ETHER

Build Instructions

V1.0

Building the Ether

Thank you for purchasing the Ether DIY Kit.

This kit is designed for through-hole assembly: all SMD components are already pre-soldered. The project is well within reach for anyone with basic soldering experience, take your time and follow the instructions step by step.

Warranty

BLACK NOISE warrants the contents of this kit to be free of defects in materials or workmanship and to conform to specifications at the time of shipment for a period of two years from the date of purchase.

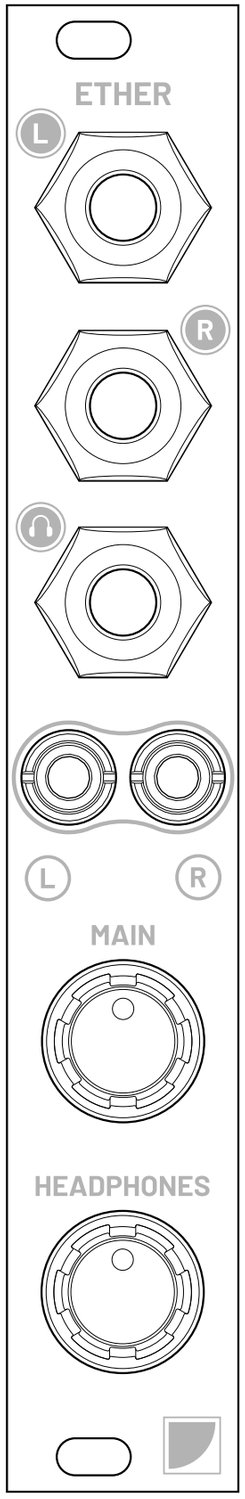
BLACK NOISE cannot be held responsible for damage resulting from incorrect assembly, soldering errors, or faulty handling during the build process.

Due to the difficulty of troubleshooting or debugging a module remotely, we do not provide assistance.

If your module is not functional due to an error during assembly, you can use our repair service: Magic Smoke Club.

For more information, please visit

www.blacknoisemodular.com



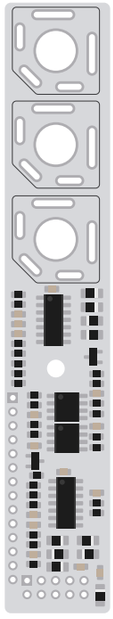
Check the components list

Before starting the build, make sure you have all the components listed in the kit.

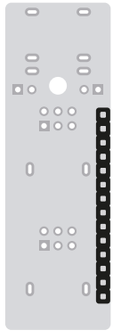
Keep each bag's components separated, as they will be used in sequence during the build.

01 Faceplate

02 PCB Control Board



03 PCB Main Board



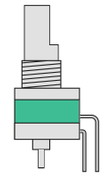
M3 Hex Screw

A1 **x2**

M3 Spacer

A2 **x1**

Pot. Stereo B100K-D



A3 **x2**

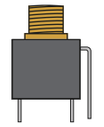
LED THT

A4 **x2**

LED Spacer

A5 **x2**

Mono Jack Conn.



A6 **x2**

Jack Nut

A7 **x2**

Pot Nut Black

A8 **x2**

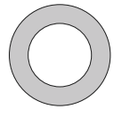
TRS 6.5 Jack Conn.

A9 **x3**

6.5 Jack Nut Black

A10 **x3**

6.5 Jack Washer



A11 **x3**

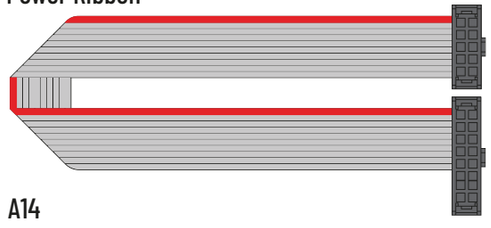
Knob

A12 **x2**

Knob Cap

A13 **x2**

Power Ribbon



A14 **x1**

Install spacer on the back of the small board

Take the small PCB (control board).

