LM-75-24-G2B2

Bluetooth 5.0 SIG Mesh

Tunable White LED Driver (Constant Voltage)

- Small size and light weight. The housing is made from V0 flame retardant PC materials from SAMSUNG/COVESTRO.
- The clamshell design and screwless type for strain-relief. The design of dismountable end cap allows you to adjust the length of housing depending on your needs.
- 2 SELV output channels with common anode.
- Adopt constant power design that can adjust different color temperature while brightness remains the same.
- Color temperature range: 2700-6500K.
- With soft-on and fade-in dimming function, enhancing your visual comfort.
- High frequency exemption level.
- Dimming from 0~100%, down to 0.1%.
- Bluetooth 5.0 SIG Mesh with high networking capability is reliable and stable.
- Gain control on iOS or Android devices through Bluetooth connection.
- Comply with the EU's ErP Directive, standby power consumption < 0.5W.
- Innovative thermal management technology intelligently protects the life of the LED driver.
- Overheat, over voltage, overload, short circuit protection and automatic recovery.
- Suitable for Class I、II、III indoor light fixtures.
- Up to 50,000-hour life time.
- 2-year warranty (Rubycon capacitor).

Bluetooth®
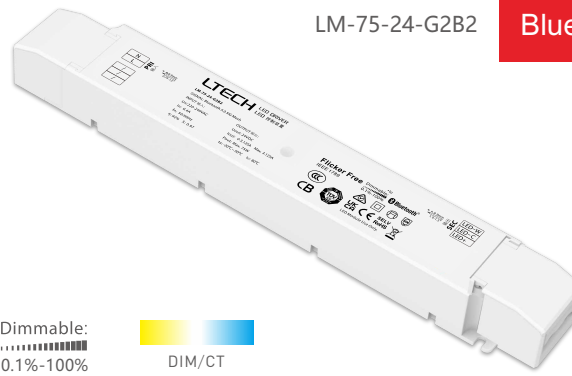
Flicker-free
IEEE 1789
Achieve the high frequency exemption level

Dimmable:
0.1%-100%
DIM/CT
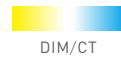
The certification icon represents on-going certification applications only, and final certification qualification is subject to actual products.

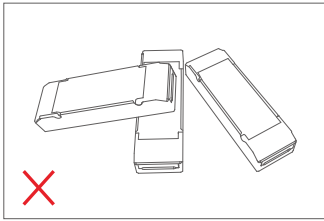**T-PWM** Super depth dimming technology

PWM Digital Dimming

Overheat Protection

V Overvoltage Protection

Over Load Protection

Short Circuit Protection

Technical Specs

Model		LM-75-24-G2B2	
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	24Vdc	
	Output Voltage Range	24Vdc ± 0.5Vdc	
	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 0.1%	
	Overload Power Limitation	≥102%	
	Ripple	≤300mV	
	PWM Frequency	3600Hz	
INPUT	DC Voltage Range	220-280Vdc	
	AC Voltage Range	198-264Vac	
	Rated Voltage	220-240Vac	
	Frequency	50/60Hz	
	Input Current	Max.0.4A/230Vac	
	Power Factor	PF>0.97/230Vac (at full load)	
	THD	THD<14%@230Vac (at full load)	
	Efficiency (typ.)	>92%	
	Standby power consumption	<0.5W	
	Inrush Current	Cold start 40A@230Vac (Test twidth=372us tested under 50% Ipeak)	
	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	±0.03%/°C (0-50°C)	
	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°C, and recover automatically	
	Overload Protection	Shut down the output when current load≥102%, and recover automatically	
	Short Circuit Protection	Enter hiccup mode if short circuit occurs, and recover automatically	
	Overvoltage Protection	Shut down the output when non-load voltage≥26V, and recover automatically	
SAFETY & EMC	Withstand Voltage	I/P-O/P: 3750Vac	
	Isolation Resistance	I/P-O/P: 100MΩ/500VDC/25°C/70%RH	
	Safety Standards	CCC	China	GB19510.1, GB19510.14
		TUV	Germany	EN61347-1, EN61347-2-13, EN62493
		CB	CB member states	IEC61347-1, IEC61347-2-13
		RCM	Australia	AS/NZS61347.1, AS61347-2-13
		CE	European Union	EN61347-1, EN61347-2-13, EN62493
		UKCA	Britain	BS EN61347-1, BS EN61347-2-13, BS EN62493
	EMC Emission	CCC	China	GB/T17743, GB17625.1
		RCM	Australia	EN IEC 55015, EN IEC 61000-3-2, EN61000-3-3
		CE	European Union	EN IEC 5501, EN IEC 61000-3-2, EN61000-3-3
		UKCA	Britain	BS EN IEC 55015, BS EN IEC 61000-3-2, BS EN 61000-3-3, BS EN 61547
	EMC Immunity	EN61000-4-2,3,4,5,6,8,11, EN61547		
	Strobe Test Standard	IEEE 1789		
OTHERS	Life Time	50000h	
	Warranty	2 years	

