



MAR

Quick guide

Thank you for choosing MAR 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 MAR, 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

MAR is a **Multichannel Dual Mixer** module designed for its use on modular synthesizers. Due to its DC-coupled connections, this module is capable of mixing audio, CV and gate signals between $\pm 10V$.

• Mixer X

Four-channel mixer with gain control for each X channel. This mixer features 2 outputs, the mixer's own output and its inverted. The output level is shown in the X LED.

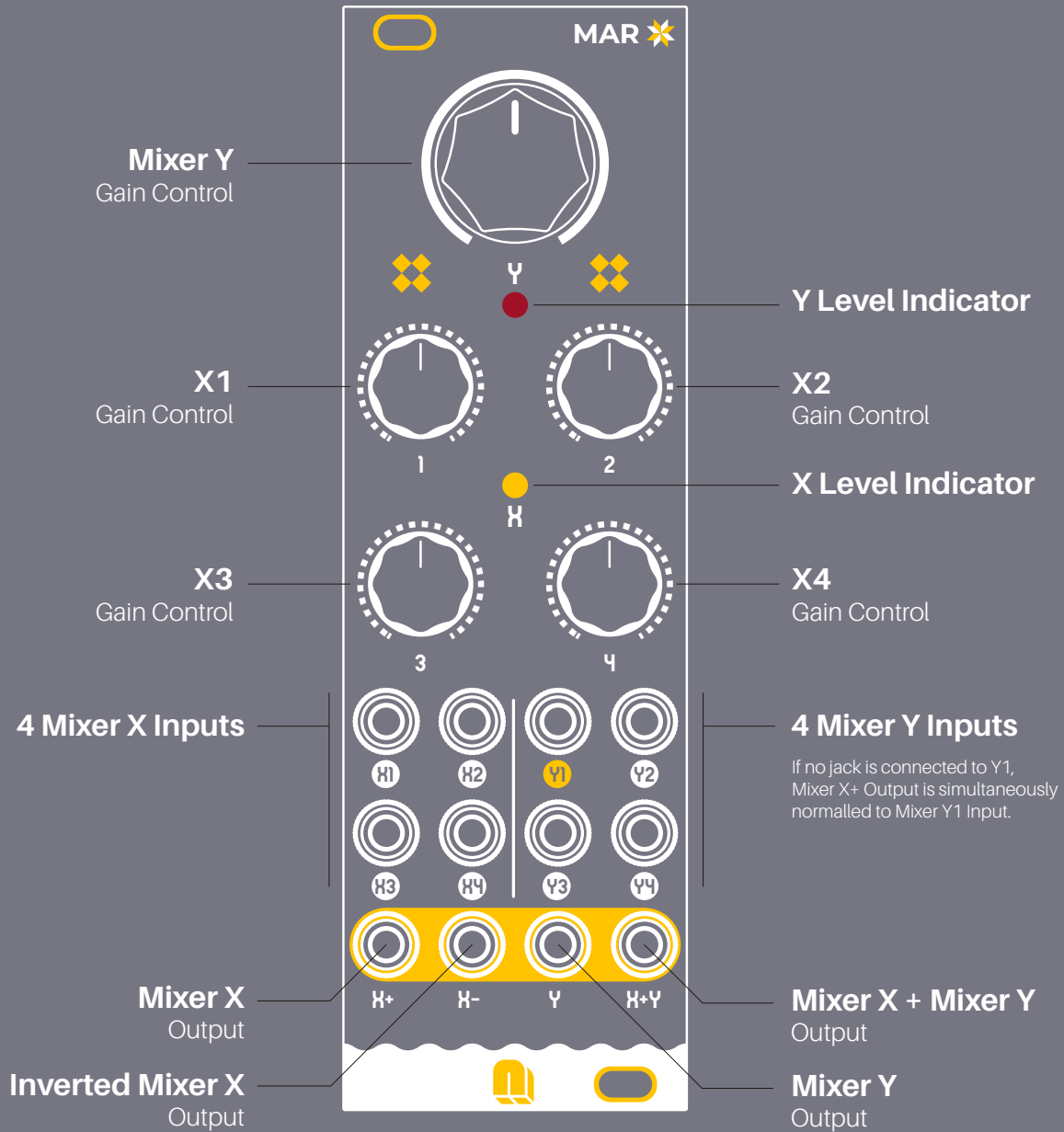
• Mixer Y

Four-channel mixer with gain control for the sum of the Y channels. This mixer features one output. The output level is shown in the Y LED.

