

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 synthesisers 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)

Important notes:

Poly module Gate outputs are 0-12V (the Eurorack norm is 0-5V).

Detailed power consumption for Poly module:
max 100mA on 5V, max50mA for +12V, 0mA for -12V

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.

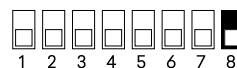
Next mode

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: by using the jumper switch on Poly's back panel you can choose one global CC parameter for all modulation outputs. The first number in column below corresponds to a CC message number and the row of 8 digits corresponds to the jumper switch 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