

LTECH

# DMX512 DECODER

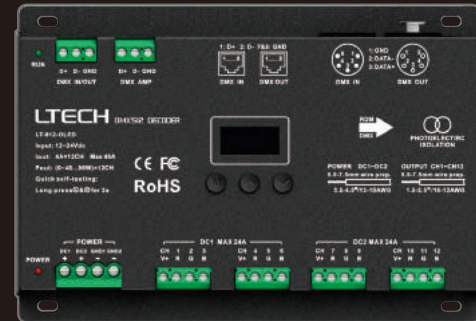
LT-912-OLED

**12**  
CHANNELS

- OLED display
- 8 bit / 16 bit
- 3 kinds of DMX interfaces
- Dimming Curve: 0.1-9.9
- Shortcut / Over load protection



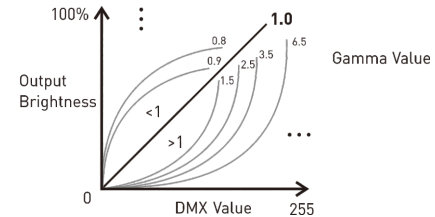
Photoelectric  
Isolation



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

## Product Introduction:

1. Designed for Hi-power multiple channels application, 12 channels output, and Max. 4A current per channel, up to 1152W output power.
2. Easy operation with OLED screen and the touch buttons.
3. 3 kinds of mode optional: single color, color temperature, RGB.
4. Support 3 kinds of DMX ports with signal isolation function: 5-pin XLR, RJ45 and green terminal (with signal amplifier function).
5. With RDM remote management protocol, the operations can be completed via the RDM master console, such as parameters browsing & setting, DMX address setting, equipment recognition, etc.
6. With photoelectric isolation function.
7. With shortcut protection and over load protection, as well as warning function when fault.
8. With fast self-testing function.
9. 16bit / 8bit resolution optional.
10. Multiple dimming curve (0.1-9.9) optional.



5-pin XLR



RJ45



RDM

Photoelectric  
IsolationShortcut  
ProtectionOver load  
Protection

Display

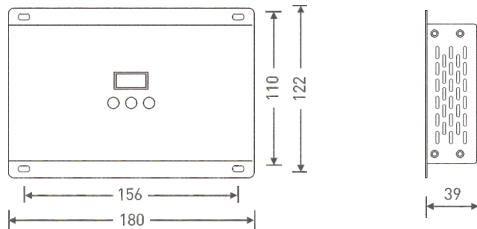
## Technical Specs:

Model :	LT-912-OLED
Input Signal :	DMX512/RDM
Input Voltage :	12-24Vdc
Current Load :	4A × 12CH Max 48A
Output Power :	[0~48W...96W] × 12CH Max. 1152W
DMX Interface :	5-pin XLR, RJ45, Green terminal
Control Mode :	Dimming/CT/RGB
Dimming Curve :	0.1~9.9
Grey Level :	8bit (256 levels) / 16bit (65536 levels)
Photoelectric Isolation :	Yes
Protection:	Shortcut / Over load
Working Temperature :	-30°C~65°C
Dimensions :	L180×W122×H39mm
Package Size :	L193×W127×H41mm
Weight (G.W.) :	700g

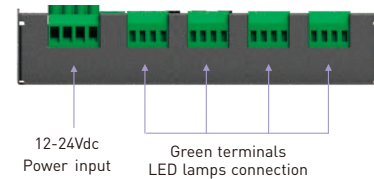
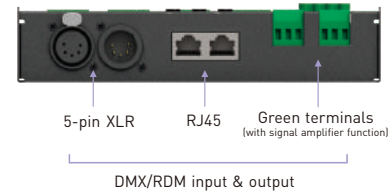
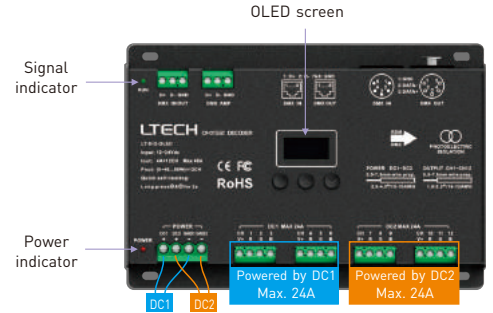


## Product Size:

The Unit: mm



## Main Component Description:



## OLED Screen Interface:



M ^ v

Press "M" key, switch entries.  
 Press "^" or "v" key, parameter adjustment.  
 Long press "M" key, back to main page.  
 Exit: back to previous page.

