

High Power Analog Controller

Model No

OPT - APA 60 24 - 2

- Channel
- Max. output voltage 24V
- Max. output current 60 / 6 A 30 / 3 A
- Controller type: analog, current
- OPT



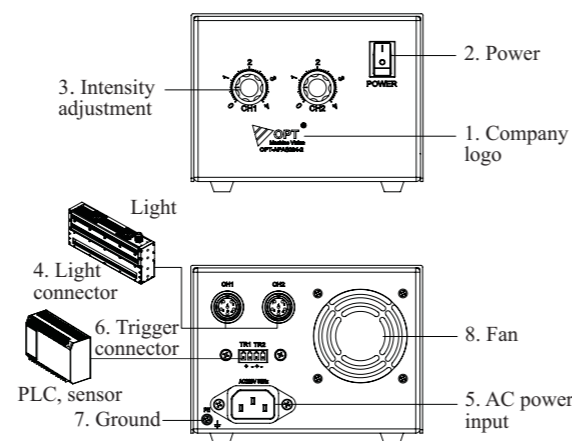
NO.	P/N	Channel	Matching lights
1	APA6024-2	2	0.8 - 6 A line lights
2	APA3024-2	2	0.8 - 3 A line lights

Product Features

- 1 Continuous control of the current strength
- 2 Short circuit protection
- 3 Trigger signal input: connect an external signal source (e.g. a camera trigger signal) for synchronized strobing of the illumination device.
- 4 Detects max. output current automatically

Device Overview

No.	Item	Description
1	Company logo	OPT brand
2	Power	Turns the controller on/off
3	Intensity adjustment	Adjusts the intensity and width of the trigger pulse
4	Light connector	For 24 V line lights
5	AC power input	Input voltage 100 - 240 V AC, 50/60 Hz
6	Trigger connector	For connection with an external trigger source such as a PLC, sensor or camera
7	Ground	Ground protection
8	Fan	For cooling of the device



Connection Setup

- Step 1: Turn the intensity adjustment wheels to zero (counterclockwise)
- Step 2: Connect the light with the controller; pls. refer to the drawing on the right.
- Step 3: For external triggering, connect the external trigger source with the trigger port.
- Step 4: Connect the controller with a 100 - 240 V AC power source and switch the controller on. The indicator is lit.
- Step 5: Turn the intensity adjustment wheels until the intended brightness of the light is reached.

Connector specification:

Pin	Pin Definition
1	Light+
2	Light-
3	Fan+
4	Fan-
5	Res
6	Res

Parameter Description

Item	Parameter	Description
Input voltage	100 - 120 V AC or 200 - 240 V AC	Change by internal switch
Intensity control	continuous	Manually at the device
Trigger mode	Switch	Supports NPN trigger
Trigger delaytime	≤ 100 μs	
External trigger input	Light strobing is synchronized with external trigger	
External trigger frequency	max. 1 kHz	
Channels	2CH	
Output power	APA3024-2	72 W per channel max. 144 W total
	APA6024-2	120 W per channel per 1CH max. 240 W total
Overvoltage resistance	500 V DC	Leak current < 1 mA
Insulation resistance	1500 V AC, max. 1 minute	Insulation resistance > 20 MΩ
Working temp.	-5°C - 50°C	
Standby power consumption	≤ 11W	
Size [mm]	APA 3024-2	270.5 x 104.5 x 136mm
	APA 6024-2	305.8 x 136 x 98.5mm
Weight [kg]	APA 3024-2	1.8 kg
	APA 6024-2	2.1kg

Trigger port

Please refer to the drawing of the trigger port of APA6024-2 below regarding the wiring scheme.



Trigger Mode Setup

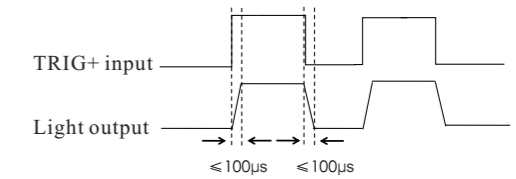
This digital controller has two modes, "ON" and "OFF", which can be set internally. Please refer to the chart below to choose the best mode for your application.

TS	Trigger mode	Description
Up	Continuous on	Trig+ and Trig- port is disconnected, the light is continuous on; Trig+ and Trig- port is connected, the light is turned off.
Down	Turn off	Trig+ and Trig- port is disconnected, the light is turned off; Trig+ and Trig- port is connected, the light is continuous on.

Sequence Diagram

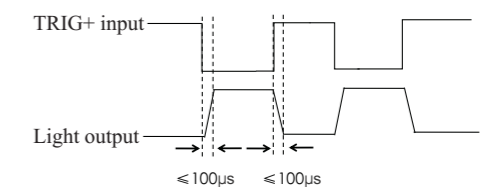
Continuous on mode

When the COM port connect the outside signal, the lighting is continuous on if the input signal of "trigger+" and "trigger-" port disconnected (high voltage trigger), the lighting is turned off if the input signal of "trigger+" and "trigger-" is connected (lower voltage trigger).

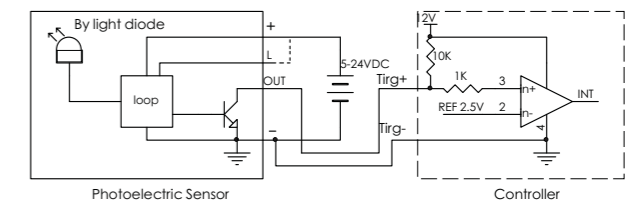


Turn off mode

When the COM port connect the outside signal, the lighting is turned off if the input signal of "trigger+" and "trigger-" port disconnected (high voltage trigger), the lighting is continuous on if the input signal of "trigger+" and "trigger-" is disconnected (lower voltage trigger).



Please find the wiring scheme of the switch and the trigger port below.



Dimensions [mm]

