Xiaolei

Intelligent Tunable White LED Driver (Constant Voltage)

NFC•))

- The housing is made of V0 flame-retardant PC material, sourced from SAMSUNG/COVESTRO.
- Features a tool-free clamshell design with detachable end caps, allowing length adjustment as needed.
- The gradient time, PWM, color temperature range, etc. can be changed through NFC via the mobile phone APP to achieve the data interaction function of the driver.
- Bluetooth 5.0 SIG Mesh with high networking capability are reliable and stable.
- Supports control for iOS and Android smart devices through direct Bluetooth connection.
- It features a soft-start gradually brightening function, making the visual experience more comfortable for human eyes.
- Provides two-channel independent SELV outputs.
- Supports deep dimming from 0~100%, with a minimum dimming level of 0.0001%.
- Color temperature range is configurable from 1000K to 10000K, with a default range of 2700K to 6500K.
- Supports over-the-air (OTA) online updates for device firmware.
- Complies with the EU ERP Directive on energy efficiency, with no-load power consumption < 0.5W and network standby power consumption < 0.5W.
- Innovative thermal management technology intelligently protects the LED driver's lifespan
- Protection features of overheat, over voltage, overload and short circuit, automatic recovery function.
- Suitable for Class I / II / III indoor luminaires.
- Service life up to 100,000 hours under normal use.
- 5-year warranty (Rubycon capacitor).

Bluetooth®

DIM / CCT

Flicker-Free
IEEE 1789

Dimmable:
1:1000000

CCC CE CB ⧈25 TÜV ⊕ EAC EL ErP RED SRRC SELV RoHS ⊕ □ ⊕ ▽110 ⊠

The certification icon represents undergoing certification applications only, and final certification qualification subject to actual product
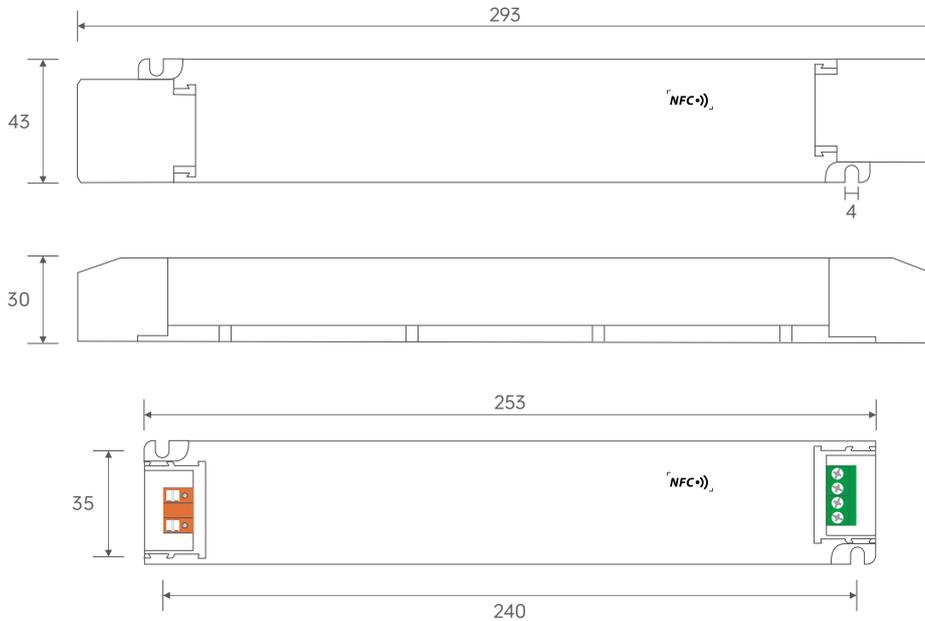
PWM Digital Dimming | Overheat Protection | Over voltage protection | Over Load protection | Constant power design | Short circuit protection

Technical Specs

Model		LM-75-24-G2B2F		
Features	Output Type	Constant voltage		
	Dimming Interface	Bluetooth 5.0 SIG Mesh		
	Output Feature	Isolation		
	Protection Grade	IP20		
	Insulation Grade	Class II (Suitable for class I/ II /III light fixtures)		
OUTPUT	Output Voltage	24V⎓		
	Output Voltage Range	24V ± 0.5V ⎓		
	Output Current	Max. 3.125A		
	Output Power	Max. 75W		
	Output Power Range	0~75W		
	Strobe Level	High frequency exemption level		
	Dimming Range	0~100%, down to 0.0001%		
	Overload Power Limitation	≥102%		
	Ripple	300mV		
	PWM Frequency	300-22000Hz		
INPUT	Input AC Voltage	220-240V~		
	Input DC Voltage	220-240V⎓ (EMI needs to be evaluated after the lamp is equipped.)		
	Frequency	50/60Hz		
	Input Current	Max. 0.4A/230V~		
	Power Factor	PF>0.98/230V~ (at full load)		
	THD	THD<10%@ 230V~(at full load)		
	Efficiency (Typ.)	92%		
	Inrush Current	Cold start 45A(Test twidth=300us tested under 50% Ipeak)/230Vac		
	Anti Surge	L-N: 2KV		
	Leakage Current	Max. 0.5mA		
ENVIRONMENT	Working Temperature	ta: -20 ~ 50℃ tc: 80℃		
	Working Humidity	20 ~ 95%RH, non-condensing		
	Storage Temperature/Humidity	-40 ~ 80℃, 10~95%RH		
	Temperature Coefficient	±0.03%/℃(-20℃-50℃)		
	Vibration	10~500Hz, 2G 12min/1cycle, 72 min for X, Y and Z axes respectively		
PROTECTION	Overheat Protection	Intelligently adjust or turn off the output current if the PCB temperature ≥110℃, and recover automatically		
	Overload Protection	Automatically protect the device when the load exceeds 102% of the rated power. Automatically recover once load is reduced		
	Short Circuit Protection	Enter hiccup mode if short circuit occurs, and recover automatically		
	Overvoltage Protection	Shut down the output when no-load voltage≥28V, and recover automatically		
SAFETY & EMC	Withstand Voltage	I/P-O/P:3750V~		
	Insulation Resistance	I/P-O/P: 100MΩ/500VDC/25℃/70%RH		
	Safety Standards	CCC	China	GB19510.1，GB19510.14，GB19510.213
		TUV	Germany	EN61347-1，EN61347-2-13，EN62493
		CB	CB Member States	IEC61347-1，IEC61347-2-13
		CE	European Union	EN61347-1，EN61347-2-13，EN62384
		EAC	Russia	IEC61347-1，IEC61347-2-13
		RCM	Australia	AS 61347-1，AS 61347-2-13
		ENEC	Europe	EN61347-1，EN61347-2-13，EN62384
	EMC Emission	CCC	China	GB/T17743，GB17625.1
		CE	European Union	EN55015，EN61000-3-2，EN61000-3-3，EN61547
		EAC	Russia	IEC62493，IEC61547，EH55015
		RCM	Australia	EN55015，EN61000-3-2，EN61000-3-3，EN61547
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11,EN61547		
ErP	Power Consumption	Networked standby	< 0.5W (After shutdown by command)	
		No-load power consumption	< 0.5W(When the lamp is not connected)	
	Flicker/Stroboscopic Effect	IEEE1789	Meet IEEE 1789 standard/High frequency exemption level	
		CIE SVM	PstLM≤1.0，SVM≤0.4	
	DF	Phase factor	DF≥0.9	
OTHERS	Weight(N.W.)	290g±10g		
	Dimensions	293×42.5×30mm(L×W×H)		

This driver is suitable for connecting LED lighting fixtures with resistor current limiting (such as LED light strips). If it is connected to a fixture with built-in constant current IC for current limiting, an instantaneous inrush current dozens of times higher will be generated, causing the driver to activate overload protection (hiccup and strobing). When placing an order, such fixtures with built-in constant current IC for current limiting (e.g., MR16 bulbs, underground lights, wall washers, constant current hard light strips, etc.) need to be specified to facilitate the burning of a special program.
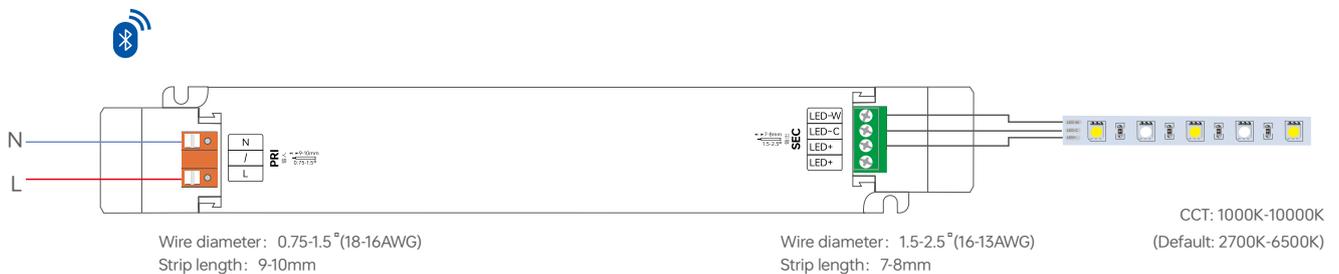
Product Size

