

# 551

## MIDI TO VOLTAGE CONVERTER

Rotary switch to select the Midi modulation source, which appears as a control voltage at the "Controller"-jack. In addition the module sets itself to the Midi channel of the attached Midi source device (e.g. keyboard) if in position "Ch. Select"

Output for the keyboard-control voltage (according to the Midi note-number)

Output for the "Controller"-voltage

Output for the keyboard gate signal

Output for the pitch bend voltage

Indicator LEDs for gate- and controller activity

Output for the modulation wheel voltage

Output for the velocity control voltage

Switch to select keyboard priority

Addition of pitch bend voltage

Legato-mode on/off

Midi activity indicator at Midi-input

Midi-input

Midi-thru



The M 551 is a module, which transforms an attached Midi signal into a couple of analogue control voltages. Thereby modular synthesizers can be integrated into a Midi-network and controlled by Midi-master-keyboards or Midi-hardware- or software-sequencers/DAWs.

The M 551 derives the following six control voltages from the fed Midi-messages:

- **Keyboard CV** (from Midi-note-number)  
*Depending on the 'Priority' switch, the lowest, highest or last received note-on message is getting transformed.*  
Voltage range:  $-2/+8 V$
- **Gate** (from the current Midi note-on/note-off commands)
- **Velocity** (transforms the key velocity [note-on velocity] of the current note-on message)  
Voltage range:  $0-10 V$
- **Mod. Wheel** (derives a control voltage from Midi-modulation messages [Controller 1].)  
Voltage range:  $0-10 V$
- **Pitch Wheel** (control voltage from the Midi pitch bend commands, bipolar)  
Voltage range:  $\pm 5 V$   
*(If "Add Bend CV" is active, a pitch bend voltage of  $\pm 0,5 V$  is added internally to the keyboard control voltage).*
- **Controller** (transforms a selectable Midi controller into a control voltage [ $0-10 V$ ])

Available are:

- After touch
- Breath controller (CC 2)
- Foot pedal (CC 4)
- Sustain pedal (CC 64)
- Panorama (CC 10)
- Main volume (CC 7),
- the unspecified parameters CC 20, CC 21, CC 22.

The functions of the three toggle switches are:

- **Add Bend CV**  
*In 'on'-position the Midi Pitch bend voltage (attenuated to  $\pm 0.5 V$ ) is added internally to the keyboard voltage to ease pitchbending the oscillator*

- **Priority**  
*Keyboard control voltage/gate signal/velocity voltage are derived from the highest/lowest/last received note-on message*

- **Keyboard Mode**  
*Retrig triggers a new keyboard control voltage/gate signal combination at any struck key*

*Legato starts a new event not before all keys are released*

To select the **Midi-Channel**: Dial the rotary switch to the „Channel Select“ position and initiate a MIDI-channel message (e. g. strike a note on a keyboard); the module sets itself to the most recently received MIDI channel (this setting is saved even if the unit is switched off)