Intelligent LED Driver
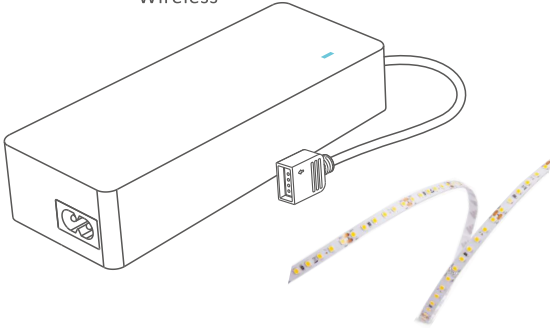
XIAOLEI 小雷

Model: ST-75-12-W1W2
ST-75-12-W2W2
ST-75-12-W3W2
ST-75-24-W1W2
ST-75-24-W2W2
ST-75-24-W3W2

WiFi RF Wireless

Manual

CE RoHS

Product Introduction

Intelligent LED driver is suitable for home lighting, enable to adjust the brightness/color of light and stepless dimming without flicker. It also supports a variety of control modes: intelligent audio voice control and timing control. Also it can be controlled by remote and wireless dimmer panel, which meets the application of different scenes to make life more intelligent.

Product Features

- Wireless signal: WiFi, RF 2.4GHz.
- Support 3G/4G signal controlling driver.
- Support wireless panel, remote controlling driver.
- Dimming range from 0-100%, LED start at 0.1% possible.
- 0~100% flicker-free, achieve the level of exemption assessment.
- Active PFC function.
- 100~240Vac wide voltage input.
- Over-heat / Over voltage / Over load / Short circuit protection, recover automatically.
- Class 2 power supply. Full protective plastic housing.
- Compliant with Safety Extra Low Voltage standard.
- Suitable for indoor application for Ⅰ/Ⅱ/Ⅲ .

Accessories

LED driver 1pcs   LED strip wiring cable 1pcs   Power cord 1pcs   Technical brochure 1pcs
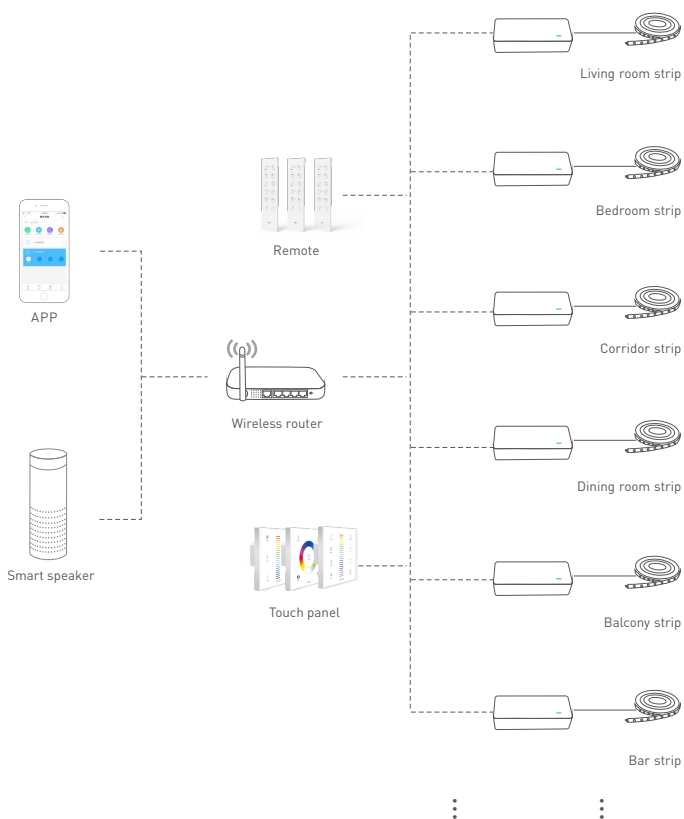
Product Size
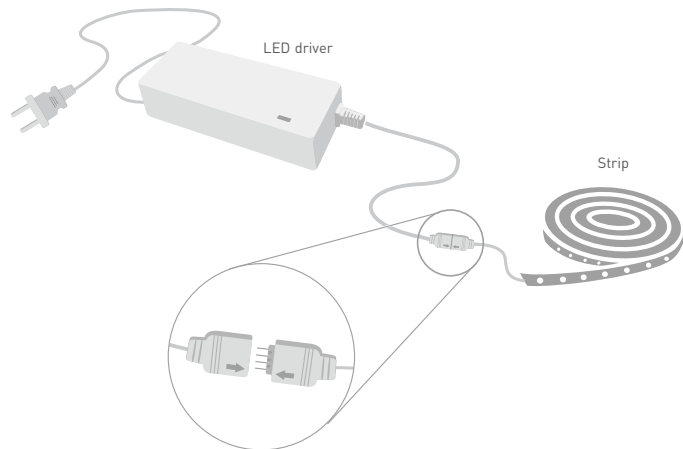
Unit: mm

