

# MIDI



## **Description**

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MIDI is a plug and play solution for interfacing with your computer or MIDI hardware. Four modes provide monophonic, duophonic, dual mono, and quad trigger operation.

MIDI clock, CC messages, and note on messages are all easily accessible between the four modes. The status LED provides clear indication of MIDI data being received by the module. Class compliant MIDI device on Mac/PC/Linux. Get connected with MIDI.

- USB mini connector
- 2 CV outputs (12 bit resolution)
- 2 Gate outputs
- MIDI Clock
- Class compliant MIDI device on Mac/PC/Linux
- MIDI monitor status LED

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## **Installation**

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To install, locate 2 HP of space in your Eurorack case and confirm the positive 12 volts and negative 12 volts sides of the power distribution lines. Plug the connector into the power distribution board of your case, keeping in mind that the red band corresponds to negative 12 volts. In most systems, the negative 12 volt supply line is at the bottom. The power cable should be connected to the MIDI with the red band facing the front of the module.

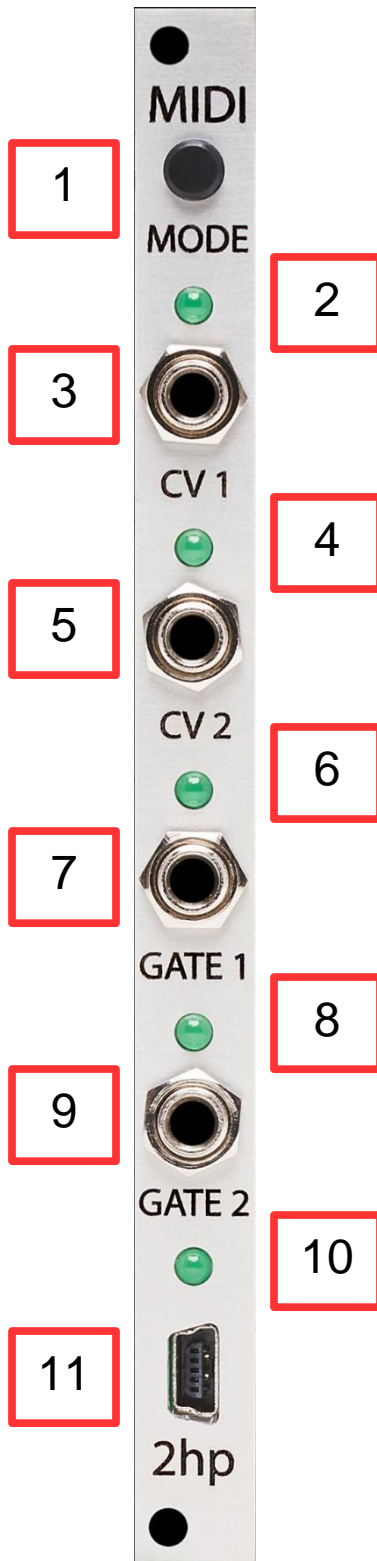
## **Specifications**

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**Format:** 2 HP Eurorack module

**Depth:** 45mm (Skiff Friendly)

**Max Current:** +12V = 27mA  
-12V = 3mA



## General Functions Overview

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### 1. MODE BUTTON:

Manual selection of the four modes

### 2. CV 1 LED:

LED indication of the signal present at the CV 1 output

### 3. CV 1:

Configurable control voltage output

Range: 0V – 5V

### 4. CV 2 LED:

LED indication of the signal present at the CV 2 output

### 5. CV 2:

Configurable control voltage output

Range: 0V – 5V

### 6. GATE 1 LED:

LED indication of the signal present at the GATE 1 output

### 7. GATE 1:

Configurable gate output

Range: 0V – 5V

### 8. GATE 2 LED:

LED indication of the signal present at the GATE 2 output

## **9. GATE 2:**

Configurable gate output

Range: 0V – 5V

## **10. MIDI STATUS LED:**

LED indication of MIDI communication between devices

## **11. USB MINI CONNECTOR:**

Connection for computer interfacing

## **Changing Modes**

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To change modes, press and hold the Mode Button until all LEDs illuminate. Press the Mode Button again to navigate to the desired mode.

CV 1 LED = Monophonic Mode

CV 2 LED = Duophonic Mode

Gate 1 LED = Dual Monophonic Mode

Gate 2 LED = Quad Trigger/Gate Mode

Once the desired mode has been navigated to, press and hold the Mode Button until all LEDs illuminate.

Release the Mode Button and the desired mode will be selected.

