ST·OUT

Quick guide

Thank you for choosing ST·OUT for your Eurorack System.

Powering up

1. Turn off the power of your modular synthesizer.

2. Double check the power cord polarity. If you plug the module backwards you might damage its electronic circuits.

If you flip over your ST·OUT, you will find the "RED" mark at the PCB power connector, which must match the colored line on the ribbon cable.

3. Once you have checked all the connections, you can turn on your modular system.

4. If you notice any anomalies, turn your system off right away and check again your connections.

Description

ST·OUT is a **balanced stereo output** interface designed to connect your modular system to **external gear** (like mixers, speakers, audio interfaces, or recorders) with clean gain, tone shaping, and dynamic control.

It converts modular-level signals to balanced line-level, ensuring clarity and consistency across a wide range of setups.

A **Drive switch** adds soft or hard clipping for subtle coloration or aggressive saturation. The **Tilt EQ** knob helps you quickly shape your mix's tonal balance, while the detailed VU meter keeps your levels in check.

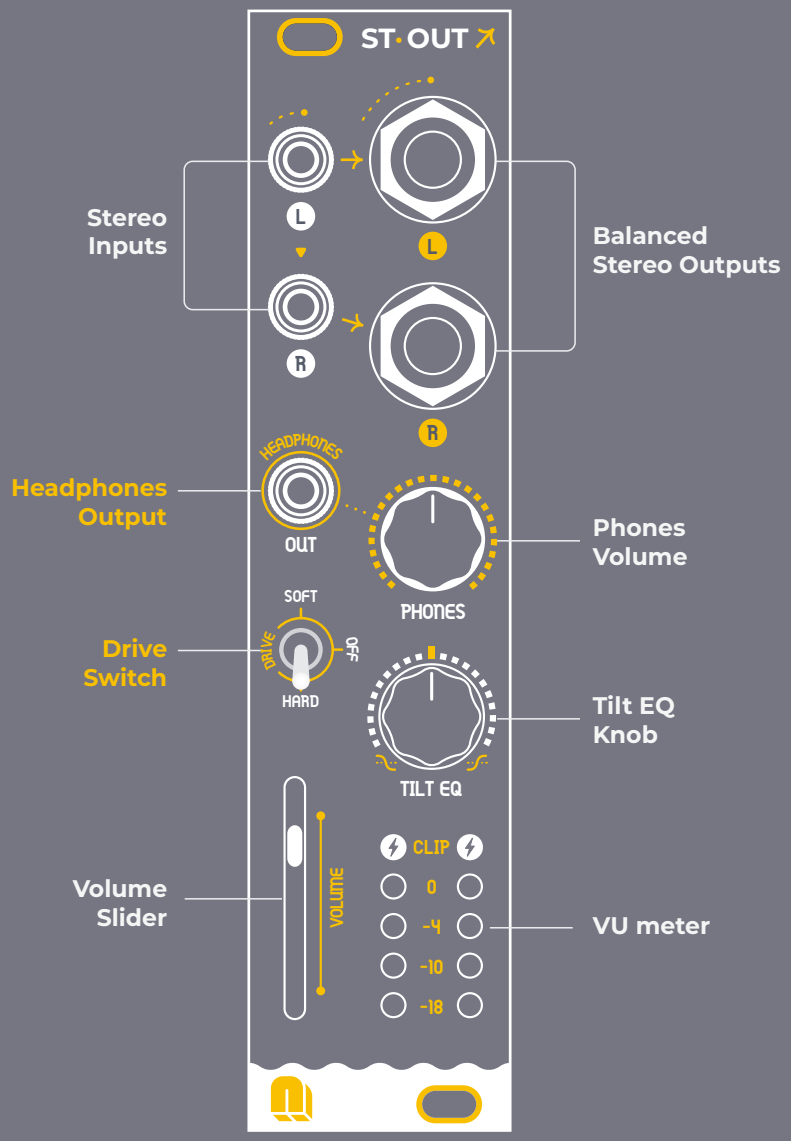
ST·OUT also features a dedicated **headphone output** with separate volume control, making it ideal for direct monitoring or use as a secondary stereo out.

Key features

- **Stereo balanced outputs**
- **Drive switch (Off / Soft / Hard)**
- **Tilt EQ**
- **Headphones out with independent volume**
- **VU Meter with clip indicator**
- **AC Coupled: 0dB = 3Vpp (Line level)**

Layout · General view

This image will clarify the function of each of the elements of the module.