Product Size

Unit: mm

293

43

30

253

35

240

Wiring Diagram

Wireless connection

W

C

N
L

PRI

SEC LED-W
LED-C
LED+

DIM: 0~100% dimming
CCT: 2700-6500K

Wire diameter: 0.75-1.5″ (20-16AWG)
Strip length: 8-9mm

Wire diameter: 1.0-1.5″ (22-16AWG)
Strip length: 8-9mm

✳ Access the network to control through App and Bluetooth.

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
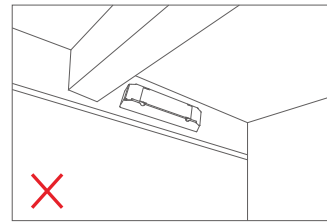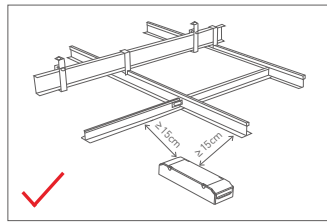

Please do not stack the products. The distance between two products should be ≥15cm so as not to affect heat dissipation and the lifespan of the products.
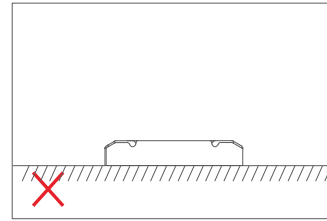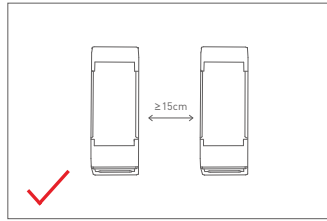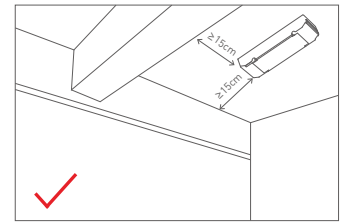

