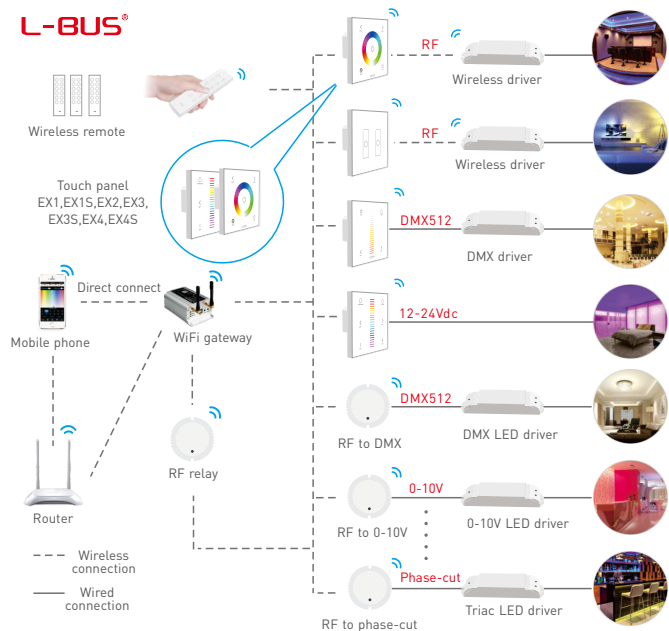# LTECH

EX Series Touch Panel

| EX1 (Dimming) | EX1S (Dimming) | EX2 (CT) | EX3 (RGB) | EX3S (RGB) | EX4 (RGBW) | EX4S (RGBW) |

Manual
www.ltech-led.com

L-BUS®

Wireless remote

Touch panel
EX1,EX1S,EX2,EX3,
EX3S,EX4,EX4S

Direct connect

Mobile phone

WiFi gateway

Router

RF relay

RF   Wireless driver
RF   Wireless driver
DMX512   DMX driver
12-24Vdc
DMX512   DMX LED driver
RF to DMX
0-10V   0-10V LED driver
RF to 0-10V
Phase-cut   Triac LED driver
RF to phase-cut

- - - - Wireless connection
——— Wired connection

1

Product features

LTECH

- Adopt wireless RF and wired DMX512 protocol 2 in 1 control mode, more flexible and convenient for project installation.
- Advanced RF wireless sync/zone control technology, make sure dynamic color modes synchronously among multiple drivers.
- Install touch panel at different areas, can control the same LED light, achieve multi-panel control, no quantity limited.
- Touch keys with chord and LED indicator.
- Adopts capacitive touch control technology makes LED dimming selection more user-friendly.
- Compatible with remote and APP control.
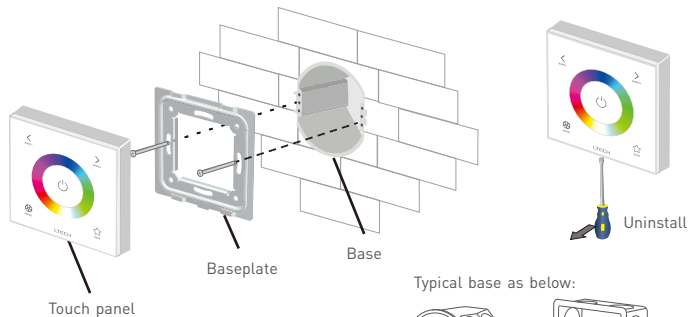
Technical specs

Model	EX1	EX1S	EX2	EX3	EX3S	EX4	EX4S
Control type	Dimming		CT	RGB		RGBW	
Input voltage	100-240Vac						
Output signal	RF 2.4GHz, DMX512						
Working temp.	-20℃~55℃						
Dimensions	L86×W86×H36(mm)						
Package size	L113×W112×H50(mm)						
Weight(G.W.)	225g						

FC CE RoHS warranty 5 years SGS ISO9001:2008

RCM certification No.: RCMP17114 001

Installation instruction

LTECH

Touch panel

Baseplate

Base

Uninstall

Typical base as below:

European style

86 size

Product size   Unit: mm

86

48

86

25

48

55

82

60

Terminals

100-240Vac
power input

DMX signal
output

Key functions

Brightness
touch slider

☆ Scene-mode
Short press: play
Long press: save

⏻ ON/OFF

‹ Brightness-

› Brightness+
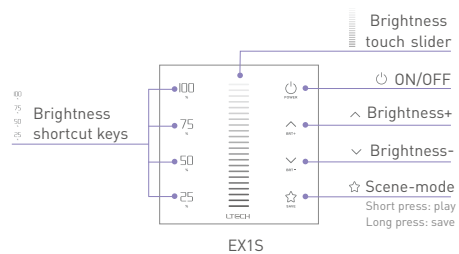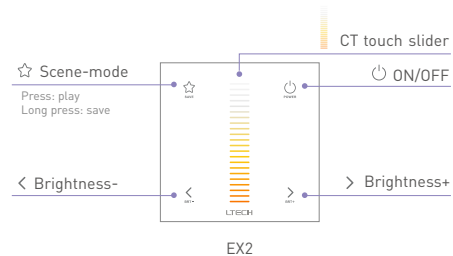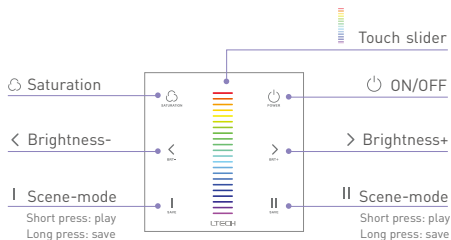
EX1

* When blue status light of ⏻ key is on, long press ⏻ to turn on/off buzzer.
  When white status light of ⏻ key is on, long press ⏻ to match code.

Brightness
touch slider

Brightness
shortcut keys

⏻ ON/OFF

⌃ Brightness+

⌄ Brightness-

☆ Scene-mode
Short press: play
Long press: save

EX1S

* When blue status light of ⏻ key is on, long press ⏻ to turn on/off buzzer.
  When white status light of ⏻ key is on, long press ⏻ to match code.

CT touch slider

☆ Scene-mode
Press: play
Long press: save

⏻ ON/OFF

‹ Brightness-
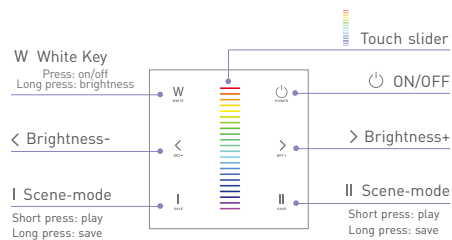
› Brightness+

EX2

* When blue status light of ⏻ key is on, long press ⏻ to turn on/off buzzer.
  When white status light of ⏻ key is on, long press ⏻ to match code.

EX3

Touch slider

☁ Saturation

⟨ Brightness-

I Scene-mode
Short press: play
Long press: save

⏻ ON/OFF

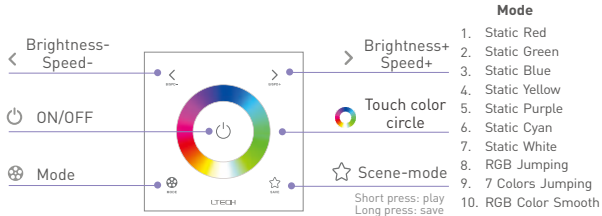⟩ Brightness+

II Scene-mode
Short press: play
Long press: save

✳ EX3 panel's 2 scene-mode keys are corresponding with WiFi-106 gateway APP's 1 & 2 scene-mode key, the scenes can be changed by APP or panel.
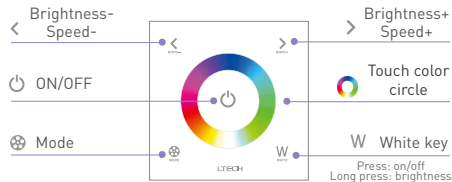
EX3S

Brightness-
Speed-

⏻ ON/OFF

❋ Mode

Brightness+
Speed+

Touch color circle

☆ Scene-mode
Short press: play
Long press: save

Mode
1. Static Red
2. Static Green
3. Static Blue
4. Static Yellow
5. Static Purple
6. Static Cyan
7. Static White
8. RGB Jumping
9. 7 Colors Jumping
10. RGB Color Smooth
11. Full-color Smooth

✳ When blue status light of ⏻ key is on, long press ⏻ to turn on/off buzzer.
When white status light of ⏻ key is on, long press ⏻ to match code.

EX4

W White Key
Press: on/off
Long press: brightness

Touch slider

⟨ Brightness-

I Scene-mode
Short press: play
Long press: save

⏻ ON/OFF

⟩ Brightness+

II Scene-mode
Short press: play
Long press: save

✳ EX4 panel's 2 scene-mode keys are corresponding with WiFi-106 gateway APP's 1 & 2 scene-mode key, the scenes can be changed by APP or panel.

Mode
1. Static Red
2. Static Green
3. Static Blue
4. Static Yellow
5. Static Purple
6. Static Cyan
7. Static White
8. RGB Jumping
9. 7 Colors Jumping
10. RGB Color Smooth
11. Full-color Smooth
12. Static Blue
   (only close RGB)

EX4S

Brightness-
Speed-

⏻ ON/OFF

❋ Mode

Brightness+
Speed+

Touch color circle

W White key
Press: on/off
Long press: brightness

✳ When blue status light of ⏻ key is on, long press ⏻ to turn on/off buzzer.
When white status light of ⏻ key is on, long press ⏻ to match code.

