

LTECH

EX Series Touch Panel



EX1S
(DIM)



EX2
(CT)



EX4S
(RGBW)



Q
series
remote



F
series
remote



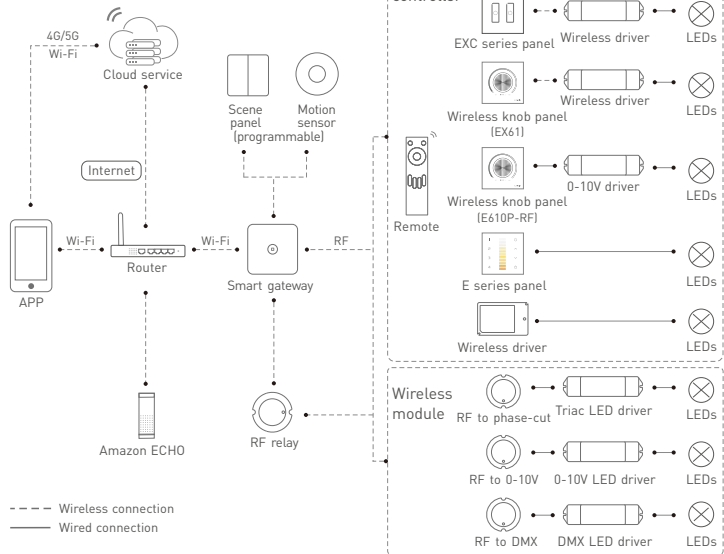
APP

Manual

www.ltech-led.com

System Diagram

L-BUS



Product Features

- Adopt wireless RF and wired DMX512 protocol 2 in 1 control mode, more flexible and convenient for applications in projects.
- Leading RF wireless sync control technology realizes the consistency of dimming and dynamic color changing among multiple drivers.
- Multiple touch panels can control the same LED lights, no limit on panel quantity.
- Touch keys with chord and LED indicator.
- Adopt capacitive touch control technology makes LED dimming selection more user-friendly.
- Control the panels by a remote, or by APP when a LTECH gateway is added.

Technical Specs

Model	EX1S	EX2	EX4S
Control Type	DIM	CT	RGBW
Input Voltage	100-240V~		
Output Signal	DMX512		
Wireless Type	RF 2.4GHz		
Working Temp.	-20°C~55°C		
Dimensions	L86×W86×H36(mm)		
Package Size	L113×W112×H50(mm)		
Weight(G.W.)	225g		

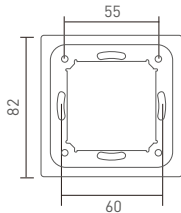
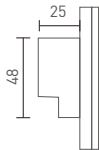
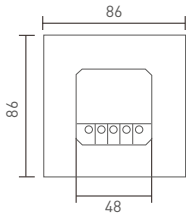
* Product with **L-BUS** logo, supports the function of WIFI-108 advanced mode.
Advance Mode



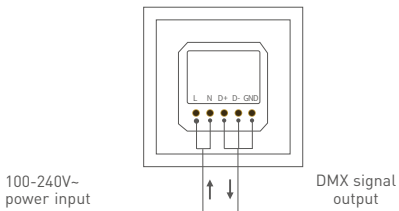
RoHS

Product Size

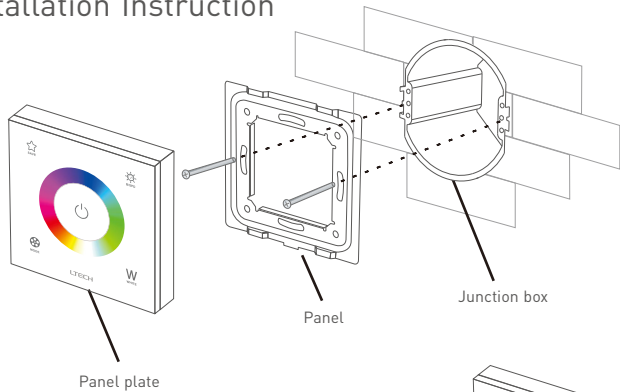
Unit: mm



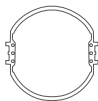
Terminals



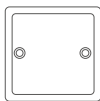
Installation Instruction



Junction boxes are as follow:







