

LTDV6CH | DATASHEET

Strobe controller 6 channels



SPECIFICATIONS

Electrical specifications

Output channels		6
Max continuous current	(A)	-
Max pulse current	(A)	17
Max pulse voltage ¹	(V)	46
Max dissipable thermal power per channel	(W)	5
Pulse delay ²	(µs)	0 - 65 535
Pulse width ²	(µs)	10 - 65 535
Pulse delay repeatability	(µs)	0.1
Pulse width repeatability	(µs)	0.1
Power supply ³	(V)	24
Data Interface		RS485
Communication protocol		Modbus RTU
I/O interface		4x opto-isolated input 2x opto-isolated output

Mechanical specifications

Width ⁴	(mm)	123
Length ⁴	(mm)	205
Height ⁴	(mm)	84
Mass	(g)	1300
Mounting		DIN rail

¹ Maximum output voltage depends on the output current. Higher current draw lowers the maximum output voltage.

² In variable resolution depending on selected value.

³ ± 10%.

⁴ Including DIN rail where available on the product.

KEY ADVANTAGES

- Industrial design with opto-isolated I/O signals
- High-precision LED strobe control with configurable timing
- Wide interface compatibility for integration into PC and PLC systems*
- Up to 8 independently controlled output channels
- High output currents with options for intensive LED loads
- Integrated thermal overload protection*

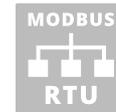
*available on some models

Opto Engineering® range of strobe controllers offers repeatable fast pulsing for quick and accurate strobing of a wide variety of LED lightings.

KEY FEATURES



24 V



MODBUS RTU



OPTO ISOLATED I/O

Environment Specification

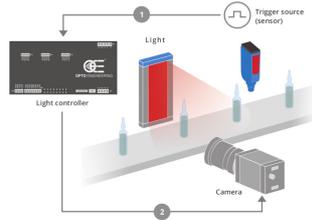
Operating temperature	(°C)	0-40
Storage temperature	(°C)	0-50
Operating relative humidity	(%)	20-85, non condensing
IP rating		IP20
Installation		Indoor use only

TRIGGERING OPTIONS AND WIRING DIAGRAM

Two typical camera triggering arrangement (Option A and B) are illustrated for each controller model. Triggering Option A) is preferred because the controller directly filters the trigger signals getting rid of unwanted noise. This configuration is possible because Opto Engineering® controllers feature dedicated synchronization outputs which are not commonly available from other manufacturers.

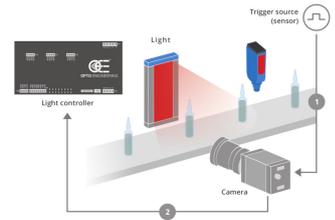
CONTROLLER TRIGGERS CAMERA

Triggering arrangement where the light controller is triggered by trigger source(s) (sensor positioned on the manufacturing line) and the lighting controller then triggers the camera(s). This arrangement has the advantage that the controller can filter the trigger signals before passing the command to the camera and the light.

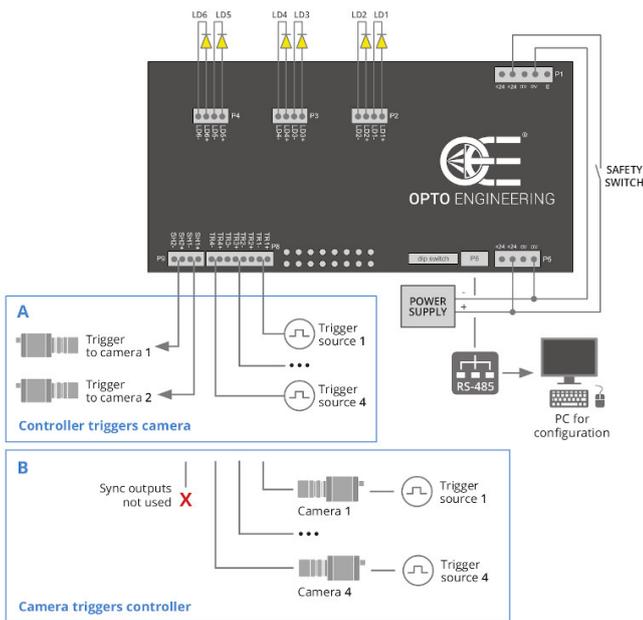


CAMERA TRIGGERS CONTROLLER

Arrangement where each camera is triggered by a trigger source (sensor), the camera then triggers the light controller and starts its exposure.



WIRING DIAGRAM



COMPATIBLE PRODUCTS

Full list of compatible products available [here](#).



A wide selection of innovative machine vision components.

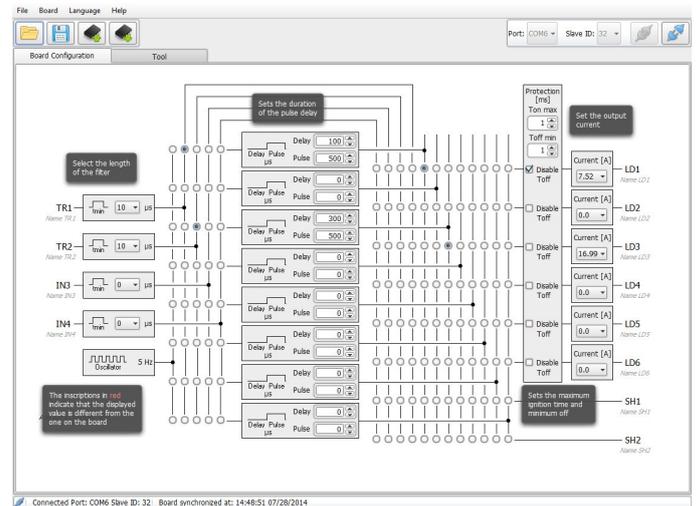
EASY CONFIGURATION

LTDV6CH can be configured via RS485. You can either download and use our free LTSW software to configure the controller from your PC or directly send low-level commands from a PC using the Modbus/RTU slave protocol (all the Modbus function codes supported by the controller are listed in the manual available online).

The LTSW software offers a very intuitive and graphical user interface where you can:

- Set the output current intensity of each connected illuminator in steps of 98 mA
- Set the pulse duration and pulse delay of each illuminator in steps of 1 μ s
- Control the connected illuminators with up to 4 synchronization inputs
- Control up to 2 synchronization outputs (e.g. up to 2 cameras)
- Write and save different configurations depending on your application

To use LTSW configuration software your PC must have a native RS485 communication interface or a suitable RS485/USB converter must be used (PN: ADPT001).



Main control panel of configuration software