Laser Trigger Module User Guide

Licel GmbH

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1 Introduction

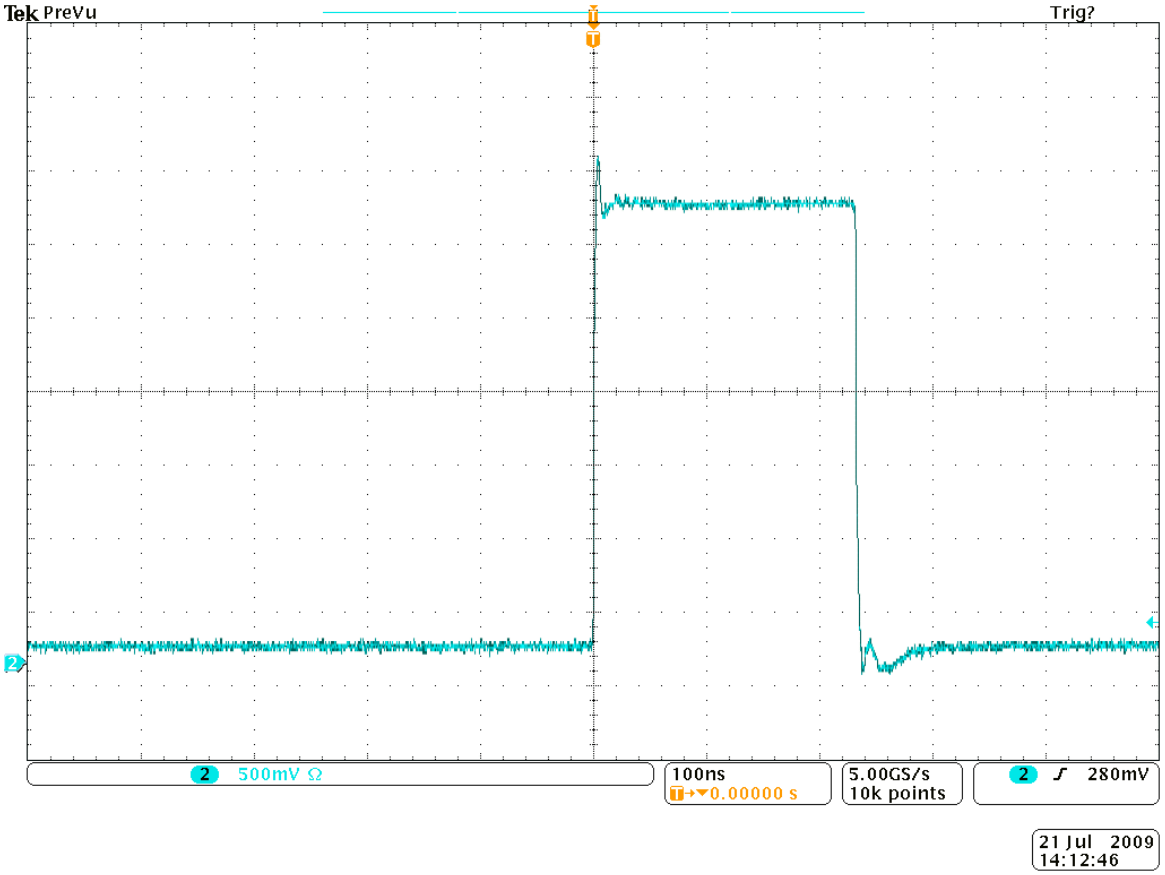
The Laser Trigger Module uses a photodiode to pick up a weak reflection from the outgoing laser beam. The optical signal is then preamplified, discriminated and amplified so that it can drive a Licel Rack6 or individual transient recorders.

2 Power supply

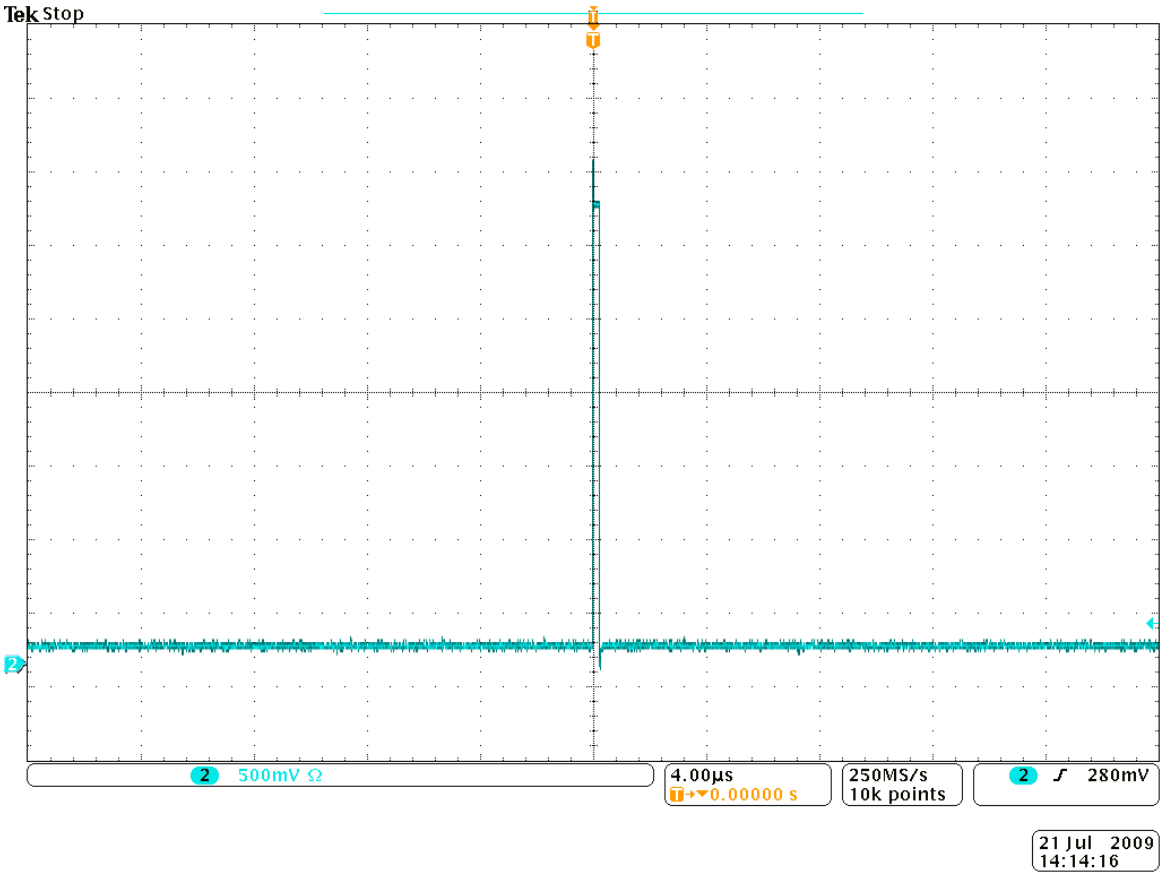
The unit can be either connected to Rack6 with a usual transient recorder power cable or to external supply which must deliver +5V and -5V with 100mA.

3 Setup

Once the unit is powered plug the diode into the module and mount it close to the laser beam. The trigger output of the module should be connected to a oscilloscope. Terminate the input at the oscilloscope with 50Ω. Select 100ns per div as the horizontal scale and 1V/div as the vertical scale. Turn the know till a trigger signal like the shown one appears.



Decrease the timing resolution and verify that no double trigger appears.



Use this signal to trigger the Rack6.