Please do not place the products on the floor. The distance between the product and the floor should be ≥100cm so as to avoid signal interference.
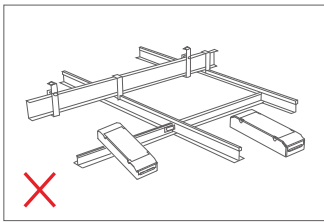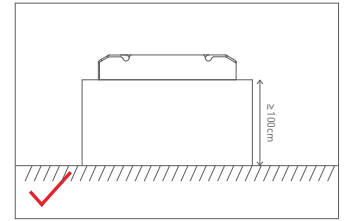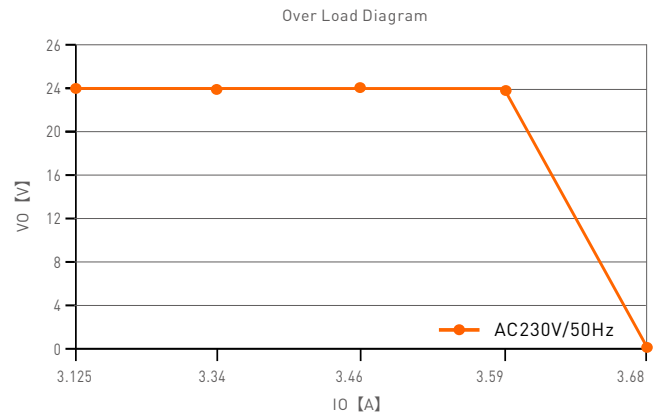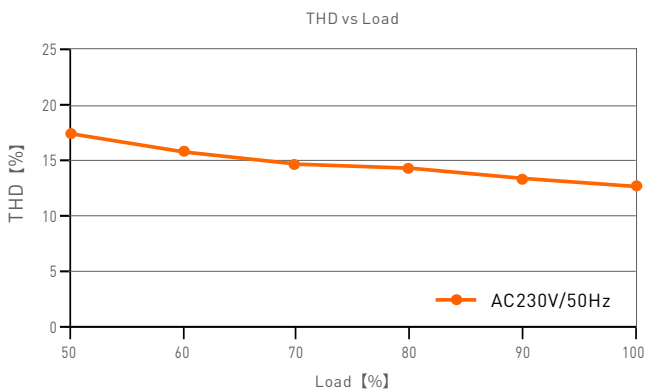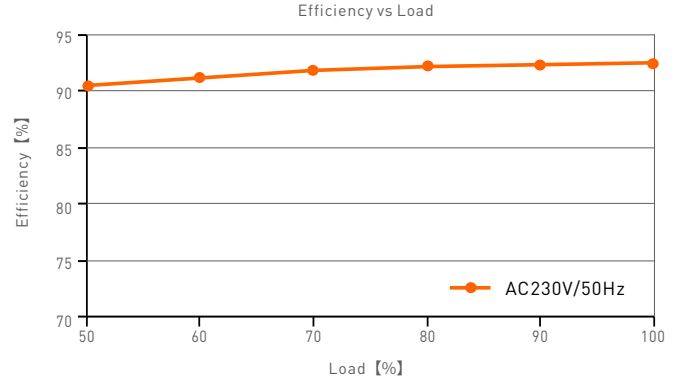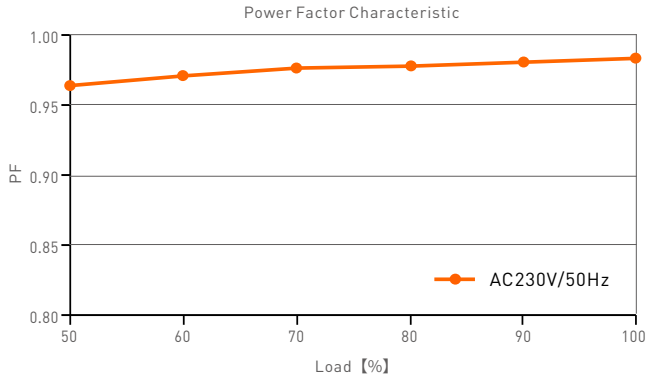

Please do not place the products near a large area of metal objects (such as metal stud ceilings). The distance between the product and the metal object should be ≥15cm so as to avoid signal interference.

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.

