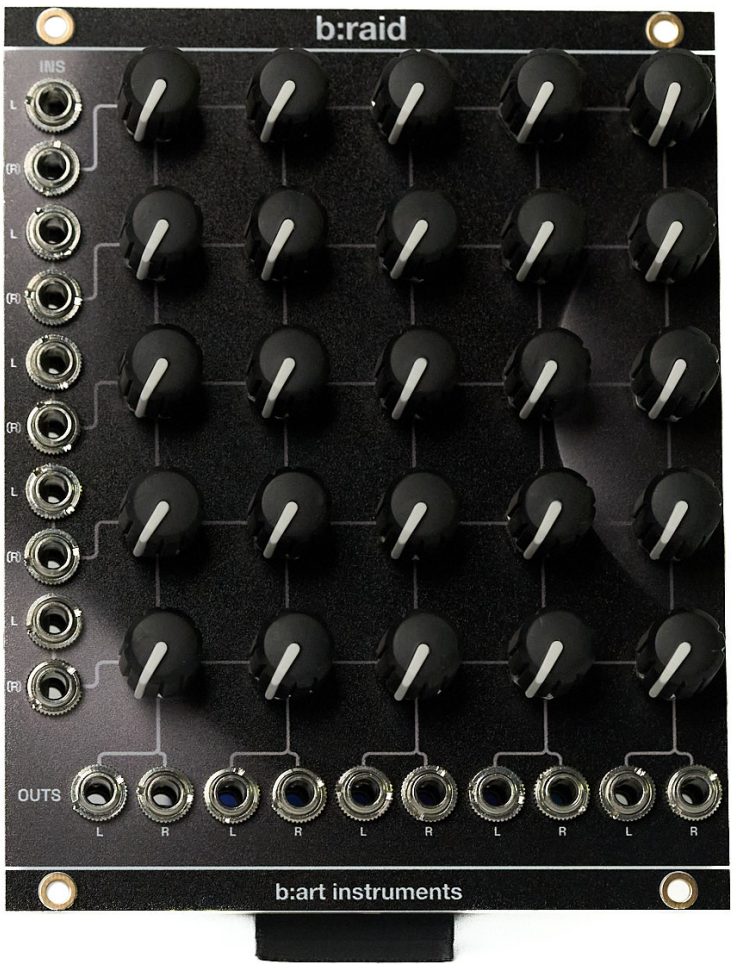
b:art instruments

b:raid

5x5 infinitely expandable stereo matrix mixer



User Manual

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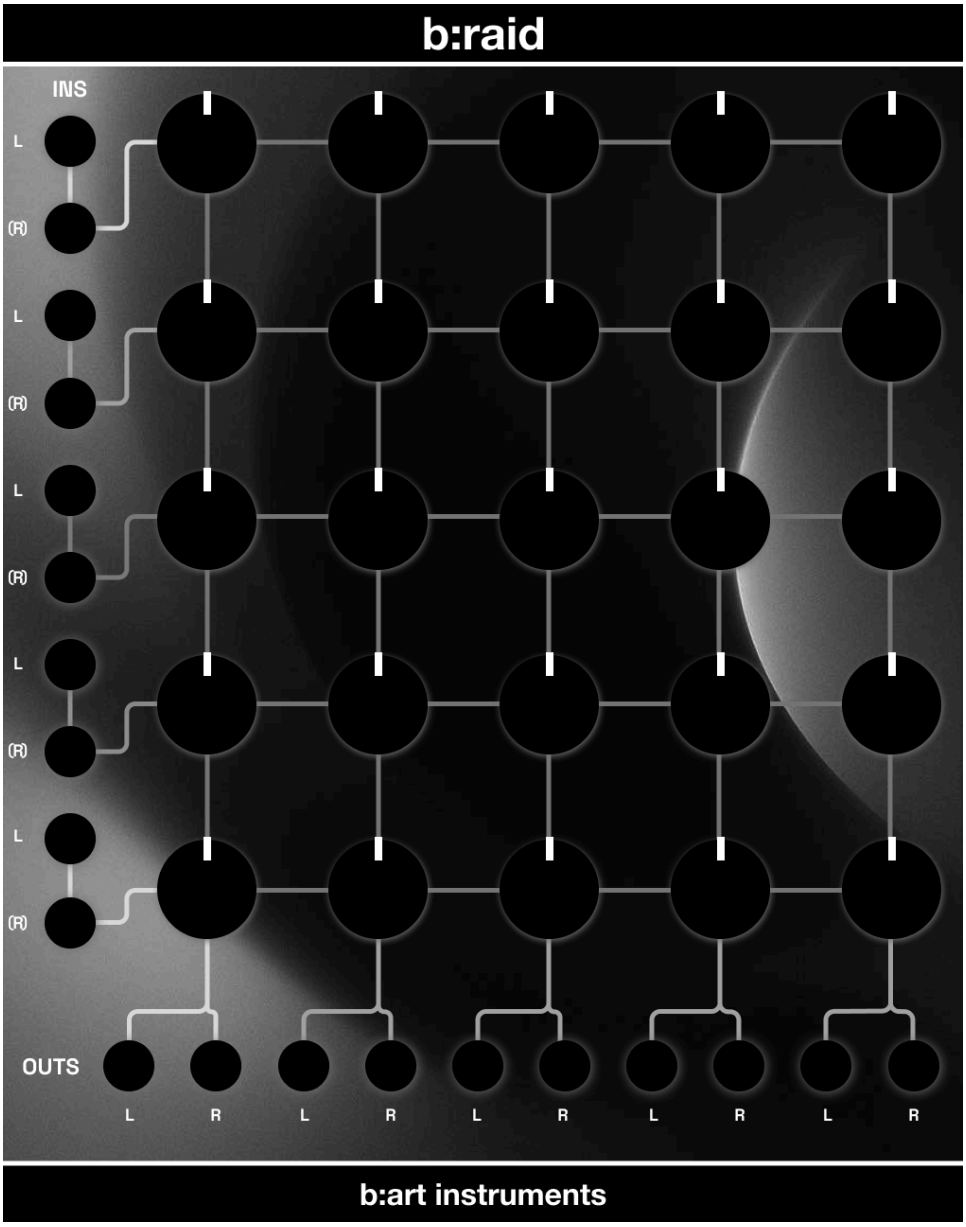
Installation