58
143
32

Product Parameters

Model		ST-75-12-W1W2	ST-75-12-W2W2	ST-75-12-W3W2
OUTPUT	Type	Dimming	Color temperature	RGB
	Output Voltage	12Vdc		
	Output Voltage Range	12Vdc ± 0.5Vdc		
	Output Current	5A	2.5A×2CH	1.67A×3CH
	Output Power	Max. 60W		
	Strobe Level	High frequency exemption level.		
	Overload Power Limitation	≥102%		
	Ripple & Noise	≤200mV		
	PWM Dimming Frequency	3600Hz		
INPUT	Wireless Frequency	WiFi, RF 2.4GHz		
	Input Voltage	100-240Vac		
	Frequency	50/60Hz		
	Input Current	Max. 0.77A		
	Power Factor	PF>0.99/115Vac PF>0.95/230Vac, at full load		
	THD	115Vac@THD≤9% 230Vac@THD≤17%		
	Efficiency(typ.)	91%		
	Inrush Current(typ.)	Cold start 40A at 230Vac		
	Anti Surge	L-N: 1KV		
	Leakage Current	Max. 0.5mA		
ENVIRONMENT	Working Humidity	20 ~ 95%RH, non-condensing		
	Storage Temp., Humidity	-40°C ~ 80°C, 10~95%RH		
	Vibration	10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes.		
PROTECTION	Over-heat Protection	Intelligently adjusting or turning off the output current if the PCB temperature ≥110°C, auto recovers.		
	Over Voltage Protection	Shut down the output when non-load voltage≥13V, auto recovers.		
	Over Load Protection	Shut down the output when power load≥102%, auto recovers.		
	Short Circuit Protection	Enter hiccup mode if short circuit occurs, auto recovers.		
SAFETY & EMC	Withstand Voltage	I/P-O/P: 3750Vac		
	Isolation Resistance	I/P-O/P: 100MΩ/500VDC/25°C/70%RH		
	Safety Standards	UL8750, IEC/EN61347-1, IEC/EN61347-2-13		
	EMC Emission	EN55015, EN61000-3-2 Class C, IEC61000-3-3		
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11 EN61547		
	Strobe Test Standard	IEEE 1789		
OTHERS	Dimension	L143×W58×H32(mm)		
	Packing	L168×W123×H35(mm)		
	Weight(G.W.)	430g		

Model		ST-75-24-W1W2	ST-75-24-W2W2	ST-75-24-W3W2
OUTPUT	Type	Dimming	Color temperature	RGB
	Output Voltage	24Vdc		
	Output Voltage Range	24Vdc ± 0.5Vdc		
	Output Current	3.125A	1.56A×2CH	1.04A×3CH
	Output Power	Max. 75W		
	Strobe Level	High frequency exemption level.		
	Overload Power Limitation	≥102%		
	Ripple & Noise	≤300mV		
	PWM Dimming Frequency	3600Hz		
INPUT	Wireless Frequency	WiFi, RF 2.4GHz		
	Input Voltage	100-240Vac		
	Frequency	50/60Hz		
	Input Current	Max. 0.95A		
	Power Factor	PF>0.99/115Vac PF>0.95/230Vac, at full load		
	THD	115Vac@THD≤8% 230Vac@THD≤15%		
	Efficiency(typ.)	91%		
	Inrush Current(typ.)	Cold start 40A at 230Vac		
	Anti Surge	L-N: 1KV		
	Leakage Current	Max. 0.5mA		
ENVIRONMENT	Working Humidity	20 ~ 95%RH, non-condensing		
	Storage Temp., Humidity	-40°C ~ 80°C, 10~95%RH		
	Vibration	10~500Hz, 2G 12min./1cycle, period for 72min. each along X, Y, Z axes.		
PROTECTION	Over-heat Protection	Intelligently adjusting or turning off the output current if the PCB temperature ≥110°C, auto recovers.		
	Over Voltage Protection	Shut down the output when non-load voltage≥26V, auto recovers.		
	Over Load Protection	Shut down the output when power load≥102%, auto recovers.		
	Short Circuit Protection	Enter hiccup mode if short circuit occurs, auto recovers.		
SAFETY & EMC	Withstand Voltage	I/P-O/P: 3750Vac		
	Isolation Resistance	I/P-O/P: 100MΩ/500VDC/25°C/70%RH		
	Safety Standards	UL8750, IEC/EN61347-1, IEC/EN61347-2-13		
	EMC Emission	EN55015, EN61000-3-2 Class C, IEC61000-3-3		
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11 EN61547		
	Strobe Test Standard	IEEE 1789		
OTHERS	Dimension	L143×W58×H32(mm)		
	Packing	L168×W123×H35(mm)		
	Weight(G.W.)	430g		

