

Poly is a universal polyphonic MIDI to CV converter. It provides an arsenal of CV analogue options, including eight rows of Gate, Pitch, Velocity and Modulation for complete control of Eurorack synthesizers and drum machines. The Poly's flexibility, with its vast array of multiple inputs and outputs, provides the user with the freedom to connect all sorts of sequencers, digital audio workstations (DAWs), keyboards, controllers, apps and more, the only limit is your imagination.

Polyend Poly Technical Specifications:

Inputs:

- MIDI DIN
- USB A (5V)
- USB B

Outputs:

- 8 Gate Outputs (0-12V)
- 8 Pitch Outputs (0-12V, V/oct.)
- 8 Velocity Outputs (0-12V)
- 8 Modulation Outputs (0-12V, selectable CC message 0-127 using DIP switch on the back panel)

Dimensions: Eurorack Width - 22 HP; Depth: 25 mm

Modes

First and Next modes are designed for playing Eurorack synths with an external controller, and we made this work with automatic gate recognition, a sophisticated technology that understands what is connected to the Poly without the need for manual buttons or switches.

First mode

In First mode you can send MIDI note to one or more of your modules/synths. Let's use keyboard controller as an example. First key used will occupy gate one. While the first key remain hold, the second one pressed will occupy first available gate, etcetera for each another key and gate.

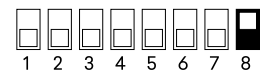
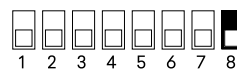
Next mode

Next mode works like voices do in most polyphonic synthesizers. When you send MIDI note, it will look for next non-occupied inserted gate and trigger it.

Note: In First or Next mode if you want to play a chord using single MIDI channel, remember to insert cables to gate inputs.

Channel mode

Channel mode offers two options:



MIDI Channel

Channel translates data received from MIDI channels 1-8 and directs them into the corresponding CV voices. This mode is what the majority of users will employ to connect DAWs or external sequencers.

- Voice 1 - MIDI Channel 1
- Voice 2 - MIDI Channel 2
- Voice 3 - MIDI Channel 3
- Voice 4 - MIDI Channel 4
- Voice 5 - MIDI Channel 5
- Voice 6 - MIDI Channel 6
- Voice 7 - MIDI Channel 7
- Voice 8 - MIDI Channel 8

MIDI Notes

This option translates data received from MIDI notes from C to G and directs them into the corresponding CV voices (no matter the octave). This scenario works great for triggering drums from drum pads or drum triggers.

- Voice 1 - MIDI Note C
- Voice 2 - MIDI Note C#
- Voice 3 - MIDI Note D
- Voice 4 - MIDI Note D#
- Voice 5 - MIDI Note E
- Voice 6 - MIDI Note F
- Voice 7 - MIDI Note F#
- Voice 8 - MIDI Note G

MIDI CC Messages settings



| | | | | | | | |
|----|---------|----|---------|----|---------|-----|---------|
| 0 | 0000000 | 32 | 0000010 | 64 | 0000001 | 96 | 0000011 |
| 1 | 1000000 | 33 | 1000010 | 65 | 1000001 | 97 | 1000011 |
| 2 | 0100000 | 34 | 0100010 | 66 | 0100001 | 98 | 0100011 |
| 3 | 1100000 | 35 | 1100010 | 67 | 1100001 | 99 | 1100011 |
| 4 | 0010000 | 36 | 0010010 | 68 | 0010001 | 100 | 0010011 |
| 5 | 1010000 | 37 | 1010010 | 69 | 1010001 | 101 | 1010011 |
| 6 | 0110000 | 38 | 0110010 | 70 | 0110001 | 102 | 0110011 |
| 7 | 1110000 | 39 | 1110010 | 71 | 1110001 | 103 | 1110011 |
| 8 | 0001000 | 40 | 0001010 | 72 | 0001001 | 104 | 0001011 |
| 9 | 1001000 | 41 | 1001010 | 73 | 1001001 | 105 | 1001011 |
| 10 | 0101000 | 42 | 0101010 | 74 | 0101001 | 106 | 0101011 |
| 11 | 1101000 | 43 | 1101010 | 75 | 1101001 | 107 | 1101011 |
| 12 | 0011000 | 44 | 0011010 | 76 | 0011001 | 108 | 0011011 |
| 13 | 1011000 | 45 | 1011010 | 77 | 1011001 | 109 | 1011011 |
| 14 | 0111000 | 46 | 0111010 | 78 | 0111001 | 110 | 0111011 |
| 15 | 1111000 | 47 | 1111010 | 79 | 1111001 | 111 | 1111011 |
| 16 | 0000100 | 48 | 0000110 | 80 | 0000101 | 112 | 0000111 |
| 17 | 1000100 | 49 | 1000110 | 81 | 1000101 | 113 | 1000111 |
| 18 | 0100100 | 50 | 0100110 | 82 | 0100101 | 114 | 0100111 |
| 19 | 1100100 | 51 | 1100110 | 83 | 1100101 | 115 | 1100111 |
| 20 | 0010100 | 52 | 0010110 | 84 | 0010101 | 116 | 0010111 |
| 21 | 1010100 | 53 | 1010110 | 85 | 1010101 | 117 | 1010111 |
| 22 | 0110100 | 54 | 0110110 | 86 | 0110101 | 118 | 0110111 |
| 23 | 1110100 | 55 | 1110110 | 87 | 1110101 | 119 | 1110111 |
| 24 | 0001100 | 56 | 0001110 | 88 | 0001101 | 120 | 0001111 |
| 25 | 1001100 | 57 | 1001110 | 89 | 1001101 | 121 | 1001111 |
| 26 | 0101100 | 58 | 0101110 | 90 | 0101101 | 122 | 0101111 |
| 27 | 1101100 | 59 | 1101110 | 91 | 1101101 | 123 | 1101111 |
| 28 | 0011100 | 60 | 0011110 | 92 | 0011101 | 124 | 0011111 |
| 29 | 1011100 | 61 | 1011110 | 93 | 1011101 | 125 | 1011111 |
| 30 | 0111100 | 62 | 0111110 | 94 | 0111101 | 126 | 0111111 |
| 31 | 1111100 | 63 | 1111110 | 95 | 1111101 | 127 | 1111111 |