

Intelligent LED Driver(Constant Voltage)

- Housing made from SAMSUNG/COVESTRO's V0 flame retardant PC materials.
- Screwless wire-pressing flip cover design, with detachable end caps. The length of the shell can be adjusted as needed.
- Supports full-command NFC fast programming; the mobile APP can be used to change dimming modes, PWM, brightness range, etc., via NFC, realizing the data interaction function of the driver.
- Supports 0-10V, PUSH DIM, and corridor light dimming
- 0-10V port ultra-low power consumption <0.05mA.
- Dimming range: 0-100%, and the LED starts dimming from 0.01%.
- Soft-on and fade-in dimming function enhances your visual comfort.
- The dimming interface is equipped with photoelectric isolation, complies with the latest safety standards, and is more safe and reliable.
- 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 for intelligent protection of power supply lifespan.
- Overheat, over voltage, overload, short circuit protection and automatic recovery.
- Suitable for Class/II/III indoor light fixtures.
- Normal service life can reach 100,000 hours.
- 5-year warranty (Rubycon capacitor).

Technical Specs

Flicker Free
IEEE1789

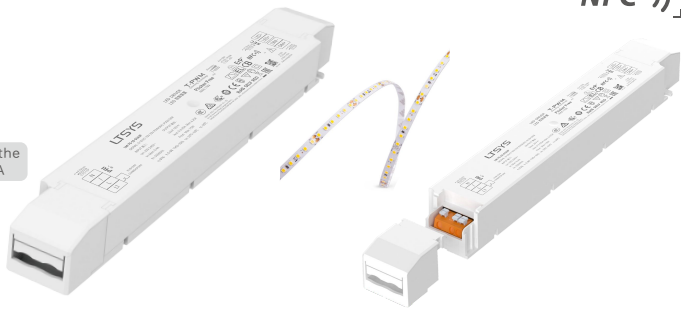
5 in 1dimming
0-10V
1-10V
10V PWM
RX
PUSH DIM

Current consumption of the
0-10V interface < 0.05mA

Dimmable:
1: 10000



The certification icon represents undergoing certification applications only, and final certification qualification subject to actual product.



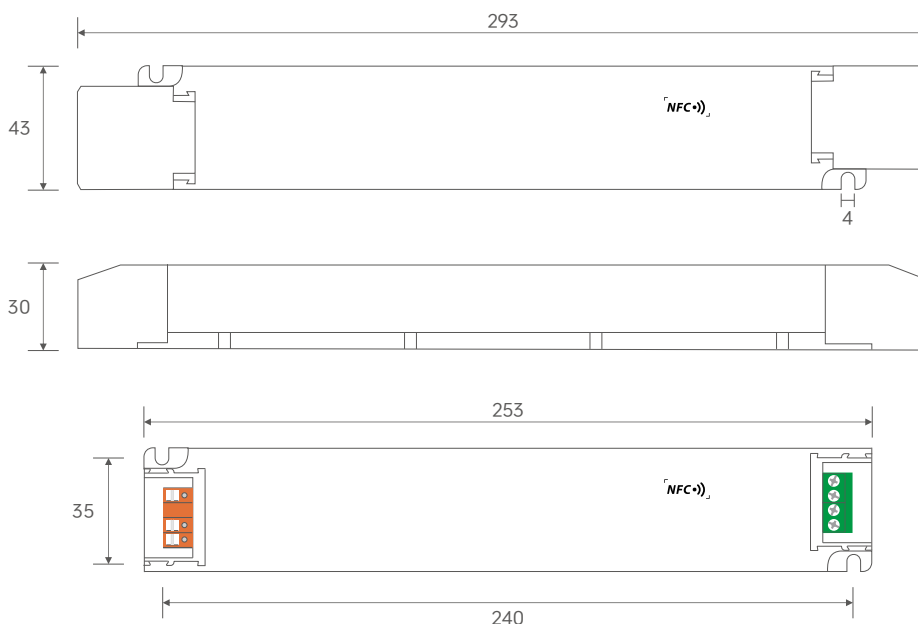
NFC

Model		LM-75-24-G1A2F		LM-75-12-G1A2F	
Features	Output Type	Constant voltage			
	Dimming Interface	0/1-10V, Push DIM			
	Output Feature	Isolation			
	Protection Grade	IP20			
	Insulation Grade	Class II (Suitable for class I/ II /III light fixtures)			
OUTPUT	Output Voltage	24V $\equiv$		12V $\equiv$	
	Output Voltage Range	24V $\pm$ 0.5V $\equiv$		12V $\pm$ 0.5V $\equiv$	
	Output Current	Max. 3.125A		Max. 6.25A	
	Output Power	Max. 75W			
	Output Power Range	0-75W			
	Strobe Level	High frequency exemption level			
	Dimming Range	0-100%, down to 0.01%			
	Overload Power Limitation	$\geq$ 102%			
	Ripple	$\leq$ 300mV		$\leq$ 200mV	
INPUT	PWM Frequency	300-22000Hz			
	Input AC Voltage	220-240V~			
	Input DC Voltage	220-240V $\equiv$ (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%		91%	
	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°C tc: 80°C			
	Working Humidity	20 ~ 95%RH, non-condensing			
	Storage Temperature/Humidity	-40 ~ 80°C, 10~95%RH			
	Temperature Coefficient	$\pm$ 0.03%/°C(-20°C-50°C)			
	Vibration	10~500Hz, 2G 12mins/cycle, 72 min for X, Y and Z axes respectively			
PROTECTION	Overheat Protection	Intelligently adjust or turn off the current output if the PCB temperature $\geq$ 110°C. When the PCB temperature <90°C, automatically recover normal output			
	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	No-load voltage $\geq$ 28V; output turns off and can recover automatically.		No-load voltage $\geq$ 16V; output turns off and can recover automatically.	
SAFETY & EMC	Withstand Voltage	I/P-O/P:3750V~			
	Insulation Resistance	I/P-O/P: 100M Ω /500VDC/25°C/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	
		KC	Korea	KC61347-1, KC61347-2-13	
		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	BIS	India	IS 15885 (PART 2/SEC 13)	
		CCC	China	GB/T17743, GB17625.1	
		CE	European Union	EN55015, EN61000-3-2, EN61000-3-3, EN61547	
		KC	Korea	KN15, KN61547	
		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 switching on/off via 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 $\leq$ 1.0, SVM $\leq$ 0.4		
OTHERS	DF	Phase factor	DF $\geq$ 0.9		
	Weight(N.W.)	290g $\pm$ 10g			
	Dimensions	293 $\times$ 42.5 $\times$ 30mm(L $\times$ W $\times$ 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.

