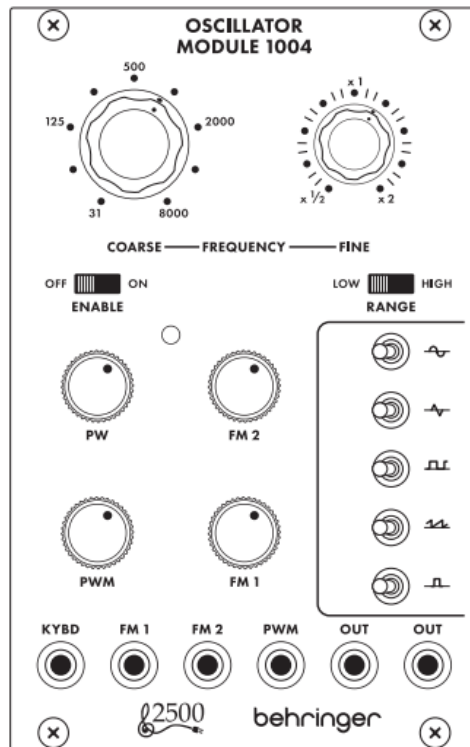


behringer OSCILLATOR MODULE 1004 Legendary 2500 Series Dual Core VCO Module User Guide

Quick Start Guide



OSCILLATOR MODULE 1004

Legendary 2500 Series Dual Core VCO Module for Eurorack

V 1.0

behringer

OSCILLATOR MODULE 1004

Safety Instruction

1. Please read and follow all instructions.
2. Keep the apparatus away from water, except for outdoor products..
3. Clean only with a dry cloth.
4. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
5. Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
6. Use only attachments/accessories specified by the manufacturer.



7. Use only specified carts, stands, tripods, brackets, or tables. Use caution to prevent tip-over when moving the cart/apparatus combination.
8. Avoid installing in confined spaces like bookcases.
9. Do not place near naked flame sources, such as lighted candles.
10. Operating temperature range 5° to 45°C (41° to 113°F).

LEGAL DISCLAIMER

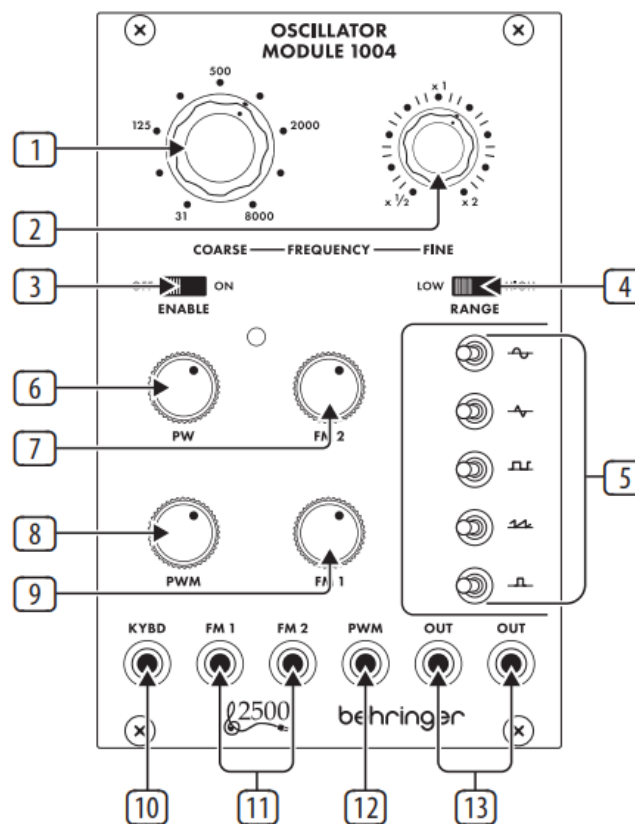
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LIMITED WARRANTY

For the applicable warranty terms and conditions and additional information regarding Music Tribe's Limited Warranty, please see complete details online at [community.musictribe.com/support](https://musictribe.com/support).

OSCILLATOR MODULE 1004 Controls



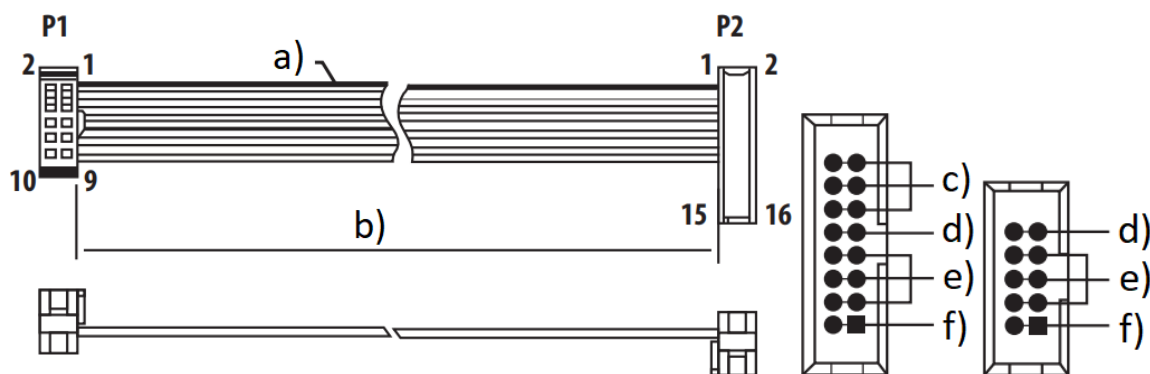
Controls

(1) **COARSE FREQUENCY** – Sets the frequency from 0.03 to 32 Hz in the low (LFO) range, or from 15.5 Hz to 16 kHz in the high (audio) range, depending on the Fine frequency knob setting.