Controls

- **Phones Volume Knob**

  Controls the output level of the headphones jack. Independent from the main volume slider.

Fig.1 Detail of Phones Knob

- **Tilt EQ Knob**

  Adjusts the global tone of the output by tilting the frequency response around a central point: boosting highs while cutting lows (or vice versa) with a single control.

Fig.2 Detail of Tilt EQ Knob

- **Drive** Switch
  Adds analog coloration and soft clipping to the output signal.

  - **Off.** Clean signal.
  - **Soft.** Saturates above 5V, softly limiting peaks for subtle warmth.
  - **Hard**. Pronounced clipping around 3.3V for aggressive, driven textures.

Fig.3 Detail of Drive Switch

- **Volume Slider**

  Main volume control for the stereo output. Visual alignment with the VU meter makes it easy to adjust levels quickly.

VU Meter
Displays the output signal level in real time. Helps ensure proper gain staging and avoid unwanted clipping. Red LEDs indicate when clipping is occurring.

AC Coupled: 0dB = 3Vpp (Line level)

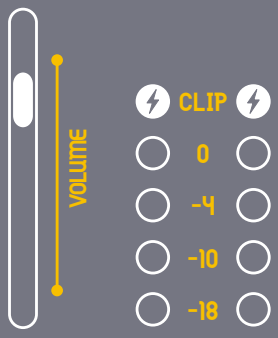


Fig.4 Detail of Volume Slider & VU Meter

Inputs & Outputs

• Inputs

Stereo Inputs (L/R)
3.5mm inputs for receiving modular-level audio. The left input is normalled to the right if no cable is connected.

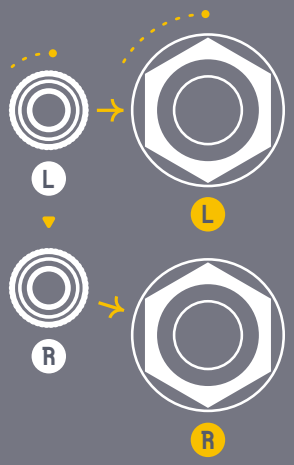


Fig.5 Detail of L/R Inputs (White) & Outputs (Yellow)

• Outputs

Stereo Outputs (L/R)
Balanced 1/4" TRS outputs designed to send your modular audio to mixers, sound cards, speakers, or any line-level destination.

Headphones Out
A 3.5mm stereo jack for monitoring the final output directly. Can also be used as an auxiliary stereo output or to drive small passive speakers.

Fig.6 Detail of Headphones Out

Compliance

This device complies to the **EU guidelines** and is manufactured **RoHS** conforming without use of led, mercury, cadmium and chrome. Nevertheless, this device is special waste and disposal in household waste is not recommended.

This device meets the requirements of the following standards and directives:

- **EMC: 2014/30/EU**
- **EN 55032.** Electromagnetic compatibility of multimedia equipment.
- **EN 55103-2.** Electromagnetic compatibility - Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use.
- **EN 61000-3-2.** Limits for harmonic current emissions.
- **EN 61000-3-3.** Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems.
- **EN 62311.** Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields.
- **RoHS2: 2011/65/EU**
- **WEEE: 2012/19/EU**

Guarantee

This product is covered by **2 years of guarantee** on purchased goods, which begins when you receive your package.

- **This guarantee covers**

  Any defect in the manufacturing of this product.
  Replacement or repair, as decided by NANO Modules.

- **This guarantee does not cover**

  Any damage or malfunction caused by incorrect use , such as, but not limited to:
  - Power cables connected backwards.
  - Excessive voltage levels.
  - Unauthorized mods.
  - Exposure to extreme temperature or moisture levels.

Please contact our customer service - jorge@nanomodul.es - for a return authorization before sending the module. The cost of sending a module back for servicing is paid for by the customer.

Technical Specifications

Dimensions 6HP – 30×128,5mm
Current +12V 50mA / +5V 0mA / -12V 50mA
Input & Output Signals ±10V
Impedance Input 100k - Output 50
Materials PCB and Panel - FR4 1,6mm
Depth 40mm including connectors - Skiff friendly

Modules are designed and assembled in València.

Contact

Bravo!
You have learned the basic fundamentals of your ST·OUT Module.

If you have any doubts, please feel free to contact us.
nano-modules.com/contact