Insert the 3 mm screw from the front side.

On the back side, fix the metal spacer onto the screw.

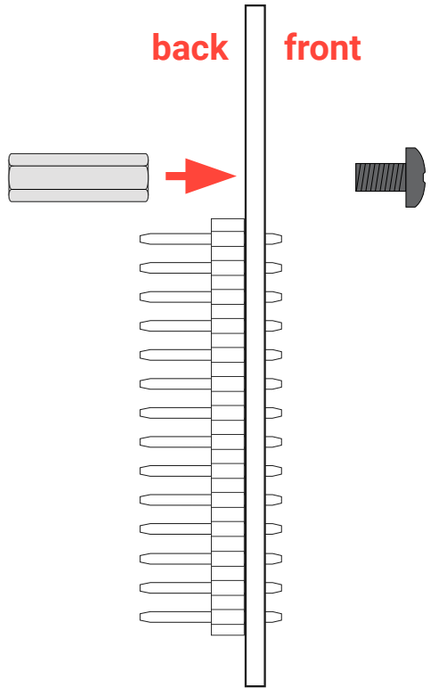
4

M3 Hex Screw

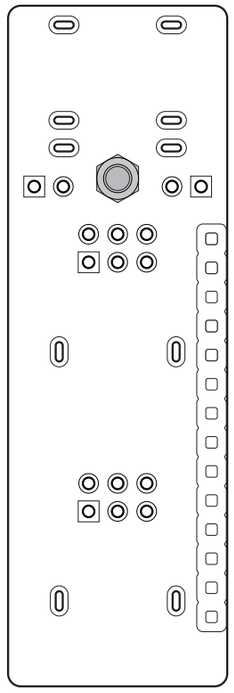
A1 **x1**

M3 Spacer

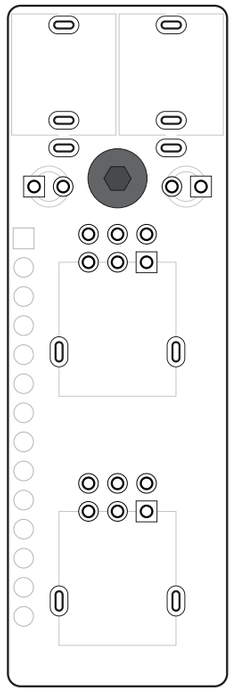
A2 **x1**



Left Side



Back Side



Front Side

Insert the 2 potentiometers

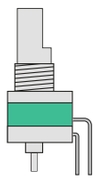
Do not solder yet!

Lightly bend the side legs inward so they slide in more easily.

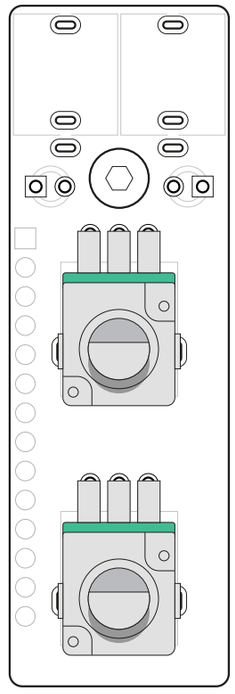
Insert the 6 main pins first.

Insert the side legs one after the other. Take your time and be patient.

Pot. Stereo B100K-D



A3 **x2**



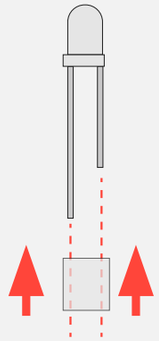
Front Side

Insert the LEDs and LED spacers

Do not solder yet!

