# LDT-PNL-DMXRF-4Z-CCT-WH

## Four-Zone DMX512 & RF DUO Wheel Panel

A mains-powered touch wheel panel that sends DMX512 or compatible RF control signals for four cct (warm white + cool white) lighting zones. Use it with suitable decoders or receivers; it does not directly power an LED strip.

### Model specifications

| | |
|---|---|
| Product function | Four-zone DMX512 master and RF remote |
| Lighting type | DUO (warm white + cool white) |
| Power supply | 100-240 VAC |
| Maximum input current | 0.1 A |
| Output signals | DMX512 + compatible RF 2.4 GHz |
| DMX output channels | 8 |
| Independent zones | 4 |
| RF distance | Up to 10 m in unobstructed space |
| Dimming | 0-100%; 256 levels |
| Operating temperature | -30 to +55 °C |
| Maximum case temperature | +65 °C |
| IP rating | IP20 |
| Panel dimensions | 86 x 86 x 33 mm |
| User interface | Touch wheel and zone buttons |

This is a 100-240 VAC control panel, not a low-voltage PWM load controller. Keep mains and control-signal wiring correctly separated.

The following technical-reference pages retain the complete diagrams, dimensions, settings and installation instructions. Select the lighting variant stated on this cover; family diagrams may also illustrate other variants.

**DMX512**

# Wall Mounted Touch Panel



DIM DUO RGB RGBW

CE RoHS emc LVD

- Touch panel 4 zone 1-4 color DMX512 master, can also be used as 4 zone 1-4 color RF remote.
- DMX signal output, comply to standard DMX512 protocol, compatible with DMX decoder from any supplier.
- When used as RF remote, each zone can remote control multiple RF 2.4G LED controllers.
- Ultra sensitive high strength glass touch panel with touch color wheel in the middle.
- Smooth and accurate color adjustment by touching the color wheel.
- Touch keys with LED indicator.
- White & Black glass panel available.

## Technical parameters

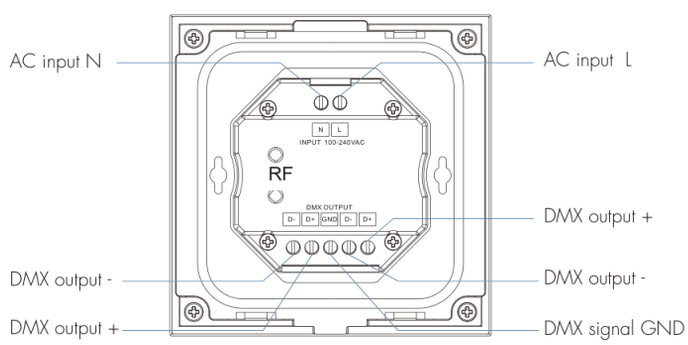
| Model No. | DIM | DUO | RGB | RGBW |
|---|---|---|---|---|
| Light type | Single color | Dual color | RGB | RGBW |
| Output dmx channel number | 4 | 8 | 12 | 16 |

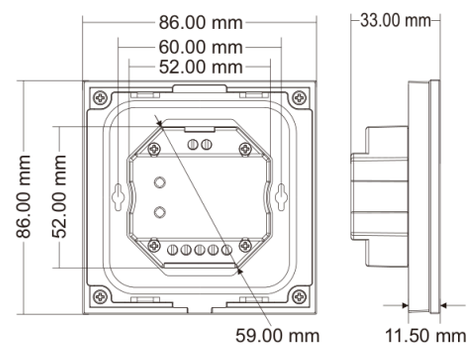
| Input and Output | |
|---|---|
| Input voltage | 100-240VAC |
| Input current | Max 0.1A |
| Output signal | DMX512, RF 2.4GHz |
| **Dimming data** | |
| Input signal | Touch key, RF 2.4GHz |
| RF Control distance | 10m(Barrier-free space) |
| Dimming level | 256 levels |
| Dimming range | 0-100% |
| **Warranty** | |
| Warranty | 5 years |

| Safety and EMC | |
|---|---|
| EMC standard (EMC) | ETSI EN 301 489-1 V2.2.3<br>ETSI EN 301 489-17 V3.2.4 |
| Safety standard | EN 62368-1:2020+A11:2020 |
| Radio Equipment(RED) | ETSI EN 300 328 V2.2.2 |
| Certification | CE,EMC,RED |

