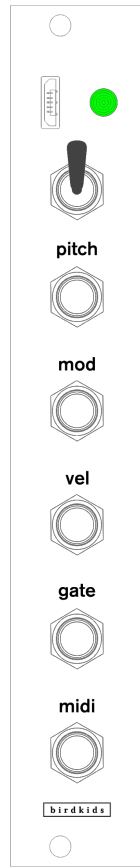



Power / MIDI **Representation**

Revision: 2.23
Short Description: 16bit High-precision MIDI-to-CV converter.
 Super Low-noise PSU for the Eurorack standard, operating on USB power.
Width: 4HP (3U)
Maximum Depth: 40mm
Power Consumption (external mode, USB-powered): 80mA @ 5V
Power Consumption (internal mode, BUS powered): 42mA @ 5V
 3,6mA @ 12V
 2mA @ -12V





Input **Function** **Representation** **Range** **Characteristic** **Short explanation**

Input	Function	Representation	Range	Characteristic	Short explanation
USB-Micro B input socket	USB Power Source Input		>1.5A minimum	5V	USB-Micro B input socket, >1.5A source recommended
midi	MIDI source input		MIDI range	MIDI	Use supplied 3.5mm to MIDI adapter cable

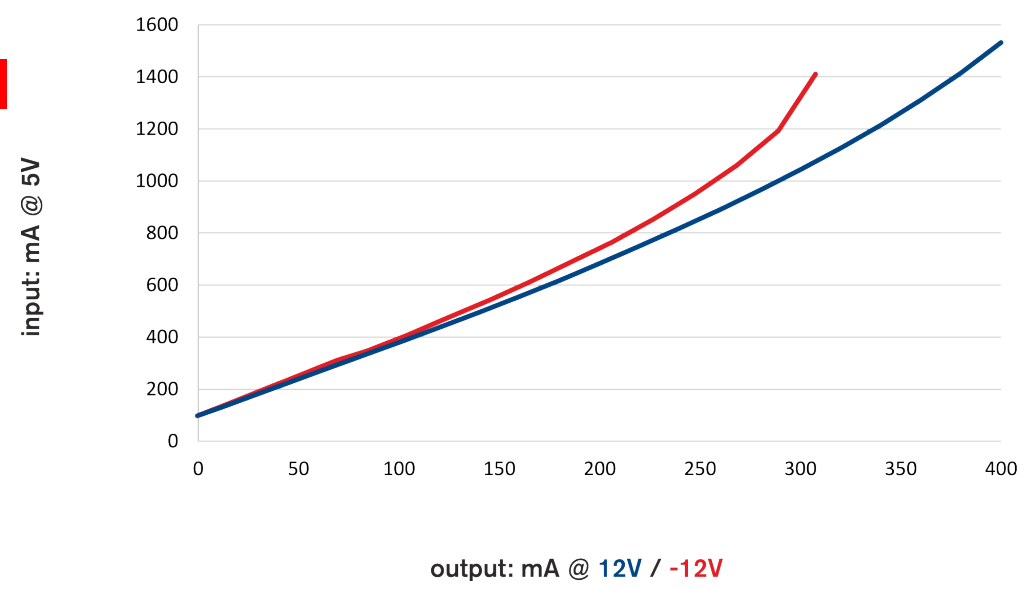
Output **Function** **Representation** **Range** **Characteristic** **Short explanation**

Output	Function	Representation	Range	Characteristic	Short explanation
pitch	1v/oct pitch output		-3V to 5V	1v/oct exponential CV	pitch output for external sources tracking 1v/oct
mod	Modulation output		0V to 5V	CV	MIDI modulation wheel 0-127 binary to cv conversion output
vel	Velocity output		0V to 5V	CV	MIDI note velocity 0-127 binary to cv conversion output
gate	Gate output		5V (positive)	CV spike	MIDI note gate length conversion to cv

Control	Function	Representation	Range	Characteristic	Short explanation
on/off toggle	ON/OFF		On / Off	binary	on/off switch in default externalmode
Operation LED	Indication LED		On / Off	binary	On / Off indicator in default mode, lights up regardless of switch position in internal mode when adequately powered via bus.

PSU Specifications	12V	(-)12V
In default external mode the POWER / MIDI delivers up to 400mA on the positive 12V rail and up to 300mA on the negative (-)12V rail provided sufficient input @ 5V via an adequate USB-Power source.	<= 400 mA	<= 300mA

performance chart (input @5V vs. positive & negative 12V rails):
Sum rail values in mA for total required 5V supply!



Modes of Operation

External Mode (default): Standalone PSU unit for EURORACK standardized (+/- 12V including 5V) systems - powered via an external USB source (USB-Micro B socket, min. Source requirements: >1.5A). Integrated high-precision 16bit MIDI-to-CV interface.

Internal Mode: Integrated high-precision 16bit MIDI-to-CV interface.
No output is generated on the 12V rails, in internal mode the unit does NOT operate as a PSU!

IMPORTANT! Internal mode requires removal of the J9 PIN header before powering the module!
Failure to do so might damage the unit!

The module can be powered by any bus-board providing sufficient 5V current (POWER / MIDI requirements: 42mA @ 5V ; 3,6mA @ 12V ; 2mA @ -12V) on the EURORACK standardized 5V rail using a standard 16PIN Flat-Ribbon connector.

Red stripe = -12v
Misalignment or misorientation of Flat-Ribbon connector might damage the unit!