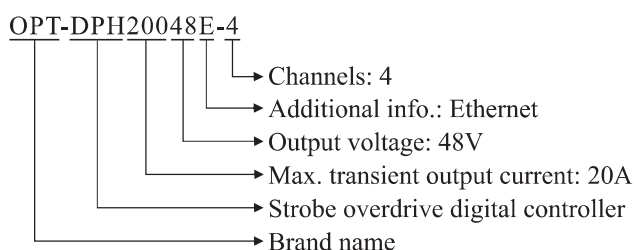


DPH Strobe Overdrive Digital Controller



Selection Guide



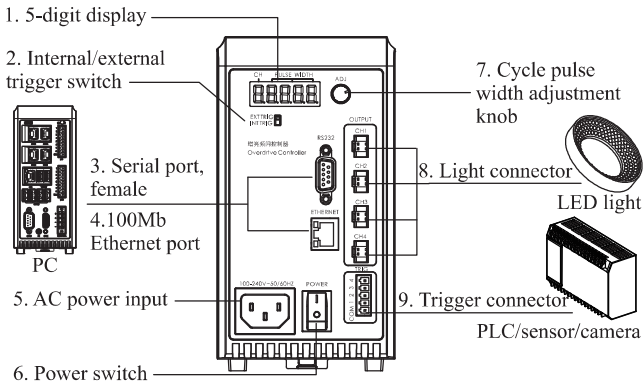
Product Features

- Programmable trigger: Maximum of 32 programmable steps and intensity, pulse width and trigger source can be defined in each step.
- Overdrive® technology
- The upper limit of external trigger frequency settable
- ≤ 15μs trigger response time
- Simultaneous communication of multiple channels
- External trigger: External trigger input (e.g. camera trigger signal) for related light strobes and other sequences. (Strobe mode can greatly improve light source expectancy.)
- Internal trigger cycle setting: 15 - 1000ms
- RS232 interface
- 100Mb Ethernet interface
- Temperature controlled fan
- Convenient mounting with screws or on DIN rails

Specifications

Item	Parameter	Description
Input voltage	100 - 240V AC 3.6A 50/60Hz	
Output voltage	48V	
Lighting mode	Strobe	
Internal trigger	Yes	Enabled via the trigger mode switch, and the external trigger is disabled.
Internal trigger cycle	15 - 1000ms	Adjusted via the adjustment knob or DEMO software; the cycle of each channel can be different.
External trigger mode	Level trigger	
Output pulse width	1 - 1023μs	Adjusted via the adjustment knob or DEMO software; the pulse width of each channel can be different.
Programmable trigger	Yes	Both the pulse width and trigger source settable
Response time	≤ 15μs	
Short-circuit protection	Yes	The related channel is shut down and "Err2" displays.
Max. transient output current	20A/CH	4CH total ≤ 40A
Upper limit of external trigger frequency	1 - 900Hz	40Hz by default
Fan control	Via temperature	
Communication	RS232/Ethernet	
Standby power consumption	≤ 3.4W	
Hi-Pot test	1500VAC 1min	Leakage current < 10mA
Insulation	500VDC	Insulation resistance > 20MΩ
Operating temperature	-5°C - 50°C	
Dimensions (mm) (L × W × H)	91×133×171	Refer to the drawing for details
Weight (kg)	1.1	

Device Overview



No.	Item	Description
1	5-digit display	The first digit on the left indicates the operating channel, and the other 4 show the corresponding pulse width or internal trigger cycle.
2	Internal/external trigger switch	INT TRIG: Internal trigger EXT TRIG: External trigger
3	Serial port, female	Communication with PC via the RS232 interface
4	100M Ethernet port	Communication with PC via the Ethernet interface
5	AC power input	100 - 240V AC 50/60Hz
6	Power switch	Turns on/off the controller
7	Cycle pulse width adjustment knob	Press the knob, the digit that flashes is chosen; press it again, the next digit is chosen; turn the knob in clockwise to increase the value and in anti-clockwise to reduce the value
8	Light connector	Each light (4 in total) individually controlled
9	Trigger connector	Connects external trigger for strobe; trigger pulse width settable

Trigger Mode Setting

Switch	Mode
EXT TRIG	External trigger
INT TRIG	Internal trigger

Error Code Description

Code	Description	Display	Solution
Err2	Short-circuit protection	"Err2"	Remove ERR and reboot
Err4	Driver hardware communication ERR	"Err4"	Return to OPT for repair
Err5	Display hardware communication ERR	"Err5"	Return to OPT for repair

Remark: "-----" displays when the controller is turned on, and the corresponding value displays later.

Trigger

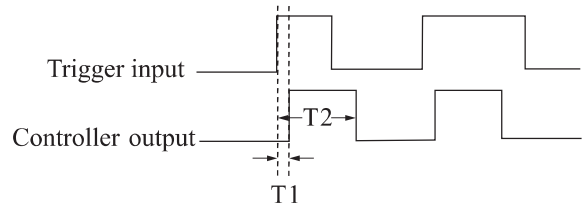
Trigger Mode	Trigger Polarity	Description
Internal trigger	Auto trigger	The controller will output the corresponding pulse width per the set trigger cycle.
External trigger	Rising edge trigger	48V single channel output; trigger pulse width setting: 1 - 1023µs
	Falling edge trigger	
Programmable trigger	Rising edge trigger	Switch to the mode via DEMO software in the external trigger mode; set a step list before entering into the mode
	Falling edge trigger	

Remark: Rising edge trigger is the default trigger polarity.

Trigger Sequence

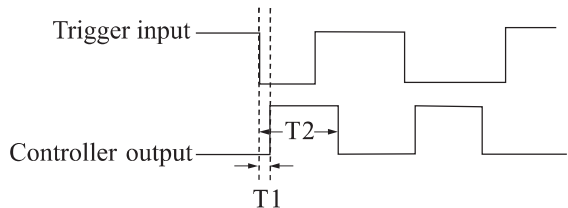
Rising edge trigger

The illumination time is equal to the trigger pulse width, which is set via DEMO software or the adjustment knob.



Falling edge trigger

The illumination time is equal to the trigger pulse width, which is set via DEMO software or the adjustment knob.

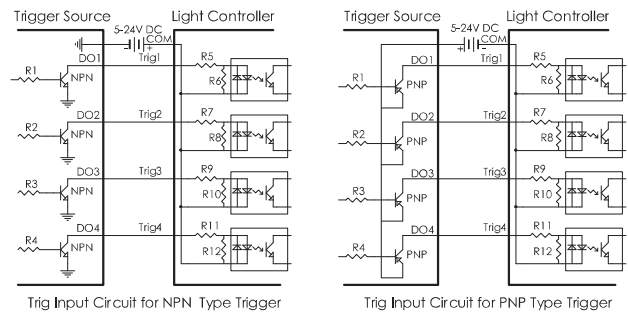


Remarks

1. T1: Enabling response time; T2: Trigger pulse width
2. T1 ≤ 15µs; T2 setting range: 1 - 1023µs

Trigger Wiring Diagrams

4 trigger channels, and bidirectional optocoupler inside
Low level: 0 - 2V input voltage; high level: 5 - 24V input voltage. The rising edge trigger is the default trigger polarity. The diagrams are as below.



Dimensions (mm)

