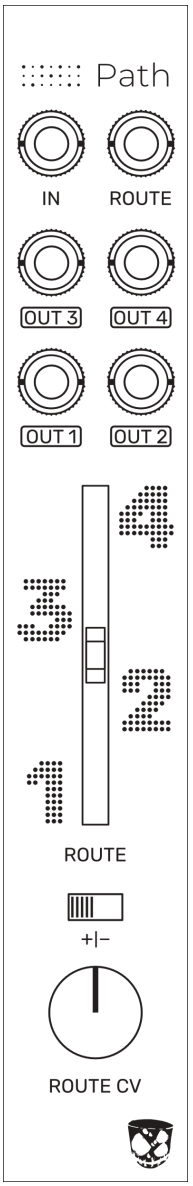


PATH

ANALOG MORPHING ROUTER

User Manual

LIMITED WARRANTY

Vostok Instruments warrants this product to be free of defects in material or construction for three years from the date of purchase (invoice required).

During that period, any malfunctioning unit will be repaired, serviced, and calibrated on a return-to-factory basis, with the customer paying the transit cost to Vostok Instruments.

Malfunctions resulting from wrong power supply voltages, backward or reverse power connections, abusive treatment, removing knobs, or any other obvious user-inflicted faults are not covered by this warranty, and regular repair rates will apply.

Vostok Instruments implies and accepts no responsibility for harm to persons or apparatus caused through the operation of this product.

The device intended for repair or replacement under warranty should be shipped in the original packaging only. Vostok Instruments can not take any responsibility for damages caused during transit. So before sending us anything, contact us at vostokinstruments@gmail.com.

INSTALLATION

Path needs a power supply capable of providing 70mA on each of the +12V and -12V rails, and 4HP of free space in your case. We strongly recommend that you check the current consumption of your system on the ModularGrid website and your power supply capabilities before plugging in the module.

To install it, turn your case off and connect the supplied power cable to both the module and your Bus Board, minding the polarity so that the RED Stripe on the cable is oriented to the -12V line on both the module and the Bus Board. Please refer to your case manufacturers' specifications for the location of the negative supply.

Always turn your case off before plugging and unplugging any Eurorack module.

INTRODUCTION

Path is a four-channel Interpolating Router created in collaboration with Ben Wilson "DivKid".

Born from the roots of our previous module, Trace, Path picks its central concept and does something relatively simple yet powerful: it flips it.

The circuit routes one signal to four possible outputs, fading from one to the next following a soft slope response to ensure smooth transitions.

Path counts with Trace's best features. It shares the same DC-coupled interpolating circuit at its heart, making it perfect for experimenting with any signal on any of its inputs.

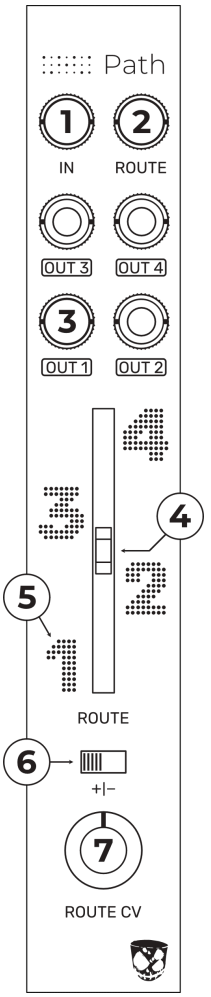
Thanks to the fixed voltage normalled at its main input, Path is also a versatile and unique modulation source out of the box.

Its compact size and layout make Path a very performative and handy tool for adding an organic layer of movement and experimentation to every patch.

TECHNICAL SPECIFICATIONS

- **Size:** 4HP
- **Current draw:** +/-12V: 70mA, +5V: 0mA
- **Depth:** 32mm (including power cable)
- **Input Impedance:** 51kΩ (Signal Input), 100kΩ (ROUTE CV Input)
- **Output Impedance:** 1kΩ

OVERVIEW



1. **Signal Input:** DC-Coupled. With nothing patched, a fixed voltage of approx. 10V is present on this input.

2. **ROUTE CV Input:** CV control over the ROUTE parameter. Range 5 Vp-p.

3. **Signal Outputs:** DC-Coupled.

4. **ROUTE Fader:** morphs through the outputs from the bottom (1) to the top (4)

5. **LED Signal Indicators:** shows the position of the routing circuit.

6. **ROUTE CV Input Mode Switch:** selects the polarity of the signal plugged into the ROUTE input between Original (left) and Inverted (right).

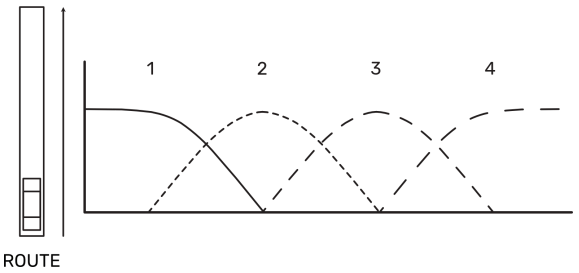
7. **ROUTE CV Input Attenuator:** controls the level of the signal plugged into the ROUTE input.

FUNCTIONAL MAP

Routing

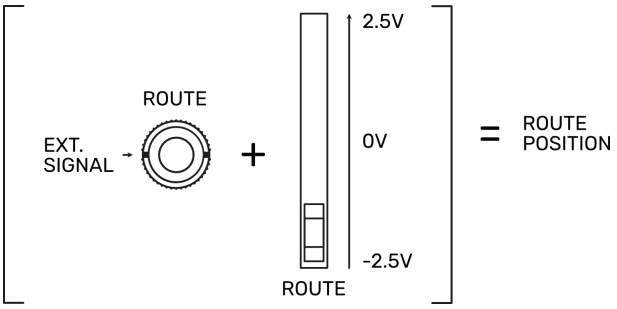
Signal routing is Path's main function. By moving the ROUTE slider from the bottom to the top, we can morph between the different outputs in ascendant order, having the first channel (1) at the bottom position and the last channel (4) at the top.

The figure shows the ROUTE circuit behavior. It works as an array of four serial macro-controlled VCAs, which allows fading between the four channels.



ROUTE CV Control

The input routing can be CV controlled using the ROUTE CV Input, which sums the value of its incoming signal to the voltage value set by the ROUTE slider. See figure below.



The circuit covers the whole routing span with 5Vp-p signals. Thanks to the onboard attenuator, hotter signals can be adjusted to work within the desired range.

If the limit of 5Vp-p is exceeded, e.g., by applying a +/-5V LFO with the attenuator fully clockwise and the ROUTE Fader at the mid position. The circuit will hold its position at the extremes till the input voltage turns down into the operating range, which can be interesting for creating an asymmetric behaviour.

The incoming signal can be inverted using the two-position switch, allowing it to reverse the routing direction concerning the incoming CV signal.