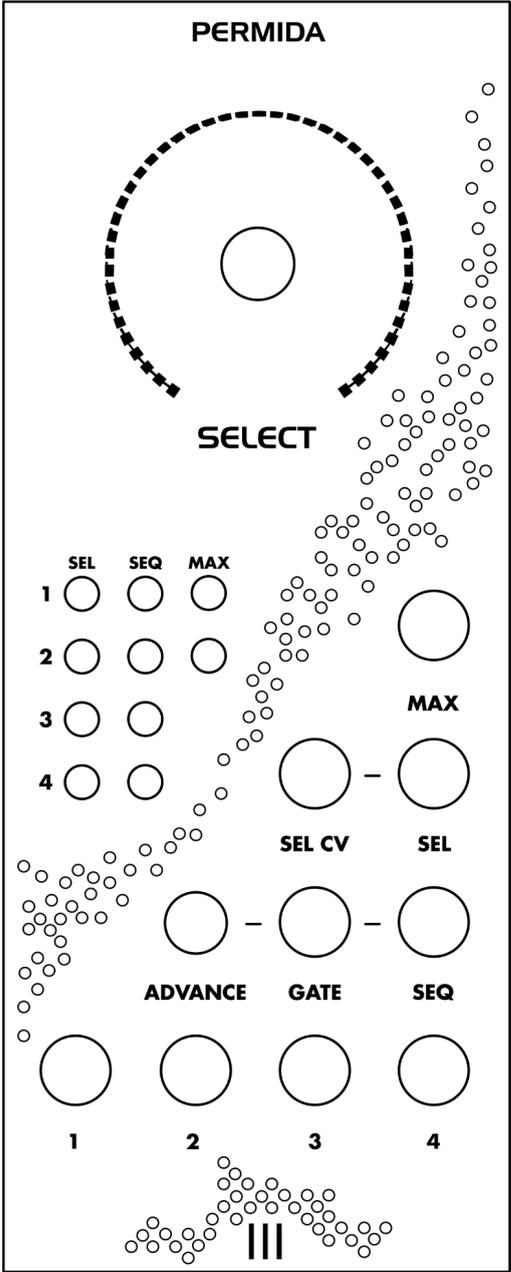


Tre Modular - Permida

User Manual

Thank you for choosing
Tre Modular - Permida Eurorack
module!

This guide will walk you through
the features, and usage of this module.



Permida:

Permida is a versatile analog utility module designed to expand signal routing and control possibilities in your system. It combines three core functions - Voltage controlled switch (Selector), Sequential Switch, and Max Value into a compact, intuitive interface with both manual and voltage-controlled operation.

Voltage-Controlled Switch (Selector):

Choose between four audio or modulation signals using the potentiometer or CV control. LEDs provide clear visual feedback of the active selection.

Select potentiometer is active only if nothing is plugged into the Select CV input.

Select potentiometer will switch at 9 o'clock, 12 o'clock and 3 o'clock.

At channel switching points it is possible to put this circuit in a glitched state where both channels can be heard at the same time.



Control voltages:

You can choose control voltage range for the Selector circuit with a jumper on the back of the module. You can set it either to 0v to +5V or -5V to +5V. This will not affect the Select potentiometer. If the control voltage is within Eurorack standards, it can exceed the jumper's set range without risk of damaging the module.

Selector voltage range:

Unipolar:

Channel 1: +900mV and below
Channel 2: +900mV to +2.4V
Channel 3: +2.4v to +3.9V
Channel 4: +3.9V and above

Bipolar:

Channel 1: -3V and below
Channel 2: -3V to 0V
Channel 3: 0V to +3V
Channel 4: +3V and above

Sequential Switch:

Step through four inputs sequentially via gate signal or Advance button. Dedicated LEDs track the current stage for precise performance control.

Sequential switch gate input will accept any signal above +2.1V even if it is not a square wave.

Maximum speed for the gate signal is 1kHz . Signals faster than this will make sequential switch glitch and at higher speeds freeze until it receives a signal that is within its range of operation. It does not damage the unit in any way so feel free to experiment.

Max Value Circuit:

Compare incoming signals and output the maximum value in real time.

Operates with bipolar signals from -5 V to $+5\text{ V}$, accepting both modulation and audio signals. Signals above this range may clip.

Due to the nature of this circuit, if you unplug the source signal but leave the patch cable connected to Permida, the Max Value circuit can produce glitched sound or no sound at all. To restore operation, unplug the cable from Permida. This will not cause damage to the module.

If all inputs are left unplugged, MAX output will default to -5 V .

Additional:

Inputs are normalled in the following order:

Channel 1 → Channel 2 → Channel 3 → Channel 4 → Channel 1

Specifications:

Module width: 10 HP

Module depth: 25mm

Sequential switch max speed: 1kHz

Signal input: +/- 5v

Power Consumption: 36mA at +12V / 32mA at -12V

Reversed polarity protection

Controls:

Select potentiometer: Selects one of four signals.

Voltage-Controlled Features:

Selector CV: Provides voltage control over the Selector circuit.

Inputs:

Signal inputs: Four inputs for audio or modulation signals.

Sequential switch gate input: Gate input for advancing the sequential switch.

Outputs:

Max value output: Outputs the Max value signal.

Selector output: Outputs the selector signal.

Sequential switch output: Outputs the sequential switch signal.

Buttons:

Advance button: Advances the sequential switch by one step.

LEDs:

Max value LEDs: Indicate activity of the Max value circuit.

Sequential switch LEDs: Indicate activity of the sequential switch circuit.

Selector LEDs: Indicate activity of the Selector circuit.

Installation:

Power off your Eurorack system.

Insert the module into an available slot.

Connect the power cable, ensuring correct polarity.

Power on your Eurorack system.

Enjoy!

Additional Information:

For any additional questions or support, please contact Tre Modular at support@tremodular.com.

Happy patching!