European style

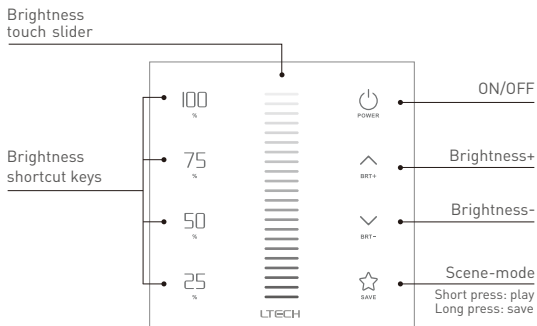


86 type



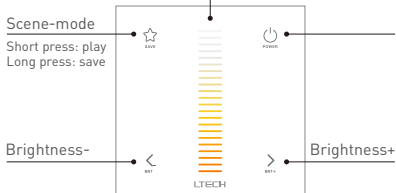
Key Functions

- * When blue indicator light of  key is on, long press  to turn on/off buzzer. When white indicator light of  key is on, long press  to match code.
- * EX panel's scene-mode keys are corresponding with gateway APP's scenes, the scenes can be changed by APP or panel.





EX1S

CT touch slider



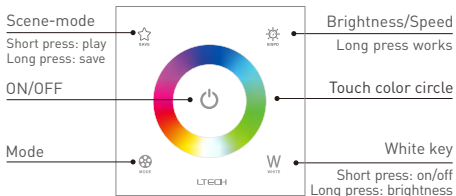
EX2

CT & CT2 mode of EX2 panel switch to each other:
Simultaneously long press  and  button for 3 seconds, the buzzer beeps once then switch successfully.

(Factory default: CT mode)

DMX Adresse \ Mode	CT	CT2
1	C	BRT
2	W	CT


* Please switch the color temperature mode when the switch indicator light is white.



EX4S

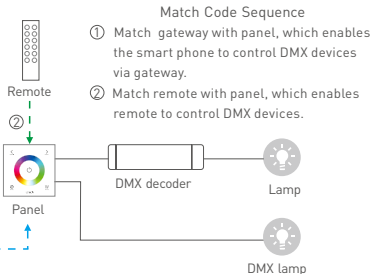
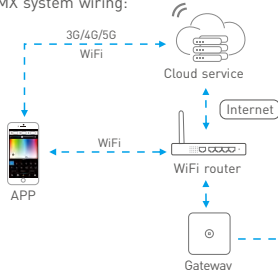
Mode

- Static red
- Static green
- Static blue
- Static yellow
- Static purple
- Static cyan
- Static white
- RGB jumping
- 7 color jumping
- RGB gradient
- 7 color gradient
- Static black (Close RGB only)

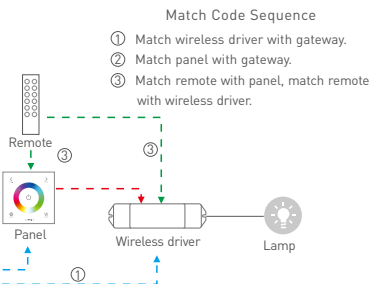
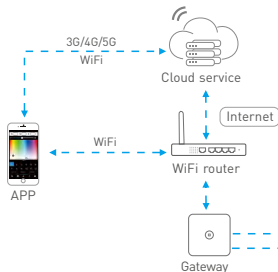
* White light only: press  key to choose black mode, then press W key.