### 1. DMX Address Setting

DMX: 001 Hz: High  
 Mode: RGB 8bit  
 Curve: Standard  
 TOOL&v TEST&v

Main page

Press "^" or "v" key to set DMX address.  
 Range: 1-512

### 2. PWM Frequency

DMX: 001 Hz: High  
 Mode: RGB 8bit  
 Curve: Standard  
 TOOL&v TEST&v

Press "^" or "v" key to switch frequency.  
 Optional: High  
 Std (standard)  
 Mid (middle)  
 Low

### 3. Mode

DMX: 001 Hz: High  
 Mode: RGB 8bit  
 Curve: Standard  
 TOOL&v TEST&v

Press "^" or "v" key to switch mode.  
 Optional : Dim  
 CT  
 RGB

### 4. Resolution

DMX: 001 Hz: High  
 Mode: RGB 8bit  
 Curve: Standard  
 TOOL&v TEST&v

Press "^" or "v" key to switch resolution.  
 Optional : 8bit  
 16bit

### 5. Dimming Curve

DMX: 001 Hz: High  
 Mode: RGB 8bit  
 Curve: Standard  
 TOOL&v TEST&v

Press "^" or "v" key to switch dimming curve.  
 Optional : Standard  
 Linear  
 0.1-9.9

### 6. Tool

DMX: 001 Hz: High  
 Mode: RGB 8bit  
 Curve: Standard  
 TOOL&v TEST&v



Press "^" or "v" key to enter submenu.

Screen: ON+Addr  
 Contrast: 40%  
 Buzzer: ON  
 Lock: OFF EXIT&v

EXIT  
 (Press "v" key)



Screen lock: set Lock: ON,  
 screen will be locked if  
 unmanned operation for 2 min,  
 press "M" key for 3s to unlock.

### 7. Test

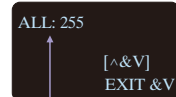
DMX: 001 Hz: High  
 Mode: RGB 8bit  
 Curve: Standard  
 TOOL&v TEST&v



Press "^" or "v" key to enter submenu.

CH01: 255  
 CH02: 255  
 CH03: 255 [^&v]  
 EXIT &v

Brightness setting  
 (range: 0-255)  
 Press "^" or "v"  
 to next page



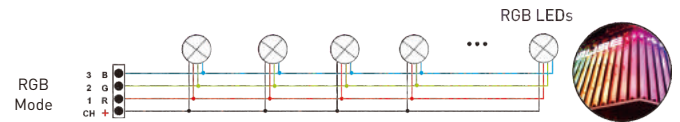
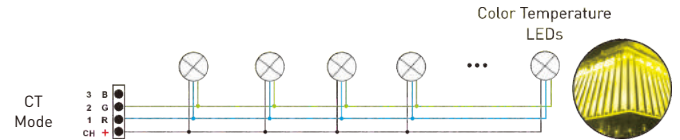
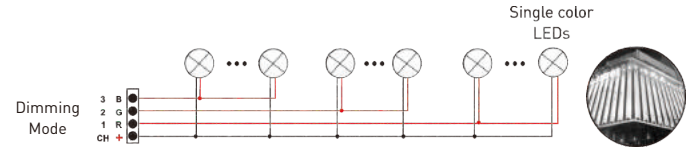
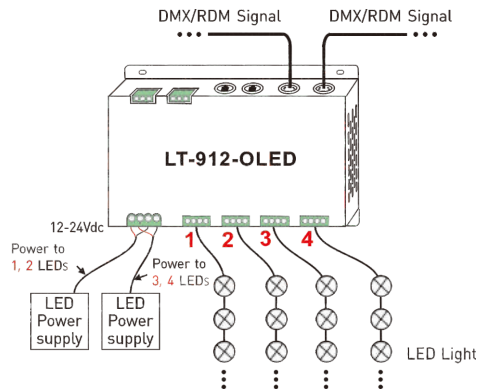
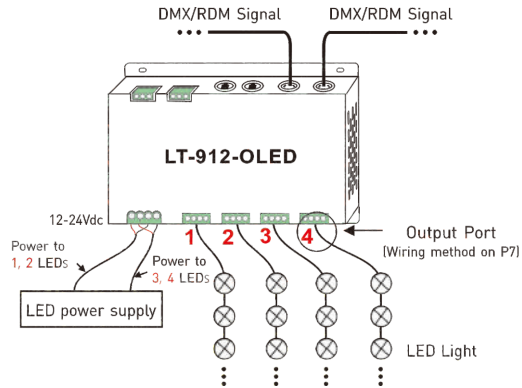
Press "v" to exit