1. Ensure that your Eurorack system is powered off.
2. Connect the 10-pin IDC connector to the back of the module.
3. Connect the 16-pin IDC connector to the power supply board inside your Eurorack case.
4. Optionally connect one or more additional modules as described on **page 5**. Use only the supplied 20-pin fine-pitch IDC cables.
5. Mount the module(s) to the case using M3 screws.
6. Power on your Eurorack system.

Safety information

- Do not expose the module to moisture or extreme temperatures.
- Do not operate the module in environments with excessive amounts of dust in the air.
- The module's inputs are protected against electrostatic discharge, but be careful when handling the module itself.

Controls



b:raid is organized as a 5×5 matrix. Each input can be routed to each output with an individual level control at every crossing point.

The controls are arranged as a grid, making it easy to see how each input interacts with each output. This layout keeps the module simple to read while still offering a large amount of routing flexibility.

Because the module is stereo, each control point affects both left and right channels together through a dual-gang potentiometer.

Matrix mixer basics

Unlike a regular mixer, where signals are summed into a single destination, a matrix mixer lets each input be sent independently to several outputs. This makes it useful for routing, parallel processing, feedback setups, and more complex signal distribution.

In **b:raid**, every input has its own dedicated row of controls, and every output has its own dedicated column. Turning up a knob adds that input to that output. This means the module can behave like several mixers at once, depending on how you patch it.

Stereo Operation

b:raid is a stereo matrix mixer, which means each input and output consists of separate left and right jacks.

The left input is normalled to the right input when the right jack is not patched. This makes mono-to-stereo use easy and keeps patching fast when a stereo source is not available.

Each matrix control moves both channels together, so stereo material stays matched through the signal path.

Alternatively, two separate mono signals can be controlled simultaneously with just one knob by patching them into the left and right input of the same channel.

Effects Sends

One of the common use cases for **b:raid** is managing effects sends.

You can route a source to one or more outputs feeding external effects, then bring the processed signal back into the matrix or into another part of your system.

This makes it easy to create parallel processing setups, shared reverb or delay paths, and flexible wet/dry balancing across several sources.

Expandability

b:raid is designed to be infinitely expandable. You can combine two modules to create a 10×5 or 5×10 matrix, and larger combinations can build into 10×10, 15×15, and beyond.

There is a dedicated expansion cable provided with each module that lets you connect them in a simple and intuitive way by following the markings on the back of the module.

Technical specifications

Operating voltages:	–12V / +12V
Power draw:	80mA –12V / 80mA +12V
Width:	20HP
Depth:	17mm (22mm with power header)
Audio inputs level:	22Vp-p (-11V/+11V)
Audio outputs level:	22Vp-p (-11V/+11V)
Input impedance:	10kΩ
Output impedance:	1000Ω

CE

This product was tested and found compliant with the following standards:
EN 55032:2015/A11:2020, EN 55035:2017, EN IEC 63000:2018.
For details, please visit:
https://www.bartinstruments.com/pages/conformity

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