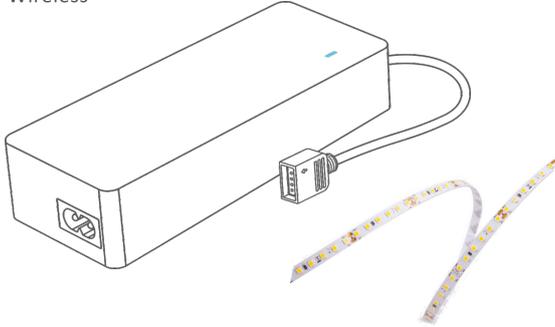




Intelligent LED Driver

Model: ST-75-12-W1R
 ST-75-12-W2R
 ST-75-12-W3R
 ST-75-24-W1R
 ST-75-24-W2R
 ST-75-24-W3R

RF
 Wireless



Manual



Product Introduction

Xiaolei intelligent LED driver is one of products in Xiaolei Intelligent Lighting System. It is suitable for home lighting, enable to adjust the color of light and stepless dimming without flicker. It also supports a variety of control modes: when equipped with a gateway, APP control, intelligent audio voice control, scene control, timing control can be realized. Also 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: RF 2.4GHz.
- Controlled by wireless panel, remote and intelligent gateway via RF signal.
- Controlled by mobile phone.
- Multiple driver's effect synchronization can be achieved.
- 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 .
- 2 years warranty.