✳ White light only: press ❋ key to choose black mode, then press W key for white light.

Match code sequence

DMX System Wiring

APP
Remote
Router
Panel
DMX decoder
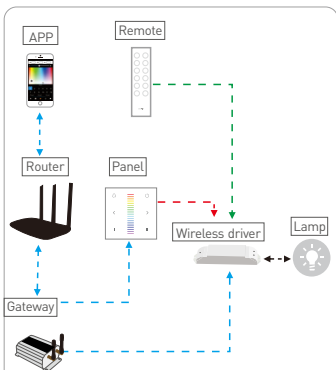Lamp
DMX lamp
Gateway
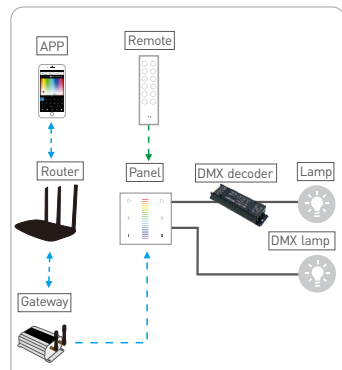
* PS: No router needed when gateway works with phone directly.

Match Code Sequence

1. Configure gateway with panel, which enables the smart phone to control DMX devices via gateway.
2. Configure remote with panel, which enables remote to control DMX devices.

Wireless System Wiring

APP
Remote
Router
Panel
Wireless driver
Lamp
Gateway

* PS: No router needed when gateway works with phone directly.

Match Code Sequence

1. Wireless driver & gateway.
2. Panel & gateway.
3. Remote & panel , remote & wireless driver.

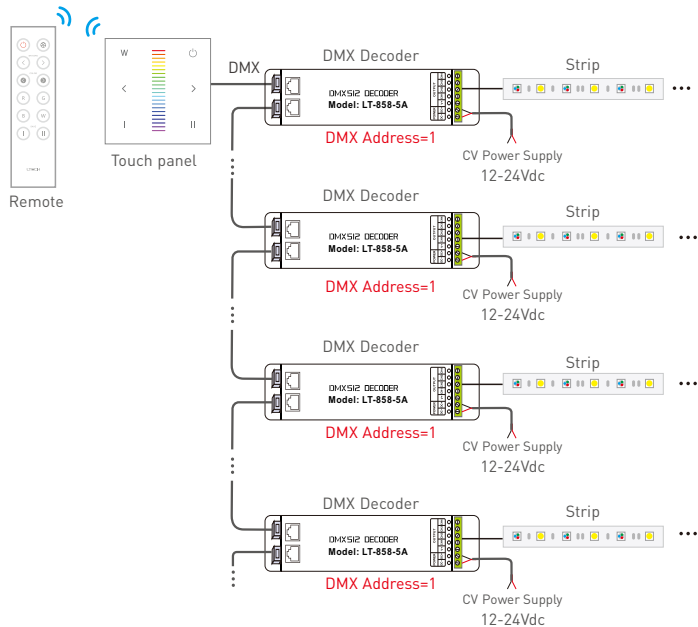# Application composition

DMX512 control

1. Touch panel + DMX driver + Lamp

2. Remote + Touch panel + DMX driver + Lamp

3. WiFi master controller + Touch panel + DMX driver + Lamp

4. WiFi master controller + Remote + Touch panel + DMX driver + Lamp

Wireless control

1. Touch panel + Wireless driver + Lamp

2. Remote + Touch panel + Wireless driver + Lamp

3. WiFi master controller + **Touch panel** + Wireless driver + Lamp

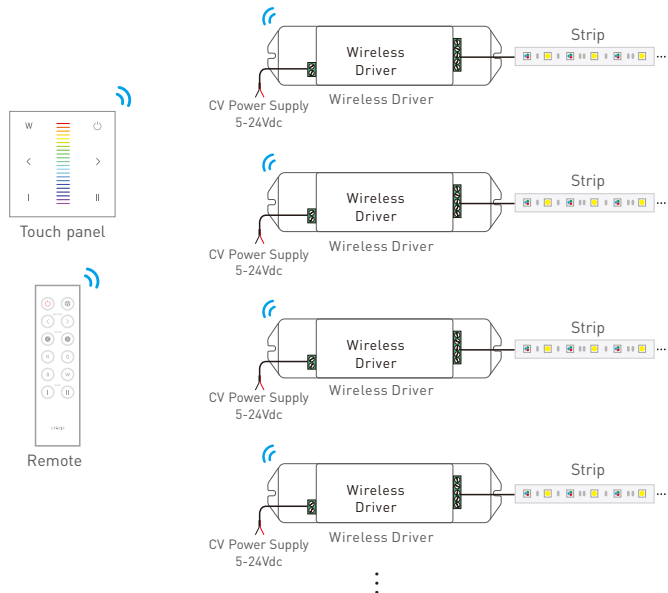4. WiFi master controller + Remote + Touch panel + Wireless driver + Lamp

