

ETHER

User Manual

v1.0



Thank you for purchasing ETHER.

Ether is a 4HP output module, the bridge from your eurorack system to professional recording and live environments. A compact, effortless, crystal-clear, and reliable connection to the outside world, matching high-end DI box performances.

Eurorack levels are too high for most audio gear. Ether is calibrated for studio mixers, active speakers, audio interfaces, recorders, FX pedals, and headphones. It provides balanced 6.35 mm TRS line-level outputs and a dedicated 6.35 mm stereo headphones amplifier, with independent volume control.

Staying true to our DNA, we draw from forgotten past to innovate. While many premium solutions rely on rare, expensive transformers, we took inspiration from a vintage French military radio circuit made for maximum signal integrity using stable, time-proven components.

The core of the original design is a 1972 op-amp that looks modest on paper but performs exceptionally well with precisely tuned resistor and capacitor values. We adapted the circuit for modern, reliable op-amps while preserving the strengths of the original design, achieving some of the lowest noise and distortion levels in eurorack.

Waranty

BLACK NOISE warrants its products to be free of defects in materials or workmanship and to be conform with the specifications at the time of shipment for a period of two years from the date of purchase. During that period any malfunctioning or damaged units will be repaired, service and calibrated into your workshop.

This warranty does not cover any problems resulting from damages during shipping, incorrect installation or power supply, abusive treatment, or any other obvious user-inflicted fault. If your product warranty is passed, it still can be serviced as long as parts are available in our workshop. We reserve the right to charge for labor, parts and transit expenses where applicable.

Before sending your product to our workshop please contact us for RMA and details. Any unsolicited parcel will be rejected and or returned. The postage to our workshop is on the customer. The return of your module is on us. BLACK NOISE cannot take any responsibility for damages caused during transport.

Contact us

contact@blacknoisemodular.com



Specs

Width: 4HP

Depth: 33mm

Power: +12V: 36mA

-12V: 36mA

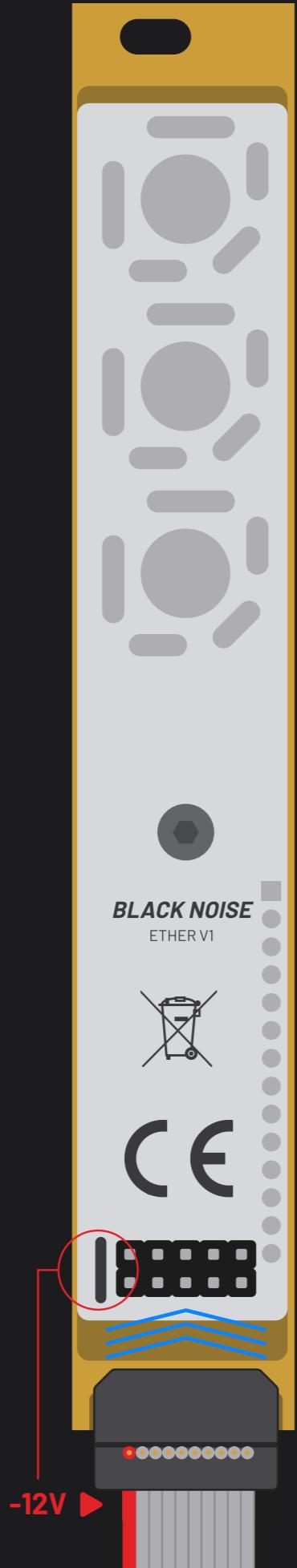
+5V: 0mA



The Ether begins

Installation

1. Turn off your Eurorack system and unplug the power cord.
2. Connect the provided ribbon cable's 16-pin head to the system's power bus, making sure the red stripe matches the one indicated on the bus.
3. Connect the provided ribbon cable's 10-pin head to Ether, making sure the red stripe matches the -12V black line indicated on the module.
4. Place Ether on the rails of your system.
5. Plug your system's power cord back in and turn it on.