(2) **FINE FREQUENCY** – Adjusts the frequency by a factor of ± 1 octave, potentially halving or doubling the frequency at either extreme.

- (3) **ENABLE switch** – Turns the oscillator on and off.
- (4) **RANGE switch** – Determines whether the oscillator operates in the low (subsonic/LFO) band or the high (audio) band.
- (5) **WAVEFORM switches** – Engage up to 5 waveforms by moving the relevant toggle switch to the left, or engage the inverse waveform by moving the switch to the right. The center position turns the waveform off. Engaging multiple switches simultaneously produces the average of all active waveforms.
- (6) **PW knob** – Manually control the pulse width for the pulse waveform.
- (7) **FM 2 knob** – Attenuates the signal connected to the FM 2 input.
- (8) **PWM knob** – Adjusts the modulation depth of the PMW control input.
- (9) **FM 1 knob** – Attenuates the signal connected to the FM 1 input.
- (10) **KYBD** – Connect a keyboard or other external frequency control via 3.5 mm TS cable.
- (11) **FM 1/2** – Connect external voltages to modulate the frequency.
- (12) **PWM** – Connect an external voltage to modulate the pulse width.
- (13) **OUT** – Send the oscillator signal to other modules via 3.5 mm TS cable.

Power Connection



Connect end P1 to the module socket

Connect end P2 to the power supply

- a) Red Stripe
- b) 200 mm ± 10
- c) HOT USED
- d) + 12V
- e) GROUND
- f) – 12V

The OSCILLATOR MODULE 1004 module 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 the 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 part way 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 1/2	
Type	2 x 3.5 mm TS jacks
Impedance	50 k Ω , unbalanced
Max input level	10 V, 1 V/octave
Keyboard	
Type	3.5 mm TS jack
Impedance	50 k Ω , unbalanced
Max input level	10 V, 1 V/octave
PWM	
Type	3.5 mm TS jack
Impedance	50 k Ω , unbalanced
CV range	± 10 V, 10% per volt
Outputs	
Out	
Type	2 x 3.5 mm TS jacks
Impedance	1 k Ω , unbalanced
Max output level	10 V p-p
Controls	
Coarse	Sets oscillator frequency (8 octave range)
Fine	Oscillator fine adjustment (± 1 octave)

Range	Select LFO (0.06 Hz – 16 Hz) or audio band (31 Hz – 8 kHz)
Enable	Oscillator on/off
PW	Pulse width adjustment (5% – 95%)
PWM	Modulation depth adjustment (-∞ to unity gain)
FM 1/2	Attenuate FM inputs (-∞ to unity gain)
Waveform switches	Select up to 5 waveforms (sine, tri, square, saw, pulse)
Power	
Power supply	Eurorack
Current draw	60 mA (+12 V), 50 mA (-12 V)
Physical	
Dimensions	46 x 81 x 129 mm (1.8 x 3.2 x 5.1")
Rack units	16 HP
Weight	0.17 kg (0.37 lbs)

FEDERAL COMMUNICATIONS COMMISSION COMPLIANCE INFORMATION

Behringer

OSCILLATOR MODULE 1004

Responsible Party Name: **Music Tribe Commercial NV Inc.**

Address: **122 E. 42nd St.1,
8th Floor NY, NY 10168,
United States**

Email Address: legal@musictribe.com

OSCILLATOR MODULE 1004

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on,

the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Important information:

Changes or modifications to the equipment not expressly approved by Music Tribe can void the user's authority to use the equipment.



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: Gammel Strand 44, DK-1202 København K, Denmark

UK Representative: Music Tribe Brands UK Ltd.
Address: 8th Floor, 20 Farringdon Street London EC4A 4AB, United Kingdom



Correct disposal of this product: This symbol indicates that this product must not be disposed of with household waste, according to the WEEE Directive (2012/19/EU) and your national law. This product should be taken to a collection center licensed for the recycling of waste electrical and electronic equipment (EEE). The mishandling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the efficient use of natural resources. For more information about where you can take your waste equipment for recycling, please contact your local city office, or your household waste collection service.

: OSCILLATOR MODULE 1004

: Music Tribe Commercial FZE –
Made in China

CAN ICES003 (B)/NMB003 (B)

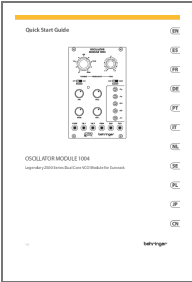
We Hear You

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Documents / Resources

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