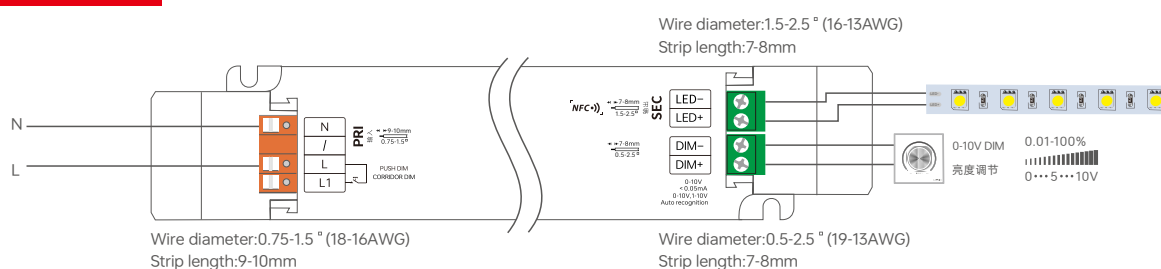
Product Size

Unit:mm



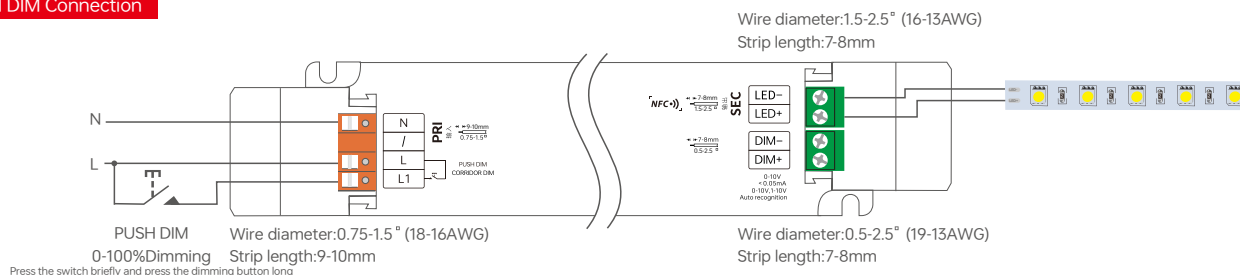
Wiring Application Diagram

0-10V Connection Method



*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.

PUSH DIM Connection



*The priority of the dimming interface is: First 0-10V, and then PUSH DIM.

*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.

Switch to PUSH DIM Mode:

Method 1: If it has been switched to the corridor dimming mode, connect the wires according to the PUSH DIM wiring diagram. Press the switch briefly 5 times within 3 seconds of reset button, then press and hold it for 6 seconds, and then press it briefly 5 times within 3 seconds. The driver will automatically switch to the Push DIM dimming mode.

Method 2: If it is switched to the corridor mode, you can switch to the Push DIM dimming mode through the NFC Lighting app.

PUSH DIM



Reset Switch

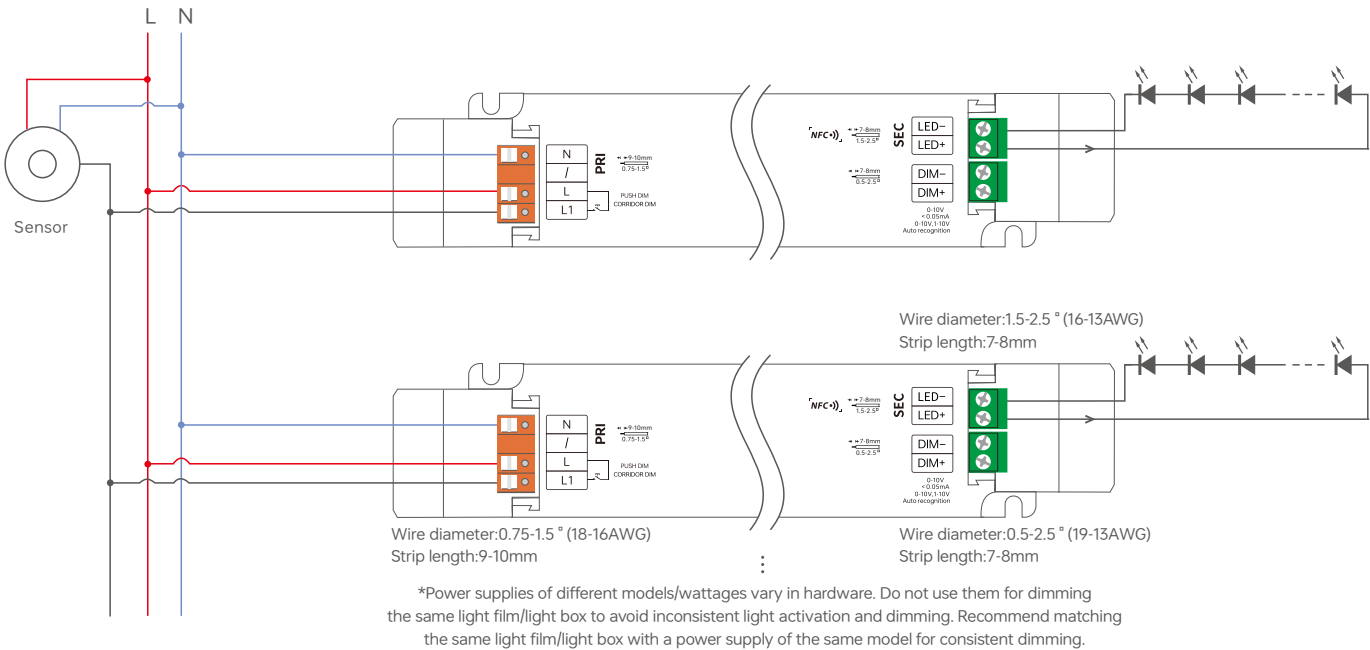
Short press : on/off control.

Double-click: Not available.

Long press : Adjust the current brightness.

Dimming memory : When the light is switched on/off again, the light will resumes to the previously set brightness level.

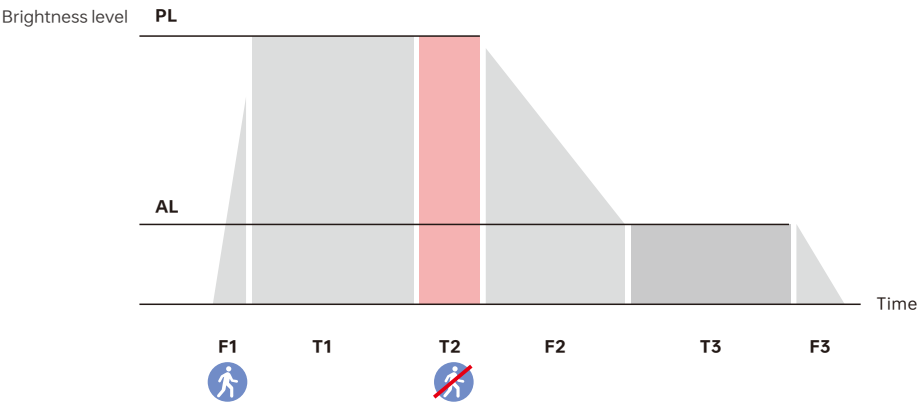
Corridor Dimming Application



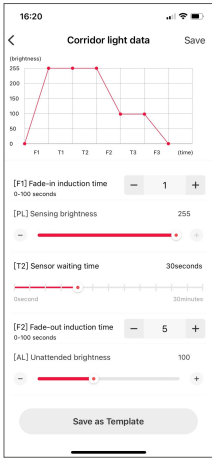
Switch to the corridor light mode

- Method 1:** Configure and switch the corridor light function via NFC, and the Push DIM function will be turned off.
- Method 2:** After connecting the wires according to the corridor dimming wiring diagram, keep moving within the effective sensing area for more than 2 minutes, and it will automatically switch to the corridor dimming mode with all lights on at full brightness.
- Method 3:** After connecting the wires according to the corridor dimming wiring diagram, first replace the sensor with a common switch, then turn on the common switch and keep it conducting for 2 minutes. The driver will automatically switch to the corridor dimming mode. After that, remove the common switch and replace it with the sensor again.
- Note:** During normal operation, it is recommended to set the hold-time of the motion sensor to the minimum. It is necessary to select a motion sensor with an AC switch.