Change all value  
 simultaneously  
 (on the last page)

\* Fast self-testing function: press "^" or "v" keys simultaneously for 2-3 seconds under any page, decoder will enter self-testing function.

# Wiring diagram:

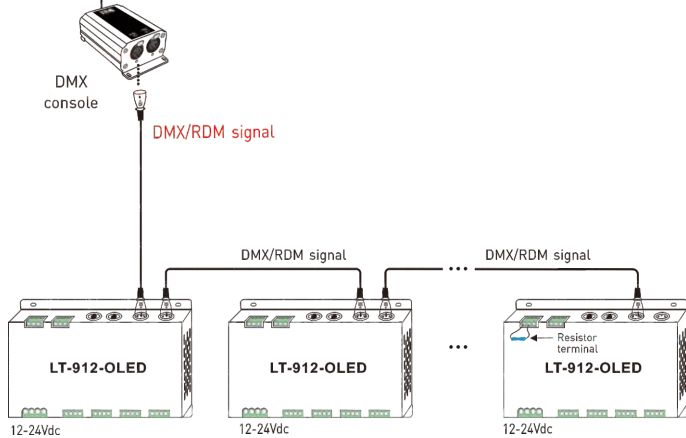
## 1 Connecting LED lights:



2. DMX console connection:



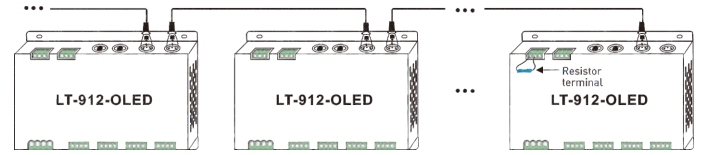
LT-912-OLED is equipped with 3 types DMX terminals for users' selection. The following diagram takes 5-pin XLR as an example, same connecting method for the rest two: RJ45 & green terminal [with amplifier function].



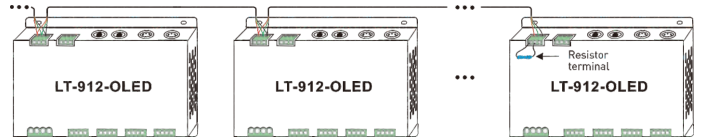
\* If the recoil effect occurs because of longer signal line or bad line quality, please try to connect 0.25W 90-120Ω terminal resistor at the end of each line.

\* An amplifier is needed when more than 32 decoders are connected, signal amplification should not be more than 5 times continuously.

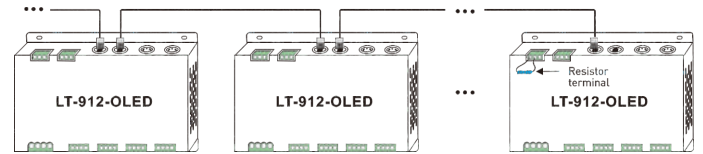
3. The connection diagram of 3 kinds of DMX/RDM terminals:



5-pin XLR Connected in Parallel



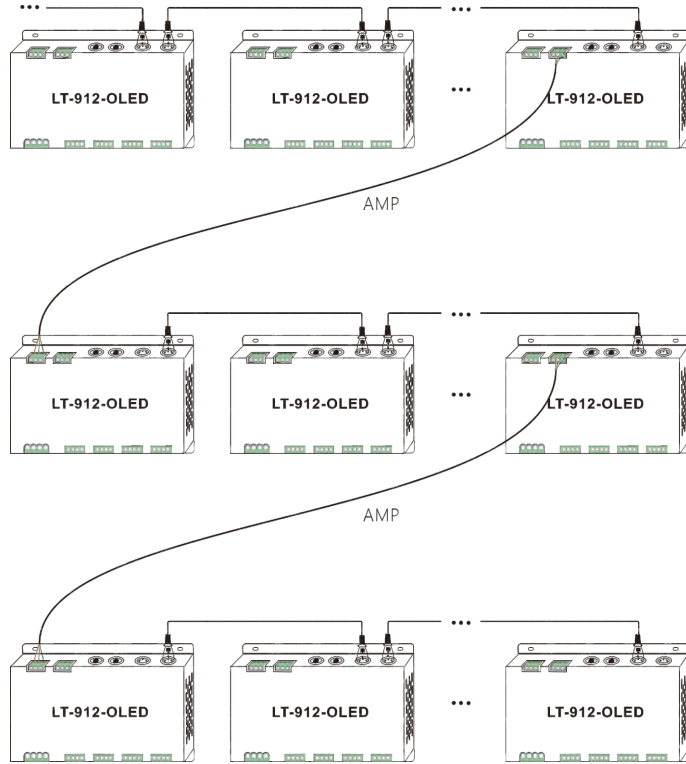
Green Terminal Connected in Parallel



RJ45 Connected in Parallel

These 3 terminals can be connected in a mixed way.

4. The connection diagram of AMP signal amplifier terminal:



\* AMP interface can be used for signal amplification when too many DMX decoder are connected or signal line is too long, signal amplification should be no more than 5 times continuously.

Address setting table

Mode	DIM	CT	RGB	
Address Quantity	4	8	12	
Resolution	8bit	8bit	8bit	
Channel	1	001	001	001
	2	001	002	002
	3	001	002	003
	4	002	003	004
	5	002	004	005
	6	002	004	006
	7	003	005	007
	8	003	006	008
	9	003	006	009
	10	004	007	010
	11	004	008	011
	12	004	008	012

Mode	DIM	CT	RGB	
Address Quantity	8	16	24	
Resolution	16bit	16bit	16bit	
Channel	1	001	001	001
		002	002	002
	2	001	003	003
		002	004	004
	3	001	003	005
		002	004	006
	4	003	005	007
		004	006	008
	5	003	007	009
		004	008	010
	6	003	007	011
		004	008	012
7	005	009	013	
	006	010	014	
8	005	011	015	
	006	012	016	
9	005	011	017	
	006	012	018	
10	007	013	019	
	008	014	020	
11	007	015	021	
	008	016	022	
12	007	015	023	
	008	016	024	

## Attention:

1. The product shall be installed and serviced by the qualified person.
2. This product is non-waterproof. Please avoid the sun and rain. When installed outdoors please ensure it is mounted in a water proof enclosure.
3. Good heat dissipation will prolong the working life of the controller. Please ensure good ventilation.
4. Please check if the output voltage of the LED power supply used comply with the working voltage of the product.
5. Please ensure that adequate sized cable is used from the controller to the LED lights to carry the current. Please also ensure that the cable is secured tightly in the connector.
6. Ensure all wire connections and polarities are correct before applying power to avoid any damages to the LED lights.
7. If a fault occurs, please return the product to your supplier. Do not attempt to fix this product by yourself.

## Warranty Agreement:

1. We provide lifelong technical assistance with this product:
    - A 5-year warranty is given from the date of purchase. The warranty is for free repair or replacement if cover manufacturing faults only.
    - For faults beyond the 5-year warranty, we reserve the right to charge for time and parts.
  2. Warranty exclusions below:
    - Any man-made damages caused from improper operation, or connecting to excess voltage and overloading.
    - The product appears to have excessive physical damage.
    - Damage due to natural disasters and force majeure.
    - Warranty label, fragile label and unique barcode label have been damaged.
    - The product has been replaced by a brand new product.
  3. Repair or replacement as provided under this warranty is the exclusive remedy to the customer. We shall not be liable for any incidental or consequential damages for breach of any stipulation in this warranty.
  4. Any amendment or adjustment to this warranty must be approved in writing by our company only.
- ★ This manual only applies to this model. We reserve the right to make changes without prior notice.