Unit：mm

293

43

4

30

253

35

240

Wiring Diagram

Wireless connection method

N

L

PRI

LED-W
LED-C
LED+
LED+

SEC

CCT: 1000K-10000K
(Default: 2700K-6500K)

Wire diameter：0.75-1.5 ˚(18-16AWG)
Strip length：9-10mm

Wire diameter：1.5-2.5 ˚(16-13AWG)
Strip length：7-8mm

＊ Control through Bluetooth network access via the APP
*Power supplies of different models/wattages vary in hardware. Do not use them for dimming
the same light film/light box to avoid inconsistent light activation and dimming. Recommend matching
the same light film/light box with a power supply of the same model for consistent dimming.

Protective Housing Application Diagram

Tension plate

Remove the protective housing
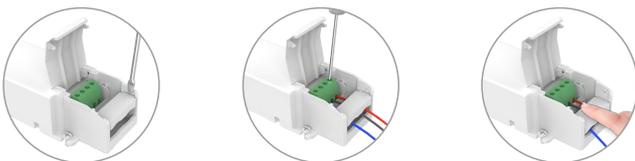
1. Pry up the protecting housing in the side plate position with a tool.
2. Connect to electrical wires with a screwdriver as wiring diagram shows.
3. Press down the tension plate to fix the the electrical wires, then close the protective housing.

Pull the housing left and right from the bottom to remove it.

Installation Precautions
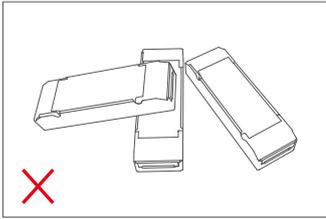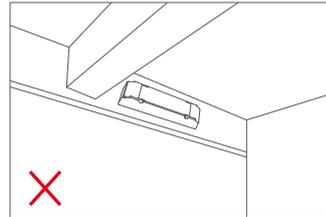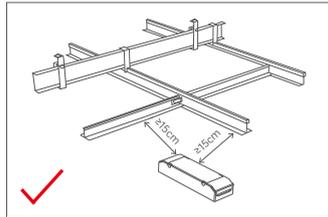

Please do not stack the products. The distance between two products should be ≥15cm so as not to affect heat dissipation and the lifespan of the products.
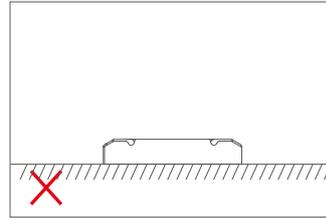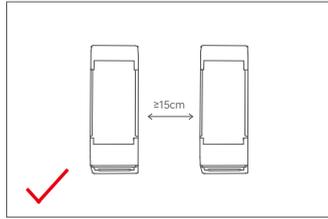
Please do not place the products on the floor. The distance between the product and the floor should be ≥100cm so as to avoid signal interference.
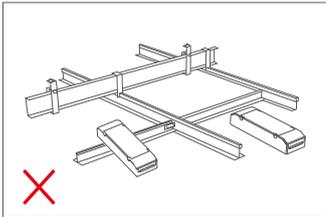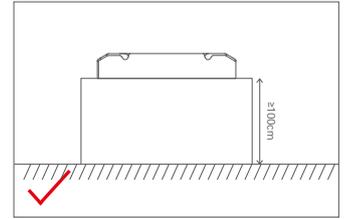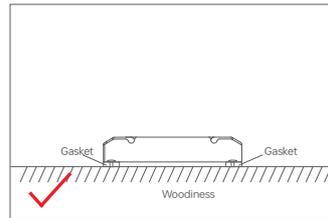

Please do not place the products near a large area of metal objects (such as metal stud ceilings). The distance between the product and the metal object should be ≥15cm so as to avoid signal interference.
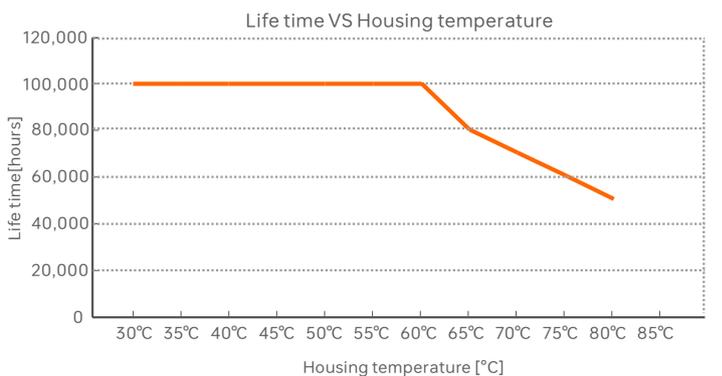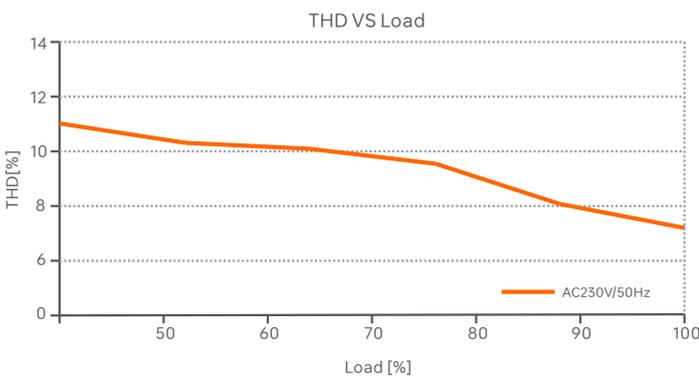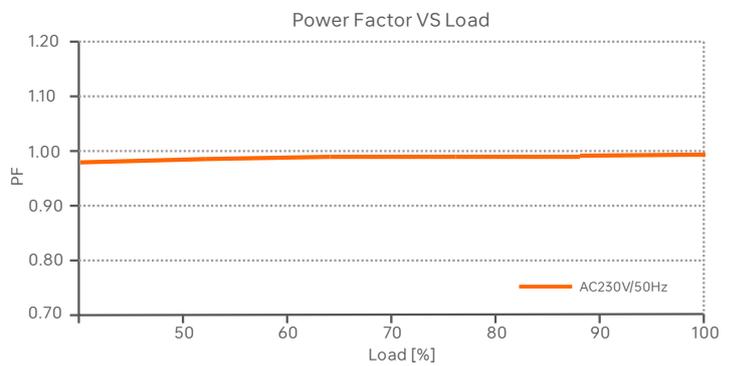
Please do not install the products on beams or near the corners. The distance between the product and the beam or the corner should be ≥15cm so as to avoid signal interference.
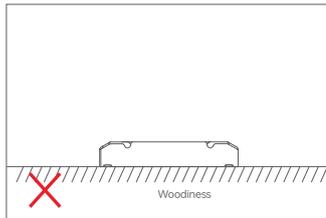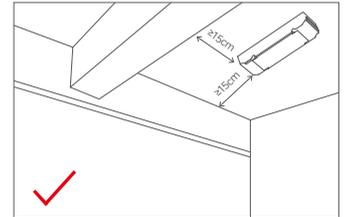
Do not fix the product screws tightly against the wooden board. Instead, add a washer with a thickness of ≥ 7mm under the fixing screws.
Leaving some gaps can effectively dissipate heat, preventing any impact on the product's heat dissipation performance and service life.