## **Modes**

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### **MONOPHONIC MODE (CV 1 LED)**

Monophonic Mode has different functionality based on the currently selected MIDI channel

#### **MIDI Channel 1, 13, 14, 15, and 16**

- CV 1 - 1V/Octave note output
- CV 2 - Velocity output
- Gate 1 - Gate output
  - Voltage is high from Note-On message until Note-Off message
- Gate 2 - 1 PPQN MIDI Clock output

### **MIDI Channel 2**

- CV 1 - 1V/Octave note output
- CV 2 – Velocity output
- Gate 1 - Gate output
  - Voltage is high from Note-On message until Note-Off message
- Gate 2 - 4 PPQN MIDI Clock output

### **MIDI Channel 3**

- CV 1 - 1V/Octave note output
- CV 2 – Velocity output
- Gate 1 - Gate output
  - Voltage is high from Note-On message until Note-Off message
- Gate 2 - 8 PPQN MIDI Clock output

### **MIDI Channel 4**

- CV 1 - 1V/Octave note output
- CV 2 - Velocity output
- Gate 1 - Gate output
  - Voltage is high from Note-On message until Note-Off message
- Gate 2 - 24 PPQN MIDI Clock output

### **MIDI Channel 5**

- CV 1 - 1V/Octave note output
- CV 2 - CC 1
- Gate 1 - Gate output
  - Voltage is high from Note-On message until Note-Off message
- Gate 2 - 1 PPQN MIDI Clock output

### **MIDI Channel 6**

- CV 1 - 1V/Octave note output
- CV 2 - CC 1
- Gate 1 - Gate output
  - Voltage is high from Note-On message until Note-Off message
- Gate 2 - 4 PPQN MIDI Clock output

### **MIDI Channel 7**

- CV 1 - 1V/Octave note output
- CV 2 - CC 1
- Gate 1 - Gate output
  - Voltage is high from Note-On message until Note-Off message
- Gate 2 - 8 PPQN MIDI Clock output



### **MIDI Channel 8**

- CV 1 - 1V/Octave note output
- CV 2 - CC 1
- Gate 1 - Gate output
  - Voltage is high from Note-On message until Note-Off message
- Gate 2 - 24 PPQN MIDI Clock output

### **MIDI Channel 9**

- CV 1 - 1V/Octave note output
- CV 2 - Gate output
  - Voltage is high from Note-On message until Note-Off message
- Gate 1 - MIDI Start & MIDI Stop messages
- Gate 2 - 1 PPQN MIDI Clock output

### **MIDI Channel 10**

- CV 1 - 1V/Octave note output
- CV 2 - Gate output
  - Voltage is high from Note-On message until Note-Off message
- Gate 1 - MIDI Start & MIDI Stop messages
- Gate 2 - 4 PPQN MIDI Clock output

### **MIDI Channel 11**

- CV 1 - 1V/Octave note output
- CV 2 - Gate output
  - Voltage is high from Note-On message until Note-Off message
- Gate 1 - MIDI Start & MIDI Stop messages
- Gate 2 - 8 PPQN MIDI Clock output

### **MIDI Channel 12**

- CV 1 - 1V/Octave note output
- CV 2 - Gate output
  - Voltage is high from Note-On message until Note-Off message
- Gate 1 - MIDI Start & MIDI Stop messages
- Gate 2 - 24 PPQN MIDI Clock output

It is important to note that MIDI channels 1, 13, 14, 15 and 16 have the same functionality

## **DUOPHONIC MODE (CV 2 LED)**

Duophonic Mode has the same functionality for all MIDI channels

The newest Note-On & Note-Off messages will be emitted from the CV/Gate pair with the oldest data

- CV 1 - 1V/Octave note output
- CV 2 - Gate output
  - Voltage is high from Note-On message until Note-Off message
- Gate 1 - 1V/Octave note output
- Gate 2 - Gate output
  - Voltage is high from Note-On message until Note-Off message

## **DUAL MONOPHONIC MODE (GATE 1 LED)**

Data sent on MIDI Channels 1 or 3-16 will be emitted from the CV 1 and Gate 1 outputs

Data sent on MIDI Channel 2 will be emitted from the CV 2 and Gate 2 outputs

- CV 1 - 1V/Octave note output
- CV 2 - Gate output
  - Voltage is high from Note-On message until Note-Off message
- Gate 1 - 1V/Octave note output
- Gate 2 - Gate output
  - Voltage is high from Note-On message until Note-Off message

## **QUAD TRIGGER/GATE MODE (GATE 2 LED)**

Data sent on MIDI Channels 1 or 3-16 will emit as 6ms trigger signals from all outputs

Data sent on MIDI Channels 2 will emit as gate signals from all outputs  
Voltage is high from receipt of Note-On message until Note-Off message

- CV 1 – Trigger/Gate output for Note #36 (C1)
- CV 2 - Trigger/Gate output for Note #38 (D1)
- Gate 1 - Trigger/Gate output for Note #40 (E1)
- Gate 2 - Trigger/Gate output for Note #41 (F1)