Manuals+ — User Manuals Simplified.
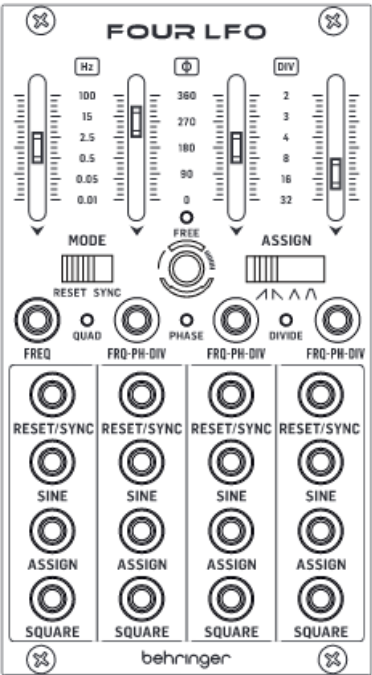
behringer FOUR LFO Quad LFO with Assignable Waveforms for Eurorack User Guide

Contents

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FOUR LFO

Quad LFO with Assignable Waveforms for Eurorack

V 2.0

one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11. Use only attachments/ accessories specifi ed by the manufacturer.

12. Use only with the cart, stand, tripod, bracket, or table specifi ed by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug this app aratus during lightning storms or when unused for long periods of time.

14. Refer all servicing to qualifi ed service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

15. The apparatus shall be connected to a MAINS socket outlet with a protective earthing connection.

16. Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

17. 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 effi cient use of natural resources. For more information about where you can take your waste equipment for recycling, please contact your local city offi ce, or your household waste collection service.

18. Do not install in a confi ned space, such as a book case or similar unit.

19. Do not place naked fl ame sources, such as lighted candles, on the apparatus.

20. Please keep the environmental aspects of battery disposal in mind. Batteries must be disposedof at a battery collection point.

21. This apparatus may be used in tropical and moderate climates up to 45°C.

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 community.musictribe.com/pages/support#warranty.

Power Connection

The 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.
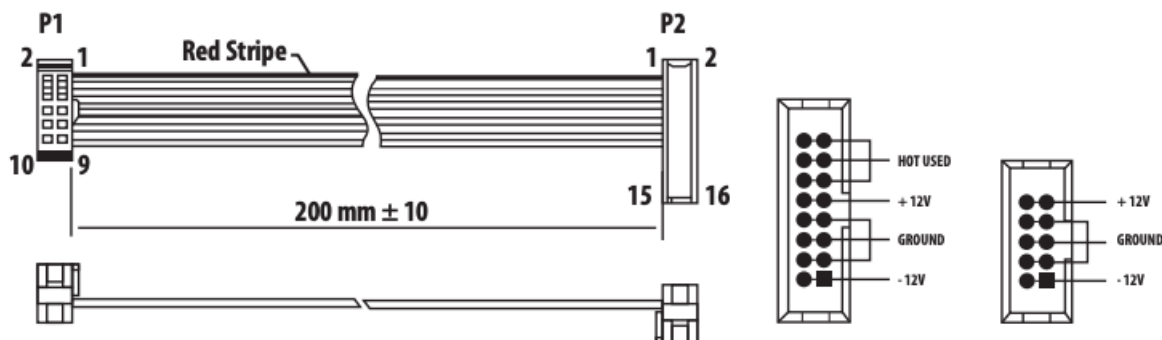
Connect end P1 to the module socket
Connect end P2 to the power supply

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.

