LTECH

EX Series Touch Panel

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

Manual
www.ltech-led.com

LT-BUS

- Wireless remote
- Touch panel EX1,EX1S,EX2,EX3, EX3S,EX4,EX4S
- Mobile phone — Direct connect
- 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

- Adopt wireless RF and wired DMX512 protocol 2 in 1 control mode, more flexible and convenient for project installation.
- Advanced RF wireless sync control technology, be able to realize dimming, synchronous dynamic changing color effect between receivers.
- 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.
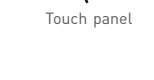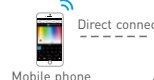- Touch panel can be controlled by remote directly or smart phone if add a gateway.

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

2

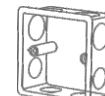
Installation instruction
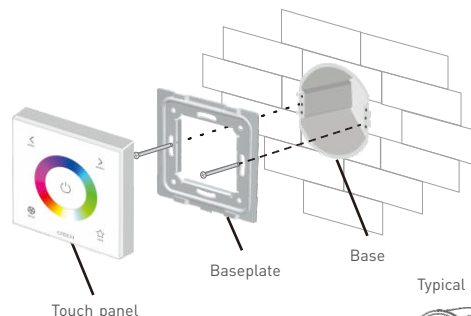
- Touch panel
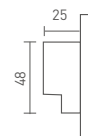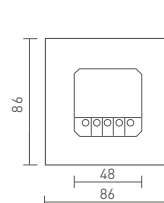- Baseplate
- Base
- Uninstall

Typical base as below:
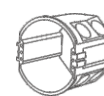
European style   86 size

Product size   Unit: mm
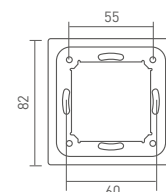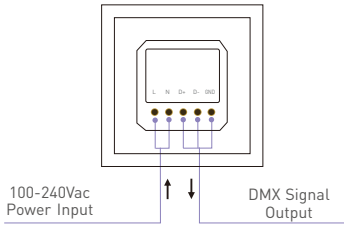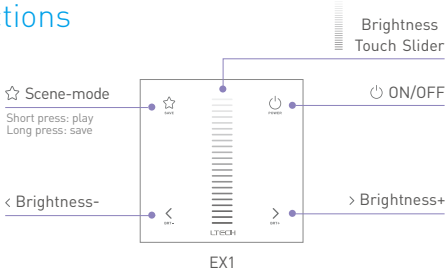
86
48
86

25
48

55
82
60

3

Brightness
Touch Slider

ON/OFF

Brightness
Shortcut Keys

100
75
50
25

ON/OFF
Brightness+
Brightness-
Scene-mode
Short press: play
Long press: save

EX1S

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

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.

CT touch slider
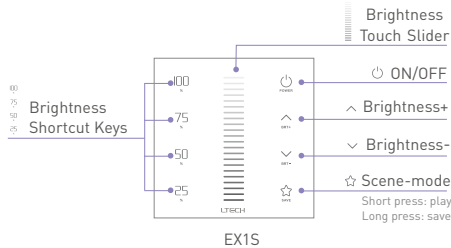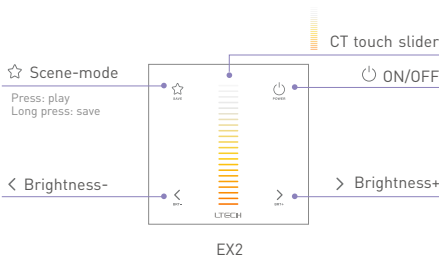
☆ Scene-mode
Press: play
Long press: save

ON/OFF

‹ Brightness-

› Brightness+

EX2
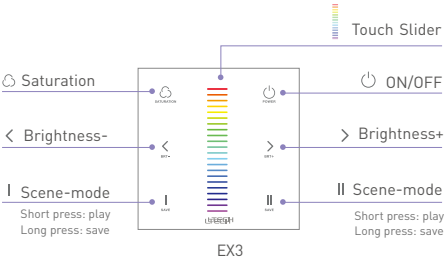
✳ When blue status light of ⏻ key is on, long press ⏻ to turn on/off buzzer.
When white status light of ⏻ key is on, long press ⏻ to match code.

4

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LTECH

LTECH
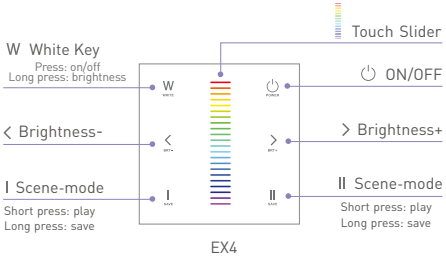
Touch Slider

Saturation

ON/OFF

‹ Brightness-

› Brightness+

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

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

EX3

✳ 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.