Corridor Dimming: Working Process



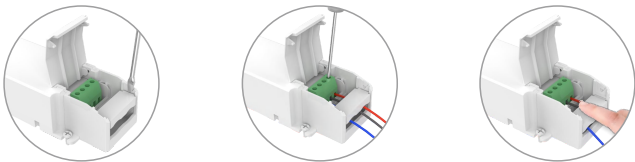
Name	Default	Setting Range
(F1) Gradual Entry Sensing Time	1 s	0-100 s
(PL) Sensing Brightness	255	0-255
(T1) Sensing Holding Time	Set through the sensor	
(T2) Delay Time	30 s	0 s, 5 s, 10 s, 20 s, 30 s, 45 s, 1 min, 2 min, 3 min, 5 min, 10 min, 20 min, 30 min
(F2) Gradual Exit Sensing Time	1 s	0-100 s
(AL) Standby Brightness	100	0-255
(T3) Sensing Standby Time	30 s	0 s, 5 s, 10 s, 20 s, 30 s, 45 s, 1 min, 2 mins, 3 mins, 5 mins, 10 mins, 20 mins, 30 mins, Permanent
(F3) Gradual Exit to Off Time	1 s	0-100 s



Note: *If the lamp needs to be on standby at a low brightness level, the [T3] Sensing Standby Time should be set to "Permanent".
*The above parameters are set through the NFC lighting APP.

Protective Housing Application Diagram

Tension plate



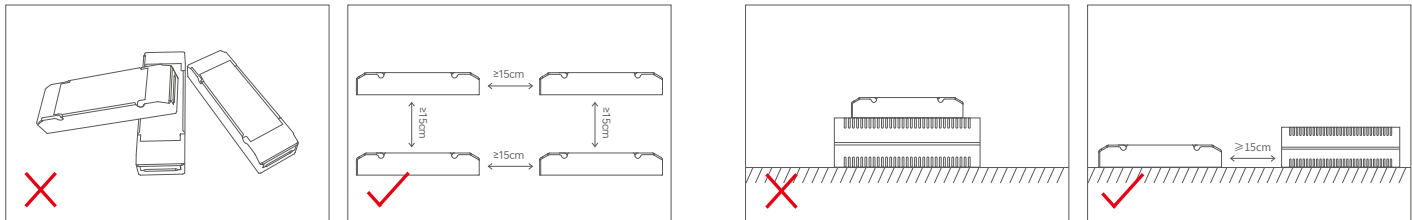
1. Pry up the protecting housing in the side plate position with a tool.
2. Connect to electrical wires with a screwdriver as wiring diagram shows.
3. Press down the tension plate to fix the the electrical wires, then close the protective housing.

Remove the protective housing



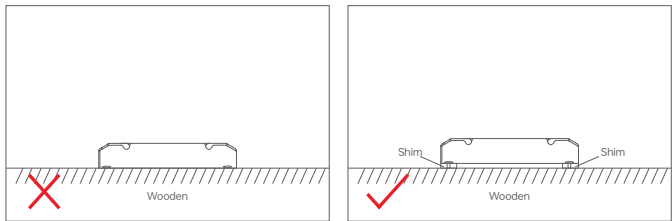
Pull the housing left and right from the bottom to remove it.

Installation Precautions



Please do not stack the products. The distance between two products should be $\geq 15\text{cm}$ so as not to affect heat dissipation and the lifespan of the products.

Please not place the products on LED drivers. The distance between the product and the driver should be $\geq 15\text{cm}$ so as not to affect heat dissipation and shorten the lifespan of the products.



Please do not fasten the product screws tightly against the wooden board. Instead, add a washer of $\geq 7\text{mm}$ under the fixing screws. Leaving a gap can effectively dissipate heat, preventing any impact on the product's heat dissipation and service life.

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).



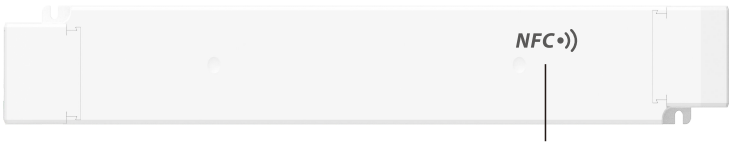
* Before you begin setting the parameters of the driver, please make sure the driver is powered off.

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.



