

# ED103-MIDI2SDS MIDI to Trigger Module



The Panther EDxxx Series is a collection of modules designed to fit the EuroRack module size.

## The ED103 – MIDI2SDS MIDI Trigger Unit

The ED103-MIDI2SDS is an 8-channel MIDI note to Trigger unit suitable for use with a variety of drum machines including the SDS range from Simmons for which it was originally designed.

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.

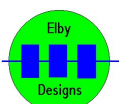
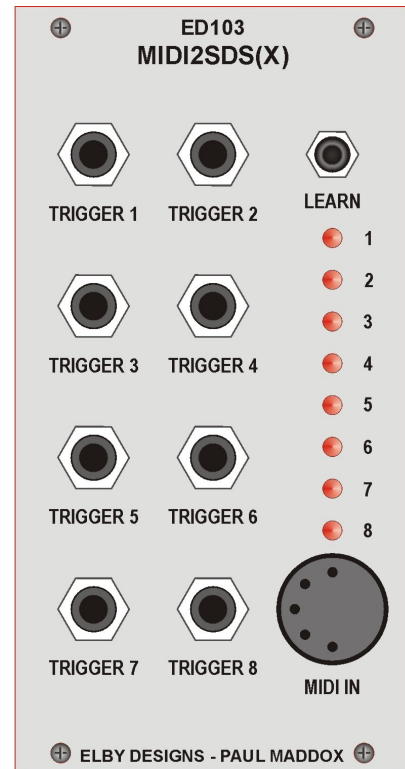
The amplitude of the trigger outputs can be adjusted using two onboard trimpots. P151 sets the lower voltage level and is factory set for 0V. P152 sets the upper voltage level which can extend from around 5V to 10V. The factory setting is 5V

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 more on channel 11, one on channel 15 and one on channel 2.

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 trigger its output, and then flash the next LED showing it is waiting for the next trigger assignment.

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

8 LED's indicate the status of each of the output triggers and are also used during LEARN mode to assist the user whilst programming the board.



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# ED103-MIDI2SDS MIDI to Trigger Module

## Setting-up the ED103-MIDI2SDS

There are 3 adjustments that can be made on the ED103-MIDI2SDS.

The 1<sup>st</sup> adjustment defines the pulse-width of the TRIGGER outputs. This should be set to the smallest time period possible consistent with reliable triggering and operation of the attached triggered devices. If the pulse is set too small then the triggered devices may not trigger reliably or some devices may not produce the full 'sound' for which they were designed. Increasing the pulse-width over the optimum period will affect the speed at which ED103-MIDI2SDS can accept repetitive triggers for the same output. This adjustment is made with P101 and the range can be set from around 1mS per pulse to over 130mS per pulse.

The 2<sup>nd</sup> adjustment is used to set the lower voltage level of the output trigger pulse. P151 should be adjusted so that lower trigger pulse voltage is around 0V.

The 3<sup>rd</sup> adjustment is used to set the higher voltage level of the output trigger pulse. P152 should be adjusted so that higher trigger pulse voltage is at the desired voltage.

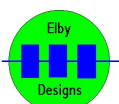
DIPSWITCH #1 can be used to invert the trigger output logic. With the switch in the OFF position the output is a positive going pulse starting at 0V (or the voltage set by P151) to a maximum of the voltage set by P152. the actual output voltage will depend upon the VELOCITY value of the received MIDI message.

Setting DIPSWITCH #1 to the ON position will invert this with the output sitting at the voltage set by P152 and going to a maximum of 0V, again with the actual output being dependent on the VELOCITY value.

The other 3 DIPSWITCH positions are not currently used.

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Power Requirements	+12V @ 50mA, -12V @ 10ma
Module Width	14HP



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