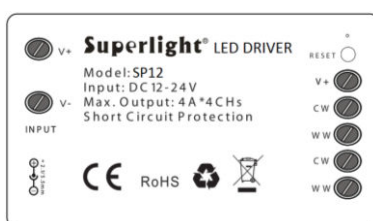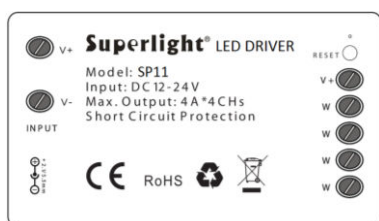# SP11/SP12/SP14

WIFI LED Controller for DIM/CCT/RGBW

Controller adopts the most advanced PWM (Pulse Width Modulation) digital control technology, it is used for controlling constant voltage LED lamps. For instance, point source of light, flexible light strip, led modules, led strings and so on. SP11 for single color, SP12 for dual white, SP14 for RGBW. The WIFI control technology powered by Tuya.

Product Features

- WIFI technology powered by Tuya.
- Short-circuit protection.
- DC12-24V, four channels output, Max. load current: 4CH*4A; Max. load power: 192W/12V; 384W/24V.
- RF remote control is optional, compatible remote control item: Rotatif Switch.
- Memory function, each time power-on reserve the mode which stop in the last power-off.
- Designed for constant voltage LED lights, SP11 for single color, SP12 for dual white, SP14 for RGBW.
- Warranty of this product is one year, exclude the artificial situation of damaged or overloa working.
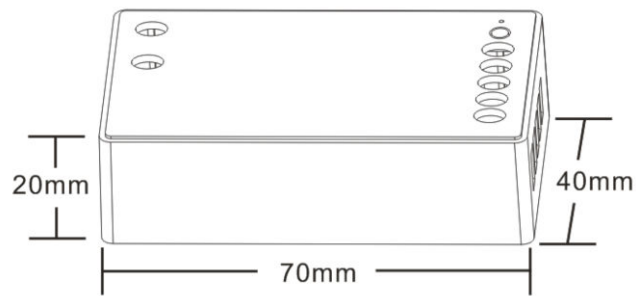
Technical Parameters

Controller

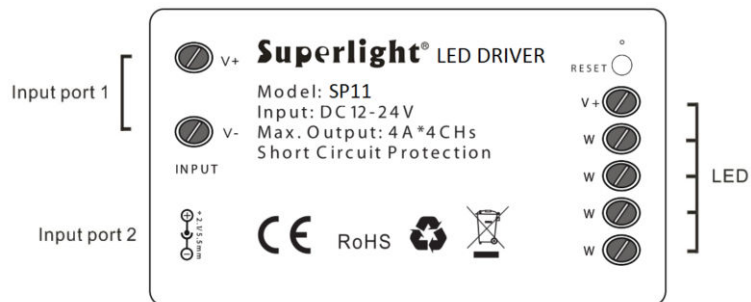| Working temperature	-20 ~ -60℃	Supply voltage	DC12V-24V
Static power consumption	<1W	Connecting mode	Common anode
Grayscale	1024 levels	Speed stage	1024 levels
External dimension	L70*W40*H20 mm	Packing size	L95*W47*H33mm
Net weight	65g	Gross weight	80g
RF frequency	2.4GHz	RF distance	≤20m
Short circuit protection	Yes	Memory function	Yes
Output	4 channels	Output current	≤4A (each channel)
PWM frequency	1.95KHz	Max. Output power	12V:<192W, 24V:<384W

Remote control (optional)

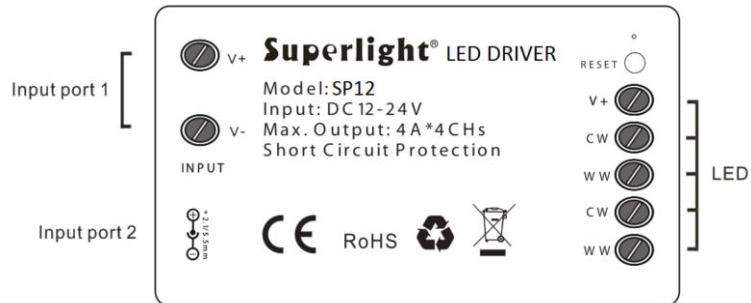| Working temperature	-20 ~ -60℃	Working voltage	3V (AAA*2PCS)
Sleep current	<25uA	Emission current	<17mA
Sleep power consumption	<75uW	Emission power consumption	<51mW
Net weight	80g	Dimension	Φ60*35mm
RF distance	≤30m	RF frequency	2.4GHz
Accessories	holder 1pc, 3M foam sponge glue 1pc.		