Relationship Diagrams

Efficiency VS Load

Power Factor VS Load

THD VS Load

Life time VS Housing temperature

LM-75-24-G2B2F
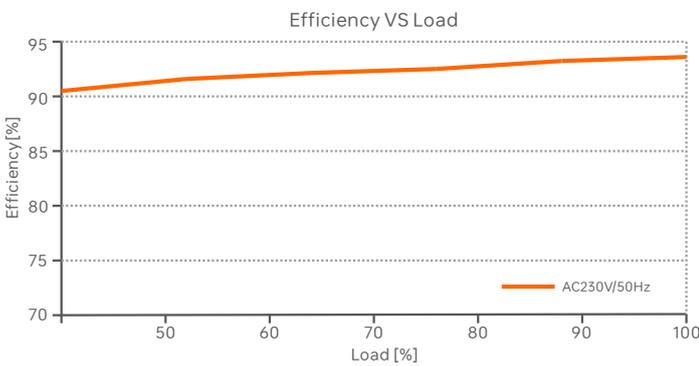
Surge Current & Corresponding Miniature Circuit Breaker (MCB) Load Capacity Table

| MCB Model	B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
Maximum Load Capacity	5	7	8	10	13	8	9	10	12	15	9	10	11	14	17

Remarks:

1. Test Conditions: Cold start 45A(Test twidth=300us tested under 50% Ipeak)/230V ~ .

2. The number of supported drivers may vary depending on the brand and model of the MCB.

3.It is recommended not to exceed the specified load capacity during on-site installation. The actual load should be determined based on field conditions.

4.If the ambient temperature exceeds 30°C or multiple MCBs are installed side by side, the number of installed drivers must be reduced and recalculated accordingly.

5.Electricians typically use Type B MCBs for residential lighting and Type C MCBs for commercial lighting applications.

6.Different testing equipment may yield variations in measured current peaks and pulse widths. Always use professional-grade instruments for accurate testing.

Flicker Test Table

IEEE 1789

Brightness

- 🔺 0.1%
- ✦ 1%
- 🔺 5%
- 🔷 10%
- ⬤ 20%
- 🔺 30%
- ⬤ 40%
- ★ 50%
- ⬤ 60%
- ⬛ 70%
- ⬟ 80%
- ★ 90%
- ◆ 100%

Limit Value of Modulation in Low Risk Areas	
Waveform frequency of Optical output (f)	Limit value (%)
f ≤ 8Hz	0.2
8Hz < f ≤ 90Hz	0.025 × f
90Hz < f ≤ 1250Hz	0.08 × f
f > 1250Hz	Exemption assessment

Limit Value of Modulation in No Effect Areas	
Waveform frequency of Optical output (f)	Limit value (%)
f ≤ 10Hz	0.1
10Hz < f ≤ 90Hz	0.01 × f
90Hz < f ≤ 3125Hz	(0.08/2.5) × f
f > 3125Hz	Exemption assessment (High frequency exemption)
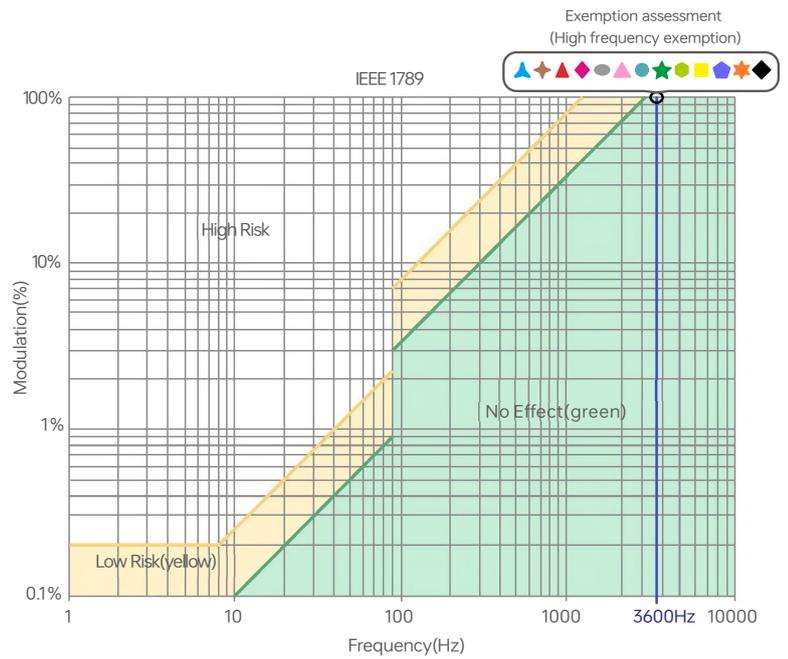
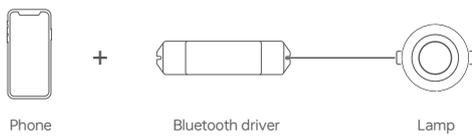Marks in the right chart are tested results of different current levels.
The output frequency is 0Hz in 100% brightness and its corresponding modulation is 0%, which could not be shown in the right chart.


Exemption assessment (High frequency exemption)

IEEE 1789

High Risk

No Effect(green)

Low Risk(yellow)

Modulation(%) — 100%, 10%, 1%, 0.1%

Frequency(Hz) — 1, 10, 100, 1000, 3600Hz, 10000

Recommended Applications

Phone user...   Phone user 1   Wi-Fi/4G/5G   CLOUD   Scene   Timing   Automation

Router   Amazon Echo   Google

Wi-Fi   Ethernet

Home appliances & accessories

Home appliance module   HVAC management module   Curtain motor

Wireless module   Switch module   Music player

Bluetooth Mesh   Super Panel 6S   Bluetooth 4.2   Bluetooth speaker

Wireless switch   Bluetooth remote   More

12:58
2022/05/30 Wed

Phone user...   Bluetooth Mesh

Mesh LAN

Intelligent Lighting

Constant Voltage	Constant Current	Smart Switch	Smart Sensor	Wireless + Wired
LM-36 series	SE-12 series	Premium series	Microwave motion sensor	Wireless module (DMX/0-10V)
LM-75 series	SE-20 series	Activated series	Infrared motion sensor	Wireless module (DMX/DALI/0-10V)
LM-150 series	SE-30 series	Creativity series		Wireless module (DALI)
LM-240 series	SE-40 series	⋮	⋮	Wireless module (Triac)

Recommended Applications

1. Achieve fast dimming control.

Phone   +   Bluetooth driver   Lamp

2. Both App and remote can control the driver after connecting the remote to the driver with App.

Phone   +   Remote   +   Intelligent wireless switch   +   Bluetooth driver   Lamp
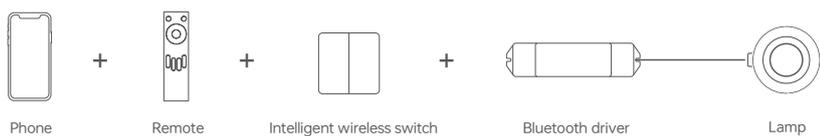
3. Both App and Super Panel can control the driver simultaneously after connecting the Super Panel to the driver with App. By connecting the Super Panel to network, you are allowed to control the driver, cloud scenes and automation remotely with App.

Phone   +   Super panel 6s   +   Bluetooth driver   Lamp

4. More applications of intelligent control are waiting for you to set up.

Use with Bluetooth L-Home APP

1. Register an account

The App is available on iOS or Android devices. Scan the QR code below with you mobile phone and follow the prompts to complete the App installation. Open the App to log in or register an account.

2. Paring instructions

Open the APP and create a home if you are a new user. Click "+" icon in the upper right corner and access the "Add Device" list, then follow the prompts to add the device. Pick "Smart lighting-DIM light" from the list and follow the prompts to power on the device firstly. Make sure the device is not connected to the network. Then click "Bluetooth Search" and follow the prompts to add the device.
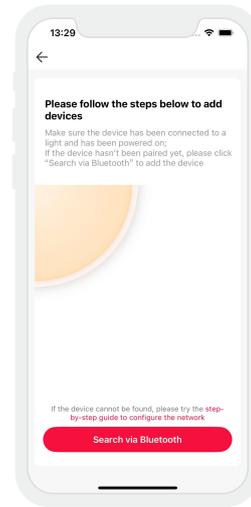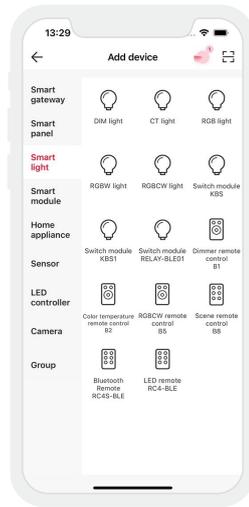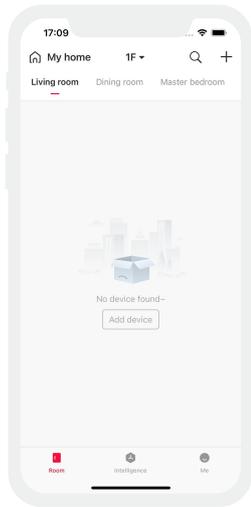
3. Control interface settings