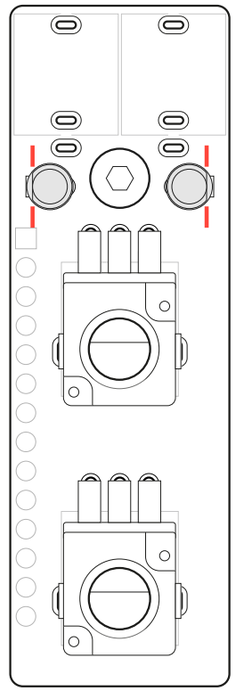
Insert the two LEDs into the provided plastic LED spacers.

1. Make sure the LEDs sit flush in the spacers.



2. Observe the polarity: the long leg (anode) goes in the round hole, the short leg (cathode, flat side) goes in the square hole. Make sure of the correct orientation by looking at the PCB from the back side and confirming that the short leg comes out of the square pad.

LED THT	LED Spacer
	
A4 **x2**	A5 **x2**



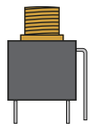
Front Side

Insert the 2 minijack sockets

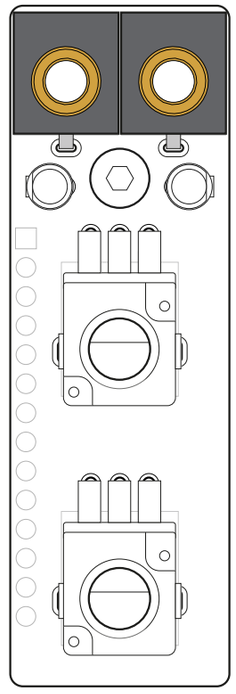
Do not solder yet!

Place the two 3.5 mm jack sockets.

Mono Jack Conn.



A6 **x2**

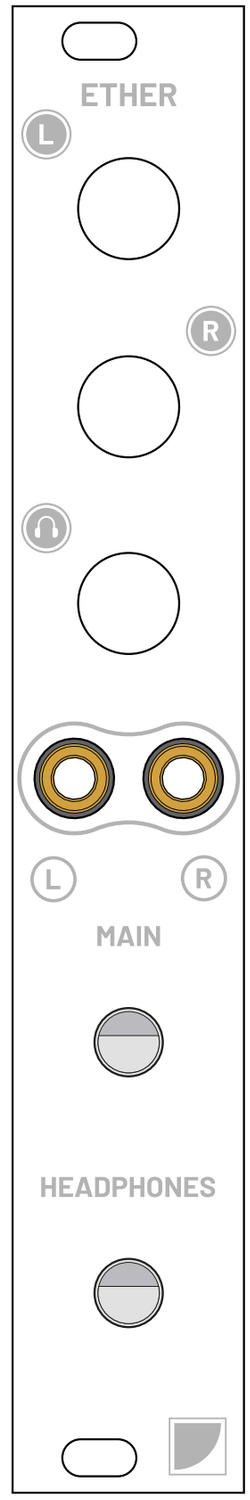


Front Side

Place the faceplate

Carefully slide the faceplate over all the components.

Ensure it doesn’t get stuck on any potentiometer shafts, or jacks.