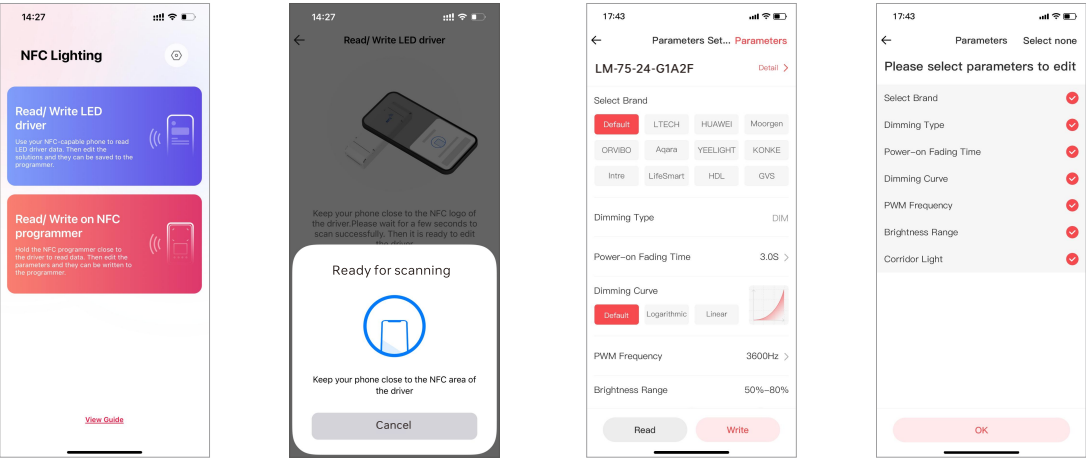
NFC sensing area of the driver

2. Edit parameters

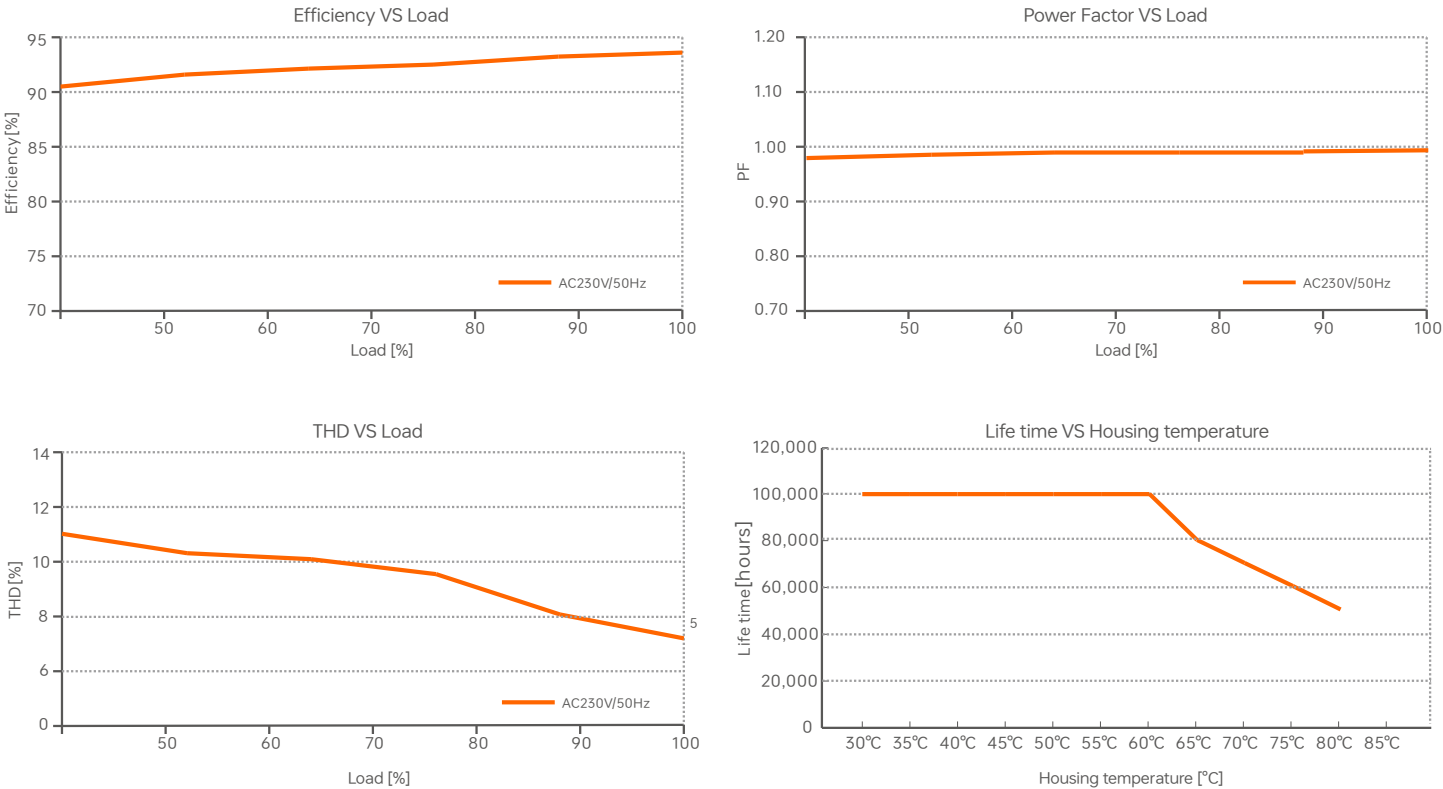
Click on [Parameter Management] to edit more advanced parameters such as Select Brand, Dimming Type, Power-on Fading Time, Dimming Curve, PWM Frequency, Brightness Range, and Corridor Light.

3. Write to the drive

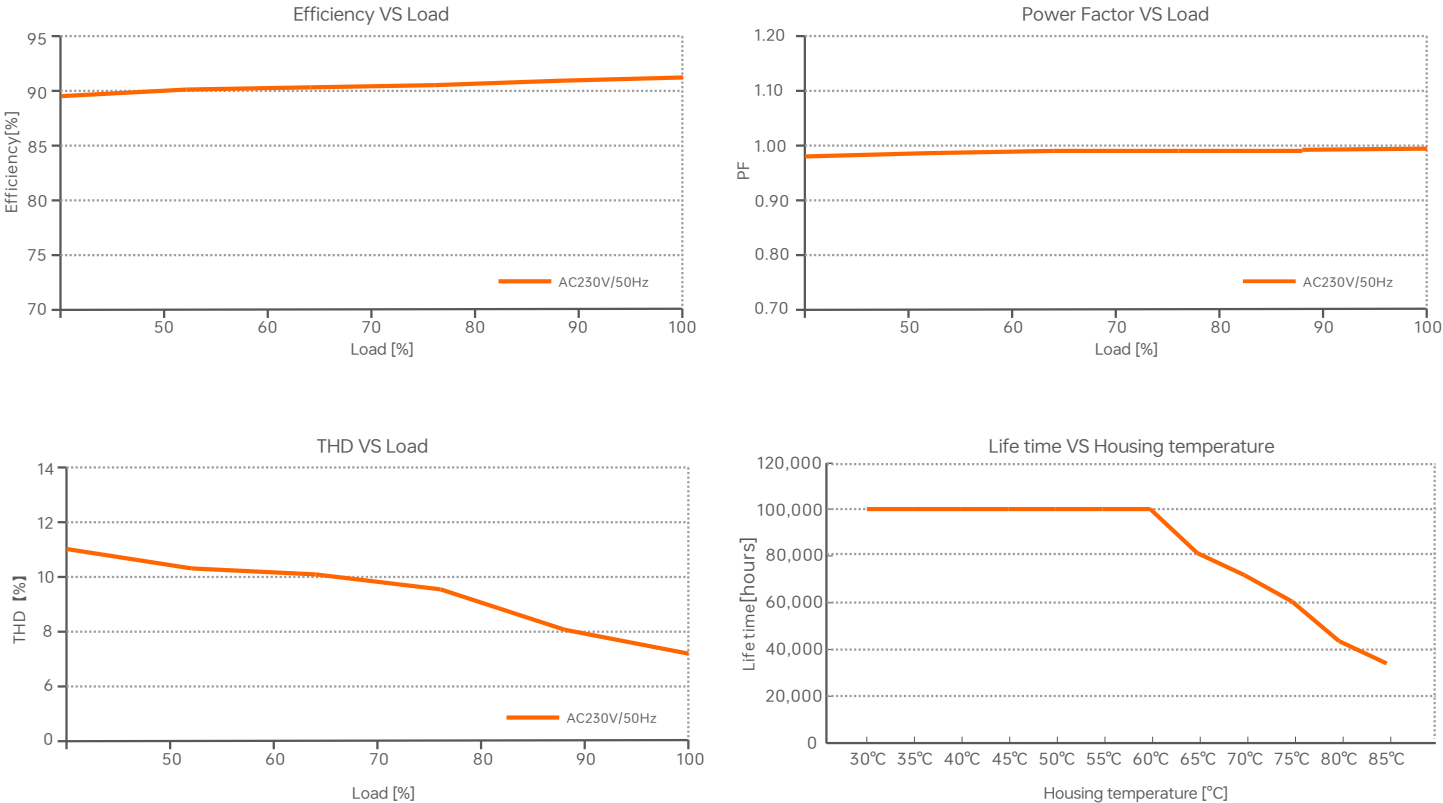
After completing the parameter settings, click [Write] in the upper right corner, and keep the programmer's sensing area close to the NFC sensing area of the driver, so the parameters can be written to the driver