After pairing up your device, go to the control interface. You'll be able to achieve your desired lighting effects by changing brightness and color temperature. Click "Theme" and you'll easily switch to multiple theme lighting effects with one tap. Click "Mode" and the App provides you editable advanced modes. Customize dynamic modes to put you into a more colorful life.
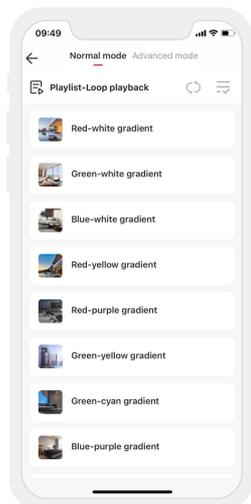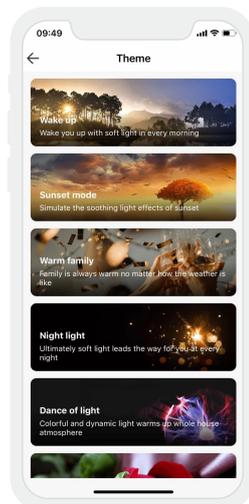
4. Light groups

Users are able to combine the same type of light fixtures into a group to control them simultaneously. Once you create the group, you can set the dim level more easily. Pick "Group-DIM light group"from the list. Follow the prompts to rename the group and click "Next" to pick the lights you are going to group together and click "Save".
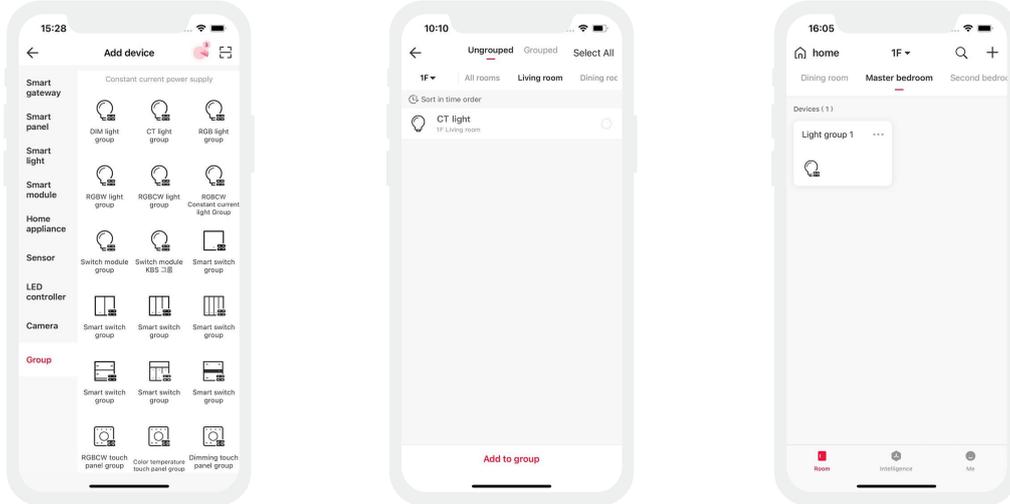
5. Advanced functions

This driver can be linked up with gateway function devices (such as Super Panel 12S) to achieve the advanced functions from local scenes and cloud scenes to automation.
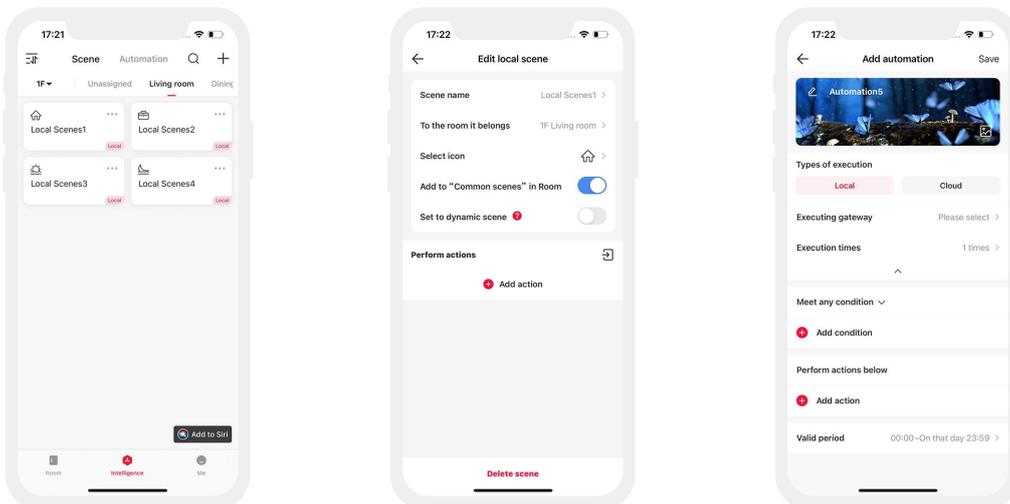
6.More Features

Interstellar Technology
- It has achieved an innovative breakthrough of no power-on required and no on-site debugging required. Staff can deploy smart home solutions in advance, preconfigure network access, grouping, scenarios, and other settings in the early stage, which greatly shortens the project cycle and reduces project costs.

Device Replacement
- When a device is damaged, lost, or offline, you can select a device of the same model to replace it. The new device will synchronize the configuration of the old one, including name, group, mode, scene, automation, and more.

Device Log
- Record the operation logs of the device.

Fade Time
- Power-on fading time: The fading time for the light to go from off to on when the device is powered on.
- Light-on fading time: The fading time for the light to go from off to on when the light fixture is turned on.
- Light-off fading time: The fading time for the light to go from on to off when the light fixture is turned off.
- Scene fading time: The fading time for the light's brightness and color during scene switching.

Power-On State
- The state maintained by the device (full brightness / off / memory / custom) when the device is powered on.

Dimming Depth
- The default dimming depth is one ten-thousandth, and the maximum achievable dimming depth is one millionth.

Brightness Range
- Customizable adjustable brightness range.

FAQs

1. What should I do if device addition fails?

1.1 Ensure the device is powered on normally and in an activated state;

1.2 Ensure the device to be added has not been added to any other account. If it has, manually restore it to factory settings;

1.3 Ensure the mobile phone and the device are as close as possible, with a recommended distance of no more than 20 meters;

1.4 If the device has been forcibly deleted, manually restore it to factory settings first, then add the device again.

2. What should I do if the device goes offline?

2.1 Please check if the device is powered on normally;

2.2 Please check if the router is working properly and the network is smooth;

2.3 If using remote control, please check if the mobile phone network is working properly and the network is smooth.

3. How to perform remote control / set up cloud scenes?

To use remote control / add and set up cloud scenes, it is necessary to use the company's super panel together.
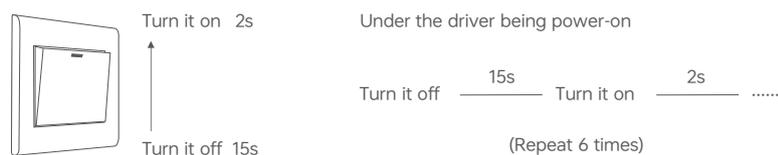
4. How to Share a Device?
Please go to "My" -> "Family Management", select the family for which you want to share devices, then click "Add Member". Follow the prompts to add the family member or friend with whom you want to share the device to this family, and the sharing process will be completed.

5. Inconsistent dimming for light films or groups in the same area?
There may be differences between hardware of different models. It is necessary to use the same model for group dimming to achieve better dimming consistency.

Reset The Device (Reset to factory defaults)

Make sure the driver is well-connected to a lamp and the lamp is on, turn it off with the switch and after 15s turn it on. After 2s, turn it off again. Repeat the same operation 6 times. When the lamp flashes 5 times , reset the device to factory defaults successfully.

Turn it on 2s

Turn it off 15s

Under the driver being power-on

Turn it off ——15s—— Turn it on ——2s—— ······

(Repeat 6 times)

Use the NFC Lighting APP

Scan the QR code below with your mobile phone and follow the prompts to complete the APP installation (According to performance requirements, you need to use a NFC-capable Android phone, or an iphone 8 and later that are compatible with iOS 13 or higher).

✱ Before you begin setting the parameters of the driver, please make sure the driver is powered off.

Read/Write the LED driver

Use your NFC-capable phone to read LED driver data, then edit the parameters and they can be directly written to the driver

1.Read the LED driver
On the APP home page, click 【Read/Write LED driver】, then keep the programmer's sensing area close to the NFC sensing area of the driver to read the driver parameters.