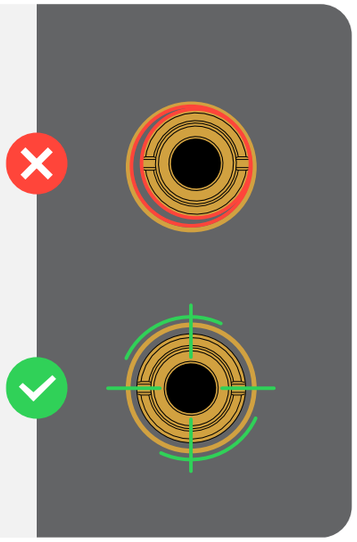


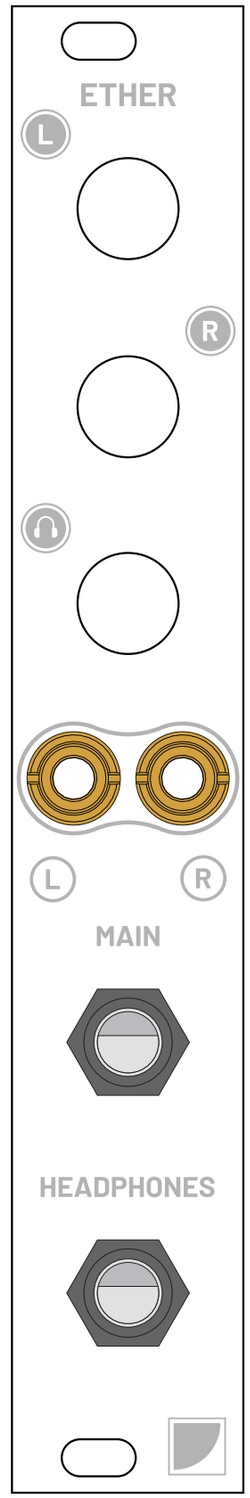
Front Side

Secure the faceplate

Place the potentiometer and jack nuts.

When a circle is printed around a jack nut on the faceplate, make sure the nut is centered within that circle before tightening it.





Front Side

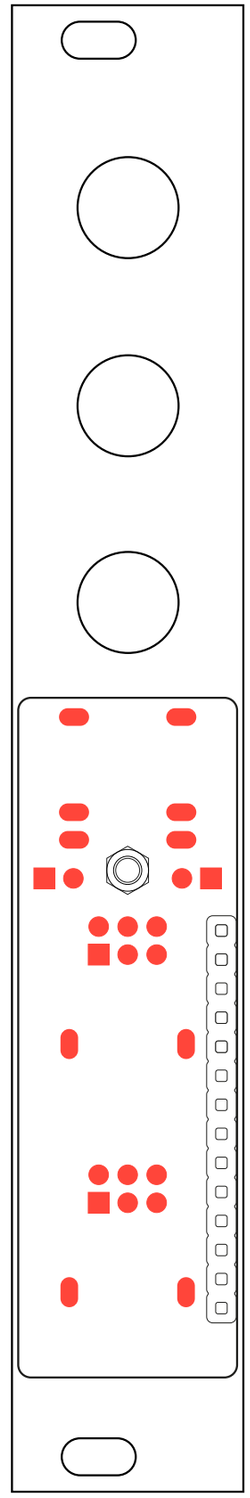
Jack Nut	Pot Nut Black
	
A7 **x2**	A8 **x2**

Solder the components

Potentiometers, LEDs, and jacks can now be soldered.

Check that all pins are soldered and that there are no solder bridges. Then clean the flux residue if needed.

After soldering, cut the excess legs of the LEDs flush with the PCB.



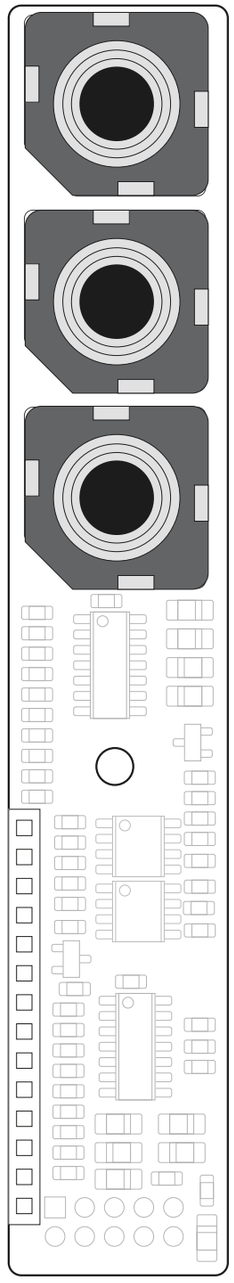
Back Side

Insert the TRS jack sockets

Do not solder yet!

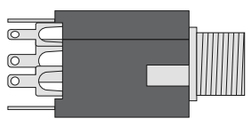
Take the large board (main board).