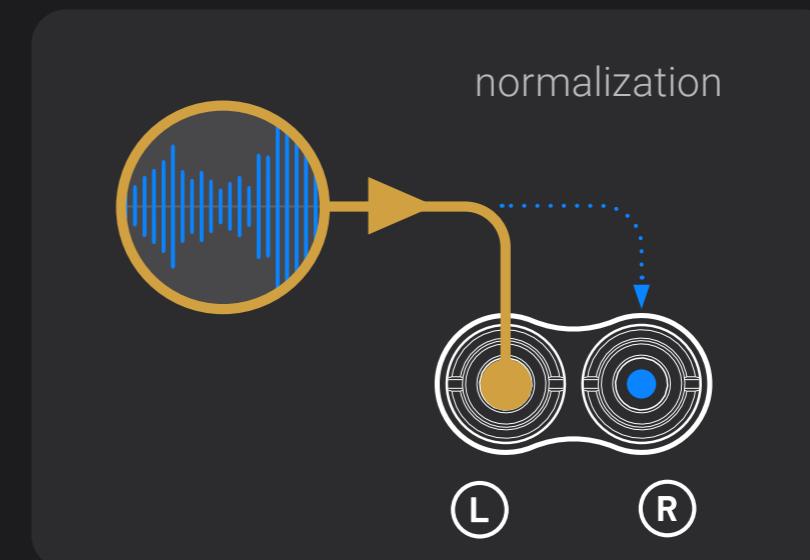




Looking through the Ether

1 Ether expects standard eurorack level audio signals to ensure optimal output performance.

For mono sources, the signal sent to the L input is internally normalized to the R channel. This normalization is automatically lifted when a jack is inserted into the R input.



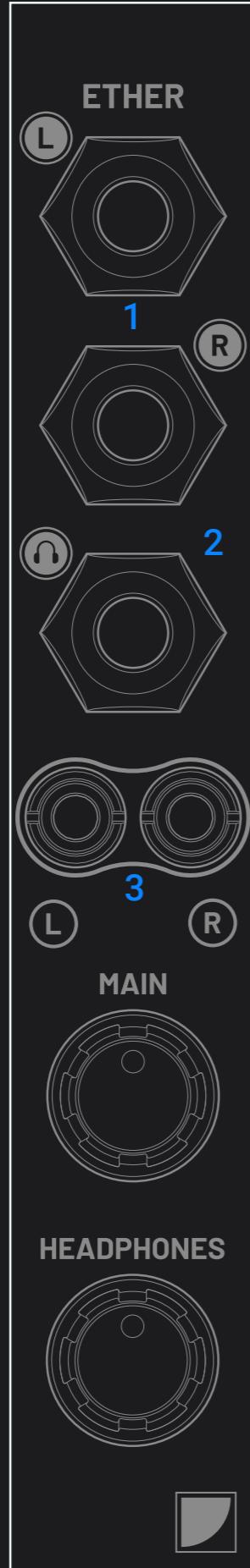
2 The two **LEDs** monitor the input level.

3 **Line outputs** are balanced to prevent ground loops and reduce noise over long cable runs. Their level is controlled by the **MAIN knob**.

4 **The headphones output** is a stereo channel with its own independent level control. It can also serve as an alternate stereo line output.



Looking through the Ether



3

1 Main outputs

- Max Level : +10 dBu
- Impedance : 250Ω

Signal integrity

- TDH + N : 0,03%
- SNR : > 120 dB
- Frequency response : 20 Hz - 20 kHz

Stereo field

- Phase deviation : < 1,6°
- Crosstalk : < -86 dB

2 Headphones output

- Max Level : +10 dBu
- Impedance : 250Ω

3 Inputs

- Nominal Input Level : +7 dBu
- Max Input Level : +21 dBu
- Headroom : +14 dBu