Relationship Diagrams

Power Factor Characteristic
AC230V/50Hz

Efficiency vs Load
AC230V/50Hz

THD vs Load
AC230V/50Hz

Over Load Diagram
AC230V/50Hz

LM-75-24-G2B2

www.ltech-led.com

Flicker Test Table

IEEE 1789

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

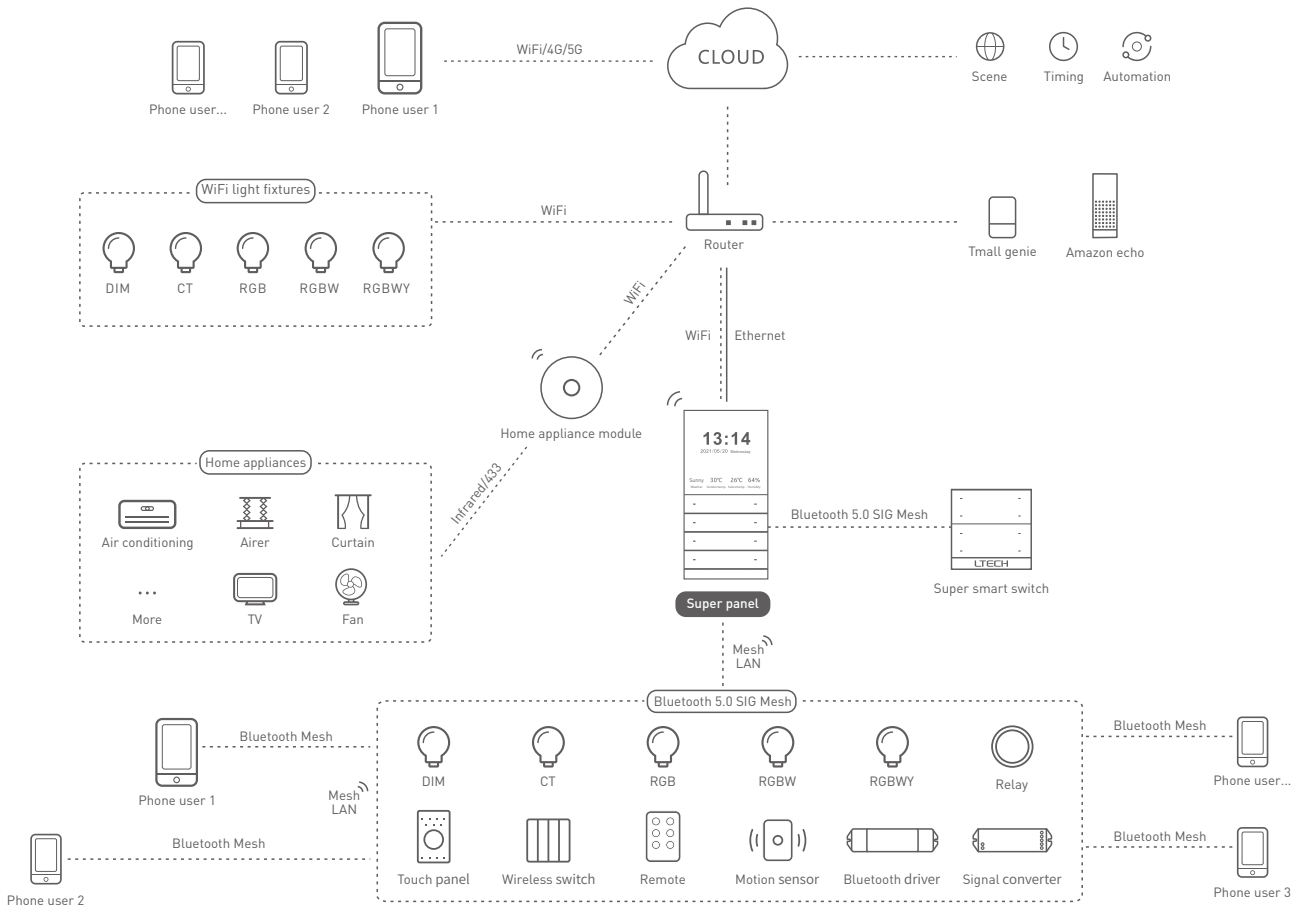| Limit Value of Modulation in No Effect Areas	
Waveform frequency of optical output (f)	Limit value (%)
f ≤ 10Hz	0.1
10Hz < f ≤ 90Hz	0.01 × f
90Hz < f ≤ 3125Hz	(0.08/2.5) × f
f > 3125Hz	Exemption assessment (High frequency exemption)