Controls
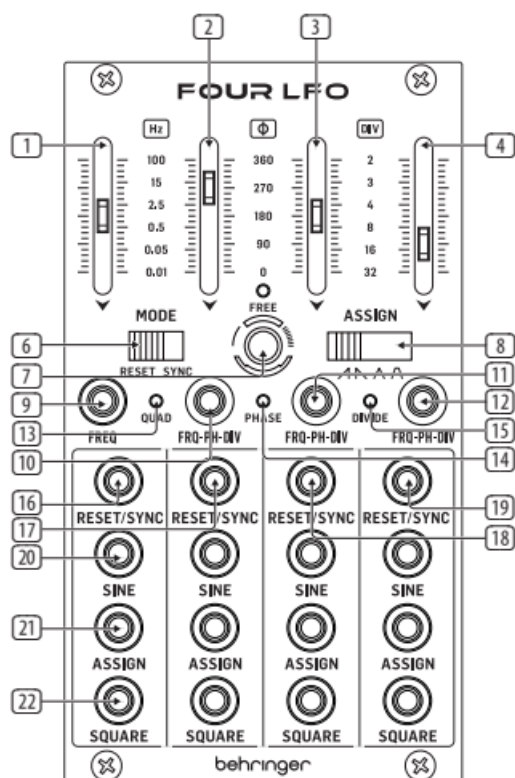
1. **FADER 1** – this fader has two functions: in free-running mode it sets the frequency for LFO 1; otherwise it acts as a master fader for the other three faders to reference.

2. **FADER 2** – in free-running mode this acts as frequency control for LFO 2; otherwise it acts as an offset against the master for LFO 2.

3. **FADER 3** – as fader 2 but for LFO 3.

4. **FADER 4** – as fader 2 but for LFO 4.

5. **FREE LED** – when this LED is lit the FOUR LFO is in free-running mode.

6. **MODE** – use this switch to select the action for sockets 16. In RESET mode a gate applied to the socket(s) will cause the waveform(s) of the LFO(s) to reset; in SYNC mode the LFO(s) will sync to a clock sent to the socket(s).

7. **TOGGLE** – use this button to switch between:
    - Free-running, where the four LFOs work independently.
    - Quad, where LFOs 2 – 4 are slaved to LFO 1 but are 90°, 180°and 270° out of phase respectively. Faders 2-4 and sockets 10-12 control the amplitude of LFOs 2-4.
    - Phase, where faders 2-4 set the phase of LFOs 2-4 against LFO 1. Sockets 10-12 allow further control of shift from external CVs.
    - Divide, where faders 2-4 set divisions of LFO 1's frequency for LFOs 2-4. Sockets 10-12 allow further CV control.

8. **ASSIGN** – sets the waveform that will be output from sockets 18. Choose between sawtooth, ramp, triangle and trapezoid. This is a global setting which will affect all four LFOs.

9. **FREQ** – use this socket to control the frequency of LFO 1 from an external CV source, in the range -5 V to +5 V.

10.

11.

12. – **FRQ/PH/DIV** – use these sockets to allow external CV control of LFOs 2-4 according to whichever mode the FOUR LFO is in. range in all modes is -5 V to +5 V.

13. **QUAD LED** – this LED is lit when the FOUR LFO is in Quad mode.
14. **PHASE LED** – this LED is lit when the FOUR LFO is in Phase mode.
15. **DIVIDE LED** – this LED is lit when the FOUR LFO is in Divide mode.
16. **RESET/SYNC 1** – a gate or clock applied to this socket causes different actions according to mode:
    - In SYNC mode it will synchronize LFO 1 to the external clock.
    - In RESET mode when the LFOs are free-running it will reset the waveform cycle of LFO 1.
    - In RESET mode when the LFOs are in QUAD, PHASE or DIVIDE it will reset the waveform cycles of all four LFOs.
17. **RESET/SYNC 2** – a gate or clock applied to this socket causes different actions according to mode:
    - In SYNC mode it will synchronize LFO 2 to the external clock.
    - In RESET mode when the LFOs are free-running it will reset the waveform cycle of LFO 2.
    - In RESET mode when the LFOs are in QUAD, PHASE or DIVIDE it will pause all four LFOs.
18. **RESET/SYNC 3** – a gate or clock applied to this socket causes different actions according to mode:
    - In SYNC mode it will synchronize LFO 3 to the external clock.
    - In RESET mode when the LFOs are free-running it will reset the waveform cycle of LFO 3.
    - In RESET mode when the LFOs are in QUAD, PHASE or DIVIDE it will reverse all four LFOs.
19. **RESET/SYNC 4** – a gate or clock applied to this socket causes different actions according to mode:
    - In SYNC mode it will synchronize LFO 4 to the external clock.
    - In RESET mode when the LFOs are free-running it will reset the waveform cycle of LFO 4.
    - In RESET mode when the LFOs are in QUAD, PHASE or DIVIDE it will shift the assignable waveform to the next option on all four LFOs, regardless of the setting of switch 8. The waveform selected by switch 8 will be selected again if the mode is changed.
20. **SINE** – sine wave outputs for each LFO.
21. **ASSIGN** – assignable waveform outputs for each LFO, according to where switch 8 is set.
22. **SQUARE** – square wave outputs for each LFO.