NFC•))

NFC sensing area of the driver
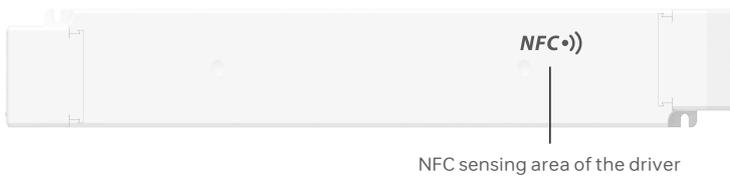
2. Edit parameters

Click on [Parameter Management] to edit more advanced parameters such as Time for Fading on, Time for Fading off, Power-on Fading Time, Brightness Range, CT Range, Power-on Status and PWM Frequency.

3. Write to the drive

After completing the parameter settings, click 【Write】in the upper right corner, and keep the programmer's sensing area close to the NFC sensing area of the driver, so the parameters can be written to the driver
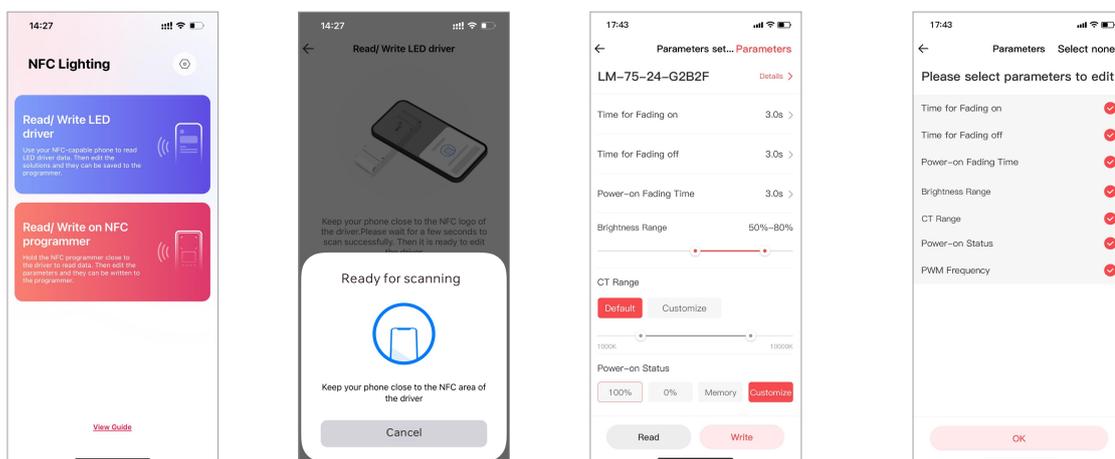
Packaging specification

Model	LM-75-24-G2B2F
Packaging box size	315×215×240mm(L×W×H)
Quantity	10 PCS per layer, 3 layers per box, 30 PCS per box
Weight	0.29kg per PC, 9.6kg±5% per box

Packaging style drawing
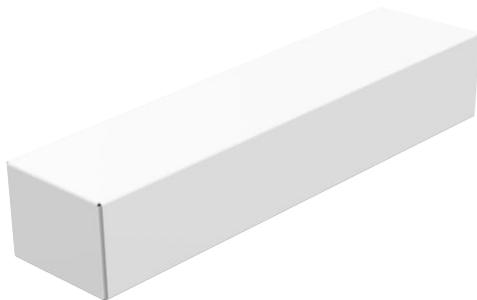
Inner packaging box

Full box packaging

Transportation and Storage

1. Transportation

Products can be shipped via vehicles, boats and planes.

During transportation, products should be protected from rain and sun. Please avoid severe shock and vibration during the loading and unloading process.

2. Storage

The storage conditions should comply with the Class I Environmental Standards. The products that have been stored for more than six months are recommended to be re-inspected and can be used only after they have been qualified.

Attentions

• Product installation and commissioning should be done by a qualified professional.

• LTECH products are and not lightningproof non-waterproof (special models excepted). Please avoid the sun and rain. When installed outdoors, please ensure they are mounted in a water proof enclosure or in an area equipped with lightning protection devices.

• Good heat dissipation will prolong the working life of products. Please ensure good ventilation.

• Please check if the working voltage used complies with the parameter requirements of products.

• The diameter of wire used must be able to load the light fixtures you connect and ensure the firm wiring.

• Before you power on products, please make sure all the wiring is correct in case of incorrect connection that causes damage to light fixtures.

• If a fault occurs, please do not attempt to fix products by yourself. If you have any question, please contact your suppliers.

✱ This manual is subject to changes without further notice. Product functions depend on the goods. Please feel free to contact our official distributors if you have any question.

Warranty Agreement

• Warranty periods from the date of delivery: 5 years.

• Free repair or replacement services for quality problems are provided within warranty periods.

Warranty exclusions below:

• Beyond warranty periods.

• Any artificial damage caused by high voltage, overload, or improper operations.

• Products with severe physical damage.

• Damage caused by natural disasters and force majeure.

• Warranty labels and barcodes have been damaged.

• No any contract signed by LTECH.

1. Repair or replacement provided is the only remedy for customers. LTECH is not liable for any incidental or consequential damage unless it is within the law.

2. LTECH has the right to amend or adjust the terms of this warranty, and release in written form shall prevail.

ZHUHAI LTECH TECHNOLOGY CO., LTD.

Address: No. 183, Shui'an 1st Road, Xiangzhou District, 519060 Zhuhai City, PEOPLE'S REPUBLIC OF CHINA   Website：www.xiaolei.com.cn

LED智能色温驱动器 (恒压型)

- 外壳采用科思创/三星PC阻燃V0级原料
- 免螺丝压线翻盖设计, 可拆卸端盖, 按需调节壳体长度
- 支持全指令NFC极速编程, 可使用手机APP通过NFC更改渐变时间、PWM、色温范围等, 实现驱动器数据交互功能
- Bluetooth 5.0 SIG Mesh通信协议, 组网能力强, 可靠稳定
- 支持iOS和安卓智能设备蓝牙直连控制
- 带软启动渐亮功能, 让人眼视觉更舒服
- 共阳极两路SELV输出通道
- 调光范围0-100%, LED从0.0001%开始调光
- 色温范围可设置1000K-10000K, 默认2700K-6500K
- 支持线上OTA升级设备固件
- 符合欧盟能效ERP指令, 空载功耗 < 0.5W, 网络待机功耗 < 0.5W
- 创新的热管理技术, 智能保护电源寿命
- 过温、过压、过载、短路保护, 可自动恢复
- 适合室内、II、III类灯具应用
- 常规使用下寿命可达10万小时
- 5年保修期（采用红宝石电容）

Bluetooth®

调光 调色温

无频闪
IEEE 1789
高频豁免级别

Dimmable:
1:1000000

NFC•))

