LITECH

DMX512 DECODER
LT-912-OLED

OLED display
8 bit / 16 bit
3 kinds of DMX interfaces
Dimming curve: 0.1~9.9
Short circuit / Over current / Overheat protection

Photoelectric isolation

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 touch buttons.

3. 3 kinds of optional modes available: DIM, CT, RGB.

4. 5-pin XLR, RJ45 and green terminal DMX interface with photoelectric isolation, improve signal transmission efficiency and anti-interference ability, the green terminal also has signal amplifier function.

5. With RDM remote management protocol, the operations can be completed via the RDM master console, such as parameters browsing & settings, DMX address settings, equipment recognition, etc.

6. With firmware upgrade function.

7. With short circuit, over current and overheat protection, as well as warning function when a fault occurs.

8. With power-on state management and fast self-testing function.

9. 16bit (65536 levels) / 8bit (256 levels) grey level available.

10. Available for standard, linear, LOG or customize 0.1-9.9 dimming curve.
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 interfaces: 5-pin XLR, RJ45, green terminal
Control modes: DIM/CT/RGB
Dimming curves: 0.1~9.9, standard, linear, LOG
Grey level: 8bit (256 levels) / 16bit (65536 levels)
Photoelectric isolation: Yes
Protection: Short circuit / Overheat / Over current protection, recover automatically.
Working temperature: -30°C~65°C
Dimensions: 180×122×39mm (L×W×H)
Package size: 193×127×41mm (L×W×H)
Weight (G.W.): 730g

Product size

Unit: mm
Main component description

OLED screen

Power indicator

- DC1
- DC2

Powered by DC1
Max. 24A

Powered by DC2
Max. 24A

Signal indicator

- 5-pin XLR
- RJ45
- Green terminals (with signal amplifier function)

DMX/RDM input & output

12-24Vdc
Power input

Green terminals
LED lamp connection
OLED screen interface


1. DMX address settings
   - DMX: 001 Hz: High
   - Mode: RGB 8bit
   - Curve: Standard
   - Dim: Smo TOOL&v
   - Main page
   - Press “∧” or “∨” key to set DMX address.
   - Range: 001–512

2. PWM frequency
   - DMX: 001 Hz: High
   - Mode: RGB 8bit
   - Curve: Standard
   - Dim: Smo TOOL&v
   - Press “∧” or “∨” key to choose.
   - Option:
     - Std (standard)
     - High
     - Mid (middle)
     - Low
   - No flicker in video camera.
   - Smooth and exquisite, human eye is comfortable.
   - *It is recommended to use standard.

3. Modes
   - DMX: 001 Hz: High
   - Mode: RGB 8bit
   - Curve: Standard
   - Dim: Smo TOOL&v
   - Press “∧” or “∨” key to choose.
   - Option:
     - DIM
     - CT/CT2
     - RGB

4. Grey scale
   - DMX: 001 Hz: High
   - Mode: RGB 8bit
   - Curve: Standard
   - Dim: Smo TOOL&v
   - Press “∧” or “∨” key to choose.
   - Option:
     - 8bit
     - 16bit (choose it if the master controller supports this function)

5. Dimming curves
   - DMX: 001 Hz: High
   - Mode: RGB 8bit
   - Curve: Standard
   - Dim: Smo TOOL&v
   - Press “∧” or “∨” key to choose.
   - Option:
     - Standard
     - Linear
     - LOG
     - 0.1–9.9
   - It is recommended to use standard, 0.1–9.9 is for special requirements.
6. Enhance dimming

- **DMX: 001**
- **Hz: High**
- **Mode: RGB**
- **8bit**
- **Curve: Standard**
- **Dim: Smo**

**TOOL & v**

**EXIT & v**

Press "^" or "v" key to choose.

**Option:** **Std [standard]**

- **Smo [smooth]**

* It is recommended to use standard.

**Smo:** This option with smooth processing, realizes flicker-free dimming and smooth dynamic effects.

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7. Tool

- **DMX: 001**
- **Hz: High**
- **Mode: RGB**
- **8bit**
- **Curve: Standard**
- **Dim: Smo**

**TOOL & v**

**EXIT & v**

**Screen: ON+Addr**

Contrast: 40%

Beep: ON

**TEST & v**

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

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

**CH01: 255**

**CH02: 255**

**CH03: 255**

[]^V

**EXIT & v**

**ALL: 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]

**Screensaver open and display address if undo for 2 minutes.**

**Screen: ON+Addr**

**Screen: ON+black**

Screensaver open and black if undo for 2 minutes.

**Screen: OFF**

Screensaver not enable.

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* 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:

- **LT-912-OLED**
- **DMX/RDM signal**
- **Output port** (Wiring method on P7)
- **Power** to LE DS

**LED driver**

**12-24Vdc**

- Power to 1, 2 LEDs
- Power to 3, 4 LEDs

**Wiring diagram**

- **DMX/RDM signal**
- **LED**
- **LEDs**

12-24Vdc

- Power to 1, 2 LEDs
- Power to 3, 4 LEDs
LT-912-OLED is equipped with 3 kinds of 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).

2. DMX console connection:

LT-912-OLED is equipped with 3 kinds of 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.
3. The connection diagram of 3 kinds of DMX/RDM terminals:

![Connection Diagram]

- **Installation attention**: please reserve enough ventilation distance between decoders (>20mm), be sure not to block the vent, or it will affect lifetime of decoder for poor heat dissipation.

4. The connection diagram of AMP signal amplifier terminal:

- Connecting with green terminal or an extra amplifier will be needed when more than 32 decoders are connected or use overlong signal wire (as shown below). Signal amplifier should not be more than 5 times continuously.
### Address setting table

<table>
<thead>
<tr>
<th>Mode</th>
<th>Channel</th>
<th>Resolution</th>
<th>Address</th>
<th>Quantity</th>
<th>Mode</th>
<th>Channel</th>
<th>Resolution</th>
<th>Address</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address Quantity</td>
<td>4</td>
<td>8</td>
<td>12</td>
<td>8bit</td>
<td>8bit</td>
<td>8bit</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

* When you select CT2, the DMX address represents brightness, color temperature and constant power output respectively.
Work with RDM editor

LT-912-OLED can work with LTECH RDM editor (Model: WiFi-RDM01) to realize changing the parameters by long-range setting, wiring diagram as below:
RDM editor App interface instruction

Download the App, setting the LT-912-OLED parameters (frequency, bit, curve, modes, dimming range, screensaver, etc.) after well connecting the RDM editor, more details, please check the manual of WiFi-RDM01.

Well installation of products first, then working with WiFi -RDM01 to realize setting parameters and firmware upgrade by App.

a: Click “Add”, edit the address in corresponding box.
b: Click “ID”, get more product details.
c: Click “edit”, enter edited interface.
d: Click “No.”, issue the recognizing command.

WiFi-RDM01 upgrade
DMX device upgrade

Supporting WiFi-RDM01 upgrade and DMX driver upgrade.

∗ 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.