PRECISION

Pressing and holding button 7 puts the FOUR LFO into precision mode to allow precise adjustment. The LED for the current mode will flash, and the faders will make fine adjustments around the centre point. When exiting precision mode the faders will not necessarily indicate the current setting, so the relevant LED will continue to flash to show this.

FIRMWARE UPDATE

On the edge of the circuit board next to the mode switch (6) there is a micro USB socket for updating the FOUR LED's firmware, using the SynthTribe application.

HINTS AND TIPS

- Use the output of one LFO to modulate the selected parameter of another. Or cascade your modulation . . .
- In free-running mode use a square wave from one LFO to reset another.

Specifications

Inputs

CV in

Type	4 x 3.5 mm TS jacks, DC coupled
Impedance	>1 MΩ, unbalanced
Max input level	10 V p-p

Reset/Sync In

Type	4 x 3.5 mm TS jack, DC coupled
Impedance	>1 MΩ, unbalanced
Max input level	10 V p-p

Outputs

Sine Out

Type	4 x 3.5 mm TS jack, DC coupled
Impedance	>1 MΩ, unbalanced
Max output level	10 V p-p

Assign Out

Type	4 x 3.5 mm TS jack, DC coupled
Impedance	>1 MΩ, unbalanced
Max output level	10 V p-p

Square Out

Type	4 x 3.5 mm TS jack, DC coupled
Impedance	>1 MΩ, unbalanced
Max output level	10 V p-p

Controls

Sliders	4 x function attenuator
Switches	Mode (Reset/Sync) / Assign (ramp, saw, triangle, trapezoid)
Button	Function (Free, Quad, Phase, Divide)
LED	Function (Free, Quad, Phase, Divide)

Power

Power supply	Eurorack
Current draw	95 mA (+12 V) and 69 mA (-12 V)

Physical

Standard operating temperature range	5° C to 40° C (41° F to 104° F)
Dimensions	71.12 x 128.5 x 32.6 mm (2.80 x 5.05 x 1.28")
Rack units	14 HP
Weight	0.14 kg (0.31 lbs)

Other important information

Important information

1. **Register online.**
   Please register your new Music Tribe equipment right after you purchase it by visiting musictribe. com. Registering your purchase using our simple online form helps us to process your repair claims more quickly and efficiently. Also, read the terms and conditions of our warranty, if applicable.

2. **Malfunction.** Should your Music Tribe Authorized Reseller not be located in your vicinity, you may contact the Music Tribe Authorized Fulfiller for your country listed under "Support" at musictribe.com. Should your country not be listed, please check if your problem can be dealt with by our "Online Support" which may also be found under "Support" at musictribe.com. Alternatively, please submit an online warranty claim at musictribe.com BEFORE returning the product.

3. **Power Connections**
   Before plugging the unit into a power socket, please make sure you are using the correct mains voltage for your particular model. Faulty fuses must be replaced with fuses of the same type and rating without exception.

FEDERAL COMMUNICATIONS COMMISSION COMPLIANCE INFORMATION

Behringer

FOUR LFO

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**

FOUR LFO
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.

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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/

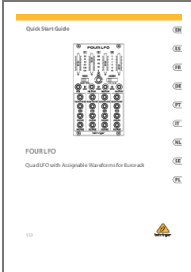EU Representative: Music Tribe Brands DK A/S Address: Gammel Strand 44, DK-1202 København K, Denmark

UK Representative: Music Tribe Brands UK Ltd. Address: 6 Lloyds Avenue, Unit 4CL London EC3N 3AX, United Kingdom

We Hear You

Documents / Resources

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FOUR LFO, Quad LFO with Assignable Waveforms for Eurorack, FOUR LFO Quad LFO with Assignable Waveforms for Eurorack, FOUR LFO Quad LFO with Assignable Waveforms, FOUR LFO Quad LFO, Quad LFO

References

- Ⓜ **Music Tribe**
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