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

Touch Slider

ON/OFF

‹ Brightness-

› Brightness+

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

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

EX4

✳ 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)

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

Brightness-
Speed-

Brightness+
Speed+

ON/OFF

Touch Color
Circle

⊛ Mode

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

EX3S
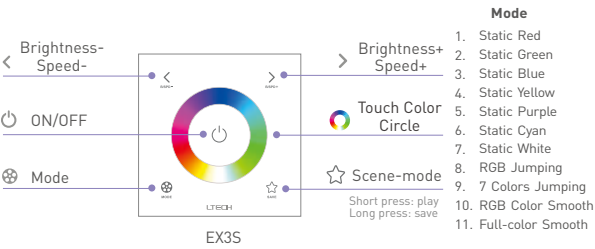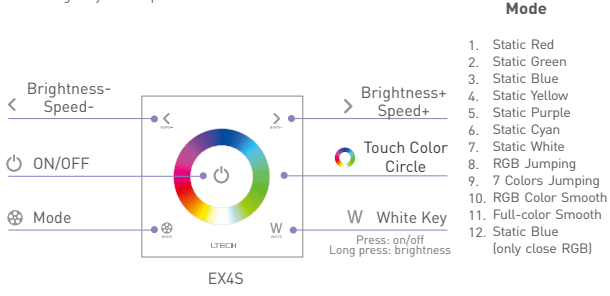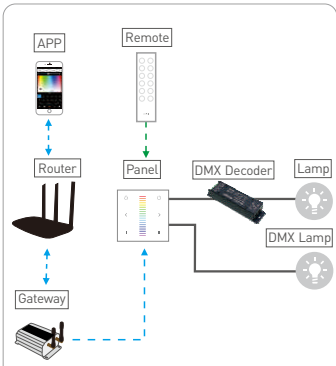
✳ When blue status light of ⏻ key is on, long press ⏻ to turn on/off buzzer.
When white status light of ⏻ key is on, long press ⏻ to match code.

Brightness-
Speed-

Brightness+
Speed+

ON/OFF

Touch Color
Circle

⊛ Mode

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

EX4S

✳ 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.

✳ RGB off and only white light is on:
press ⊛ key to select static
black mode, then press W key to
turn on the white light.

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Match Code Sequence

DMX System Wiring

APP
Remote
Router
Panel
DMX Decoder
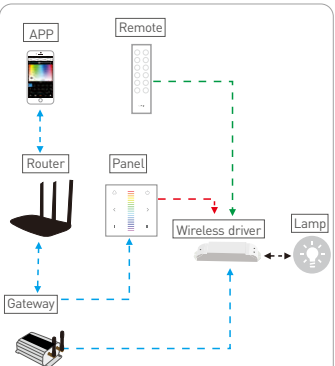Lamp
DMX Lamp
Gateway

* PS: No router needed when gateway work with phones directly.

Match Code Sequence

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

Wireless System Wiring

APP
Remote
Router
Panel
Wireless driver
Lamp
Gateway

* PS: No router needed when gateway work with phones directly.

Match Code Sequence

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

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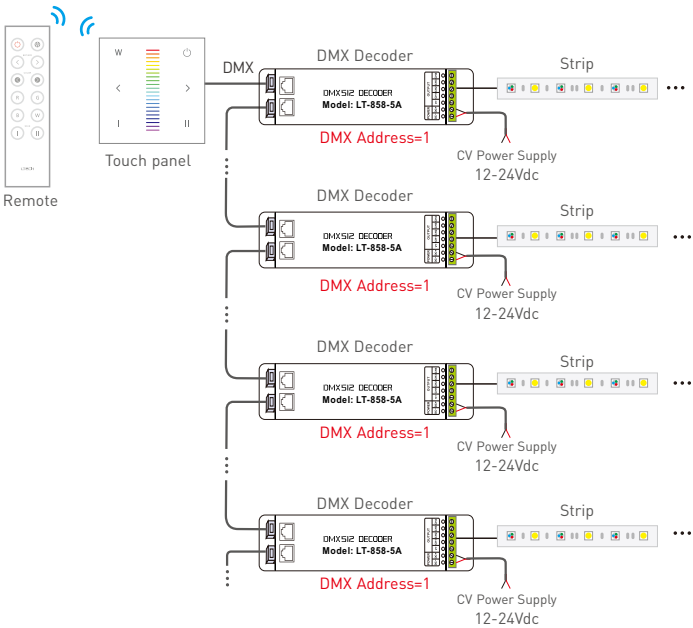# Application Composition

