

μMIDI Manual

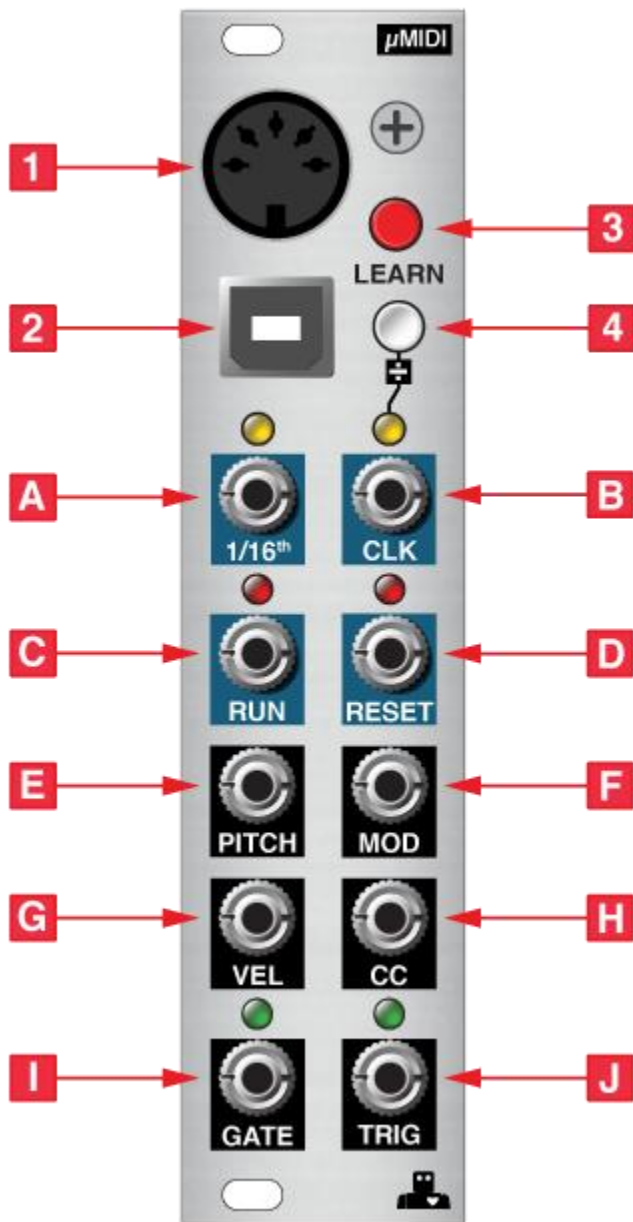
Overview

The μMIDI is a USB and DIN monophonic MIDI-to-CV and MIDI-to-clock interface.

Installation

See the [Module Installation Guide](#) for instructions on installing the module in your Eurorack modular system.

Front Panel



MIDI Interface & Controls

1. **DIN MIDI Input**
For connecting to 5-pin DIN MIDI outputs of controllers, synths, drum machines etc.
2. **USB Connector**
For connecting to computers, iPhones, iPads, other USB MIDI hosts.
3. **LEARN**
This button can be used to learn the MIDI channel on which the μ MIDI will accept notes and controller values. Pressing the button once will cause the lights on the module to blink in a cycle until the first note message is received. The listening channel will then be set to the channel of the note, and messages on other channels will be ignored. Another function of the button is to save settings. Press and hold the button for one second or longer to save the current clock division and learned channel to memory. The settings will be recalled the next time your system is powered on.
4. **÷**
The division button sets the clock division of the MIDI clock that is sent from the **CLK** output. The default setting is 6, the same as the **1/16th** output. Pressing the button repeatedly cycles through the different divisions: 6 (1/16 notes), 12 (1/8 notes), 24 (1/4 notes), 48 (1/2 notes), 96 (whole notes, eg: every measure), 1 (24 ppq), 3 (1/32 notes).