Brightness

▲ 0.1%
✦ 1%
▲ 5%
◆ 10%
⬤ 20%
▲ 30%
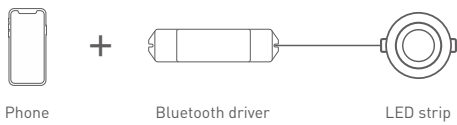⬤ 40%
★ 50%
⬟ 60%
◼ 70%
⬠ 80%
✺ 90%
◆ 100%
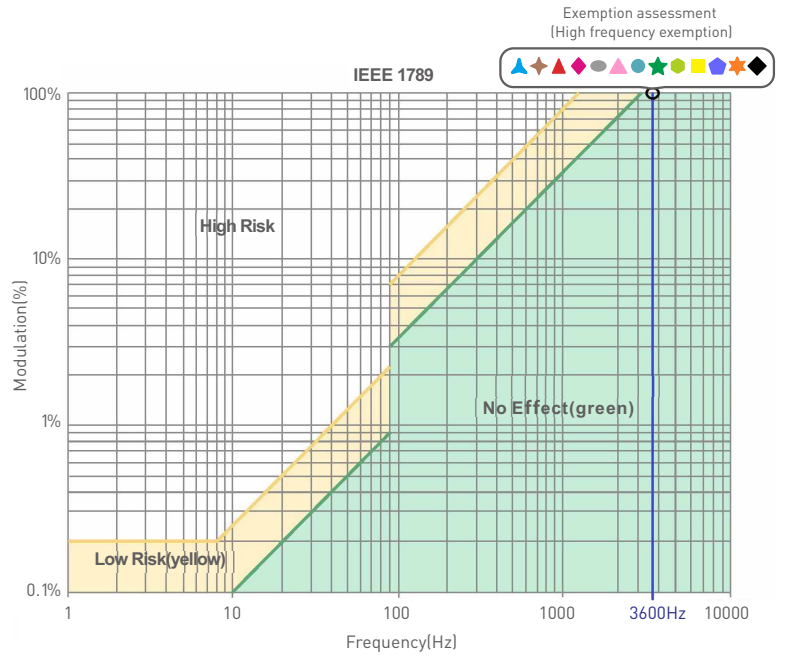
Marks in the right chart are tested results of different current levels

The output frequency is 0Hz in 100% brightness and its corresponding modulation is 0%, which could not be shown in the right chart.

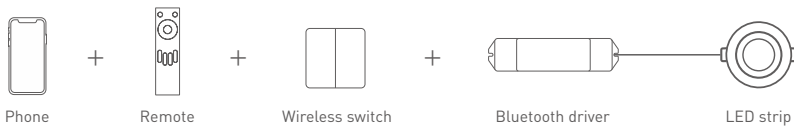Exemption assessment (High frequency exemption)

IEEE 1789

Application Diagram

WiFi/4G/5G

CLOUD

Scene Timing Automation

Phone user... Phone user 2 Phone user 1

WiFi light fixtures

WiFi

Router

Tmall genie Amazon echo

DIM CT RGB RGBW RGBWY

WiFi

WiFi | Ethernet

Home appliance module

Home appliances

Air conditioning Airer Curtain

More TV Fan

Infrared/433

13:14
2021-05-20 Wednesday

Sunny 30℃ 26℃ 64%

Bluetooth 5.0 SIG Mesh

Super smart switch

Super panel

Mesh LAN

Bluetooth 5.0 SIG Mesh

Bluetooth Mesh

Phone user 1

Mesh LAN

DIM CT RGB RGBW RGBWY Relay

Bluetooth Mesh

Phone user...

Bluetooth Mesh

Touch panel Wireless switch Remote Motion sensor Bluetooth driver Signal converter

Phone user 2

Bluetooth Mesh

Phone user 3

Recommend Applications

1. Achieve fast dimming control.

Phone + Bluetooth driver LED strip

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

Phone + Remote + Wireless switch + Bluetooth driver LED strip

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 + Bluetooth driver LED strip
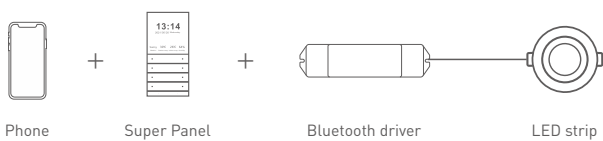
4. More applications of intelligent control are waiting for you to set up.