DMX512 control

1. Touch panel + DMX driver + Lamp

2. Remote + Touch panel + DMX driver + Lamp

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

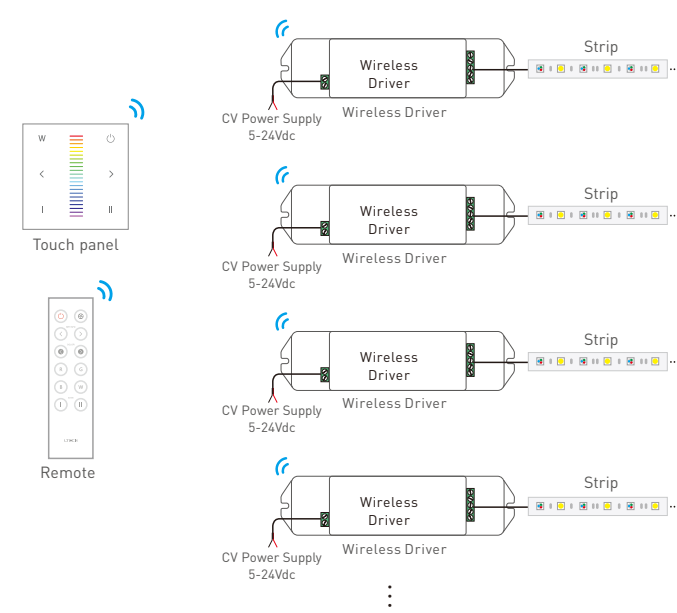4. WiFi master controller + Remote + Touch panel + DMX driver + Lamp

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

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DMX Wiring

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

10

RF Wireless Wiring

Touch panel

Remote

Wireless Driver
CV Power Supply 5-24Vdc
Wireless Driver
Strip

Wireless Driver
CV Power Supply 5-24Vdc
Wireless Driver
Strip

Wireless Driver
CV Power Supply 5-24Vdc
Wireless Driver
Strip

Wireless Driver
CV Power Supply 5-24Vdc
Wireless Driver
Strip

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

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Multi-panel Control Wiring
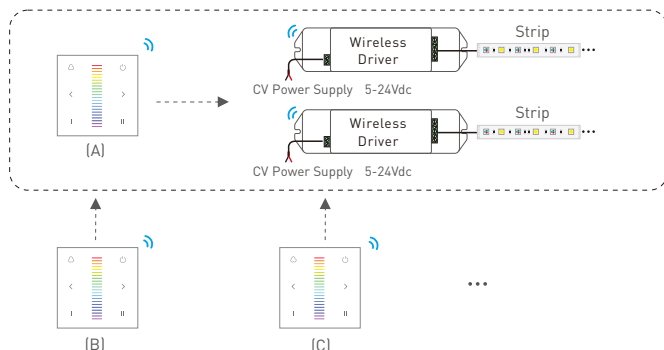
* After touch panel A realizes controlling the lamps, if B and C are matched up with A , they can also control the lamps.
* Connecting touch panel with DMX decoders can also realize multi-control function.

Match Code between Touch Panels

1. Assuming that B match up with A, long press ⏻ on B until all indicator light flicker.

2. Touch the slider on A in 5s, if indicator light of B stop flicking, match successfully.
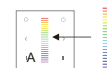
Match Code between Touch Panel & Remote

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 light flicker.

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

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

F1 [Dimming]   F2 [CT]   F3 [RGB]   F4 [RGBW]

* Please match/clear code when ⏻ status light of panel is white (for EX1S is off).

Match code between touch panel & gateway

EX1/EX1S touch panel match up with gateway.

1. Long press ⏻ on touch panel until indicator lights flicker.   EX1   EX1S

2. Click the corresponding DIM zone on mobile phone, then touch the color screen, match successfully.   Color screen
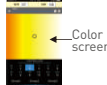
EX2 touch panel match up with gateway.

1. Long press ⏻ on touch panel until indicator lights flicker.   EX2

2. Click the corresponding CT zone on mobile phone, then touch the color screen, match successfully.   Color screen

EX3/EX3S touch panel match up with gateway.

1. Long press ⏻ on touch panel until indicator lights flicker.   EX3   EX3S

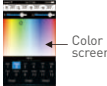2. Click the corresponding RGB zone on mobile phone, then touch the color screen, match successfully.   Color screen

EX4/EX4S touch panel match up with gateway.

1. Long press ⏻ on touch panel until indicator lights flicker.   EX4   EX4S

2. Click the corresponding RGBW zone on mobile phone, then touch the color screen, match successfully.   Color screen

* Please match/clear code when ⏻ status light of panel is white (for EX1S is off).

Match code between Touch Panel & wireless driver

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

Method 1:

1. Power on and power off receiver for 3 times, the lamps flicker, please complete step 2 within 10s.   Wireless driver

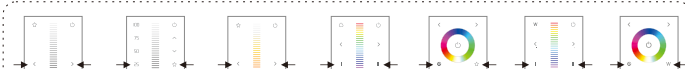2. Touch any key on touch panel, the lamps stop flicking, match successfully.

Method 2:

1. Short press "ID learning button" on receiver. the lamps flicker, please complete step 2 within 10s.   Wireless driver   ID learning button

2. Touch any key on touch panel, the lamps stop flicking, match successfully.

Clear code:

Press the bottom two key on touch panel simultaneously for 5s, the indicator light flicker several times, clear code successfully.

* Please match/clear code when ⏻ status light of panel is white (for EX1S is off).