CCC CE CB 25 TUV SUD RCM EAC EL ErP RED SRRC SELV RoHS □ △ 110

认证图标代表产品正在进行这一系列的认证申请, 认证资质以产品实物为准。

PWM 数字调光 | 过温保护 | V 过压保护 | 过载保护 | 恒功率设计 | 短路保护

技术参数

型号			LM-75-24-G2B2F		
特征	输出类型		恒压		
	调光接口		Bluetooth 5.0 SIG Mesh		
	输出特征		隔离		
	防护等级		IP20		
	绝缘等级		II类(适用于室内I、II、III类灯具)		
输出	输出电压		24V⎓		
	输出电压范围		24V ± 0.5V⎓		
	输出电流		Max. 3.125A		
	输出功率		Max. 75W		
	输出功率范围		0-75W		
	频闪级别		高频豁免考核级别		
	调光范围		0-100%, 调光深度: 0.0001%		
	过功率限制		≥102%		
	纹波与噪声		≤300mV		
	PWM调光频率		300-22000Hz		
输入	输入交流电压		220-240V~		
	输入直流电压		220-240V⎓ (EMI需配灯具后评估)		
	频率范围		50/60Hz		
	输入电流		Max. 0.4A/230V~		
	功率因数		PF>0.98/230V~ (满载)		
	总谐波失真THD		THD<10%@ 230V~(满载)		
	效率(Typ.)		92%		
	浪涌电流		冷启动45A (在50%Ipeak下测试twidth=300us)/230V~		
	抗浪涌		L-N: 2KV		
	漏电流		Max. 0.5mA		
环境	工作温度		ta: -20 ~ 50°C tc: 80°C		
	工作湿度		20 ~ 95%RH, 无冷凝		
	储存温度/湿度		-40 ~ 80°C, 10~95%RH		
	温度系数		±0.03%/°C(-20°C-50°C)		
	耐振动		10-500HZ, 2G 12分钟/周期, X, Y, Z轴各72分钟		
保护	过温保护		根据PCB温度超标情况(≥110°C), 智能调节电流输出或关闭, 可自动恢复		
	过载保护		负载电流≥102%, 关闭输出, 可自动恢复		
	短路保护		输出线路短路进入打嗝模式, 可自动恢复		
	过压保护		空载电压≥28V, 关闭输出, 可自动恢复		
安规和电磁规格	耐压		输入对输出: 3750V~		
	绝缘阻抗		输入对输出: 100MΩ/500VDC/25°C/70%RH		
	安全规范	CCC	中国	GB19510.1, GB19510.14, GB19510.213	
		TUV	德国	EN61347-1, EN61347-2-13, EN62493	
		CB	CB成员国	IEC61347-1, IEC61347-2-13	
		CE	欧盟	EN61347-1, EN61347-2-13, EN62384	
		EAC	俄罗斯	IEC61347-1, IEC61347-2-13	
		RCM	澳洲	AS 61347-1, AS 61347-2-13	
		ENEC	欧盟	EN61347-1, EN61347-2-13, EN62384	
	电磁兼容发射	CCC	中国	GB/T17743, GB17625.1	
		CE	欧盟	EN55015, EN61000-3-2, EN61000-3-3, EN61547	
		EAC	俄罗斯	IEC62493, IEC61547, EH55015	
		RCM	澳洲	EN55015, EN61000-3-2, EN61000-3-3, EN61547	
	电磁兼容抗扰度		EN61000-4-2,3,4,5,6,8,11,EN61547		
ErP	功耗	网络待机功耗	< 0.5W（通过指令开关后）		
		空载功耗	< 0.5W（不接灯具时）		
	频闪/频闪效应	IEEE1789	满足无影响/高频豁免考核级别		
		CIE SVM	PstLM≤1.0, SVM≤0.4		
	DF	相位因素	DF≥0.9		
其他	产品重量		290g±10g		
	产品尺寸		293×42.5×30mm(L×W×H)		

本款驱动器适合连接电阻类的LED灯具(如LED灯条)。如果连接内置恒流IC限流的灯具, 会产生几十倍的瞬间浪涌电流, 导致驱动器会执行过载保护(打嗝频闪)。下单时这类内置恒流IC限流的灯具需要注明(如MR16灯杯、地埋灯、洗墙灯、恒流硬灯条等), 以便烧写特殊程序。
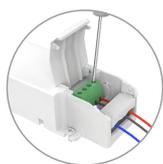
尺寸图

单位：mm

连接应用图

无线连接方式

N

L

线径：0.75-1.5²(18-16AWG)
剥线长度：9-10mm

LED-W
LED-C
LED+
LED+

线径：1.5-2.5²(16-13AWG)
剥线长度：7-8mm

色温范围可设置1000K-10000K
（默认2700K-6500K）
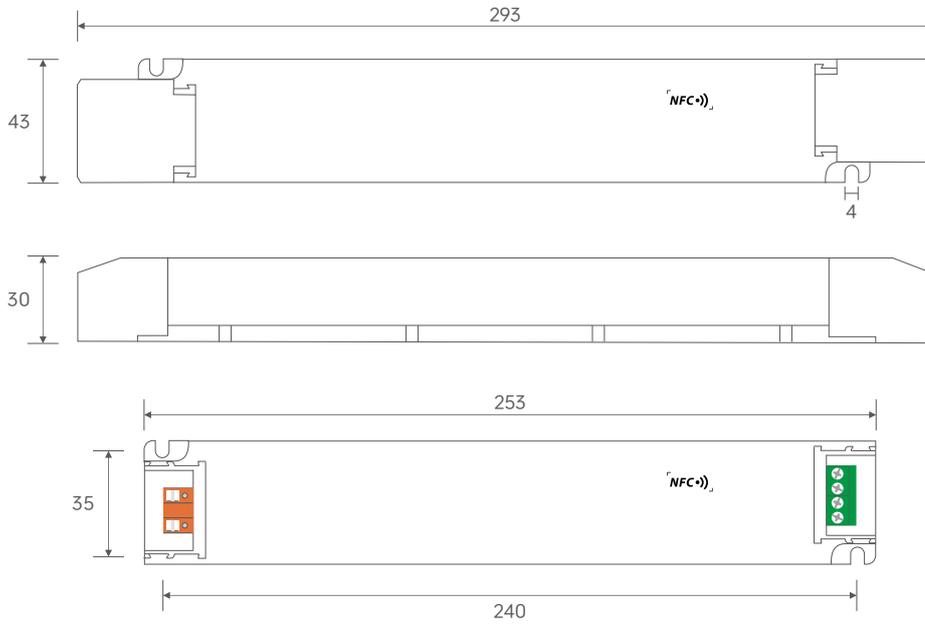
*通过APP蓝牙入网控制
*不同型号 / 功率的电源硬件有差异，勿用于同一灯膜 / 灯箱调光，避免启亮、调光效果不一致；
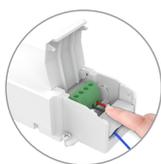建议同一灯膜 / 灯箱搭配同一型号的电源，保障调光效果一致。

保护盖应用图

压线板

1.使用工具撬起压线板
　侧边即可拆下。

2.使用螺丝批按照
　接线图接线。
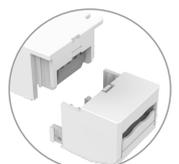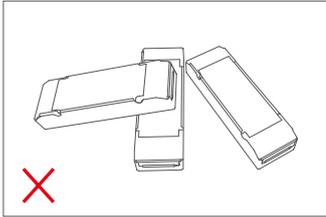
3.向下按压压线板固定住线
　合上保护盖即可。

保护盖的拆装

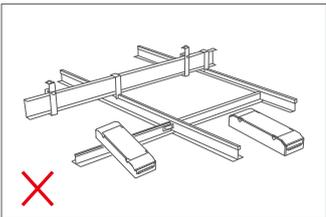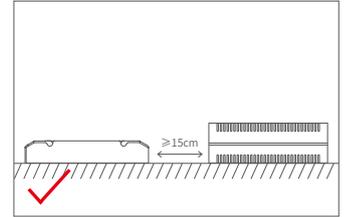在底部左右掰动，即可将保护盖拆下。

安装注意事项

请勿将产品堆叠摆放，产品与产品间隔距离应≥15cm，避免影响产品散热和使用寿命。
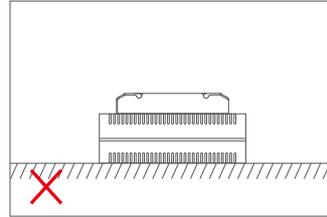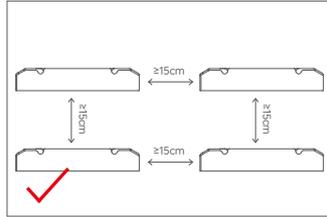
请勿将产品置于电源上方，与电源间隔距离应≥15cm，避免影响产品散热而减少使用寿命。

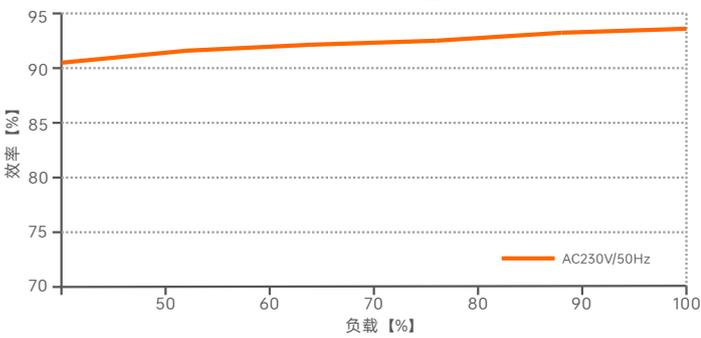请勿将产品大面积接触金属物体(如：龙骨架)，间隔距离应≥15cm，以免信号干扰影响使用。
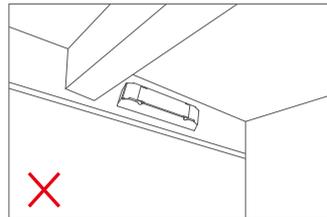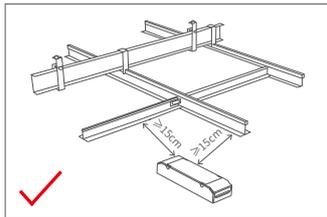
请勿将产品安装在横梁、墙角等位置，间隔距离应≥15cm，以免信号干扰影响使用。
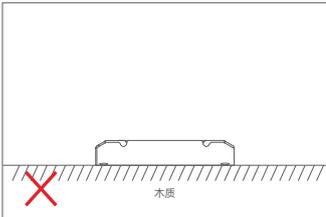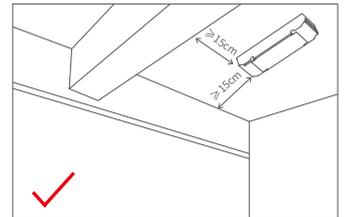
请勿将产品螺丝固定紧贴于木板，应在固定螺丝下增加≥7mm的垫片，留点空隙可以有效散热，避免影响产品散热和使用寿命。