Other Instructions

If the driver works with a remote, gateway , intelligent wireless switch or other items, please refer to related product manuals .

App Operating Instructions

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.

APP supports

Download the App
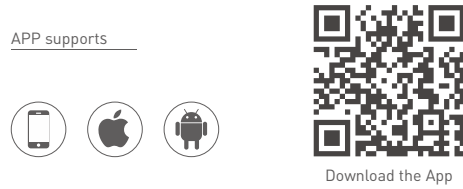
2. Pairing instrutions

Create a home if you are a new user. Click"+"icon in the upper right corner and access the"Add Device"list. Follow the prompts to add the device (LED driver) first, then pick "Smart light -CT light" in the list. Follow the prompts to power on the device first, and make sure the device is not connected to the network yet. Then click "Search via Bluetooth" and follow the prompts to add the device.
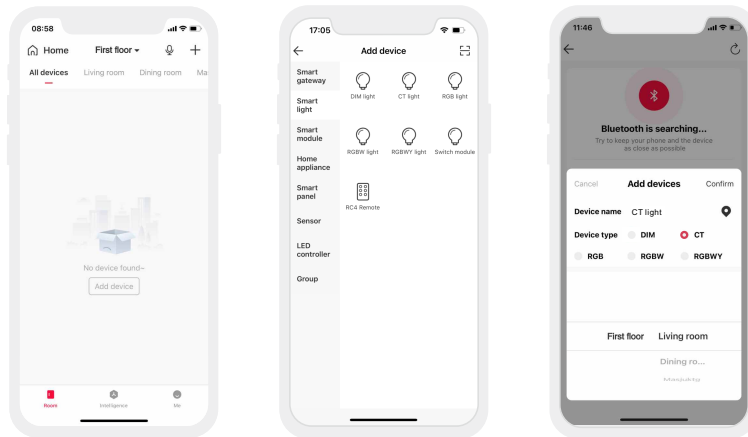
3.Control interface settings

After pairing up your device, go to the control interface. You'll be able to achieve your desired lighting effects by changing brightness, colors 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.
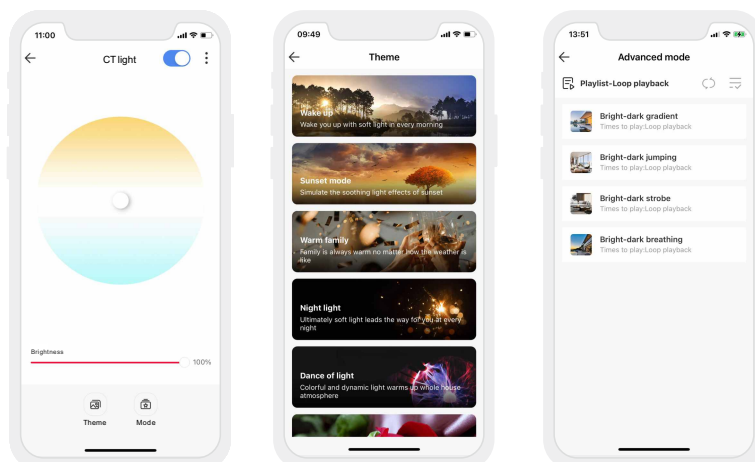
4.Light groups

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 and color temperature more easily.
Pick "Group-CT 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".
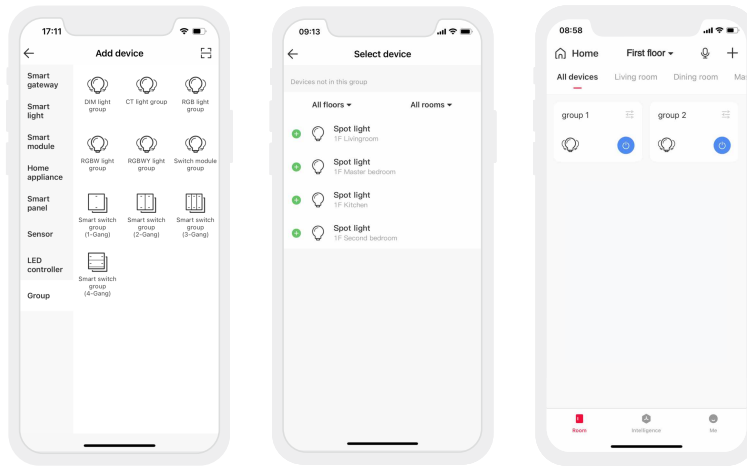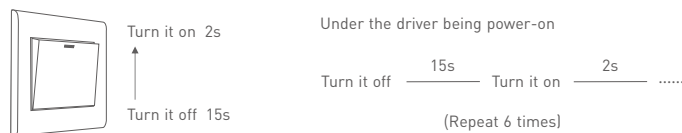