Match Code Sequence

DMX system wiring:

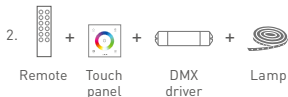


Wireless system wiring:

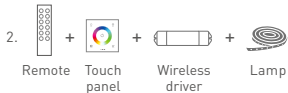


Applications

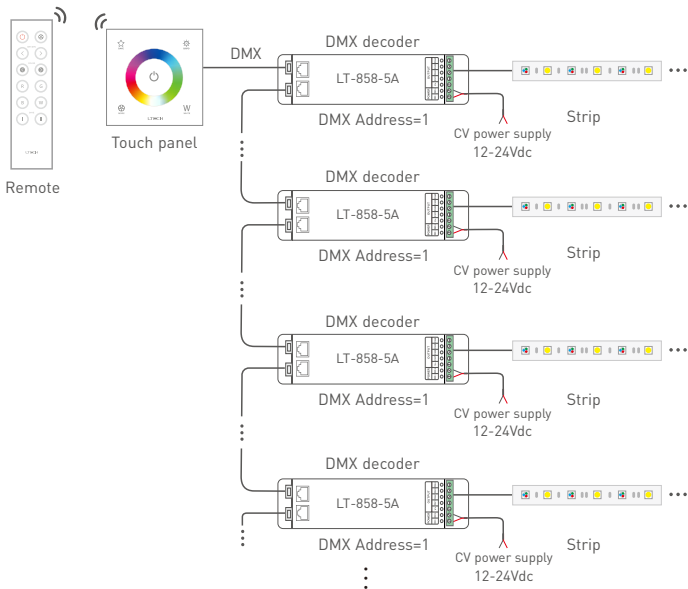
DMX512 control:



Wireless control:



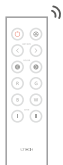
DMX Wiring



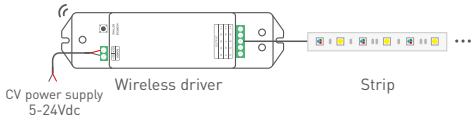
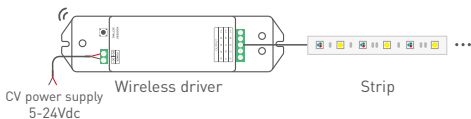
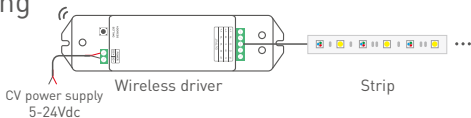
RF Wireless Wiring



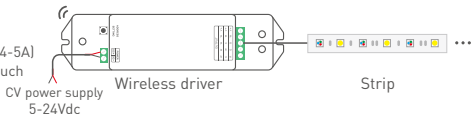
Touch panel



Remote



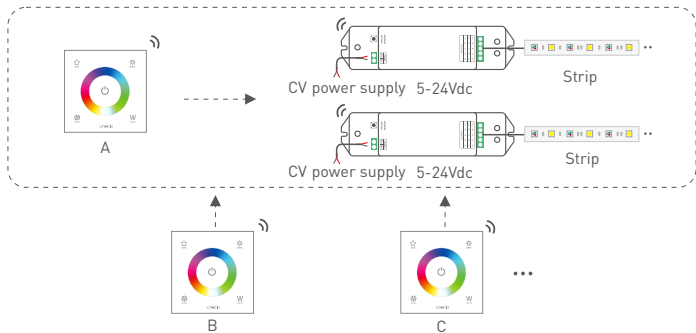
Multiple wireless receivers (F4-DMX-5A/F5-DMX-4A/F4-3A/F4-5A) can be matched with EX series touch panel within effective distance.




* To avoid the signal interference, please do not install wireless LED drivers near to a large area of metal objects or install on the metal space.

Multi-panel Control Wiring

- * After touch panel A realizes controlling the lamps, if B and C are matched with A, they can also control the lamps.
- * Linkage control is also available when the touch panels are connected to DMX decoders.

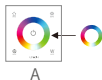


Match Code between Touch Panels

1. Assuming that B matches with A, long press  on B until all indicator lights flicker.



2. Touch the slider on A within 15s, when indicator lights of B stop flickering, match successfully.



Match Code between Touch Panel & Remote

1. When the indicator light of the panel is white, Long press  on touch panel until all indicator lights flicker.



EX1S



EX2



EX4S

2. Match with F series remote:

Long press On/Off key on F series remote, the indicator light of touch panel stop flickering, match successfully.

EX1S works with remote F1.

EX2 works with remote F2.