Relationship Diagrams



LM-75-24-G1A2F



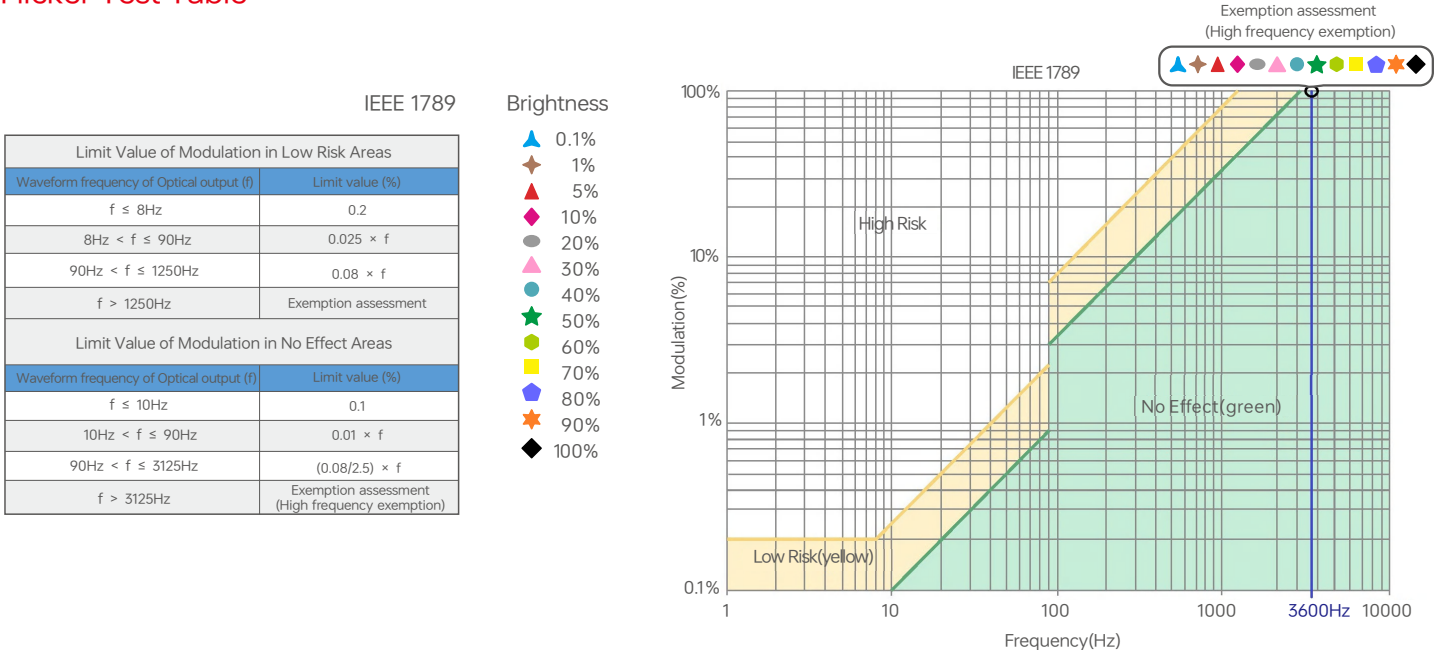
LM-75-12-G1A2F

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	11	12	13	16	19

- Remarks:
- 1. Test Conditions: Cold start 45A(Test twidth=300us tested under 50% lpeak)/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.

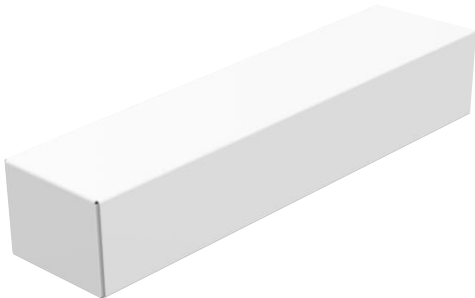
Flicker Test Table



Packaging specification

Model	LM-75-24-G1A2F/LM-75-12-G1A2F
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

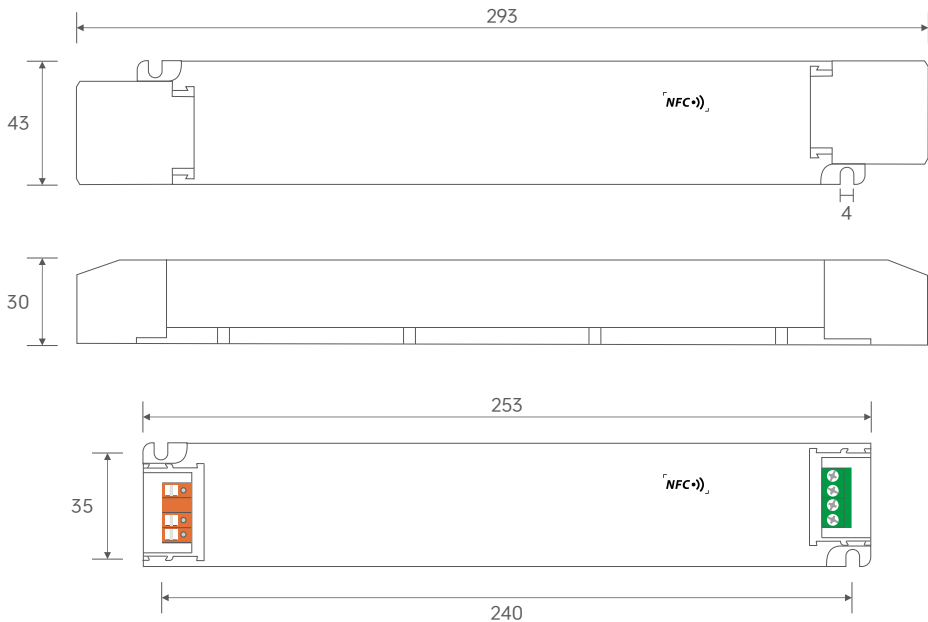
- Product installation and commissioning should be done by a qualified professional.
 - LTECH products are and not lightningproof non-waterproof (special models excepted). Please avoid the sun and rain. When installed outdoors, please ensure they are mounted in a water proof enclosure or in an area equipped 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.

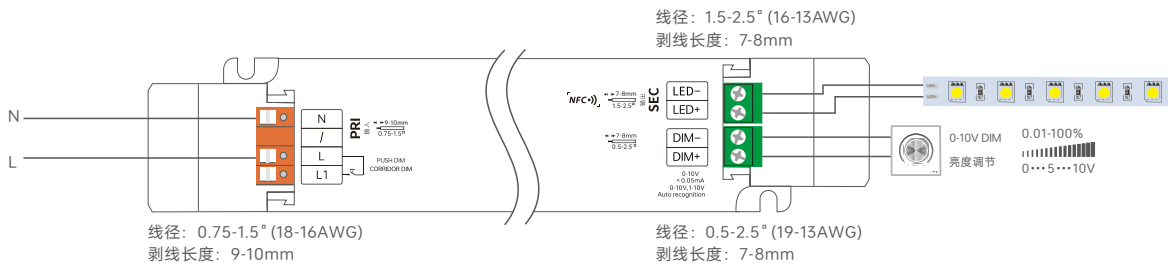
尺寸图

单位：mm



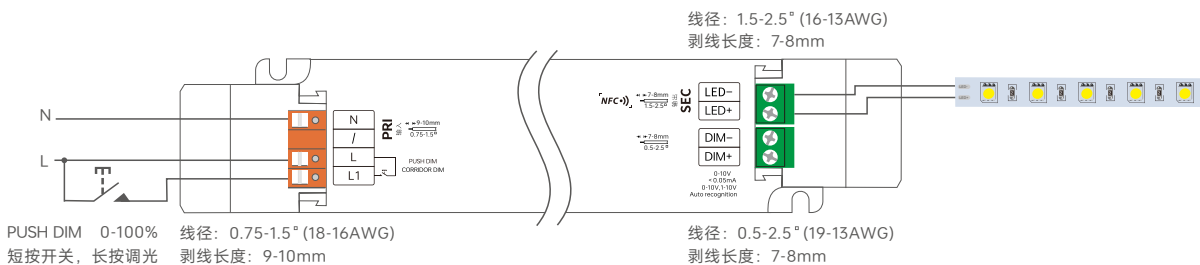
连接应用图

0-10V 连接方式



*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。

PUSH DIM 连接方式



*调光接口优先级为：首先0-10V，然后PUSH DIM
*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。

切换至PUSH DIM调光模式

方式 1: 若是已切换至走廊调光模式，可以按照PUSH DIM接线图接好线路,复位开关 3 秒内短按 5 次，然后长按 6 秒后再 3 秒内短按 5 次，驱动器将会自动切换至PUSH DIM调光模式。
方式 2: 若是已切换至走廊模式，可以通过NFC Lighting app切换成 PUSH DIM调光模式。