5. Advanced functions

This driver can be linked up with a gateway device (such as LTECH Super Panel) to achieve the advanced functions such as cloud scenes and automation.
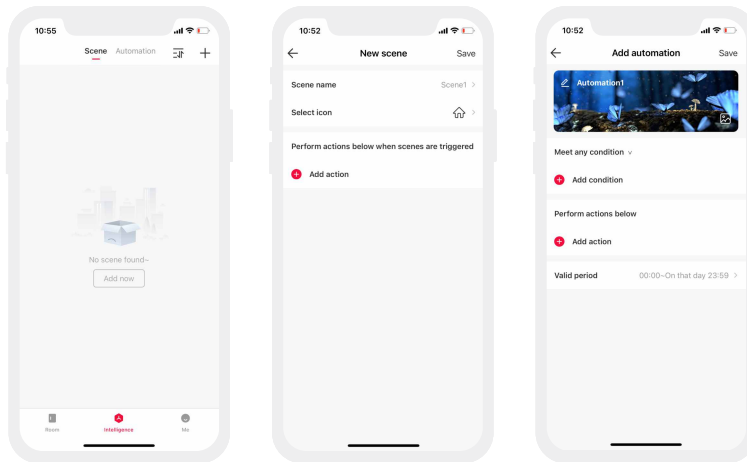
Reset The Device (Reset to factory defaults)

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)

FAQs

1. What should I do if I fail to add the device?

   1.1 Please make sure the device is powered on normally and is in the activated mode.

   1.2 Please make sure the device hasn't been added by any other account. If it has, please reset to factory defaults manually.

   1.3 The recommended distance between the mobile phone and the device is no more than 20 meters.

   1.4 If the device has been forced to delete, please reset to factory defaults manually and then add the device again.

2. What should I do if the device disconnects from the network?

   2.1 Please make sure the device is powered on normally.

   2.2 Please make sure the router works normally and the network runs smoothly.

   2.3 If you control the device remotely, please make sure your phone network runs smoothly.

3. How to control remotely and set cloud scenes?

   Remote control and cloud scene settings can achieved only by working with LTECH Super Panel.

4. How to share control of your home devices?

   Please go to"Me"- "Home Management"and access the home you want to share. Click "Add Member" and follow the prompts to add members into your home.

Packaging Specifications

Model	LM-75-24-G2B2
Carton Dimensions	315×230×215mm(L×W×H)
Quantity	10 PCS/Layer；3 Layers/Carton；30 PCS/Carton
Weight	0.35 kg/PC；11.3 kg/Carton

Packaging Image

Inner Packaging Box

Carton 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

• This product must be installed and adjusted by a qualified professional.

• This product is 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 life the product. Please install the product in a environment with good ventilation.

• When you install this product, please avoid being near a large area of metal objects or stacking them to prevent signal interference.

• Please keep the product away from a intense magnetic field, a high pressure area or a place where lightning is easy to occur.

• Please check whether the working voltage used complies with the parameter requirements of the product.

• Before you power on the product, please make sure all the wiring is correct in case of incorrect connection that may cause a short circuit and damage the components, or trigger a accident.

• If a fault occurs, please do not attempt to fix the product by yourself. If you have any question, please contact the supplier.

✳ 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: 2 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.

Update Log

Version	Updated Time	Update Content	Updated by
A0	2022.3.25	Original version	Xu shujun