Dimensions

Interface Specifications
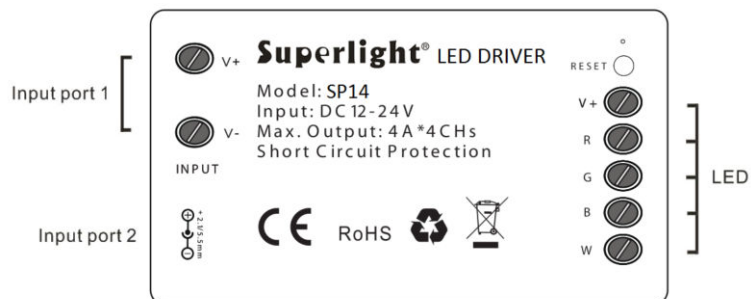
SP11：V+, W, W, W, W

SP12：V+, CW, WW, CW, WW

SP14：V+, R, G, B, W

Direction for use

WIFI controlled by Tuya Application

Long-pressing "Reset" button for 5 seconds until the green indicator light on controller flashing. Then start the connection with APP. Please read operation instruction of App, or following the pop-up prompt message with the APP, to finish the rest connection.
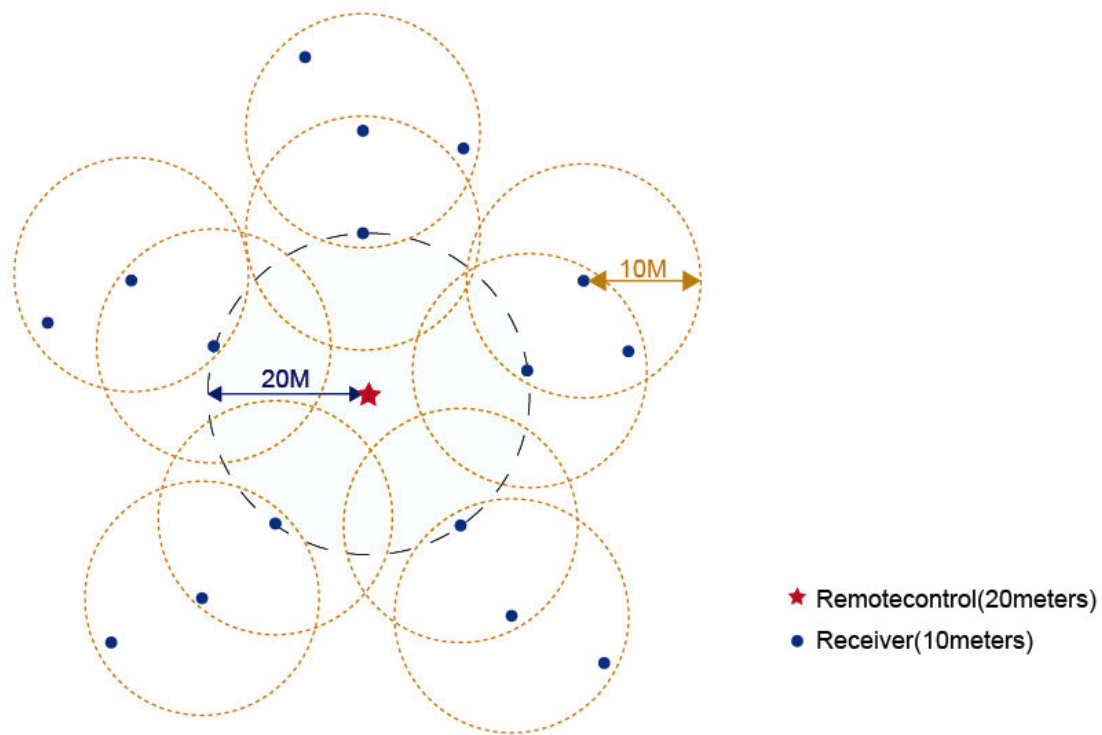
Compatible application: (Tuya)

Remote controlled by Rotatif Switch

Please pair the controller to Rotatif Switch remote control before using. The operation instruction and functions can be find from manual of Rotatif Switch remote control.