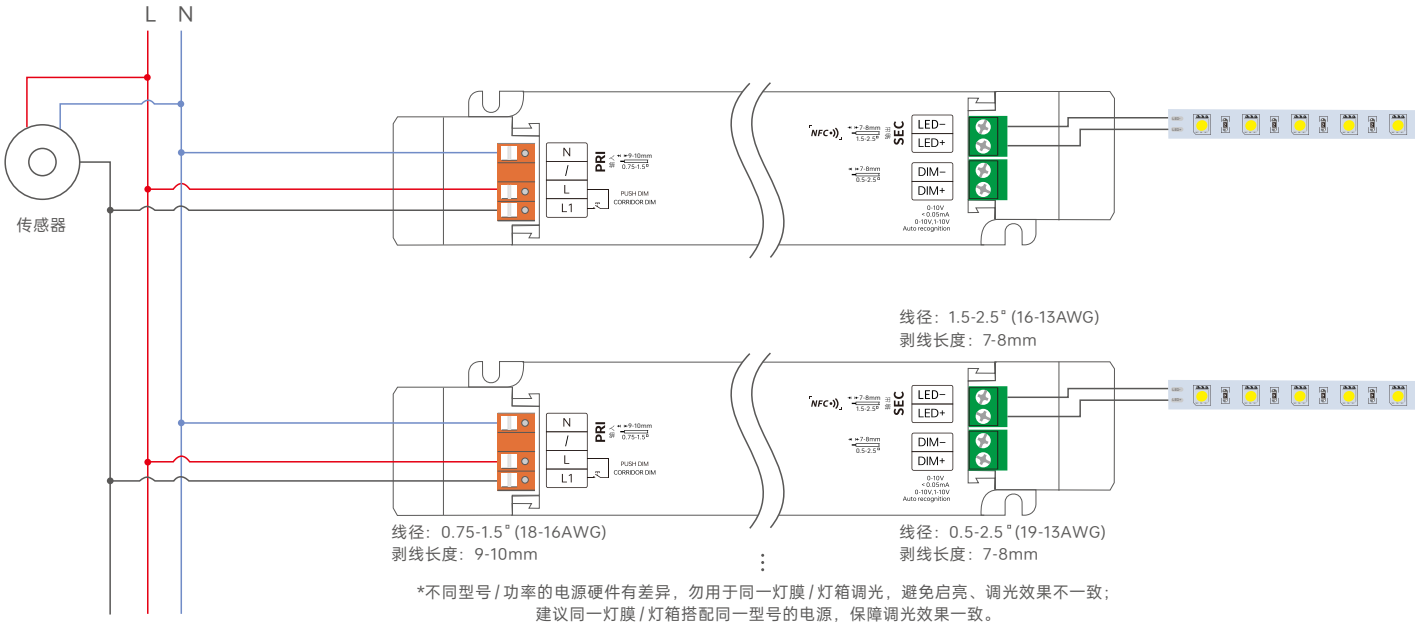
操作说明



复位开关

- 短按：开/关控制
- 双击：无
- 长按：调节当前亮度
- 调光记忆：当再次开关时，灯光会回到先前调整的亮度水平

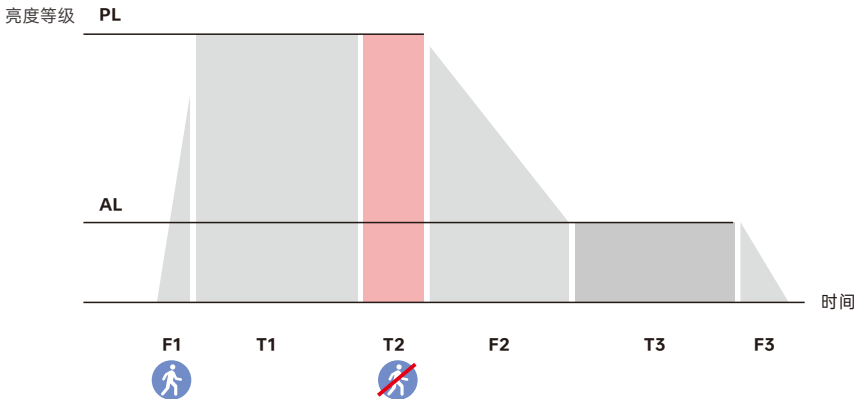
走廊灯 连接方式



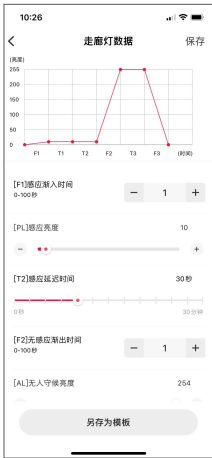
切换至走廊灯模式

- 方式 1: 通过NFC配置并切换走廊灯功能, PUSH DIM功能关闭。
- 方式 2: 按照走廊调光接线图接好线后, 保持有效感应区域内移动并持续2分钟以上, 自动切换成走廊调光模式并全亮灯。
- 方式 3: 按照走廊调光接线图接好线后, 先将传感器更换为普通开关, 然后打开普通开关持续导通2分钟, 驱动器将自动切换到走廊调光模式, 然后将普通开关移除并更换回传感器。
- 备注: 正常工作时, 推荐将移动感应器的维持时间(Hold-time)设置为最小。
需要选用带AC开关的移动感应器。

走廊调光 工作过程



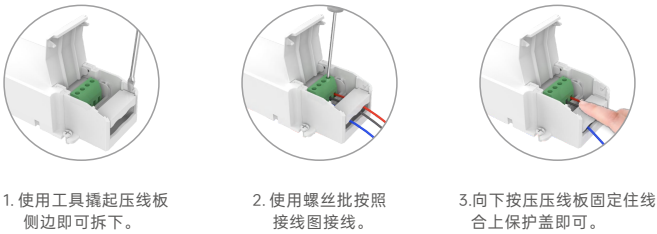
名称	默认	设置范围
(F1) 感应渐入时间	1 秒	0-100 秒
(PL) 感应亮度	255	0-255
(T1) 感应保持时间	通过传感器设置	
(T2) 感应延迟时间	30 秒	0 秒, 5 秒, 10 秒, 20 秒, 30 秒, 45 秒, 1 分钟, 2 分钟, 3 分钟, 5 分钟, 10 分钟, 20 分钟, 30 分钟
(F2) 无感应渐出时间	1 秒	0-100 秒
(AL) 无人守候亮度	100	0-255
(T3) 守候时间	30 秒	0 秒, 5 秒, 10 秒, 20 秒, 30 秒, 45 秒, 1 分钟, 2 分钟, 3 分钟, 5 分钟, 10 分钟, 20 分钟, 30 分钟, 永久
(F3) 渐出到关闭时间	1 秒	0-100 秒



