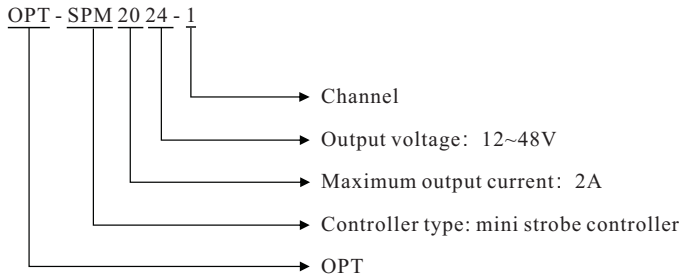


Mini Strobe Controller

Model No

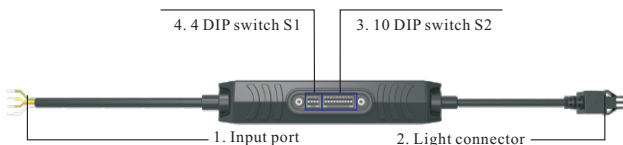


Product Features

- 1 Small size, easy for operation
- 2 High trigger frequency: up to 50KHz at max
- 3 Short trigger response time: $\leq 10\mu s$
- 4 6 trigger modes, adaptable for various work environment
- 5 Wide input voltage range from 12V DC to 48V DC, easy for using the DC power supply on the machine, and lights can be overdriven to increase the intensity
- 6 Wide trigger pulse width setting: $10\mu s \sim 1023ms$ can be set

Panel & Connector Description

No.	Interface	Description
1	Input port	Including power input and trigger signal input port; See "Connection" section for details
2	Light connector	JST SMP-02V-B 2 Pin
3	10 DIP switch S2	Pulse width setting; See "Trigger Pulse Width Setting" for details
4	4 DIP switch S1	Trigger mode switching; See "Trigger Mode Setting" for details



Input Connection

The input port is represented by four colors: white, brown, green, and yellow (as shown below). The white and brown lead wires are separately connected with the positive & negative ports of the power supply; The green and yellow lead wires are separately connected with the positive and negative ports of the trigger input signals. The internal contains opto coupler isolation. The input voltage 0~2V is low level. And the input voltage 5~24V is high level. See "Trigger Connection Reference" for details.

Wire Colour	Connection Ways
White	Power+
Brown	Power-
Green	Trigger+
Yellow	Trigger-

Trigger Mode Specification

1. Rising edge trigger

When the trigger signal is on the rising edge, the bright time of the light is consistent with the trigger pulse width. The trigger pulse width is set by the corresponding switch. See Chart 1.1, T1 is the OFF to ON response time; T2 is the trigger pulse width; $T1 \leq 10\mu s$, T2 can be set in the range of $10\mu s \sim 1023ms$

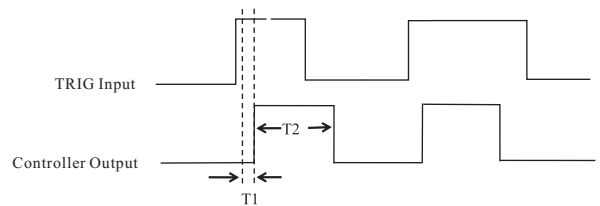


Chart 1.1

2. Falling edge trigger

When the trigger signal is on the falling edge, the bright time of the light is consistent with the trigger pulse width. The trigger pulse width is set by the corresponding switch. See Chart 1.2, T1 is the OFF to ON response time; T2 is the trigger pulse width; $T1 \leq 10\mu s$, T2 can be set in the range of $10\mu s \sim 1023ms$

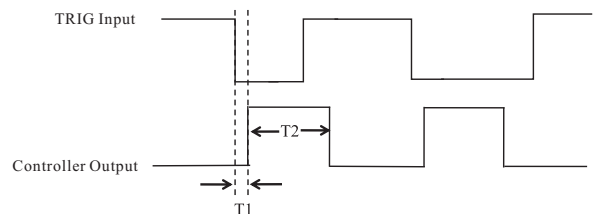


Chart 1.2

3. Real time positive trigger

When the trigger signal is high, the bright time of the light is consistent with the high level pulse width of the trigger signal. See Chart 1.3, T1 is the OFF to ON response time; T2 is the trigger pulse width; T3 is the ON to OFF response time; $T1 \leq 10\mu s$, T2 is the same as the high level pulse width, $T3 \leq 10\mu s$