Outputs

- A. **1/16th**
Trigger output which outputs a divided MIDI clock with a fixed division of 6, equivalent to 1/16th notes. Suitable for connecting to sequencer clock inputs such as the Metropolis.
- B. **CLK**
Trigger output which outputs a divided MIDI clock with a division set by the **÷** button.
- C. **RUN**
Gate output which goes high when a MIDI start or continue message is received and low when a stop message is received.
- D. **RESET**
Trigger output which sends a trigger when a MIDI reset message is received.
- E. **PITCH**
1 V / octave CV output with a range of 0 – 10 V. The voltage output is determined by the pitch of the last played note and the pitch bend control. MIDI note 0 (C-2) maps to 0 V and note 120 (C8) maps to 10 V.
- F. **MOD**
CV output with a range of 0 – 5 V. The voltage is proportional to the position of the mod wheel control. Suitable for connecting to the CV input of a VCA controlling modulation depth.
- G. **VEL**
CV output with a range of 0 – 5 V. The voltage is proportional to the velocity of the last played MIDI note. Suitable for connecting to the **LEVEL** input of an envelope generator such as the Atlantis envelope section or Dual ADSR.
- H. **CC**
CV output with a range of 0 – 5 V. The voltage is proportional to the value sent by MIDI CC #2.
- I. **GATE**
Gate output which is high when a note is being played. Suitable for connecting to the **GATE** input of an envelope such as the Atlantis envelope section or Dual ADSR.
- J. **TRIG**
Trigger output which sends a trigger when a MIDI note on message is received. Suitable for connecting to the TRIG input of an envelope generator such as the Atlantis envelope section or Dual ADSR.

Connection

DIN MIDI Devices

Connect a 5-pin MIDI DIN cable from the MIDI Out or MIDI Thru port of another MIDI device such as a controller, drum machine, or synthesizer, to the MIDI DIN port at the top of the μ MIDI.

Computer

The μ MIDI can be connected to a Mac or PC using a USB A to B cable. As it is a USB MIDI class-compliant device, no drivers are required.

iPhone or iPad

The μ MIDI can be connected to an iPhone or iPad using the [Apple Lightning to USB Camera Adaptor](#) . Connect a USB A to B cable between the adaptor and the module's USB port then connect the adaptor to your iDevice.

Operation

If you are only using MIDI clock then no further action is required. Upon receiving any MIDI clock or transport messages the clock trigger outputs of the μ MIDI will function as described in the Front Panel section above.

If you are controlling a voice with MIDI messages you need to ensure the μ MIDI is set to the channel on which the messages are being sent. The default channel is 1 but can be changed by pushing the **LEARN** button to put the module in to learn mode. When in learn mode the next received note message will be used to set the listening channel. If you wish to save the learned channel simply press and hold the button until the lights on the module all blink. The next time the module powers on it will default to the newly saved channel.

Entering learn mode also resets the voice outputs in the event you get stuck notes or wish to reset the outputs for some other reason. You can push the **LEARN** button again to exit learn mode if you don't need to change MIDI channels.

Portamento (Glide)

The μ MIDI is capable of slewing the pitch output to achieve portamento effects. Portamento is enabled by using the standard MIDI portamento controls:

- Send CC 65 (Portamento Control) with a value of 127 to enable portamento
- Use CC 5 (Portamento Time MSB) for coarse control of the portamento time, or CC 37 (Portamento Time LSB) for fine control.
- You can disable portamento by sending CC 65 (Portamento Control) with a value of 0.

Customization

The operation of the μ MIDI can be customized by visiting the [\$\mu\$ MIDI Configuration Utility](#) web page. You must use a recent version of Google Chrome and connect the μ MIDI module to your computer via the USB cable.

MIDI Implementation Chart

[\$\mu\$ MIDI 1.10 MIDI Implementation Chart](#)

Firmware Updates

Firmware for the μ MIDI can be updated using the [Intellijel Firmware Updater](#). With your modular system powered off, connect a USB cable between the module and your PC or Mac. Power on your modular while holding down the **LEARN** button. Then follow the instructions on the firmware updater page.