EX4S works with remote F4.



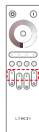
F1



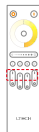
F2



F4



Q1



Q2



Q4

3. Match with Q series remote:

Long press the matching zone's "On" key on Q series remote, the indicator light of touch panel stop flickering, match successfully.

EX1S works with remote Q1.

EX2 works with remote Q2.

EX4S works with remote Q4.

* Please match/clear code when  indicator light of panel is white.

Match Code between Touch Panel & Wireless Driver

Touch panels can work with wireless driver F4-3A/F4-5A/F4-DMX-5A/F5-DMX-4A.

Method 1:

1. Power off the driver.



2. Long press On/Off key of the panel until all indicator light flicking.



3. Power on the driver, the lamps flicker slowly, please complete step 4 within 15s.

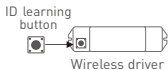


4. Short press any key or color circle / slider on the panel, match successfully.



Method 2:

1. Short press "ID learning button" on wireless driver, the lamps flicker, please complete next step within 15s.



2. Long press On/Off key on panel until all indicator light flicker.




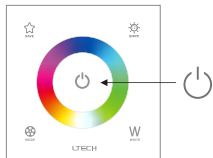
3. Short press any key or color circle / slider on the panel, match successfully.



* Please match/clear code when  indicator light of panel is white.

Match Code between Touch Panel & Gateway

1. Long press  on touch panel until indicator lights flicker.
2. Turn on APP, enter "zone set" interface, click the right top "MATCH" key, then follow the prompts.

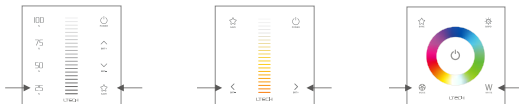


L-BUS APP



Clear Code

Press the bottom two key on touch panel simultaneously for 6s, the indicator lights flicker several times, clear code successfully.



* Please match/clear code when  indicator light of panel is white.

Attentions

- Products shall be installed by qualified professionals.
- LTECH products are non-waterproof (special models excepted). Please avoid the sun and rain. When installed outdoors, please ensure it is mounted in a water proof enclosure.
- Good heat dissipation will extend the working life of products. Please ensure good ventilation.
- Please check if the working voltage used complies with the parameter requirements of products.
- 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.

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.

LTECH

EX 系列触摸面板



EX1S
(DIM)



EX2
(CT)



EX4S
(RGBW)



Q 遥控

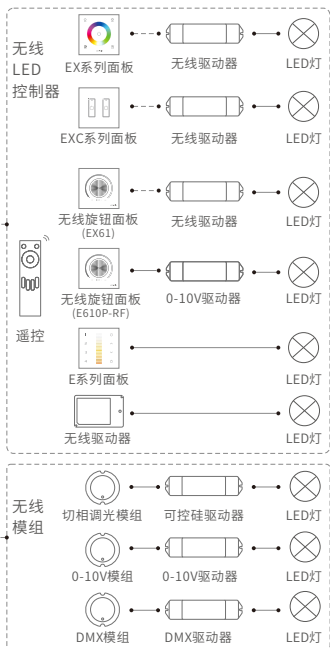
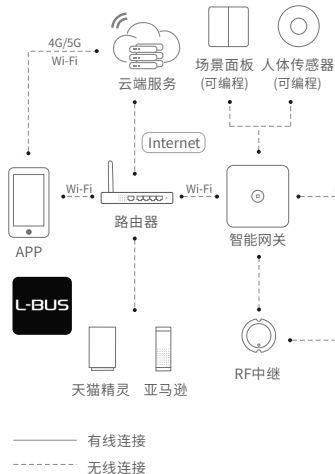
F 遥控

APP

使用说明书
www.ltech.cn

系统图

L-BUS




产品特征

- 采用无线RF与有线DMX512协议二合一控制方式，工程应用更灵活方便；
- 领先的RF无线同步控制技术，驱动器之间可实现调光与动态变化效果同步；
- 支持多个面板无线RF多联控制，无数量限制；
- 触摸按键带和弦音和LED夜光指示灯；
- 面板采用电容式触控方式，LED色彩选择更人性化；
- 面板可用遥控控制，增加网关可用手机控制。

