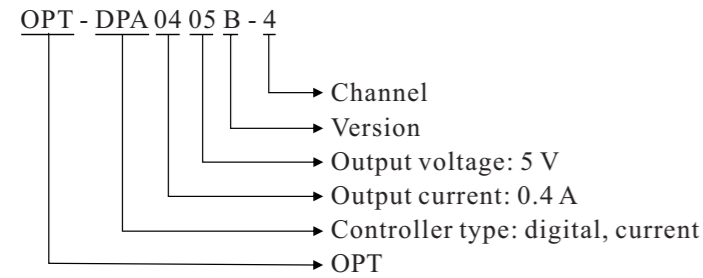


Digital Controller for Spot Lights

Model No

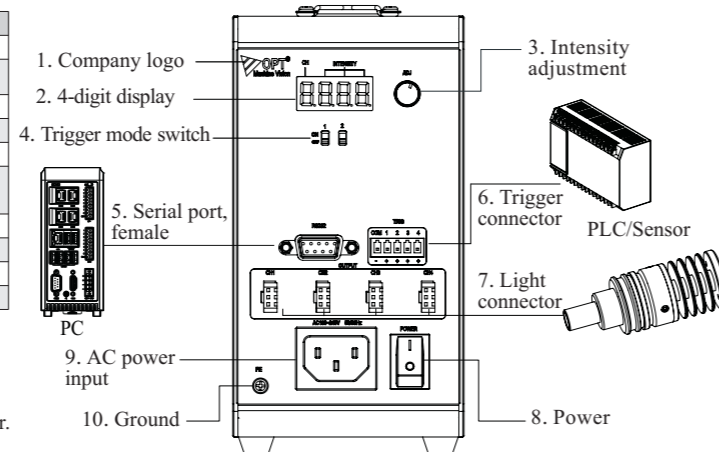


Product Features

- 256 intensity levels
- Trigger signal input: connect an external signal source (e.g. a camera trigger signal) for synchronized strobing of the illumination device.
- Power out pulse width can be adjusted
- Rs232 communication
- Easy to install: screw mount or DIN rail are available

Device Overview

No.	Item	Description
1	Company logo	OPT brand
2	4-digit display	The first number indicates the channel and the other 3 numbers show related data
3	Intensity adjustment	Adjusts the intensity and width of the trigger pulse
4	Trigger mode switch	see "Trigger Modes" below for details
5	Serial port, female	Rs232 communication interface with the PC
6	Trigger connector	For connection with an external trigger source such as a PLC, sensor or camera
7	Light connector	In total, four lights can be controlled individually
8	Power	Turns the controller on/off
9	AC power input	100 - 240 V AC, 50/60 Hz
10	PE Ground	Ground protection



Connection Setup

- Step 1: Refer to right drawing on how to connect the light with the controller.
- Step 2: For external triggering, connect the external trigger source with the trigger port.
- Step 3: Connect the controller with an 100 - 240 V AC power source and of switch the controller on. The digital display is lit. If the intensity the light shall be controlled via PC, you need to connect the PC with an RS232 cable or Ethernet cable before the controller is switched on. Use the provided software or your own application to communicate with the controller. You can adjust the settings via the PC or manually.

Trigger mode set

Mode	Ts1	Ts2
continuous mode	ON	ON
continuous mode	ON	OFF
Normal trigger mode	OFF	ON
High power trigger mode	OFF	OFF

