

# LTECH

## Dimming Color Knob Panel

Model: EB6



Manual

[www.ltech-led.com](http://www.ltech-led.com)

# Product Introduction

- It adopts the two-in-one control mode of Bluetooth 5.2 SIG Mesh wireless protocol and DMX512 protocol, making it more flexible and convenient for engineering applications.
- The knob panel supports the control of dimming, color temperature, RGB, RGBW, and RGBCW lighting fixtures, and can be used as a single-zone master control panel.
- The stepless adjustment knob allows you to set the knob sensitivity through the APP, and you can adjust the lighting/device effects as you like.
- When the knob panel is bound to RGBW or RGBCW lights/light groups, you can set the double-click mode switching sequence of the knob.
- When the knob panel is bound to RGBW or RGBCW lights/light groups, the memory mode can be enabled, and the knob will remember the last used mode.
- The scene touch button can be used by binding scenes through the L-Home APP.
- It supports setting the parameters of the knob and scene keys through the L-Home APP, and can achieve functions such as lighting switch, dimming, color adjustment, and scene control.
- When paired with a smart gateway, it can realize rich cloud scenes, cloud automation, and local automation control methods.
- It supports local scenes, and can be controlled without a gateway even when the network is disconnected, which is faster and more stable.
- It is applicable to both European standard bottom boxes and national standard 86 bottom boxes, and is compatible with more usage scenarios.

## Specification Parameters

Model	EB6
Control Type	DIM,CT,RGB,RGBW,RGBCW
Output Voltage	100-240V~
Output Signal	DMX512,DMX decoder
Wireless Type	Bluetooth 5.2 SIG Mesh
Compatible Driver	B5-3A
Working Temperature	-25°C~50°C
Dimensions	86×86×50mm (L×W×H)
Package Size	105×105×63mm (L×W×H)
Product Weight	225g



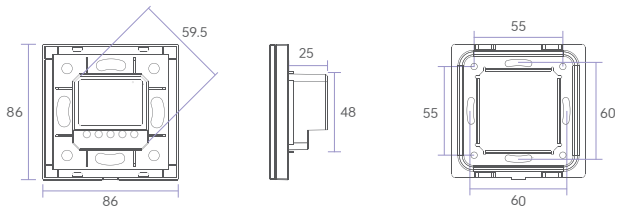
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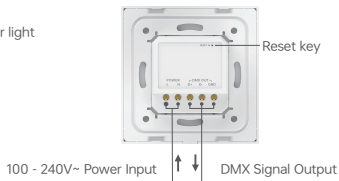
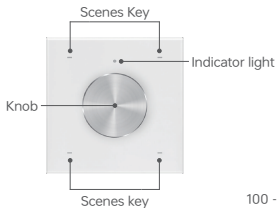
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# Product Size

Unit: mm



# Product Illustration



**Scenes key:** Clicking the scene key triggers the scene. The local scene/DALI scene needs to be bound through the L-Home APP.

**Knob:** It supports single press, double press, long press and rotate, and has different operations according to the binding type of the knob. It supports the setting of three sensitivity levels: high, medium and low.

**Indicator light:** Displays the corresponding color according to the value adjusted by the knob. White (dimming); Yellow (color temperature); Purple (RGB).

**Restore to factory settings:** Press and hold the reset key on the back of the panel with a card ejector for 6 seconds until all the indicator lights on the panel flash and then go out, indicating that the factory settings have been restored.

#### Introduction to the use of the knob:



Single Press



Double Press



Rotate



Long Press

Note: Different operations are available depending on the configuration type of the knob.

Device \ Action	Single Press	Double Press	Rotate	Long Press
DIM light	ON/OFF	No action	Adjust BRT	Adjust BRT
CT light	ON/OFF	Switch mode: BRT/CT	Adjust current BRT/CT	Adjust BRT
RGB light	ON/OFF	Switch mode: BRT/RGB	Adjust current BRT/RGB color	Adjust BRT
RGBW light	ON/OFF	Switch mode: RGBW BRT/RGB/W	Adjust current RGBW BRT/RGB color/W	Adjust BRT: RGBW/RGB/W
RGBCW light	ON/OFF	Switch mode: RGBCW BRT/RGB/CW	Adjust current RGBCW BRT/RGB color/CW color	Adjust BRT: RGBCW/RGB/CW

# Installation Steps

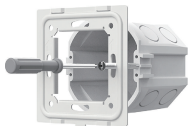
- ① Turn off the main power switch. Make sure there is no cement or other attachments on the inner wall of the 86 flush-mounted box. Trim the length of the power cord in the box to about 10CM. Use a flat-head screwdriver to pry open the bottom box of the knob panel.



- ② Connect the live wire to the L interface of the knob panel and the neutral wire to the N interface. Ensure that the power cord makes good contact with the switch terminals and that there are no exposed copper wires. (The front - end protection device of the electronic switch should not exceed 35A.)