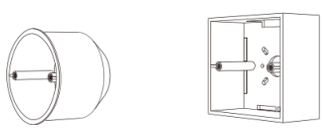
| Environment | |
|---|---|
| Operation temperature | Ta: -30°C ~ +55°C |
| Case temperature (Max.) | Tc: +65°C |
| IP rating | IP20 |
| **Package** | |
| Size | L112 x W112 x H50mm |
| Gross weight | 0.234kg |

## Mechanical structures and installations



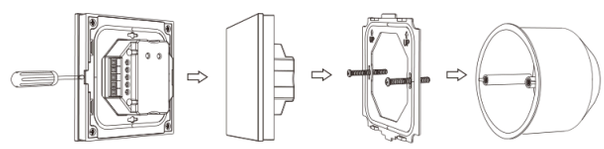




Typical base as below:



European style 86 size

Installation diagram:



Uninstall Touch panel Baseplate Base

## Key function

### DIM panel




ALL —— Turn on/off all zone light.

Brightness+, 10 levels.

Brightness-, 10 levels.

Brightness wheel.

SCENE 1 SCENE 2 SCENE 3 SCENE 4 —— 4 scenes, short press recall the scene, long press 5s save current brightness into scene 1/2/3/4.

1 ZONE 2 ZONE 3 ZONE 4 ZONE

Short press turn on zone light and select zone simultaneously, long press 2s turn off zone light.
Short press multiple zone key fastly, will select multiple zone synchronously.
4 zone control seperately or synchronously, each zone could control multiple receivers.

### DUO panel




ALL —— Turn on/off all zone light.

Brightness+, 10 levels.

Brightness-, 10 levels.

Color temperature wheel.

SCENE 1 SCENE 2 SCENE 3 SCENE 4 —— 4 scenes, short press recall the scene, long press 5s save current brightness into scene 1/2/3/4.

1 ZONE 2 ZONE 3 ZONE 4 ZONE

Short press turn on zone light and select zone simultaneously, long press 2s turn off zone light.
Short press multiple zone key fastly, will select multiple zone synchronously.
4 zone control seperately or synchronously, each zone could control multiple receivers.

### RGB panel




ALL —— Turn on/off all zone light.

Color wheel.

MODE —— Short press play 10 built-in dynamic mode, long press 2s run mode-cycle.

BRT/SPEED —— Adjust dynamic mode speed or static color brightness, 10 levels.

SCENE 1 SCENE 2 SCENE 3 SCENE 4 —— 4 scenes, short press recall the scene, long press 5s save current brightness into scene 1/2/3/4.

1 ZONE 2 ZONE 3 ZONE 4 ZONE

Short press turn on zone light and select zone simultaneously, long press 2s turn off zone light.
Short press multiple zone key fastly, will select multiple zone synchronously.
4 zone control seperately or synchronously, each zone could control multiple receivers.

### RGBW panel




ALL —— Turn on/off all zone light.

Color wheel.

MODE —— Short press play 10 built-in dynamic mode, long press 2s run mode-cycle.

BRT/SPEED —— Adjust dynamic mode speed or static color brightness, 10 levels.

WHITE —— Short press get white color, long press adjust white brightness.

SCENE 1 SCENE 2 SCENE 3 —— 3 scenes, short press recall the scene, long press 5s save current brightness into scene 1/2/3.

1 ZONE 2 ZONE 3 ZONE 4 ZONE

Short press turn on zone light and select zone simultaneously, long press 2s turn off zone light.
Short press multiple zone key fastly, will select multiple zone synchronously.
4 zone control seperately or synchronously, each zone could control multiple receivers.

**Turn on key tone:** Long press power key for 5s when all zone light is off, will turn on or turn off key tone.

Scene locking:

- Scene keys can be set to locked state, cancel long press for 5 seconds to save the scene function (default scene is not locked).
- Short press the panel on/off key, turn on the light first, then turn off the light, immediately long press the panel on/off key for 5 seconds, then immediately long press any one scene key for 5 seconds to set all scene keys to locked state.
- Short press the panel on/off key, turn on the light first, then turn off the light, immediately long press the panel on/off key for 5 seconds, then immediately long press any one scene key for 10 seconds to restore all scene keys to unlocked state.

## Touch panel work as DMX512 master match RF remote

Touch panel 4 zone DMX512 master can also match with 4 zone RF remote (Optional).
End user can choose the suitable match/delete ways. Two options are offered for selection:

### Use On/Off key

Match:
Turn on light, turn off, immediately press the On/Off key of the panel for 5s, then press any zone key of the RF remote within 5s.
The LED indicator fast flash 3 times means match is successful.