Insert the three 6.35 mm TRS jack sockets.



Front Side

TRS 6.5 Jack Conn.



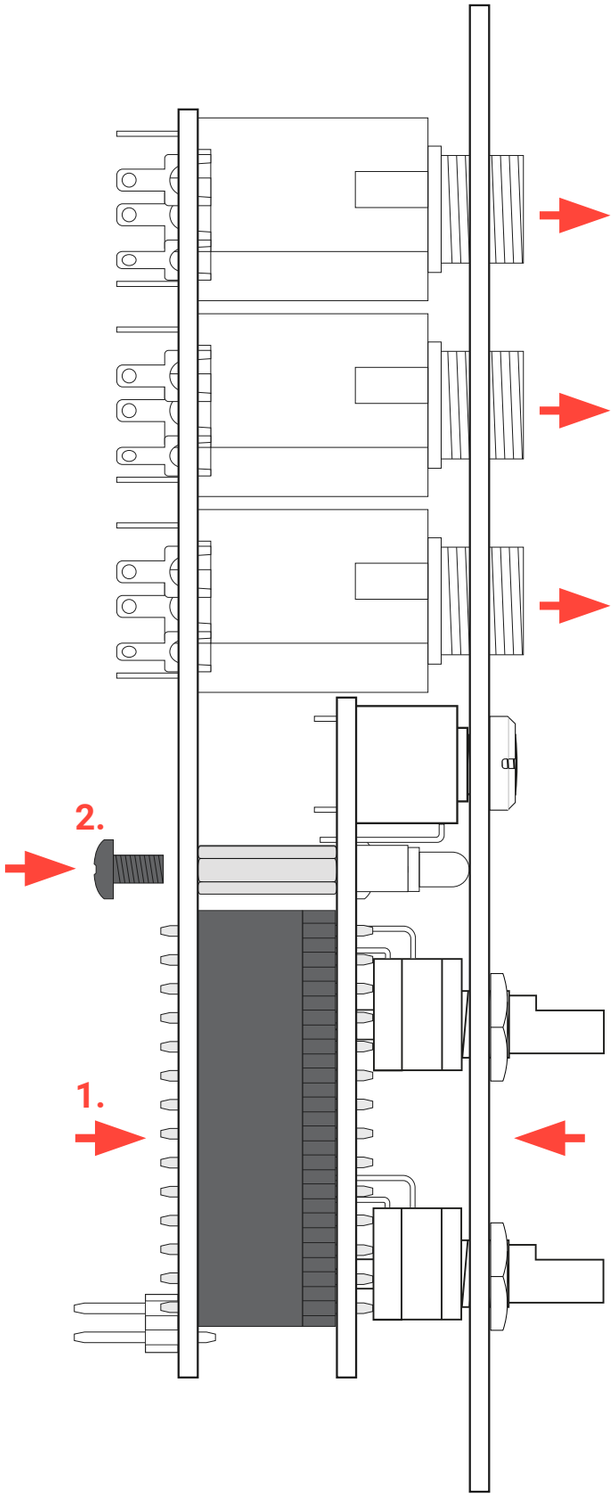
A9 **x3**

Connect the main board to the control board

Insert the 14-pin male header into the 14-pin female header to connect the two boards together (**1**).

Press gently until both boards sit flush.

On the back side, insert the second screw into the spacer to tighten the build (**2**).