- ③ Fix the bottom box to the wall flush-mounted box with screws, making the bottom box fit tightly against the wall.

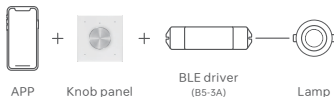


- ④ Tilt the panel and snap it onto the bottom box. Turn on the main power switch. Press the knob panel. If the lights can be controlled normally, it indicates that the installation is correct.

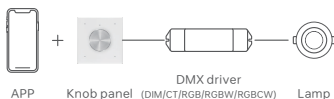


# Recommended Application Combinations

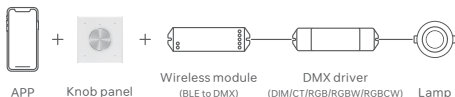
① Wireless - controlled lighting fixtures.



② Wireless + wired control for stable and reliable signals.



③ Wireless + Bluetooth local scenes to enrich different lighting applications.

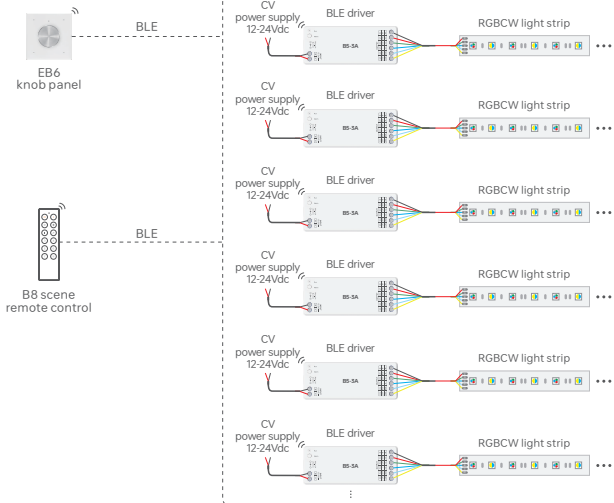


④ Visual control + traditional dimming panel remote control.



⑤ More applications of intelligent control are waiting for you to set up.

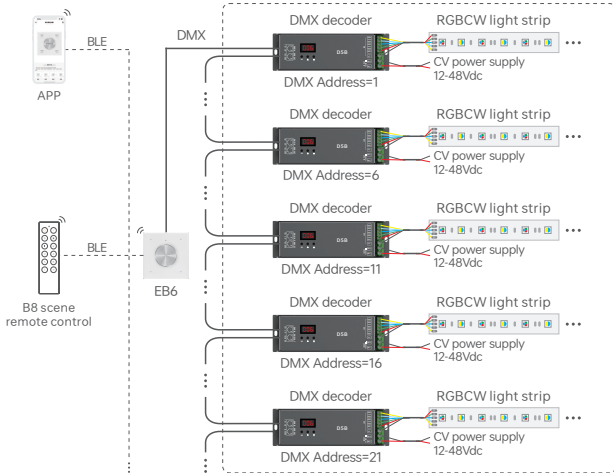
# Bluetooth Application Schematic Diagram



- \* For a better product experience, it is not recommended to use both the wired DMX output of the panel and the wireless Bluetooth driver at the same time.
- \* Please try to avoid placing the wireless drive next to large metal objects or using it in a space with a lot of metallic media, so as not to have the signal interfered with and affect its usage.



# Schematic Diagram Of DMX Application



\* If there are more than 32 DMX decoders connected, a DMX signal amplifier should be added, and the signal amplification should not be continuous for more than 5 times. When there are more than 32 DMX/RDM decoders connected, if it is necessary to modify their parameter settings, one RDM signal amplifier can be added, or after the parameter settings are completed, 1 to 5 DMX signal amplifiers can be added.

\* When the signal recoil effect affects the usage due to reasons such as a long signal line or the quality of the wire, you can try to connect a 0.25W 90-120Ω terminal resistor at the end of each signal line to solve the problem.

# DMX Channel Output Table

Type Address	DIM	CT	CT2	RGB	RGBW	RGBCW
1	DIM	C	BRT	R	R	R
2	DIM	W	CT	G	G	G
3	DIM	C	BRT	B	B	B
4	DIM	W	CT	R	W	C
5	DIM	C	BRT	G	R	W
6	DIM	W	CT	B	G	R
7	DIM	C	BRT	R	B	G
8	DIM	W	CT	G	W	B
9	DIM	C	BRT	B	R	C
10	DIM	W	CT	R	G	W
11	DIM	C	BRT	G	B	R
12	DIM	W	CT	B	W	G
13	DIM	C	BRT	R	R	B
14	DIM	W	CT	G	G	C
⋮	⋮	⋮	⋮	⋮	⋮	⋮
500	DIM	W	CT	G	W	W
⋮	⋮	⋮	⋮	⋮	⋮	/
512	DIM	W	CT	G	W	/

\* According to the illustration in the above figure, and so on.