Delete:
Turn on light, turn off, immediately press the On/Off key of the panel for 10s to delete all match,
The LED indicator fast flash 6 times means all matched remotes were deleted.

### Use Power Restart

Match:
Switch off the power of the panel, then switch on power, repeat again.
Immediately short press any zone key 3 times on the remote.
The LED indicator fast flash 3 timesmeans match is successful.

Delete:
Switch off the power of the panel, then switch on power, repeat again.
Immediately short press any zone key 5 times on the remote.
The LED indicator fast flash 6 times means all matched remotes were deleted.

## Touch panel work as RF remote

Touch panel 4 zone remote can match with RF controller for the corresponding light type.
End user can choose the suitable match/delete ways. Two options are offered for selection:

### Use the controller's Match key

Match:
Short press match key, immediately press zone key of the touch panel.
The LED indicator fast flash a few times means match is successful.

Delete:
Press and hold match key for 5s to delete all match,
The LED indicator fast flash a few times
means all matched remotes were deleted.

### Use Power Restart

Match:
Switch off the power of the receiver, then switch on power, repeat again.
Immediately short press zone key 3 times on the touch panel.
The light blinks 3 times means match is successful.

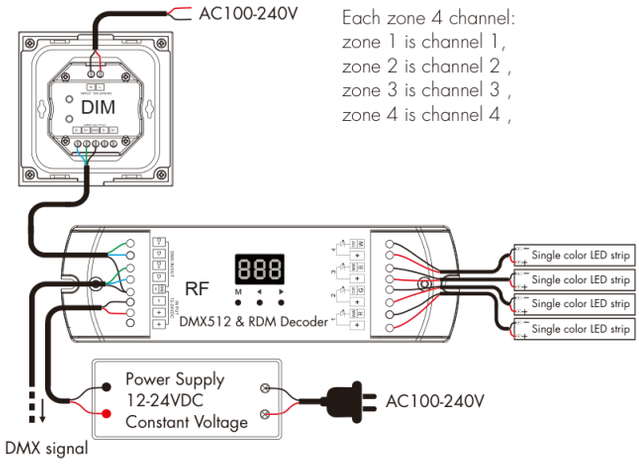
Delete:
Switch off the power of the receiver, then switch on power, repeat again.
Immediately short press zone key 5 times on the touch panel.
The light blinks 5 times means all matched remotes were deleted.

## The address assignment of touch panel work as DMX512 master

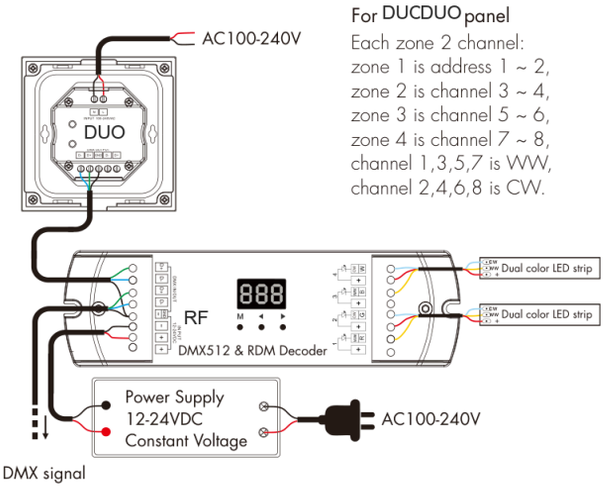
After connect with DMX decoders, please set the DMX decoders address as below:

| Model No. | DIM | DUO | | RGB | | | RGBW | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | WW | CW | R | G | B | R | G | B | W |
| Zone 1 DMX decoder's address | 1 | 1 | 2 | 1 | 2 | 3 | 1 | 2 | 3 | 4 |
| Zone 2 DMX decoder's address | 2 | 3 | 4 | 4 | 5 | 6 | 5 | 6 | 7 | 8 |
| Zone 3 DMX decoder's address | 3 | 5 | 6 | 7 | 8 | 9 | 9 | 10 | 11 | 12 |
| Zone 4 DMX decoder's address | 4 | 7 | 8 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |

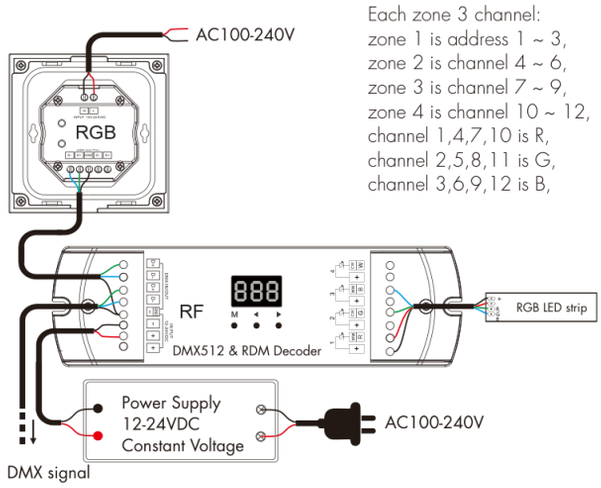
## Wiring diagram for touch panel work as DMX512 master




For DIM DIM Panel
Each zone 4 channel:
zone 1 is channel 1,
zone 2 is channel 2 ,
zone 3 is channel 3 ,
zone 4 is channel 4 ,

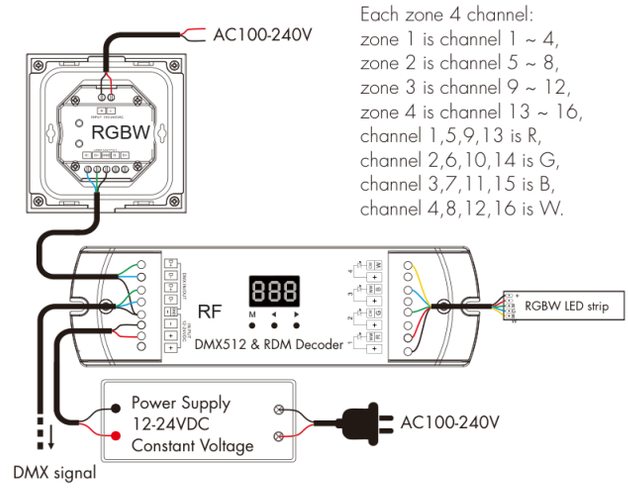



For DUCDUO panel
Each zone 2 channel:
zone 1 is address 1 ~ 2,
zone 2 is channel 3 ~ 4,
zone 3 is channel 5 ~ 6,
zone 4 is channel 7 ~ 8,
channel 1,3,5,7 is WW,
channel 2,4,6,8 is CW.




**RGB panel**

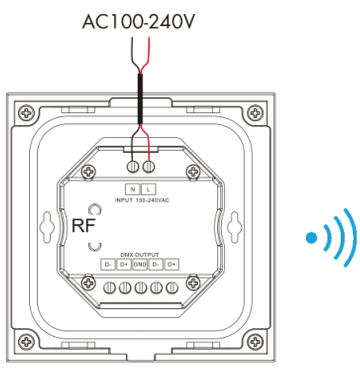
Each zone 3 channel:
zone 1 is address 1 ~ 3,
zone 2 is channel 4 ~ 6,
zone 3 is channel 7 ~ 9,
zone 4 is channel 10 ~ 12,
channel 1,4,7,10 is R,
channel 2,5,8,11 is G,
channel 3,6,9,12 is B,




**RGBW panel**

Each zone 4 channel:
zone 1 is channel 1 ~ 4,
zone 2 is channel 5 ~ 8,
zone 3 is channel 9 ~ 12,
zone 4 is channel 13 ~ 16,
channel 1,5,9,13 is R,
channel 2,6,10,14 is G,
channel 3,7,11,15 is B,
channel 4,8,12,16 is W.

## Wiring diagram for touch panel work as RF remote




## RGB/RGBW dynamic mode list (only for RGB / RGBW

| No. | Name | No. | Name |
|---|---|---|---|
| 1 | RGB jump | 6 | RGB fade in and out |
| 2 | RGB smooth | 7 | Red fade in and out |
| 3 | 6 color jump | 8 | Green fade in and out |
| 4 | 6 color smooth | 9 | Blue fade in and out |
| 5 | Yellow cyan purple smooth | 10 | White fade in and out |

## Malfunctions analysis & troubleshooting

| Malfunctions | Causes | Troubleshooting |
|---|---|---|
| No light | 1.No power.<br>2.Wrong connection or insecure. | 1.Check the power.<br>2.Check the connection. |
| Wrong color | 1.DMX decoder first address error.<br>2.Wrong connection of output wires. | 1.Check the DMX first address.<br>2.Reconnect output wires. |