DMX wiring

LTECH

Remote

Touch panel

DMX

DMX Decoder
DMX512 DECODER
Model: LT-858-5A
DMX Address=1

Strip

CV Power Supply
12-24Vdc

DMX Decoder
DMX512 DECODER
Model: LT-858-5A
DMX Address=1

Strip

CV Power Supply
12-24Vdc

DMX Decoder
DMX512 DECODER
Model: LT-858-5A
DMX Address=1

Strip

CV Power Supply
12-24Vdc

DMX Decoder
DMX512 DECODER
Model: LT-858-5A
DMX Address=1

Strip

CV Power Supply
12-24Vdc

RF wireless wiring

LTECH

Touch panel

Remote

Wireless Driver

Strip

CV Power Supply
5-24Vdc

Wireless Driver

Wireless Driver

Strip

CV Power Supply
5-24Vdc

Wireless Driver

Wireless Driver

Strip

CV Power Supply
5-24Vdc

Wireless Driver

Wireless Driver

Strip

CV Power Supply
5-24Vdc

Wireless Driver

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

Multi-panel control wiring
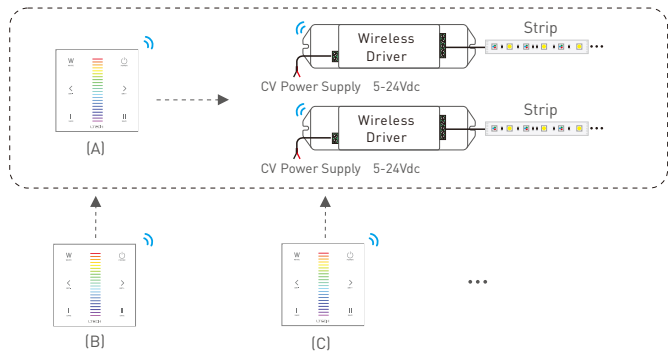
* After touch panel A realizes controlling the lamps, if B and C are matched up with A , they can also control the lamps.

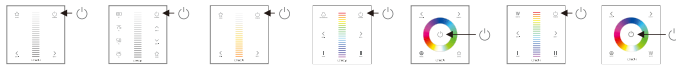* Linkage control is also available at connecting with DMX decoders.
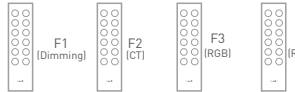
Match code between touch panels

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

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

Match code between touch panel & remote

EX1/EX1S works with remote F1.　　EX3/EX3S works with remote F3.

EX2 works with remote F2.　　　　EX4/EX4S works with remote F4.

Long press ⏻ on touch panel until all indicator lights flicker.

EX1	EX1S	EX2	EX3	EX3S	EX4	EX4S
(Dimming)	(Dimming)	(CT)	(RGB)	(RGB)	(RGBW)	(RGBW)

2. Press any key on remote, indicator light of touch panel stop flicking, match successfully.

F1	F2	F3	F4
(Dimming)	(CT)	(RGB)	(RGBW)

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

Match code between Touch Panel & wireless driver · LTECH

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

Method 1:

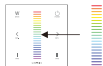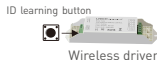|			
1. Power off the driver. Wireless driver	**2.** Long press On/Off key of the panel until all indicator light flicking.	**3.** Power on the driver, the lamps flicker slowly, please complete step 4 within 15s. Wireless driver	**4.** Short press any key or color circle/slider, match successful.

Method 2:

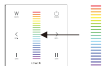|		
1. Short press "ID learning button" on EBOX-AD, the lamps flicker, please complete step 2 within 15s. ID learning button Wireless driver	**2.** Long press On/Off key on panel until all indicator light flicker.	**3.** Short press any key or color circle/slider, match successful.

✳ Please match/clear code when ⏻ status light of panel is white.

Match code between touch panel & gateway · LTECH

1. Long press ⏻ on touch panel until indicator lights flicker.

EX1	EX1S	EX2	EX3	EX3S	EX4	EX4S
[Dimming]	[Dimming]	[CT]	[RGB]	[RGB]	[RGBW]	[RGBW]

2. Turn on APP, Click "ZONE" key to enter "zone set" interface, click the right top "MATCH" key, then operate following the prompt.

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 ⏻ status light of panel is white.

✳ No further notice if any changes in the manual.
   Product function depends on the goods.
   Please feel free to contact our official distributor if any question.