关系图表

效率与负载关系图

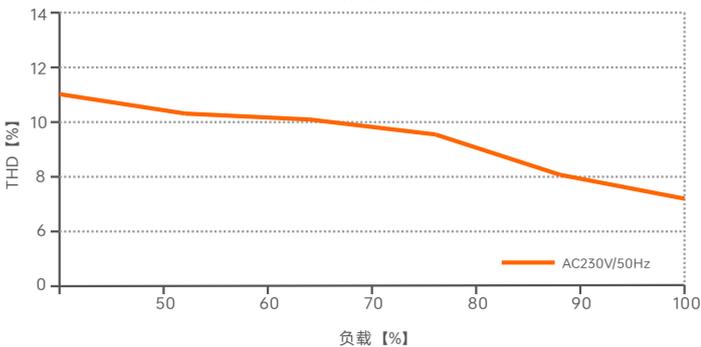效率【%】 / 负载【%】 / AC230V/50Hz

功率因数特征图

PF / 负载【%】 / AC230V/50Hz

THD与负载关系图

THD【%】 / 负载【%】 / AC230V/50Hz

寿命与外壳温度关系图

寿命【H】 / 壳温【℃】

LM-75-24-G2B2F
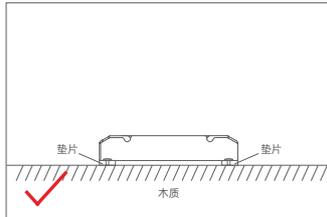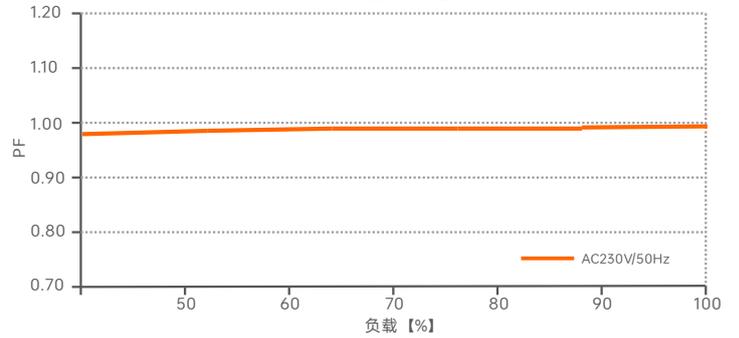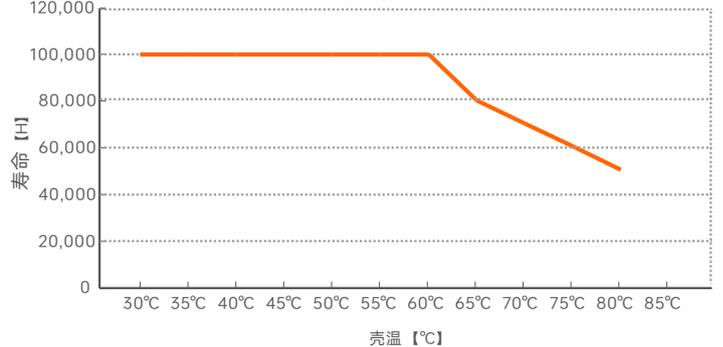
浪涌电流&对应的微型断路器(MCB)下挂载的数量对应表

微型断路器型号	B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
最大带载数量	5	7	8	10	13	8	9	10	12	15	11	12	13	16	19

备注：

1. 本数据测试条件：冷启动，45A(在50%Ipeak下测试twidth=300us)/230V~；

2. 对于不同品牌和型号的微型断路器，驱动器的数量会有所不同；

3. 现场安装时建议不要超过上述数量，具体负载量以现场安装为准；

4. 当微型断路器的安装环境温度超过30℃或多个微型断路器并排安装时，安装的驱动器数量将减少，这需要重新计算；

5. 电工通常考虑将B型MCB用于家用照明，将C型MCB用于商业照明；

6. 不同仪器设备测试出来的电流峰值和脉冲宽度有差异，请使用专业仪器设备测试；

频闪测试表

IEEE 1789

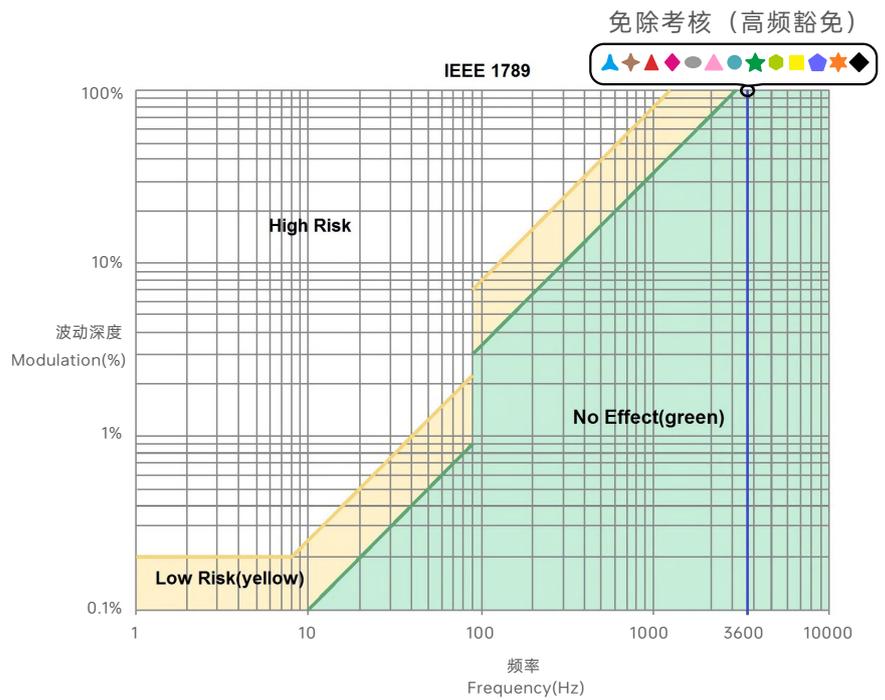| 低风险区域（Low Risk）的波动深度（Modulation）限值	
光输出波形频率 f	限值（%）
$f \leq 8Hz$	0.2
$8Hz < f \leq 90Hz$	$0.025 \times f$
$90Hz < f \leq 1250Hz$	$0.08 \times f$
$f > 1250Hz$	免除考核

无风险区域（No Effect）的波动深度（Modulation）限值	
光输出波形频率 f	限值（%）
$f \leq 10Hz$	0.1
$10Hz < f \leq 90Hz$	$0.01 \times f$
$90Hz < f \leq 3125Hz$	$(0.08/2.5) \times f$
$f > 3125Hz$	免除考核（高频豁免）

亮度

- 0.1%
- 1%
- 5%
- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%
- 100%

免除考核（高频豁免）

IEEE 1789

100%

High Risk

10%

波动深度
Modulation(%)

No Effect(green)

1%

Low Risk(yellow)

0.1%

1   10   100   1000 3600 10000

频率
Frequency(Hz)

系统图

WiFi/4G/5G
手机用户... | 手机用户1
云服务器
场景 | 定时 | 自动化
路由器
亚马逊 | 谷歌 | 小爱 | 小度

智能家电及配件
家电模块 | 中央空调模块 | 窗帘电机
干接点模组 | 开关模块 | 乐播放器
无线开关 | 蓝牙遥控器 | 更多

WiFi | Ethernet
语音控制
蓝牙 Mesh
超级面板6S
蓝牙4.2
AI语音
蓝牙音响

蓝牙 Mesh
手机用户...

