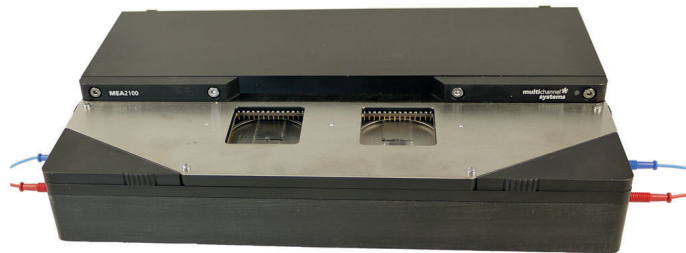


LED Stimulator for MEA2100-Systems MEA2100-opto-STIM

LED Stimulator powered by
Stimulus Generator STG4002-1.6A-opto

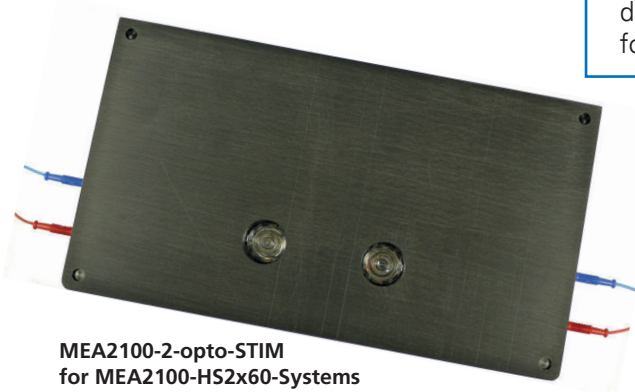
Do not look at the
Power LED flashes
without eye
protection!



LED Stimulator with MEA2100-HS2x60-Systems

Applications

The LED Stimulator is the ideal solution for using LED flashes in different intensity and pulse frequency as a stimulus. For example for optogenetic neuromodulation or retina experiments.

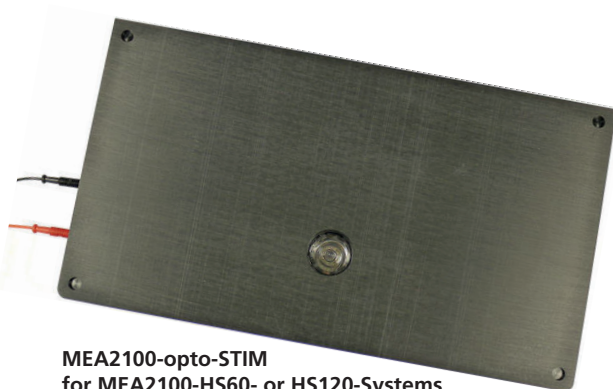


MEA2100-2-opto-STIM
for MEA2100-HS2x60-Systems

LED

LED Type: Please select the provided LED from LuxeonStar ([luxeonstar.com](http://www.luxeonstar.com), <http://www.luxeonstar.com/sinkpad-star-o-leds>). Other LED types are available on request, contact support@multichannelsystems.com.

Changing LED: Please read the instruction at the end of the datasheet.



MEA2100-opto-STIM
for MEA2100-HS60- or HS120-Systems

LED Stimulator

Two types of LED Stimulators are available, one for the MEA2100 headstages with one area for a MEA and one for the MEA2100 headstages with two areas for MEAs:

MEA2100-HS2x60-Systems (MEA2100-2-opto-STIM)
MEA2100-HS60- or HS120-Systems (MEA2100-opto-STIM)

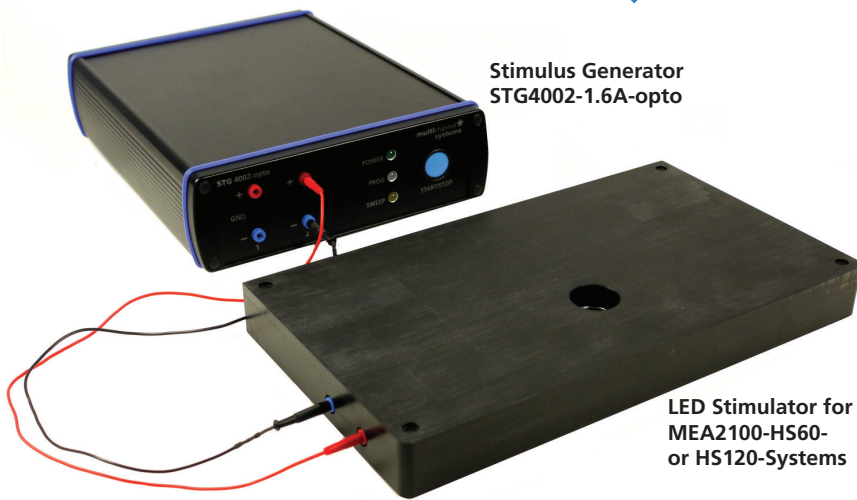
Place the MEA2100 headstage accurate on the LED Stimulator device, so that the LED is exact under the hole in the groundplate of the MEA2100 headstage.