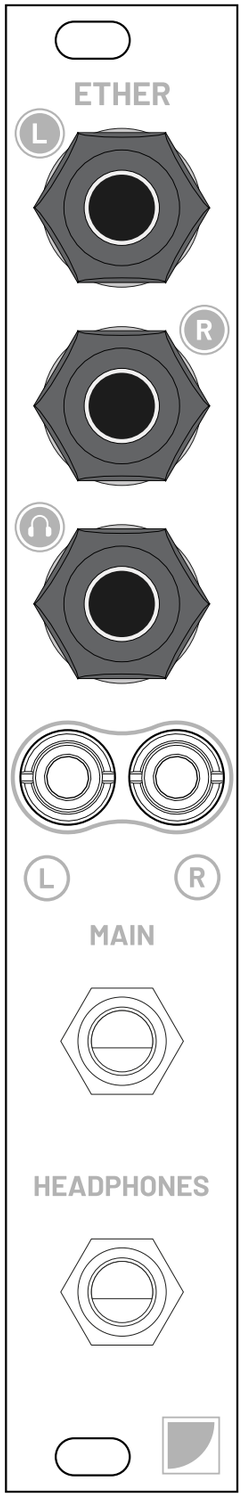
Left Side

M3 Hex Screw

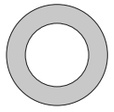
A1 **x1**

Install the TRS jack nuts

Place the jack washers and nuts on the 6.5 Jack sockets.



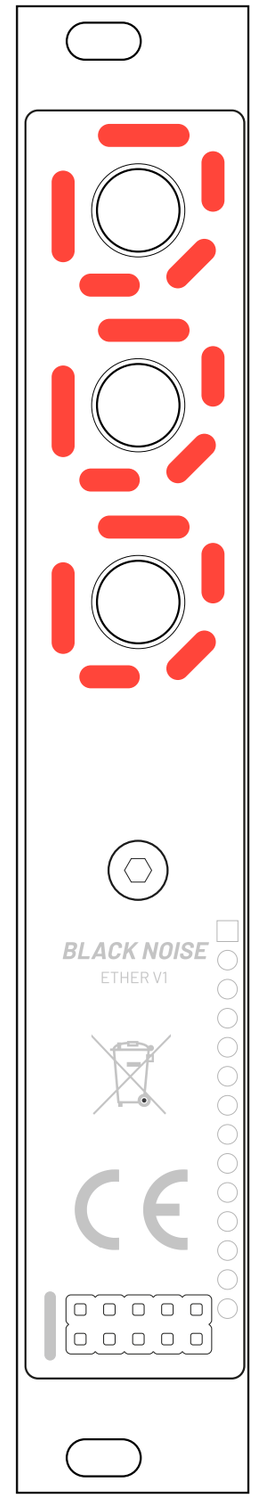
Front Side

6.5 Jack Nut Black	6.5 Jack Washer
	
A10 **x3**	A11 **x3**

Solder the TRS jack sockets

The TRS jacks can now be soldered.

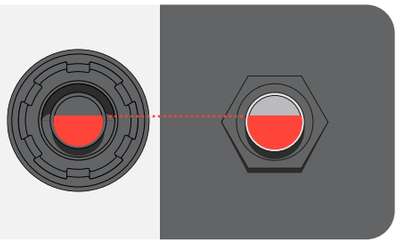
Clean the flux residue if needed.