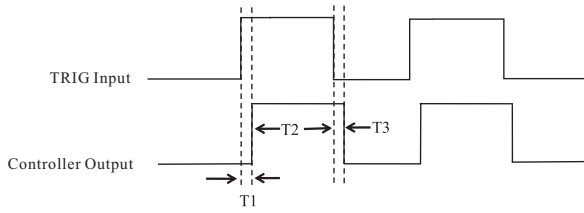


Chart 1.3

4. Real time negative trigger

When the trigger signal is low, the bright time of the light is consistent with the low level pulse width of the trigger signal.
See Chart 1.3, T1 is the OFF to ON response time; T2 is the trigger pulse width; T3 is the ON to OFF response time; $T1 \leq 10\mu s$, T2 is the same as the low level pulse width, $T3 \leq 10\mu s$

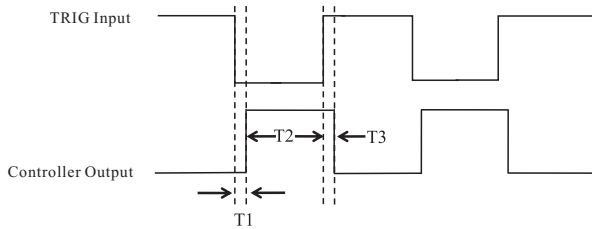


Chart 1.4

5. Time limited positive trigger

When the trigger signal is high, if the high level pulse width of the trigger signal is less than the set trigger pulse width, the bright time of the light is consistent with the high level pulse width of the trigger signal;
See Chart 1.5, T1 is the OFF to ON response time; T2 is the trigger pulse width; T3 is the ON to OFF response time; $T1 \leq 10\mu s$, T2 is the same as the high level pulse width, $T3 \leq 10\mu s$

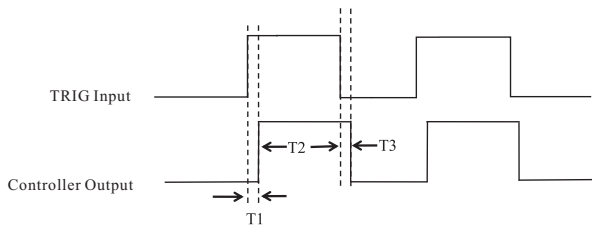


Chart 1.5

If the high level pulse width of the trigger signal is greater than or equal to the set trigger pulse width, the bright time of the light is consistent with the set trigger pulse width.
See Chart 1.6, T1 is the OFF to ON response time; T2 is the trigger pulse width; $T1 \leq 10\mu s$, T2 can be set in the range of $10\mu s \sim 1023ms$

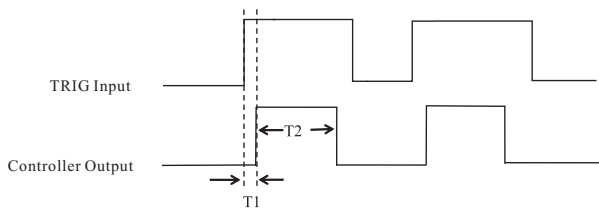


Chart 1.6

6. Time limited negative trigger

When the trigger signal is low, if the low level pulse width of the trigger signal is less than the set trigger pulse width, the bright time of the light is consistent with the low level pulse width of the trigger signal.
See Chart 1.7, T1 is the OFF to ON response time; T2 is the trigger pulse width; T3 is the ON to OFF response time; $T1 \leq 10\mu s$, T2 is the same as the low level pulse width, $T3 \leq 10\mu s$