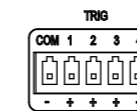
Parameter Description

Item	Parameter	Details
Input voltage	100-240 V AC	50/60Hz
Output current	0 - 0.4 A	For 5V Ligh
Intensity control	256 levels	Adjustable by intensity adjustment wheel via PC
Short circuit protection	Yes	Protection shuts down the related channel and "ER2" appears on the display
Over current protection	Yes	When the current is over 10% of set value the related channel is shut down and "ER1" appears on the display
Normal triggering	256 levels	Change by two toggle switch in panel
High-intensity triggering	255 levels	Change by two toggle switch in panel
Width of normal trigger pulses	0.1 ms - 99.9 ms	Adjustable by intensity adjustment key or via PC
Width of high intensity trigger pulse	0.01 ms - 5.00 ms	Adjustable by intensity adjustment key or via PC
Output power	2 W per channel, 8 W per 4 channels	For spot lights
Communication	RS232	
Standby power consumption	≤ 3.4 W	
Overvoltage resistance	1500 V AC, max. 1 min	Leak current < 10 mA
Insulation resistance	500 V DC	>20 MΩ
Working temperature	-5°C - 50°C	
Size [mm]	110x88x160	
Weight [kg]	1.03	

Remark: It can't detect the load automatically

Trigger Port and Setup

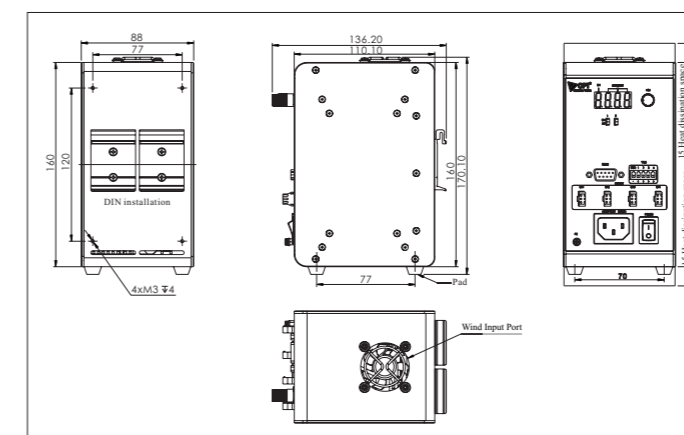
The trigger mode of this type controller is level trigger, so the trigger mode can be achieved by high voltage trigger, low voltage trigger, rising edge trigger and falling edge trigger, and the connection COM port is the same in the controller. The high power trigger (input voltage range is 5V to 24V) and low power trigger (input voltage range is 0V-2V) is separated by the dual opto-couple inside. For the rising edge trigger and falling edge trigger, normally the delivered item is rising edge trigger, but it can be adjusted to falling edge trigger by the trigger switch key on the panel.



Normal trigger way

Turn connector 1 into OFF and turn connector 2 into ON, the controller turns to normal trigger way and intensity can be adjusted from 0 to 255 level, the wide of trigger pulse can be adjusted from 1 to 99.9ms and it can be set through DEMO software or intensity adjustment key.

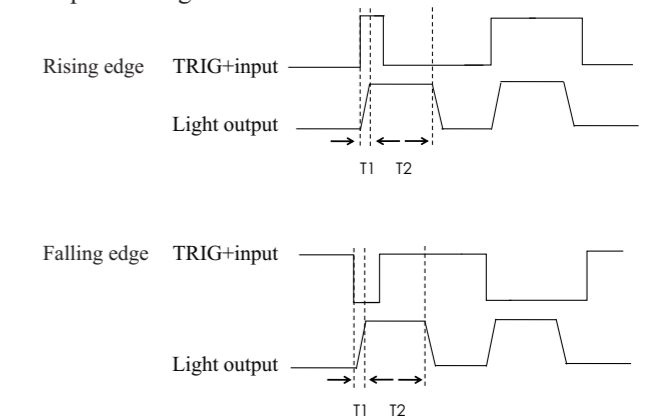
Dimensions [mm]



High intensity trigger way

Turn connector 1 and 2 into OFF at the same time, the controller turns to high intensity trigger way and one channel outputs 1A, The wide of trigger pulse can be adjusted from 0.01 to 5.00ms and it can be set through DEMO software or intensity switch key.

Sequence diagram



Description

T1 is the trigger delay time while T2 is the width of trigger pulse. Normal trigger mode: T1 80 μs; T2 can be set from 1 to 999 ms. High-intensity trigger mode: T1 80 μs; T2 can be set from 0.01 to 5.00 ms.

Two kinds ordinary trigger connection way drawings