备注: *如灯需要低亮度守候, 需要设置[T3]感应守候时间为永久
*以上参数由NFC lighting APP 设置

保护盖应用图

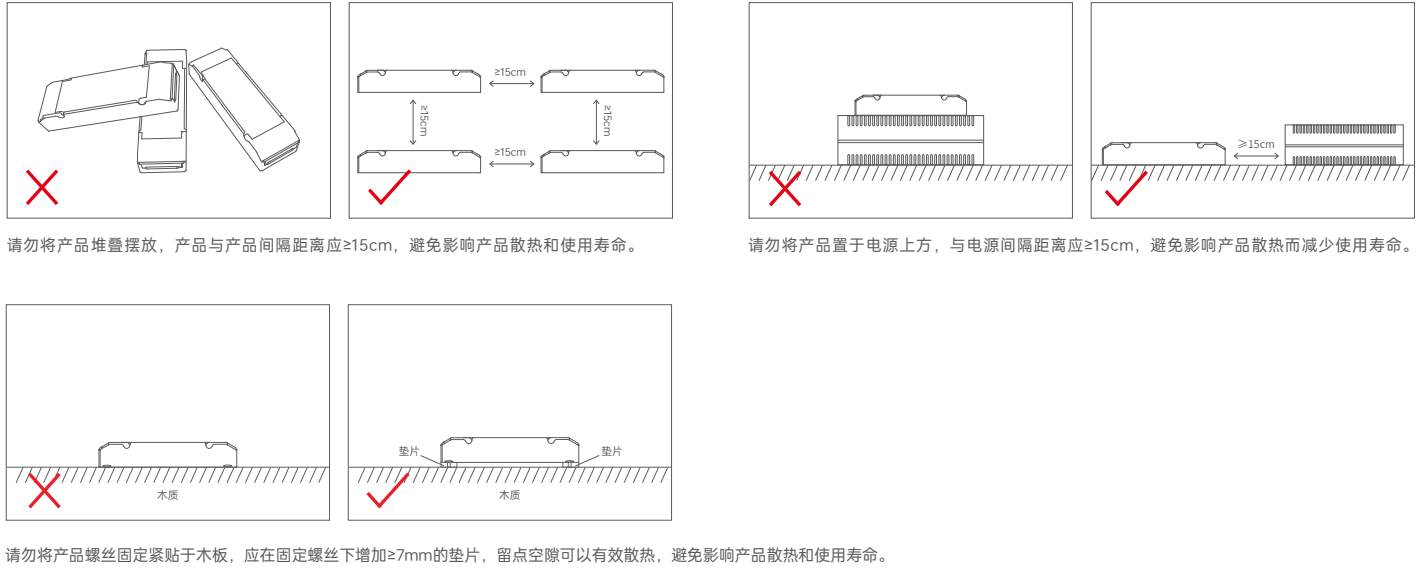
压线板



保护盖的拆装



安装注意事项



搭配 NFC Lighting APP 使用

通过手机机扫描下方二维码，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。

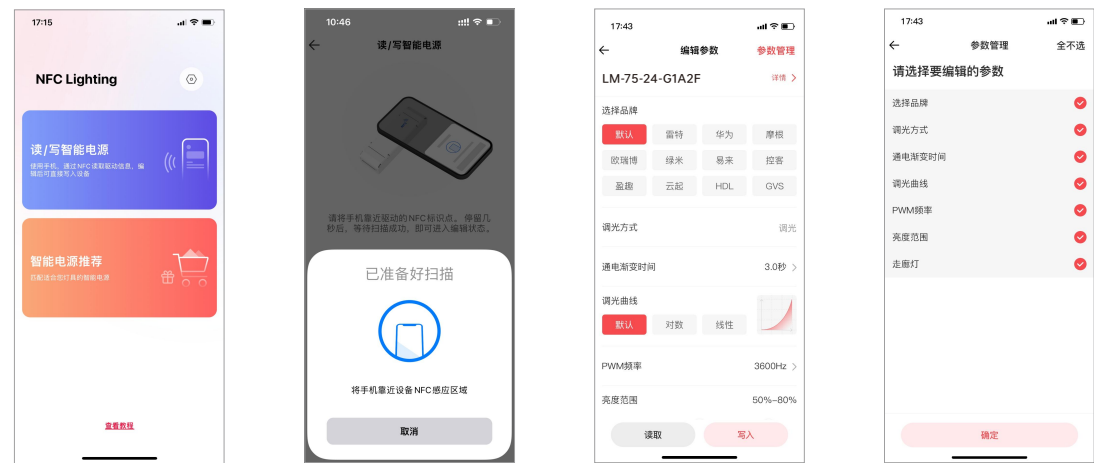


2. 编辑参数

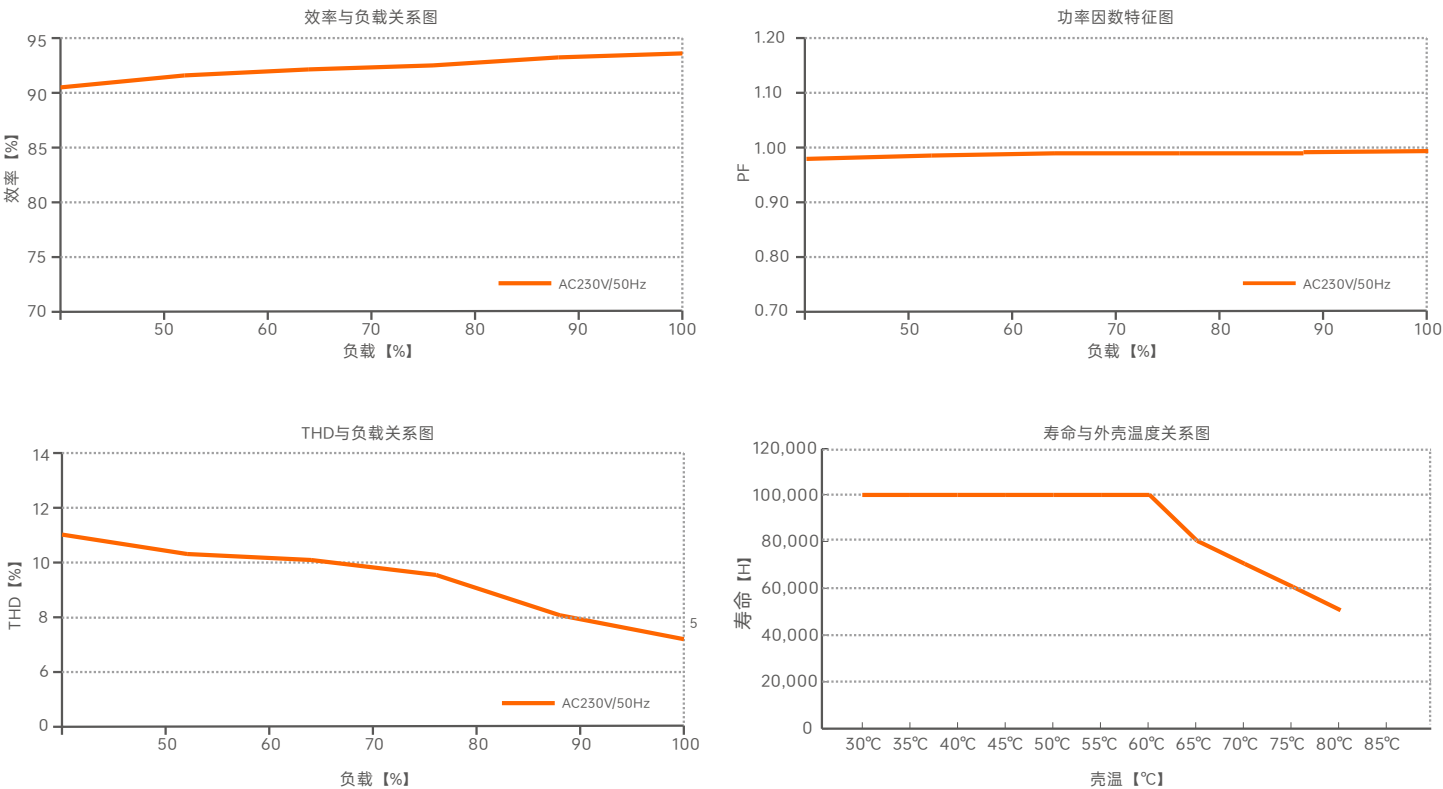
点击【参数管理】可编辑选择品牌、调光方式、通电渐变时间、调光曲线、PWM频率、亮度范围、走廊灯等参数。