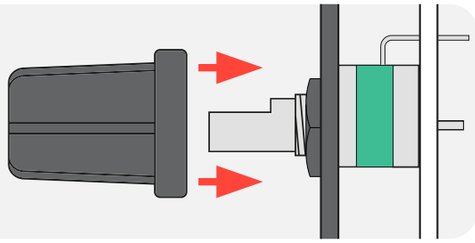
Back Side

Install the knobs

1. Align the D-shape inside the knob with the D-shape of the potentiometer shaft.



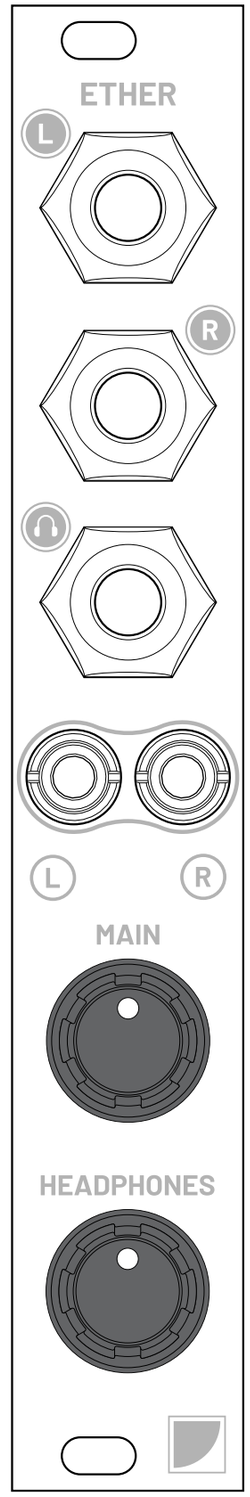
2. Place the knob on it potentiometer.



3. Turn the knob fully counter-clockwise (minimum position) so it stays stable.

4. Place the cap so the white dot marks the starting position. Align the dot with the knob's slit. take your time and be gentle.

Knob	Knob Cap
	
A12 **x2**	A13 **x2**

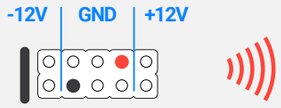


Front Side

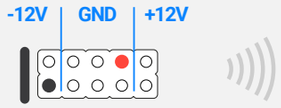
Test for short circuits

1. Set your multimeter to continuity mode (beep mode).

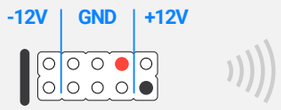
2. Place two probes on some ground pins. It should beep.



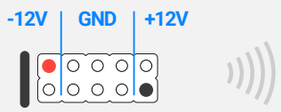
3. Keep one probe on ground and move the other one on a –12V pin. it should NOT beep.

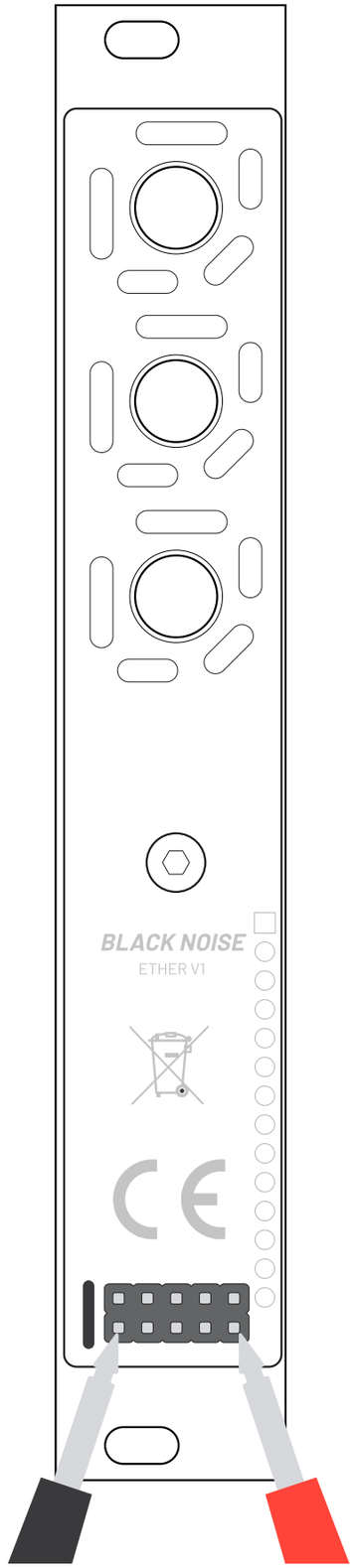


4. Keep the probe on ground and move the -12Vpin probe to a +12 V pin. it should NOT beep.



5. Keep the probe on +12 V pin and move the ground probe to a -12 V pin. it should NOT beep.





Well done!

You’ve successfully built and calibrated your Ether module!

You can now enjoy using it in your system.

For in-depth features and patch ideas, we recommend checking the full user manual available on the BLACK NOISE online ressources.