Mesh 局域网

智能照明

恒压	恒流	智能开关	智能感应器	无线、有线结合
LM-150系列	SE-12系列	轻奢系列	微波智能人体存在感应器	照明模组 (DMX/0-10V)
LM-75系列	SE-20系列	灵动系列	人体传感器	照明模组 (DMX/DALI/0-10V)
ST-75系列	SE-30系列	创想系列		照明模组 (DALI)
五路控制器	SE-40系列	⋮	⋮	照明模组 (可控硅)

推荐应用控制方式

1、快速实现本地调光。

手机 **+** 蓝牙驱动器 灯具

2、通过APP设置遥控关联驱动后，可实现APP与遥控两种控制方式控制驱动。

手机 **+** 遥控 **+** 智能无线开关 **+** 蓝牙驱动器 灯具

3、通过APP设置面板关联驱动，可实现APP与面板同时控制。并能够通过面板联网，可实现APP远程控制驱动，云场景，自动化联动功能。

手机 **+** 超级面板 6S **+** 蓝牙驱动器 灯具
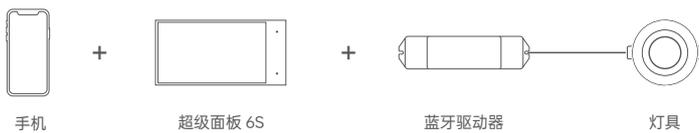
4、……智能控制，更多应用搭配等您来设置。

APP操作说明

1. 账号注册

APP兼容iOS和Android系统，通过手机扫描下方二维码，按提示完成APP安装，安装后即可进行登录/注册操作。

2. 配对操作

新用户创建家庭后，点击右上角"+"进入添加设备列表，先将驱动器按照提示添加完成后，在添加设备列表选择"智能照明-色温灯"后，按照界面提示，先将设备接通电源，确保设备处于未入网状态。然后点击"蓝牙搜索"后，按照提示完成添加设备。

3. 控制界面设置

配对完成后，进入控制界面，可以通过调节色温，亮度达到想要的灯光效果。点击主题，进入主题界面，可一键切换多种主题灯光效果。点击模式，具有可编辑的高级模式。自定义动态模式，让您的生活更加丰富多彩。

4. 灯具群组

同类型的灯具可以组成群组，用户可以对群组进行调色、调光等操作，操作更加便利。在添加设备列表中选择"群组—色温灯组"，按照界面提示编辑灯组名称后，点击"下一步"，勾选您要组成群组的设备，保存即可。

5. 高级功能

本产品可以通过与具有网关功能的设备联动，如超级面板12S。可实现本地场景、云场景、自动化等高级功能。

6.更多功能

星际技术

- 实现了免通电、免现场调试的创新突破。工作人员可以
  在前期提前部署智能家居方案，预设入网、分组、场景等，
  极大地缩短了工程周期，降低了工程成本。

设备替换

- 当设备损坏、丢失或离线时，可以选择同型号设备进行替换。
  新设备将同步旧设备的配置，包括名称、群组、模式、场景、
  自动化等。

设备日志

- 记录设备的操作日志。

渐变时间

- 通电渐变时间：当设备通电时，灯光由灭到亮的渐变时间
- 开灯渐变时间：当打开灯具时，灯光由灭到亮的渐变时间
- 关灯渐变时间：当关闭灯具时，灯光由亮到灭的渐变时间
- 场景渐变时间：场景切换中，灯光亮度，颜色的渐变时间

通电状态

- 当设备通电时，设备保持的状态（全亮/不亮/记忆/自定义）

调光深度

- 默认为万分之一，最高可实现百万分之一的调光深度。

亮度范围

- 自定义可调节的亮度范围。

常见问题

1. 设备添加失败怎么办？
1.1 确保设备正常通电，并且处于激活状态；
1.2 需要添加的设备未被其他账号添加过，如被添加过，请手动恢复出厂；
1.3 确保手机与设备两者尽量靠近，建议不超过20米；
1.4 如设备已被强制删除，请手动恢复出厂，然后重新添加设备。

2. 设备离线怎么办？
2.1 请检查设备是否正常通电；
2.2 请检查路由器是否工作正常，网络畅通；
2.3 如使用远程控制，请检查手机网络是否工作正常，网络畅通。

3. 如何远程控制/云场景设置？
如需远程控制/添加云场景设置，需搭配本司超级面板方可使用。

4. 如何共享设备？
请在"我的"一"家庭管理"，进入需要共享的家庭，点击"添加成员"，请按提示将需要设备共享的家人/朋友加入该家庭即完成共享。

5. 用于灯膜或同一个区域群组调光不一致？
不同型号硬件之间会有差异，需要用同一型号群组调光以达到更好的调光一致性。

重置设备 (恢复出厂设置)

确保驱动已接灯具且处于常亮状态下，使用开关让驱动连续断通电6次（每次断电时间15秒，通电2秒），第六次通电2秒后，灯具闪烁5次，即表示
驱动已恢复到出厂设置状态。

开（通电）2秒
关（断电）15秒

在通电情况下进行

断电 —— 15秒 —— 通电 —— 2秒 —— ……

（重复6次）

搭配 NFC Lighting APP 使用

通过手机扫描下载二维码，按提示完成APP安装。(因性能需求，要求手机型号苹果：iPhone 8及以上、且操作系统iOS13及以上；　安卓：具备NFC功能机型)

✱ **设置驱动器参数时，必须在驱动器断电情况下进行操作。**

读/写智能电源

使用手机，通过NFC读取驱动器信息，根据需求设置参数后，可直接写入驱动器。

1. 读取驱动器

在APP "首页" 点击 【读/写智能电源】，将手机感应区域靠近驱动器NFC感应区，读取驱动器参数。

驱动器NFC感应区

2. 编辑参数

点击【参数管理】可编辑开灯渐变时间、关灯渐变时间、通电渐变时间、亮度范围、色温范围、通电状态、PWM频率等参数。

3. 写入驱动器

参数设置完成后，点击右上角【写入】，将手机感应区域靠近驱动器NFC感应区，即可写入驱动器成功修改参数。

包装规格

型号	LM-75-24-G2B2F
包装箱尺寸	315×215×240mm(L×W×H)
数量	10个/层；3层/箱；30个/箱
重量	0.29kg/个；9.6kg±5%/箱

包装样式图
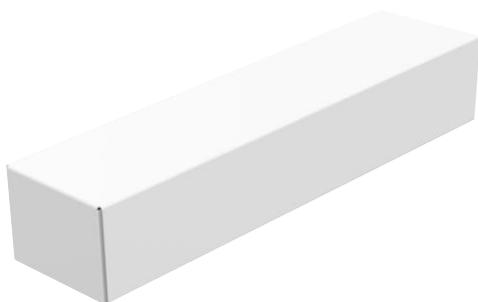
内包装盒

整箱包装

运输和贮存

1. 运输

产品适用车、船、飞机交通运输工具运输。

在运输中，应使用遮蓬进行防雨和防晒，并保持文明装卸，不应有剧烈振动、撞击等。

2. 贮存

贮存符合 I 类环境的规定。贮存期限超过6个月的产品建议重新检验，合格后方可使用。

注意事项

- 请由具有专业资格的人员进行调试安装;
- 雷特产品 (专有型号除外) 不能防水, 需避免日晒雨淋, 如安装在户外, 请用防水箱;
- 良好的散热条件会延长产品的使用寿命, 请把产品安装在通风良好的环境;
- 请检查使用的工作电压是否符合产品的参数要求;
- 使用的电线直径大小必须能足够负载连接的LED灯具, 并确保接线牢固;
- 通电调试前, 应确保所有接线正确, 以避免因接线错误而导致灯具损坏;
- 如果发生故障, 请勿私自维修; 如果有疑问, 请联系供应商。

＊ 本说明书的内容如有变更，恕不另行通知。若内容与您使用的功能有所不同，则以实物为准。如有疑问，欢迎向我司授权的经销商咨询。

保修条例

- 自出厂之日起保修服务期为5年。
- 在保修服务期内出现产品质量问题雷特科技将给予免费修理或更换服务。

非保修条例:

属下列情况不在免费保修或更换服务范围之内:

- 已经超出保修服务期;
- 过高电压、超负载、操作不当等人为造成的损坏;
- 产品外形严重损坏或变形;
- 自然灾害以及人力不可抗拒原因造成的损坏;
- 产品保修标签和产品唯一条形码损坏;
- 无雷特科技签订的合同或发票凭证。

1. 修理或更换是雷特科技对客户的唯一补救措施。雷特科技不承担任何附带引起的损害赔偿责任, 除非在适用法律范围之内。

2. 雷特科技享有修正或调整本保修条款的权利, 并以书面形式发布为准。

珠海雷特科技股份有限公司

地址：珠海市香洲区水岸一路183号　　　　　　　　　　　　　　　　　网址：www.xiaolei.cn