技术参数

产品型号	EX1S	EX2	EX4S
控制类型	调光	色温	RGBW
输入电压	100-240V~		
输出信号	DMX512		
无线类型	RF 2.4GHz		
工作温度	-20°C~55°C		
产品尺寸	86×86×36mm (L×W×H)		
包装尺寸	113×112×50mm (L×W×H)		
产品重量	225g		

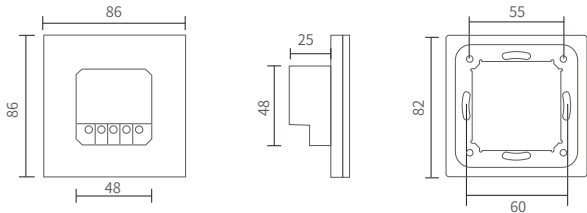
* 产品实物上带有  标志的产品，支持WIFI-108高级模式功能。



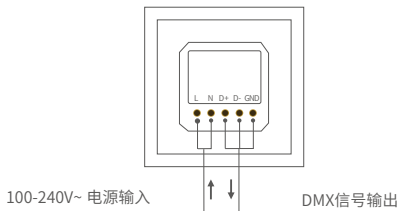
RoHS

产品尺寸

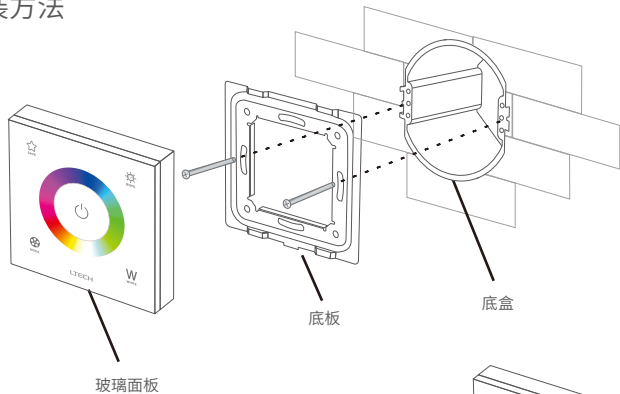
单位：mm



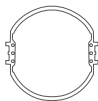
接线端子



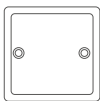
拆装方法



典型底盒如下：





欧式

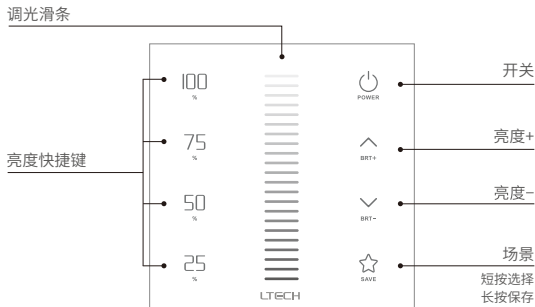


86盒



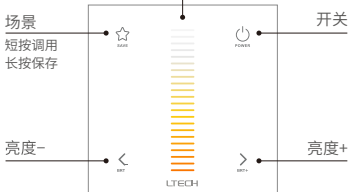
面板按键说明

- * 开关指示灯蓝色时，长按  键可开关按键声音；开关指示灯白色时，长按  键进行配对。
- * EX面板的场景键对应于WiFi网关APP的场景，手机或面板的任何一方修改，均会改变面板场景。



EX1S

色温滑条



EX2

EX2面板CT模式与CT2模式相互切换:

同时长按  和  键3秒后,蜂鸣器长响一声,切换成功。

(产品出厂默认输出CT模式)