LED Stimulator for MEA2100-Systems MEA2100-opto-STIM

LED Stimulator powered by
Stimulus Generator STG4002-1.6A-opto

STG4002-1.6A-opto

Please connect the blue output port of channel 1 or channel 2 of the stimulus generator STG4002-1.6A-opto with the provided cable to the blue input port on the side panel of the LED Stimulator and the red output port of channel 1 or channel 2 to the red input port of the LED Stimulator. Each STG channel operates one LED independently from the other.



Stimulus Generator
STG4002-1.6A-opto

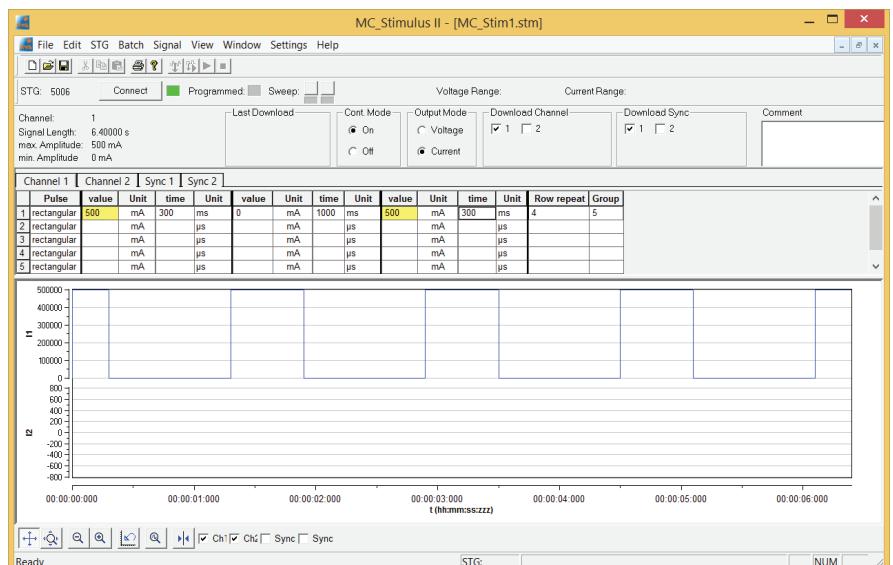
LED Stimulator for
MEA2100-HS60-
or HS120-Systems

MC_Stimulus II Software

The flexible MC_Stimulus II software (Version 3.4.6 and higher) enables complex stimulus pulses. Stimulation pattern designed in the program or imported from an external ASCII file are converted by the connected STG4002-1.6A-opto into pulses, which are sent to the stimulation LED(s).

Please read the manual
MC_Stimulus II for
information about
operating conditions of
the STG4002-1.6A-opto.

Warning: Please use the STG4002-1.6A-opto exclusive for stimulation of LEDs. Do not connect an oscillator to the STG, do not connect other external devices in series or parallel.

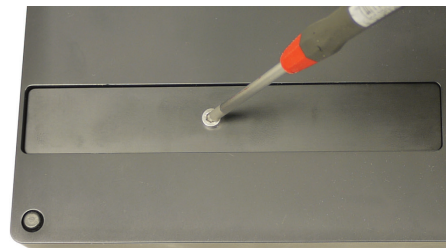


LED Stimulator for MEA2100-Systems MEA2100-opto-STIM

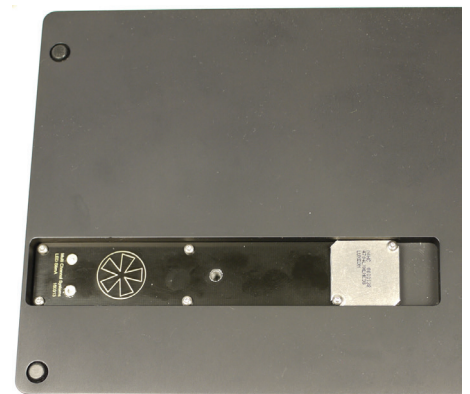
Instructions for the Replacement of the LED in a MEA2100-opto-STIM Device

**Please follow
the instructions
with great care!**

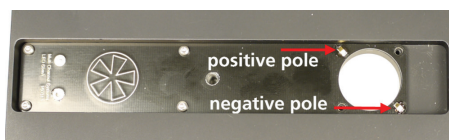
Disconnect the device
from the electrical outlet!



1. Turn the MEA2100-opto-STIM device around and put it onto a soft surface to avoid scratches. You need a Allen key 3.0 screw driver to remove the screw (M4 x 10) which fixes the cover for the LED slot. Please keep the screw for reusing it later. Remove the cover of the slot and the washer from the internal part.



2. Remove the two screws (M2 x 6) which fix the LED with a TORX T6 screw driver. These two screws are smaller than the screw of the slot cover.



3. Insert the replacement LED in correct orientation. The LED is marked with a black point in one edge. Please do not mistake the positive and negative pole, please see the pictures beside!