System Diagram

APP

Remote

Wireless router

Smart speaker

Touch panel

Living room strip

Bedroom strip

Corridor strip

Dining room strip
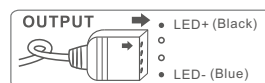
Balcony strip

Bar strip

Wiring

LED driver

Strip

Please note that the wiring arrows are in the same direction.

Please use above no. 22 wire to connect this product.

ST-75-12-W1W2
ST-75-24-W1W2

OUTPUT → • LED+ (Black)
○
• LED- (Blue)

ST-75-12-W2W2
ST-75-24-W2W2

OUTPUT → • + (Black)
○
• W (Green)
• C (Blue)

ST-75-12-W3W2
ST-75-24-W3W2

OUTPUT → • + (Black)
R (Red)
G (Green)
B (Blue)

# Operation Method

Match network:

1 Connect to the wireless router and scan QR code to download APP via mobile phone.

iOS / Android

2 After installation, the strip flashes in 30s when powered on and then the controller is ready to the configuration status accordingly.
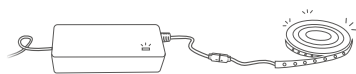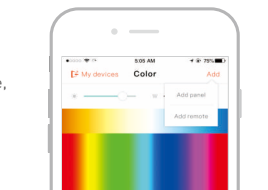

3 Turn on APP, click ⊕ icon on right top corner.

4 Enter "Add advice" interface, choose "Color light" or "CT light", connect device according prompts.
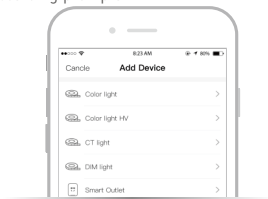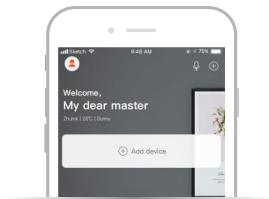
Panel or remote match code with LED driver:

After LED driver match network, enter control interface, click " Add" button on the right top corner, choose"Add panel" or "Add remote", then operate according APP's prompts.

Amazon Alexa work with LED driver:

Please find "skills" ➜ L-Home in Amazon Alexa and bind with L-Home's account, speaker control can be realized immediately.

RISK OF ELECTRIC SHOCK.
DO NOT OPEN.

Do not use in high temperature environments.
Long-term use in such environments will affect the lifespan.
No covers on the surface when in use.

CAUTION

Indoor use only.
For use with LED lighting only.

Attention

Thank you for purchasing Xiaolei products. In order to prevent lamp damage and personal safety accidents, please install and use in accordance with the instructions strictly.

• Power supplies that exceed the rated voltage range cannot be used.

• Do not install lamps above high temperature objects or in damp places. Do not install lamps in places with metal shielding to avoid affecting signal reception.

• When inspecting and repairing lamps, please entrust electrical professionals to operate.

• Please don't open, alter, repair or maintenance the remote, or it will not be guaranteed.

• Electronic parts warranty for two years from the date of purchase.

＊No further notice if any changes in the manual.
Product function depends on the goods.
Please feel free to contact our official distributor if any question.