

LED Stimulator MW24-opto-stim for Multiwell-MEA-Systems

LED Stimulator controlled via Multiwell-Screen Software, can also be used as stand-alone opto Stimulator.

Do not look at the power LED flashes without eye protection!



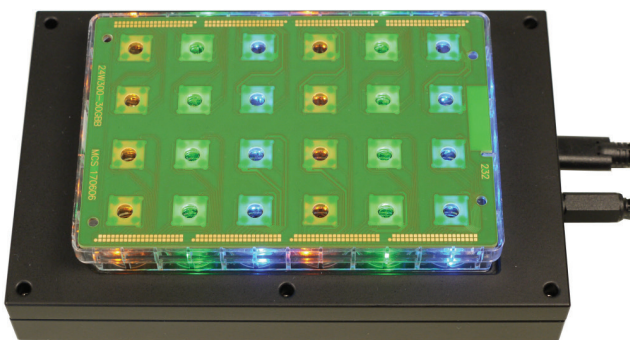
LED Stimulator with three LEDs per well



LED Stimulator MW24-opto-stim for Multiwell-MEA-Systems:



The picture shows a MW24-opto-stim device placed upside down on a 24-well plate.



The MW24-opto-stim fits upside down on top of a 24-well plate, with or without lid. The device may be used in combination with the Multiwell-MEA-System, or as stand-alone solution.

Applications

The MW24-opto-stim features three independently controllable LEDs with different wavelength for optical stimulation for each well of a 24 well plate.

LED Type

The provided LEDs are listed below. Please select up to three types of LEDs.

Red 590 nm (MW LED5 red 590nm)
615 nm (MW LED5 red 615nm)

Blue 428 nm (MW LED5 blue 428nm)
470 nm (MW LED5 blue 470nm)

Green 527 nm (MW LED5 green 527nm)

Other LED types are available on request, contact support@multichannelsystems.com

LED Stimulator

Place the MW24-opto-stim device upside down accurately on the 24-well plate in the headstage of the Multiwell-MEA-System, so that the LEDs are exactly over the wells of the 24-well plate. Please see the pictures beside.

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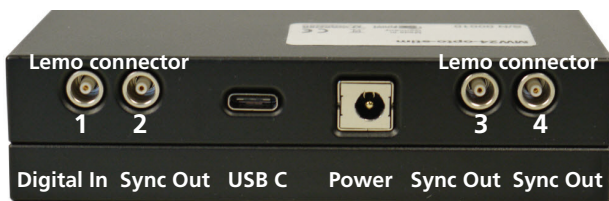
Operation of the MW24-opto-stim Device via Multiwell-Screen Software

Setup

Connect the MW24-opto-stim device to any USB 2.0 or 3.0 connector. Connect the device to a power supply.

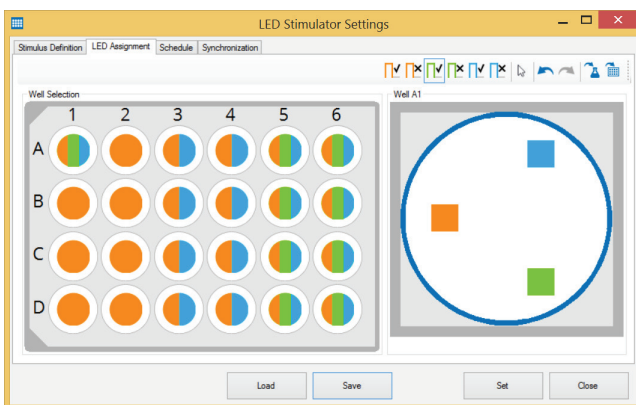
The Sync Out ports need to be connected to three of the Digital In ports of the Multiwell-MEA interface board with a Lemo-Lemo cable to be able to record light stimulation time points as triggers in the Multiwell-Screen software.

Optionally connect the Digital In port to trigger the MW24-opto-stim from an external device.



Technical Specifications

Operating temperature	0 - 50 °C
Storage temperature	0 - 50 °C
Relative humidity	10 % - 85 %
Dimensions (W x D x H)	170 mm x 108 mm x 26.5 mm
Weight	611 g
USB type C	USB 2.0 or USB 3.0 port
1 x Digital In	Lemo connector 1, EPL.00.250 NTN
3 x Sync Out	Lemo connector 2, 3 and 4, EPL.00.250 NTN
Power supply	24 VDC, 2.5 A
Power consumption	n/a
Current resolution	0.01 mA
Max. current	depends on the type of LED
Time resolution	1 ms



Multiwell-Screen Software

Please control the LED Stimulator device via the Multiwell-Screen software. The software allows you to define independent stimulation patterns for all three LED types and to activate or deactivate LEDs individually for each well.

