## MIDI2SDS(X)-1U MIDI to Trigger Unit



# MIDI2SDS(X)-1U MIDI to TRIGGER Unit User Guide V1.6

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### MIDI2SDS(X)-1U MIDI to Trigger Unit

The MIDI2SDS(X)-1U is an 8-channel MIDI note to Trigger unit suitable for use with a variety of synthesizer modules and drum machines including the SDS range from Simmons for which it was originally designed. The module is housed in a lightweight ABS 19" 1U enclosure ready for rack mounting or it can be used as a free-standing unit

The unit has 8, velocity sensitive, trigger outputs which can be assigned to a specific MIDI Note using the `LEARN' mode. The period of the gate-on time can be adjusted using the onboard trimpot (P101) from approximately 1mS to approximately 130mS.



It also has a 'LEARN' mode, which lets you assign different notes and channels to different triggers. You could, for example, have four triggers on channel 10, two on channel 11, one on channel 15 and one on channel 2.

MIDI2SDS(X) has 8 LED's which indicate the status of each of the output triggers and are also used during LEARN mode to assist the user whilst programming the board by indicating which TRIGGER output is being programmed..

#### **LEARN MODE**

To use the `LEARN' mode, you simply hold down the LEARN button until all the LED's come on. Then the LED for the first channel to be set will flash once every second, indicating that it is waiting for a note to be assigned to trigger it. Once received it will then wait for the associated NOTE OFF command before triggering its output, and then moving on to the next channel.

Repeat for all 8 triggers, if you don't want to reprogram all the outputs then simply wait, the unit will timeout after roughly 4 seconds, saving any changes to the trigger note assignments in FLASH memory.

#### **POWER**

MIDI2SDS(X)-1U is powered from a single 15VDC power supply with a minimum loading of 300mA. The connector is a 2.5mm DC socket with tip = positive.

The maximum TRIGGER output voltage will then be 10V.



## MIDI2SDS(X)-1U MIDI to Trigger Unit

#### MIDI2SDS(X) Firmware

The latest release of the MIDI2SDS(X) firmware (version 3.8 and later) includes the following 2 features:-

- Positive/negative outputs: DIPSWITCH #1 allows the outputs to be inverted so that
  they are either positive-going (from 0V to +V) or negative-going (from +V to 0V).
  Note that the actual maximum excursion in either mode is determined by the
  Velocity value received for each channel i.e. a Velocity value of 127 will result in the
  maximum excursion.
- 2. Trigger/Gate mode: DIPSWITCH #2 determines how and/or when a triggered output will turn OFF. In the TRIGGER Mode the output pulse width is determined solely by the setting of the pulse-width trimmer (P101). In the GATE Mode the output will only turn OFF when an associated NOTE OFF command is received.

Dipswitches #3 and #4 currently have no assigned function.

NB: These settings are global and apply to all 8 outputs.

