

LPZW.modules TRAM8

Manual

HW Version 1.1

Introduction and overview

The LPZW.modules TRAM8 is a MIDI Converter for Eurorack. It fits it the 1U row of cases build according to the Intellijel format¹.

It is an 8 note gate converter with 8 corresponding velocity outputs².



¹ Unless fitted with alternative Frontpanel for either 1U Tile or 3U 5HP format

² Unless an alternative Firmware was installed

Content

Manual	1
Introduction and overview	1
Content	2
Installation	3
MIDI Input	4
MIDI Learn	4
Daisy Chain multiple TRAM8	5
Firmware Update	6
Specifications	7

Installation

Use the16 pin bus cable provided.

Set the 5V selector switch to preferred position: bus or internal. If you are uncertain if your case provides 5V check this first, if the module doesn't blink with the LEDs on startup it is not powered. Select LDO then.

For daisy chaining read chapter Daisy Chain multiple TRAM8

Connect MIDI with a simple TRS cable to a 3.5mm TRS source.

There is no TRS-DIN adapter included!

Please get your own if needed (doesn't matter if "for Arturia" or "for Korg")

MIDI Input

The MIDI input is a 3.5mm auto-crossover TRS jack. The polarity of the output or DIN adapter connected to it is not important as long as it is a TRS (3 positions on the jack like a stereo headphone jack) and current sink and source are on tip and/or ring. So basically all devices from Korg, Arturia, Make Noise, any MIDI 2.0 device (sometimes called type A or B).

MIDI Learn

Press and hold the Learn button after normal power-up for more than 3 seconds. The red LED above will be lit as long as you are in "learn mode". The first note received determines the MIDI channel.

Send the 8 notes that you want to use for the your drums in the order you want them on the outputs.

The corresponding LEDs will be lit showing that this output is assigned.

All notes must be of the same MIDI channel. It is possible to assign one MIDI note to multiple outputs.

Your new map will be saved when the 8th note is received.

Daisy Chain multiple TRAM8

You might want to use more than one TRAM8 in your rack, for instance when you want to break out all 16 drum channels of your Beatstep Pro.

You can do this with a simple female jumper wire as shown here.

Before you install the jumper wire, switch the power supply of your rack off!!

Use the free pin marked OUTPUT on the first module of the chain. Leave the jumper in place on this 1st module! Remove the jumper on the next module in the chain and connect to the pin marked INPUT.

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OUTPUT-7 JUMPER	IPUI	IN	JUMPER	OUTPUT-7

Screw the modules back into the rack and power up.

The MIDI input on the front is inactive for all modules of the chain except the first module!

If you learn the MIDI map for the chain, make sure you do it module by module. If you activate Learn Mode on all modules, they learn the same notes!

Firmware Update

You can enter the firmware update mode by pressing LEARN while powering up the module.

The module will show a fast running LED pattern from left to right with all LEDs on to indicate Bootloader mode.

Connect your computer's MIDI interface directly to the TRAM8 (also works thru the Daisy Chain).

Use a SysEx software like "SysEx Librarian" (Mac OS) and send the SysEx firmware file at full speed to the module³.

The module will show the progress with its Gate LEDs, it might be that the firmware you load doesn't use up all the program memory of the processor in the module. Don't worry if the LEDs not reach the last LED.

If the transition is successful the module will show the version of the firmware while blinking.

If there are transmission errors the module will show the static pattern of LEDs 1-4 off, LEDs 5-8 on. It will reset then and start the bootloader again.

If you entered the bootloader by accident, you can leave by switching the case power off and on.

Specifications

Gate Outputs: Velocity Outputs: MIDI Input front:	0V Low, 5V High; 100 Ohm 0V to 5V ⁴ ; 100 Ohm 3.5mm TRS jack Ring/Tip auto-crossover, serial resistance 220 Ohm
Bus Connector:	Internal +12V to 5V conversion selectable with switch on backside
	+5V max. 70mA if selector switch is set to bus powered +12V max. 25mA -12V 0mA
Backside Daisy Chain:	Serial format 5V CMOS/TTL Logic; idle is 5V; no resistors in chain!



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Thanks to everyone that gave us input, ideas, support and motivation!

If you find faults or inconsistency in the manual content or unbearable grammar mistakes, please contact <u>info@leipzigwest.org</u>.