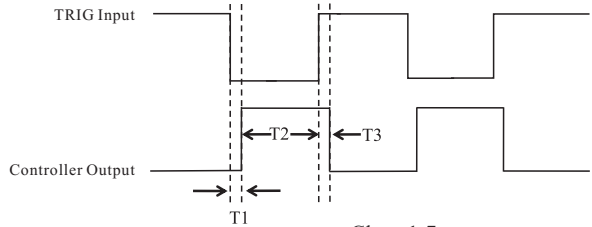


Chart 1.7

If the low level pulse width of the trigger signal is greater than or equal to the set trigger pulse width, the bright time of the light is consistent with the set trigger pulse width.
See Chart 1.8, T1 is the OFF to ON response time; T2 is the trigger pulse width; $T1 \leq 10\mu s$, T2 can be set in the range of $10\mu s \sim 1023ms$

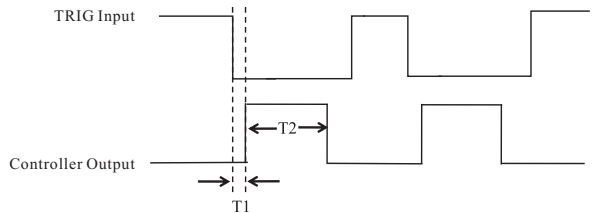


Chart 1.8

Performance Parameters

Item	Parameters	Details
Input voltage	DC 12~48V	
Output voltage	DC 12~48V	
Power polarity reverse connection protection	Yes	The input polarity reverse will not cause controller damage
External trigger input	Yes	
External trigger frequency	up to 50KHz at max	
Trigger mode	1. Rising edge trigger 2. Falling edge trigger 3. Real time positive trigger 4. Real time negative trigger 5. Time limited positive trigger 6. Time limited negative trigger	Set by switch
Trigger pulse width	$10 \sim 1023\mu s$ or $1 \sim 1023ms$	Switching time unit by switch
Trigger level	Low level: 0~2V High level: 5~24V	
Trigger response time	$\leq 10\mu s$	
Output current	Maximum continuous output current: 2A Maximum instantaneous output current: 4A	The average input current must be 0.5A much larger than the average output current
Suitable lights	Continuous: for 12-24V, 2A OPT lights with two Pins; Strobe: for 12-48V, 4A instantaneous current OPT lights with two Pins	
Standby power consumption	$\leq 1W$	
Working temperature	$-5^\circ C \sim 50^\circ C$	
Size (mm)	102.0*22.0*19.8	Refer to mechanical parameters

Trigger Mode Setting

Mode	S1.3	S1.2	S1.1
Rising edge trigger	OFF	OFF	X
Falling edge trigger	OFF	ON	OFF
Real time positive trigger	OFF	ON	ON
Real time negative trigger	ON	OFF	OFF
Time limited positive trigger	ON	OFF	ON
Time limited negative trigger	ON	ON	X

Note: (1) Sx.x indicates the number of the corresponding switches, such as S1.1, which represents the first bit of the switch S1, and S1.2 indicates the second bit of the switch S1.... And so on;

(2) ON means the switch is on, OFF indicates the switch is off, and X indicates the switch is on or off.

Trigger Pulse Width Setting

1. Switch

Switch	S1.4
1~1023ms	OFF
10~1023 μ s	ON

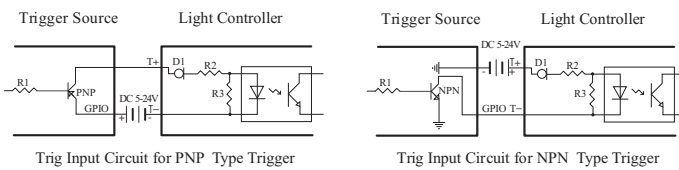
Note: When the fourth bit of S1 switch is ON, the switch S2 is 10-1023 μ s
When the fourth bit of S1 switch is OFF, the switch S2 is 1-1023ms

2. Value

S2.10	S2.9	S2.8	S2.7	S2.6	S2.5	S2.4	S2.3	S2.2	S2.1	Value
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	1
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	1
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	2
OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	3
OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF	4
...
ON	ON	ON	ON	ON	ON	ON	OFF	ON	ON	1019
ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	1020
ON	ON	ON	ON	ON	ON	ON	ON	OFF	ON	1021
ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF	1022
ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	1023

Note: When the switch is 10~1023 μ s, when the set value is less than or equal to 10, the trigger pulse width is 10 μ s.

Trigger Connection Reference



Mechanical Parameter (mm)