DMX地址	模式	
	CT	CT2
1	C	BRT
2	W	CT

*请在触摸面板开关指示灯


为白色时进行色温模式切换。



EX4S

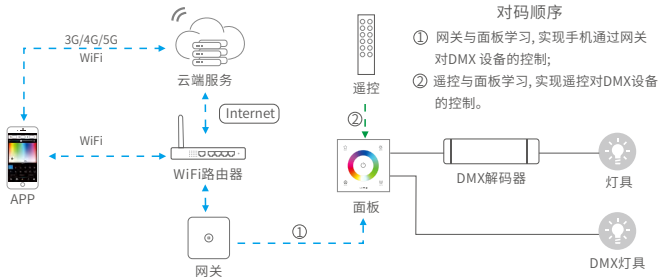
变化模式

- 静态红色
 - 静态绿色
 - 静态蓝色
 - 静态黄色
 - 静态紫色
 - 静态青色
 - 静态白色
 - 三色跳变
 - 七彩跳变
 - 三色渐变
 - 七彩渐变
 - 静态黑色(只关闭RGB)
- RGB关闭只亮白光:

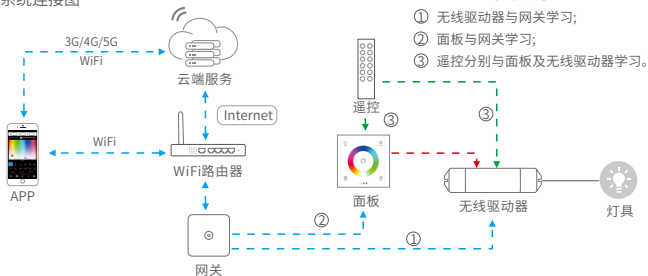
按  键选择黑色模式, 再按W键开启白光

对码顺序

DMX系统连接图



无线系统连接图



应用组合

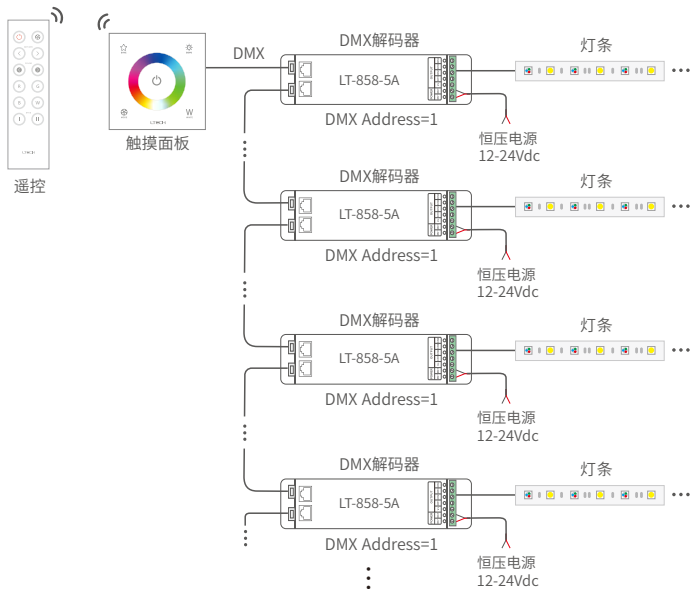
DMX512控制:



无线控制:



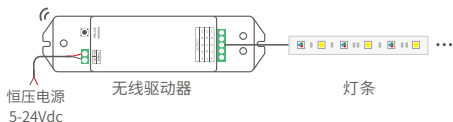
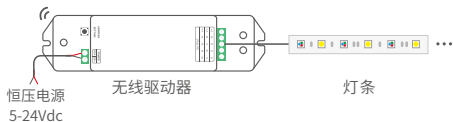
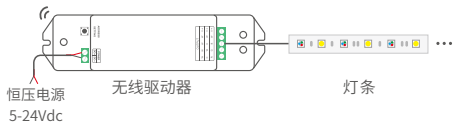
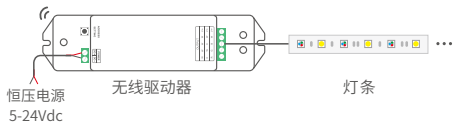
DMX输出连接