# For Use With The L - Home APP.

## 1. Register an account

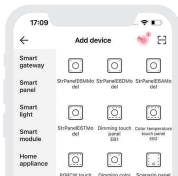
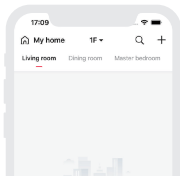
Scan the QR code below with your mobile phone. After completing the APP installation according to the prompts, you can proceed with the login/registration operation.



Scan the QR code to download the APP  
iOS/APK

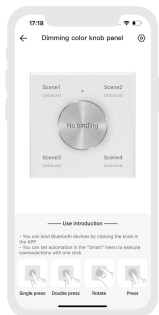
## 2. Pairing operation

For new users, after creating a home on the APP, click the "+" icon in the upper right corner on the [Room] interface for addition. Select "LED Controller" from the device addition list, and follow the prompts on the installation interface to complete the addition.



### 3. Bind the device

Click on the added knob panel in the "Room" interface to enter the [Control] interface. By long-pressing the knob, bind the light/light group that matches the network type of the product. After binding, the knob can be used to adjust the brightness, color temperature, RGB color, etc., of the bound devices. In addition, by clicking the scene key area, local scenes or DALI scenes can be bound.



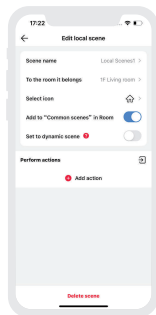
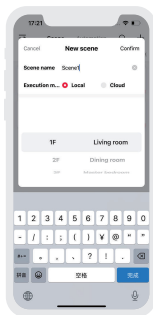
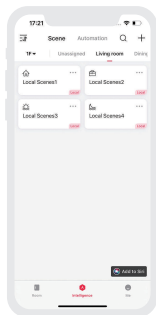
## 4. Local scene

Create a local scene:

Switch to the **【Smart】** page, click "+" in the upper right corner to create a local scene, and after setting the execution action, you can realize the local linkage of Bluetooth devices.

Binding local scenes:

On the control details page, click on the corresponding key, and set the binding scene. Once saved successfully, a short press of the button will immediately execute the bound scene.



## 5. Cloud scenes and automation

Make sure that a smart gateway, such as Super Panel 12S, has been added to the family.

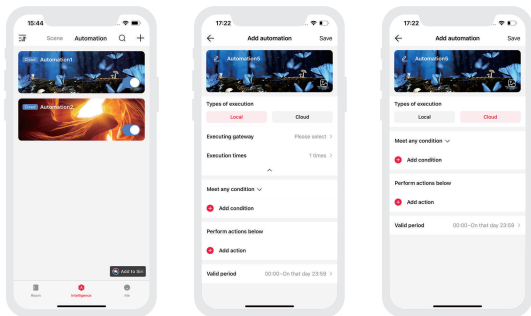
Cloud scenes:

Switch to the **【Smart】** interface and click “+” to create a cloud scene. After setting the execution action, remote linkage can be achieved.

Automation:

Select “Automation” in the **【Smart】** page and click “+” to create automation. You can choose local/cloud execution mode, and set trigger conditions and execution actions. When the set trigger conditions are met, a series of device actions are automatically triggered to achieve remote linkage.

Note: Knob panel can be set as trigger conditions or as execution actions.



# Restore To Factory Settings

**Method 1:** After the EB6 knob panel is connected to power, use a SIM - card - eject tool to long - press the reset key on the back of the panel for 6 seconds (see Figure 1). When all the indicator lights on the panel flash and then go out, it indicates that the factory settings have been restored.

**Method 2:** First, make sure that the device is properly powered on and in an online state. Then, open the L - Home APP, find the device, and enter its settings page. Click the "Delete Device" button (see Figure 2). When the system prompts "Deletion successful", it means that the device has been successfully restored to its factory settings.



Figure 1



Figure 2

## FAQs

### 1. What to do if the network configuration fails?

- ① Ensure that the device is powered on normally.
- ② Confirm that the device being added has not been added by another account. If it has been added, please manually restore the factory settings.
- ③ Ensure that the mobile phone and the device are as close as possible, preferably within 15 meters.
- ④ If the device has been forcibly deleted, please manually restore the factory settings and then add the device again.

### 2. How to remotely control the device?

When paired with our company's Smart gateway, the device can be remotely controlled via 4G/5G/WiFi on a mobile phone.

# 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.
- 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 manufacture: 5 years.
- Free repair or replacement services for quality problems are provided within warranty periods.

Warranty exclusions below:

Following conditions are not within the guarantee range of free repairing or replacement services:

- 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 or invoice 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. The warranty that issues in writting shall prevail.
- \* 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.