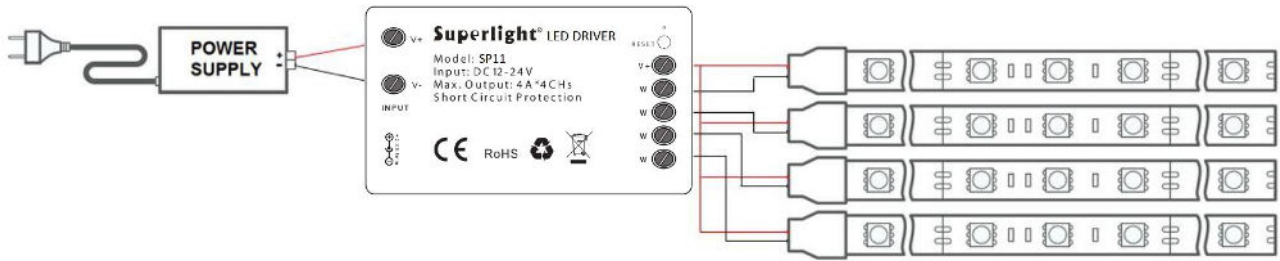### Wireless-synchronization function under remote controlled type

Receivers will transmit the control signals from the remote control and self-inspection the work statues for each other, so multiple receivers can wireless-sync-work completely when be paired to the same one remote control, not only static mode but also dynamic mode, to achieve wired-like operation experience.
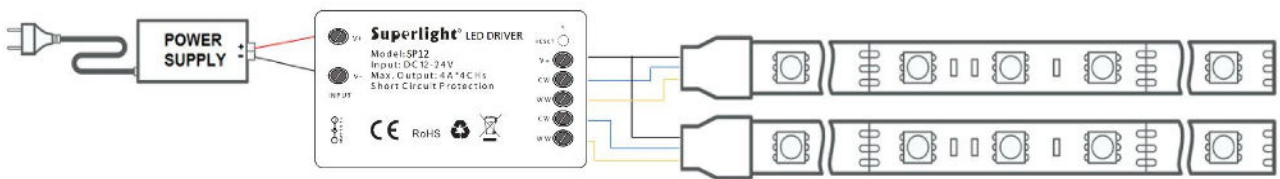

In order to achieve perfect wireless synchronization effect, please keep the distance between receivers within 10 meters as above show.
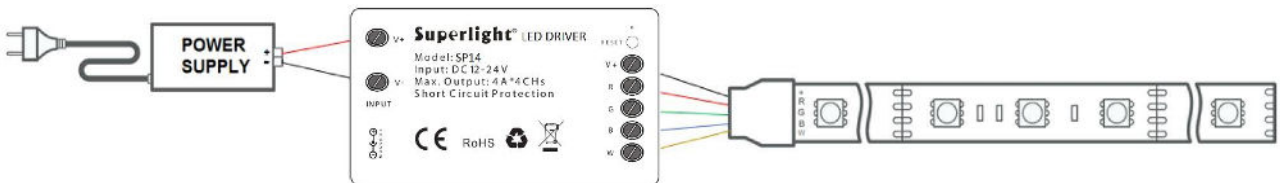
Typical Applications

Application Circuit of SP11: single color

Application Circuit of SP12: CW+WW

Application Circuit of SP14: RGBW

Product information for placing order

Product name	Item number
WIFI LED Controller for DIM/CCT/RGBW	**Single color:** SP11 **Dual white:** SP12 **RGBW:** SP14 **Remote Control (optional):** Rotatif Switch