All potentiometers use logarithmic tape to have a good control with audio signals.

Layout

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



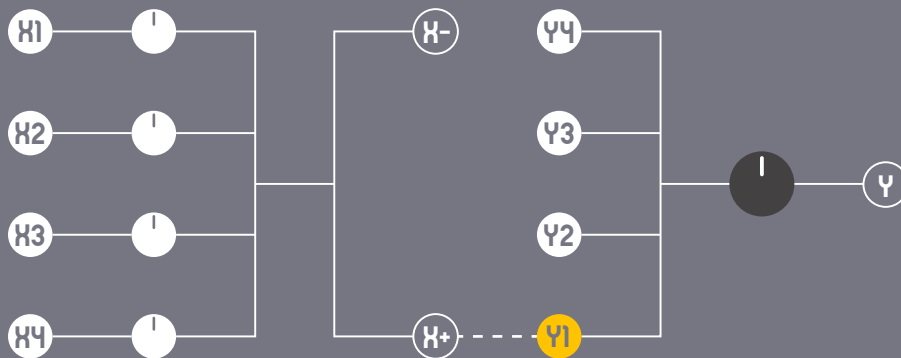
What about Y1 input?

• Y1 Not Connected

If no jack is connected to Y1, Mixer X+ Output is simultaneously normalised to Mixer Y1 Input.

This means it is possible to add Mixer X+ Output to Mixer Y's Inputs without the need to use an external patch cable.

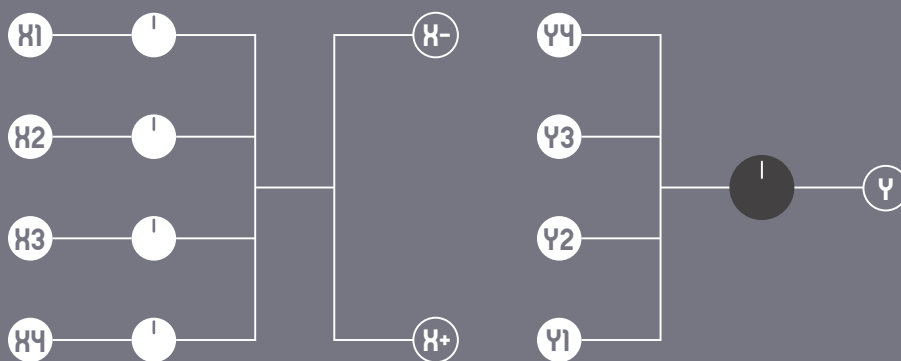
What is this for? You can use Mixer Y's Gain Control as a Global Gain Control in the Y Output!



Block Diagram if Y1 is not connected.

• Y1 Connected

If a jack is connected to Y1, Mixer X and Mixer Y work independently.



Block Diagram if Y1 is connected.

In both cases, X+Y Output will always work the same way, being the sum of X+ and Y.

Compliance

This device complies to the **EU guidelines** and is manufactured **RoHS** conforming without use of lead, 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 8HP 40x128,5mm

Current 14 mA +12V / 16 mA -12V / 0 mA +5V

Input & Output Signals between $\pm 10V$

Impedance Input 100k - Output 10k

Materials PCB and Panel - FR4 1,6mm

Depth 20mm - Skiff friendly

Modules designed and assembled in València.

Contact

Bravo!

You have learned the basic fundamentals of your MAR Module.

If you have any doubts, please feel free to contact us.

nanomodul.es/contact