3. 写入驱动器

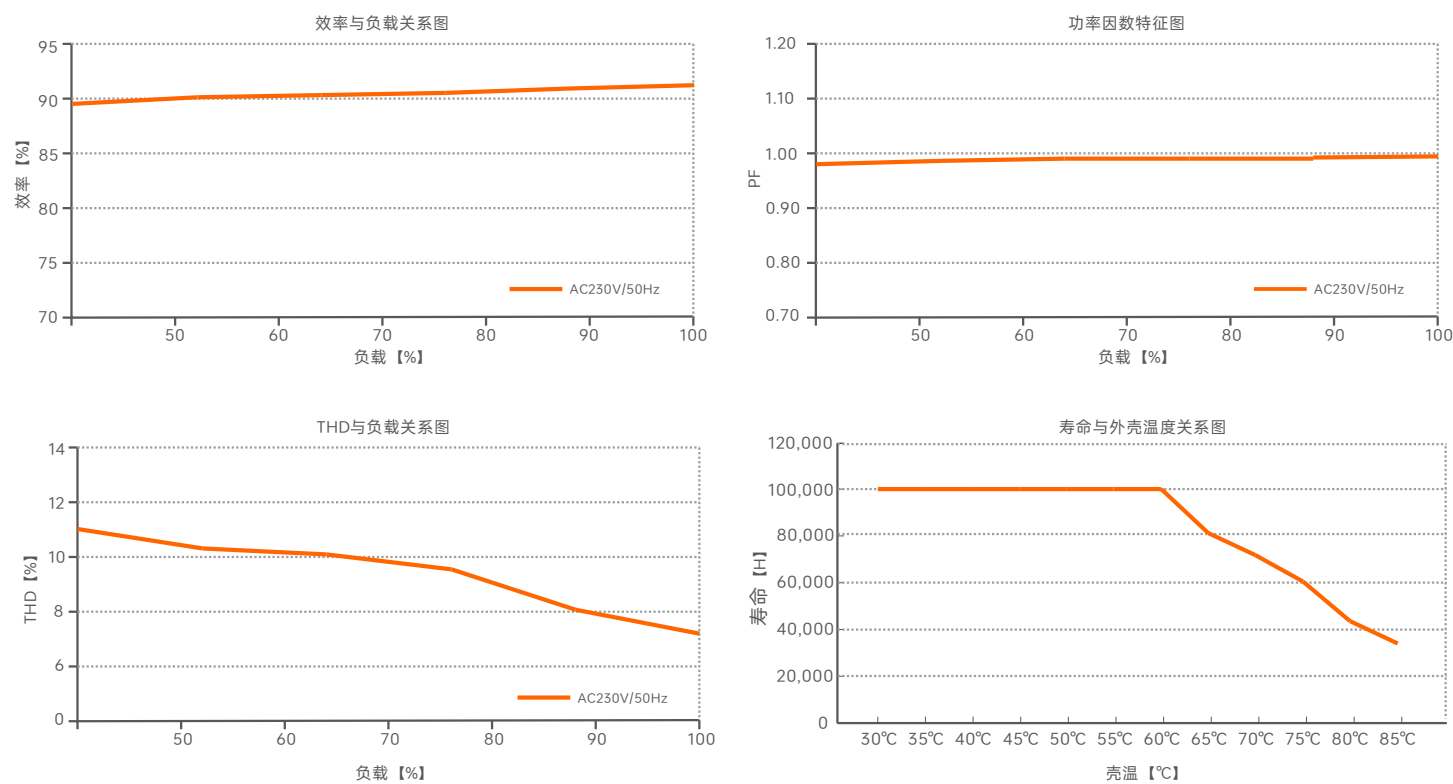
参数设置完成后，点击右上角【写入】，将手机感应区域靠近驱动器NFC感应区，即可写入驱动器成功修改参数。



关系图表



LM-75-24-G1A2F



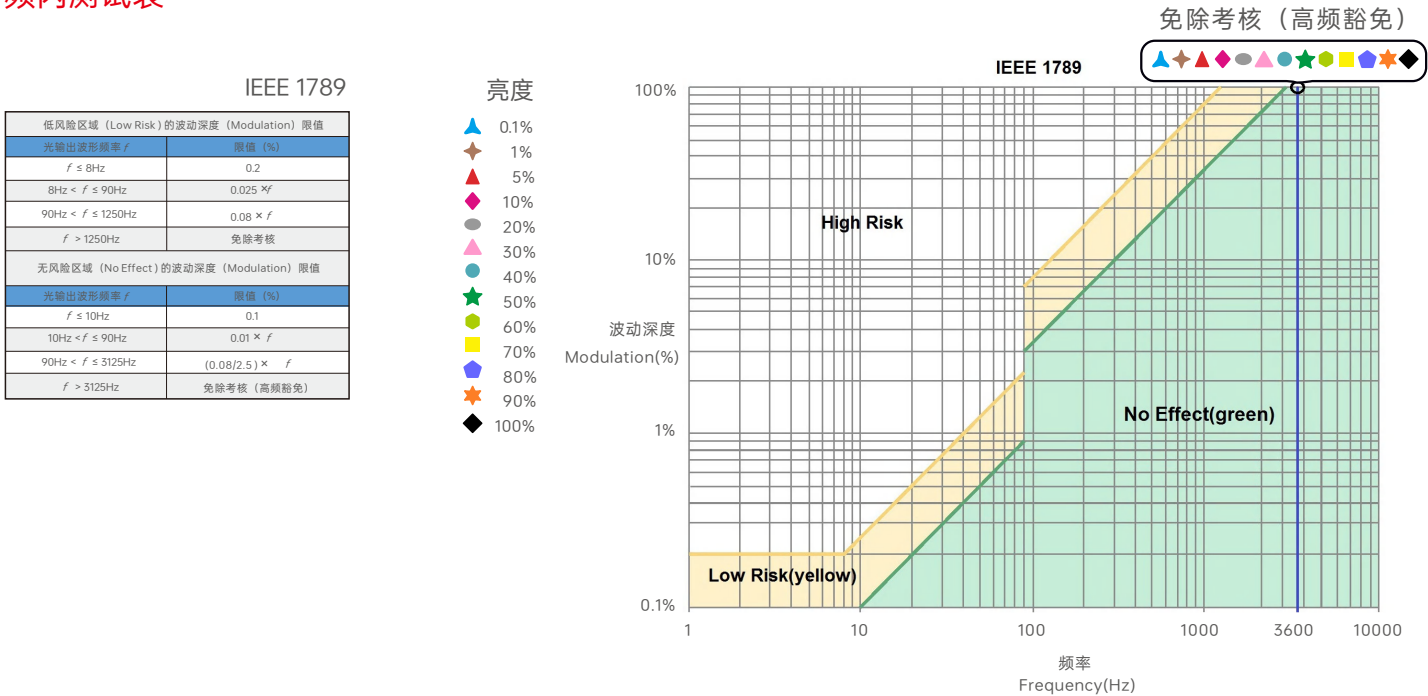
LM-75-12-G1A2F

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%peak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°C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;

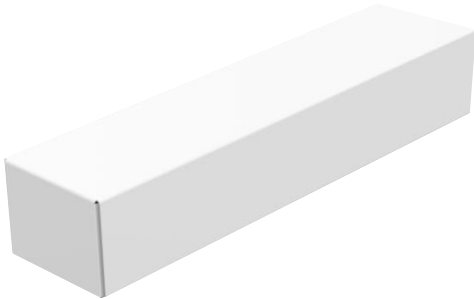
频闪测试表



包装规格

型号	LM-75-24-G1A2F/LM-75-12-G1A2F
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最唯一补救措施。雷特科技不承担任何附带引起的损害赔偿, 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。