LTDV1CH-17V | DATASHEET

OPTO ENGINEERING

Strobe controller 1 channel variable current 5 mA - 17A

KEY ADVANTAGES

Quick and accurate strobing of a wide variety of LED lightings

Easily configure and manage strobe, trigger and camera signals

Ethernet, RS485 or analogue interface

Up to 8 independently controlled output channels

Max output current up to 40A pulsed/4A continuous

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

SPECIFICATIONS

Electrical specifications

User interface		12-way dip switch
Status LEDs		Yes (for power on and trigger)
Configuration software		-
Output channels		1, constant current
Output current range	(A)	5 mA-160 mA (in steps of 5 mA) pulsed or continuous 100 mA-3.2 A (in steps of 100 mA) pulsed 1.5 A-17 A (in steps of 500 mA) pulsed
Max dissipable thermal power per channel	(W)	8
Synchronization inputs number[1]		1 opto-isolated digital input
Synchronization outputs number		1 opto-isolated digital output
Pulse delay[2]	(µs)	-
Pulse width[2]	(µs)	-
Timing repeatibility for pulse delay[3]	(µs)	-
Timing repeatibility for pulse width[3]	(µs)	-
Supply voltage[4]	(V)	24
Output voltage	(V)	0-12 (with step-up disabled) or 0-36 (with step-up enabled)
Max startup/inbrush current	(A)	2.5

Mechanical specifications

Width[5]	(mm)	119
Length[5]	(mm)	70
Height[5]	(mm)	82
Mass	(g)	500
Mounting		DIN rail

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

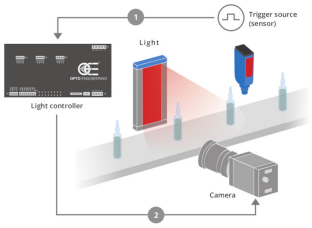
[1] Operate from 3.3V to 24V.
[2] In variable resolution depending on selected value.
[3] Digital processing.
[4] 24V supply must be regulated at ±10%.
[5] Including DIN rail where available on the product.

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.

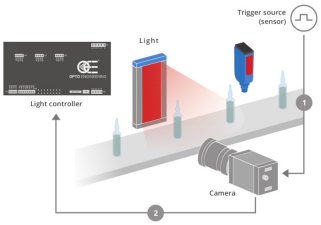
CONTROLLER TRIGGERS CAMERA

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.

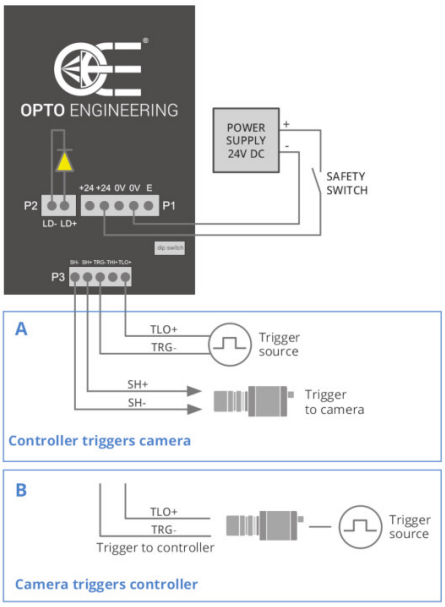


CAMERA TRIGGERS CONTROLLER

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



WIRING DIAGRAM



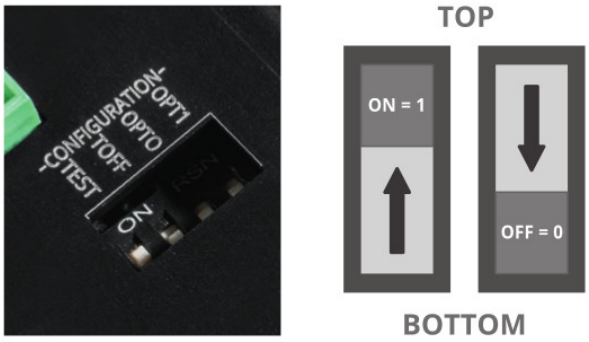
COMPATIBLE PRODUCTS

Full list of compatible products available *here*.

A wide selection of innovative machine vision components.

EASY CONFIGURATION

LTDV1CH is simply configured from the front panel via DIP switches. You can easily set the intensity of the LED lights driving current (from 5mA to 17A), filtering option for the trigger signal (select between 10 µs or 100 µs time constant) and delay for synchronization output (select between 0 or 100 µs).



DIP switches interface for simple and fast configuration