

# USB-MIDI2CV/PLUS



Manual v1.0



# OVERVIEW

DSP Synthesizers USB-MIDI2CV is a USB-MIDI to CV interface - enabling you to control an analog synthesizer or modular system from a computer or smartphone/tablet equipped with a USB port. It is class-compliant and does not require any driver. It features Volt/octave, Hz/volt and drum-trigger conversion.

- The USB-MIDI2CV is a **USB device** not a **USB host!** It can be connected to devices such as smartphones, tablets, laptop or desktop computers, but not to USB MIDI controllers.
- The CV output is for Volt/octave in the 0 to 5V range – covering 5 octaves and the Hz/volt in the 0.250 – 4.75V covering 4 octaves. Lowest note in both modes C2 #36.
- The Gate output uses V-trig with 0/5V in the Volt/octave mode and S-trig, open-collector ground in the Hz/volt mode.
- The difference between the USB-MIDI2CV and the plus version is that the later feature 2 extra CV outputs.

## OPERATING MODES

The USB-MIDI2CV interprets MIDI messages differently depending on the MIDI channel on which they are received. For example, when receiving messages on MIDI channel 1, it uses the Volt/octave and outputs a CV/Gate pair and on channel 2 it uses the Hz/volt and outputs CV/S-trig. When receiving messages on MIDI channel 10, it outputs a trigger for 4 drum instruments.

### Channel 1: Monophonic Volt/octave mode

This mode is enabled when any MIDI message is received on channel 1. The USB-MIDI2CV behaves like a classic monophonic Volt/octave - Gate converter using most recent note priority.

- PITCH: 1volt/octave Note CV with Pitchbend
- GATE: Gate on/off
- CV1: MIDI-CC #01 CV output 0-5volt (only on plus version)
- CV2: MIDI-CC #07 CV output 0-5volt (only on plus version)

### Channel 2: Monophonic Hz/volt mode

This mode is enabled when any MIDI message is received on channel 2. The USB-MIDI2CV behaves like a classic monophonic Hz/volt - S-trig converter using most recent note priority.

- PITCH: Hz/octave Note CV with Pitchbend
- GATE: S-trig on/off
- CV1: MIDI-CC #01 CV output 0-5volt (only on plus version)
- CV2: MIDI-CC #07 CV output 0-5volt (only on plus version)

## Channel 10: Drums

This mode is enabled when a MIDI message is received on channel 10. PITCH and GATE are triggered by the MIDI notes 36 and 38 CV outputs 1 and 2 are triggered by the MIDI note 40 and 41

- PITCH: note 36 trigger output 0/5volt
- GATE: note 38 trigger output 0/5volt
- CV1: note 40 trigger output 0/5volt (only on plus version)
- CV2: note 41 trigger output 0/5volt (only on plus version)

## Contact & Support

For support and questions please use these contact addresses:

Website: <http://www.dspsynth.eu>

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