Accessories



Product Size

Unit: mm

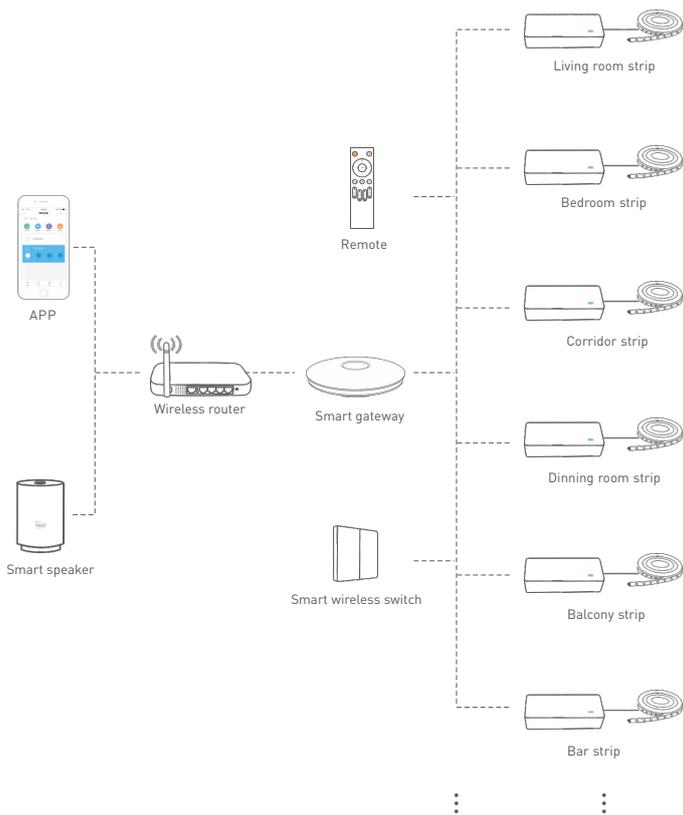


Product Parameters

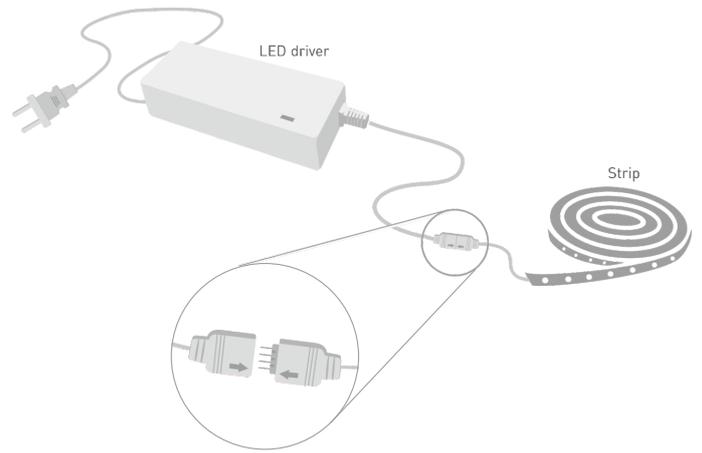
| Model | ST-75-12-W1R | ST-75-12-W2R | ST-75-12-W3R | |
|-----------------------|---------------------------|---|-------------------|-----------|
| OUTPUT | Type | Dimming | Color temperature | RGB |
| | Output Voltage | 12Vdc | | |
| | Output Current | 5A | 2.5A×2CH | 1.67A×3CH |
| | Output Power | Max. 60W | | |
| | Strobe Level | High frequency exemption level. | | |
| | Dimming Range | 0-100%, 0.1% dimming depth. | | |
| | Overload Power Limitation | ≥102% | | |
| | Ripple & Noise | ≤200mV | | |
| PWM Dimming Frequency | 3600Hz | | | |
| INPUT | Wireless Frequency | 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-PAR 1789 | | | |
| OTHERS | Dimension | L143×W58×H32(mm) | | |
| | Packing | L168×W123×H35(mm) | | |
| | Weight(G.W.) | 430g | | |

| Model | ST-75-24-W1R | ST-75-24-W2R | ST-75-24-W3R | |
|-----------------------|---------------------------|---|-------------------|-----------|
| OUTPUT | Type | Dimming | Color temperature | RGB |
| | Output Voltage | 24Vdc | | |
| | Output Current | 3.125A | 1.56A×2CH | 1.04A×3CH |
| | Output Power | Max. 75W | | |
| | Strobe Level | High frequency exemption level. | | |
| | Dimming Range | 0-100%, 0.1% dimming depth. | | |
| | Overload Power Limitation | ≥102% | | |
| | Ripple & Noise | ≤300mV | | |
| PWM Dimming Frequency | 3600Hz | | | |
| INPUT | Wireless Frequency | 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-PAR 1789 | | | |
| OTHERS | Dimension | L143×W58×H32(mm) | | |
| | Packing | L168×W123×H35(mm) | | |
| | Weight(G.W.) | 430g | | |

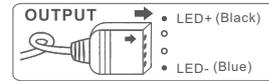
System Diagram



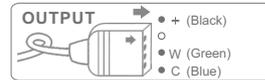
Wiring



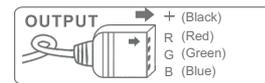
ST-75-12-W1R
ST-75-24-W1R



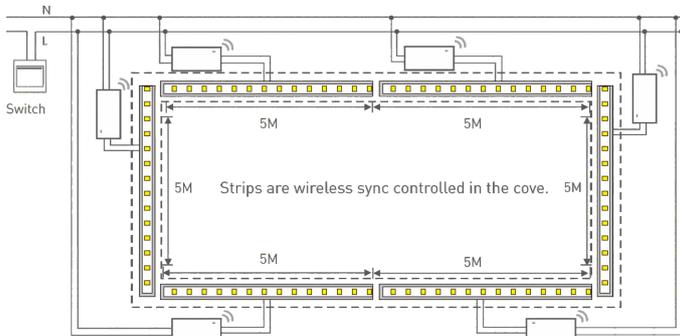
ST-75-12-W2R
ST-75-24-W2R



ST-75-12-W3R
ST-75-24-W3R



Multiple Products Applications



It is recommended that same zone lamps connect with the same circuit, when the lamps match up with the remotes, smart phone, smart wireless switch or smart speaker, the simultaneous switch and dimming can be achieved, which can solve complex wiring, and installation problems.

Operation Method

This product can be used with remote, gateway, smart wireless switch, etc. For the specific operation method, please refer to the instruction manual of the relevant product.



L-HOME APP

About Wire

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

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.



**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.