RF无线连接图



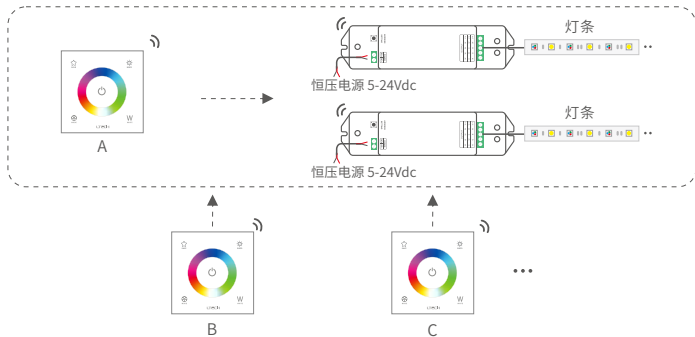
EX系列触摸面板在无线的有效范围内，
可配对任意数量的无线驱动器，如：
F4-DMX-5A/F5-DMX-4A/F4-3A/F4-5A




* 请尽量避免无线驱动器放置在大面积金属物体旁或在较多金属介质的空间上使用，以免信号受到干扰影响使用。

多联连接图

- * A面板实现对灯具的控制后，B、C面板通过学习A面板，即可达到对灯具的控制。
- * 触摸面板连接DMX解码器，也可以实现多联功能。

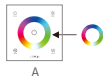


面板之间对码


1. 假设B学习A，长按B的  键，直至所有按键指示灯闪烁。



2. 15秒内按下A的滑条，B指示灯停止闪烁，对码成功。



面板与遥控对码

1. 触摸面板指示灯为白色时，长按面板的  键，直至指示灯闪烁。



EX1S



EX2



EX4S

2. 对码F系列遥控：

长按遥控器上开关键，面板指示灯停止闪烁，对码成功。

触摸面板EX1S可与遥控F1配对使用

触摸面板EX2可与遥控F2配对使用

触摸面板EX4S可与遥控F4配对使用



F1



F2



F4

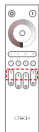
3. 对码Q系列遥控：

长按遥控器上需对码分区的按键，面板指示灯停止闪烁，对码成功。

触摸面板EX1S可与遥控Q1配对使用

触摸面板EX2可与遥控Q2配对使用

触摸面板EX4S可与遥控Q4配对使用



Q1



Q2



Q4

面板与无线驱动器对码

触摸面板可与无线驱动器F4-3A/F4-5A/F4-DMX-5A/F5-DMX-4A配对使用。

方法一：

1. 无线驱动器断电。



2. 长按面板的开关键，直到面板所有指示灯闪烁。



3. 无线驱动器上电，此时负载灯慢闪，请在15s内完成后续操作。



4. 按面板上的色环/滑条或任意键，学习成功。



方法二：

1. 短按无线驱动器的ID学习键，负载灯闪烁，请在15秒内完成后续操作。



2. 长按面板的开关键，直到面板所有指示灯闪烁。



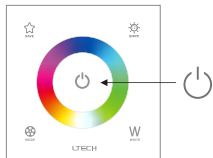
3. 按面板上的色环/滑条或任意键，学习成功。



* 请在触摸面板开关指示灯为白色时进行对码清码操作。

面板与网关对码

1. 长按面板的 \odot 键,直至指示灯闪烁。

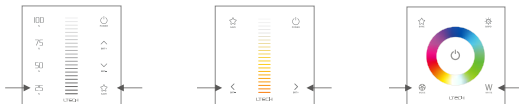


2. 打开L-BUS APP, 进入分区设置界面, 点击右上角 "Match" 按键, 按照APP指引进行操作。



面板清码

同时按面板最下面两个按键约6秒, 指示灯闪烁几次, 清码成功 (请在触摸面板开关指示灯为白色时进行对码清码操作)。



* 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。

注意事项

- 本产品请由具有专业资格的人员进行调试安装；
- 本产品(专有型号除外)不能防水，需避免日晒雨淋。如安装在户外，请使用防水箱；
- 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；
- 通电调试前，确保所有接线正确且牢固，以免短路损坏部件，触发事故；
- 如果发生故障，请勿私自维修；如果有疑问，请联系供应商。

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;
- 无雷特签订的合同或发票凭证。

1. 修理或更换是雷特对客户唯一的补救措施。雷特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。