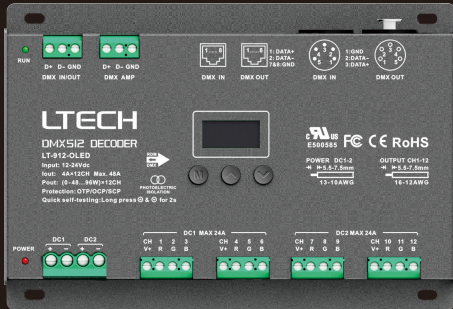# LTECH

DMX512 DECODER
LT-912-OLED

**12 CHANNELS**

OLED display
8 bit / 16 bit
3 kinds of DMX interfaces
Dimming Curve: 0.1~9.9
Protection: OTP/OCP/SCP

c**UL**us E500585

RDM ➡ DMX

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 mode optional: single color, color temperature, 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 & setting, DMX address setting, equipment recognition, etc.

6. With firmware upgrade function.

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

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

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

10. Optional for standard, linear, LOG or custom 0.1~9.9 dimming curve.
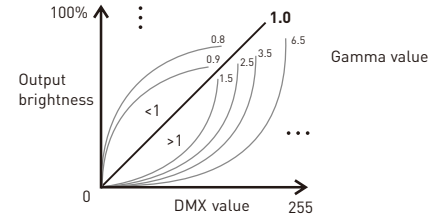
5-pin XLR   RJ45   RDM   Photoelectric isolation   Short circuit protection   Over temp. protection   Over current protection   Display
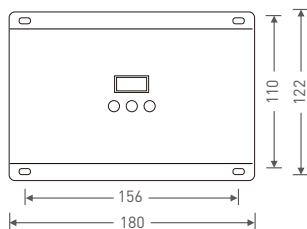
Technical specs

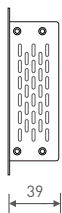|	
Model :	LT-912-OLED
Input signal :	DMX512/RDM
Input voltage :	12~24Vdc
Current load :	4A × 12CH　Max 48A
Output power :	(0~48W...96W) × 12CH　Max. 1152W
DMX interface :	5-pin XLR, RJ45, green terminal
Control mode :	Dimming/CT/RGB
Dimming curve :	0.1~9.9, standard, linear, LOG
Grey level :	8bit (256 levels) / 16bit (65536 levels)
Photoelectric isolation :	Yes
Protection:	Short circuit / Over current / Over temperature
Working temperature :	-30°C~65°C
Dimensions :	L180×W122×H39mm
Package size :	L193×W127×H41mm
Weight (G.W.) :	730g

cULus E500585　FC　CE　RoHS　warranty 5 years　SGS ISO9001:2008

Product size

Unit: mm

110
122
156
180
39

Main component description

OLED screen
Signal indicator
Power indicator
Powered by DC1 Max. 24A
Powered by DC2 Max. 24A
DC1
DC2

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

DMX/RDM input & output

12-24Vdc Power input　　Green terminals LED lamps connection
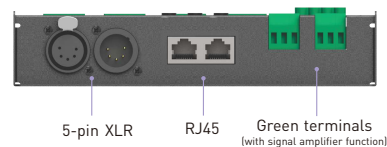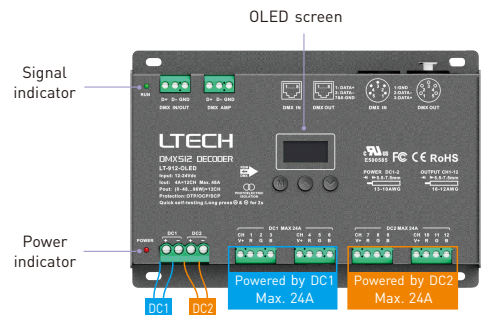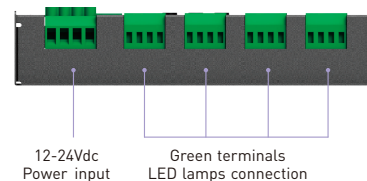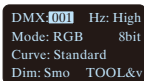
OLED screen interface

Press "M" key, switch entries.
Long press "M" key, back to main page.
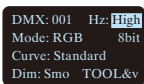Press "∧" or "∨" key, parameter adjustment.

Exit: back to previous page.

M ∧ ∨

1. DMX address setting

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.
Optional :

No flicker in video camera.

Std (standard)
High
Mid (middle)
Low

Smooth and exquisite, human eye is comfortable.
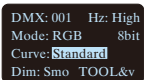
✻ It is recommended to use standard.

3. Mode

DMX: 001   Hz: High
Mode: RGB   8bit
Curve: Standard
Dim: Smo   TOOL&v
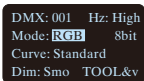
Press "∧" or "∨" key to choose.
Optional : Dim
CT
RGB

4. Grey scale

DMX: 001   Hz: High
Mode: RGB   8bit
Curve: Standard
Dim: Smo   TOOL&v
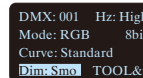
Press "∧" or "∨" key to choose.
Optional : 8bit
16bit (choose it if the master controller support this function)

5. Dimming curve

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

Press "∧" or "∨" key to choose.

Optional : 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
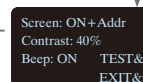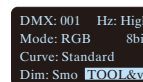Mode: RGB   8bit
Curve: Standard
Dim: Smo   TOOL&v

Press "∧" or "∨" key to choose.
Optional : Std (standard)
Smo (smooth)

✻ It is recommended to use standard.

Smo: This option with smooth processing, realize the dimming flicker-free and dynamic effects more downy.

7. Tool

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

Press "∧" or "∨" key to enter submenu

Screen: ON+Addr
Contrast: 40%
Beep: ON   TEST&v
EXIT&v

Press "∧" or "∨" key to enter submenu of test.

001

Screen: ON+Addr
Screensaver open and display address if undo for 2 minutes.

Screen: ON+black
Screensaver open and black if undo for 2 minutes.

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

Screen: OFF
Screensaver not enable.

CH01: 255
CH02: 255
CH03: 255   [∧&V]
EXIT &V
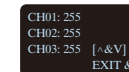
Brightness setting (range: 0~255)
Press "∧" or "∨" to next page
Press "∨" to exit

ALL: 255

[∧&V]
EXIT &V
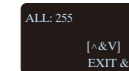
Change all value simultaneously (on the last page)

✻ Fast self-testing function: press "∧"or "∨" keys simultaneously for 2-3 seconds under any page, decoder will enter self-testing function.

Wiring diagram

1. Connecting LED lights:

DMX/RDM signal   DMX/RDM signal

LT-912-OLED

12-24Vdc   1   2   3   4   Output port
(Wiring method on P7)

Power to
1, 2 LEDS

Power to
3, 4 LEDS

LED power supply

LEDs

DMX/RDM signal   DMX/RDM signal

LT-912-OLED

12-24Vdc   1   2   3   4

Power to
1, 2 LEDS

Power to
3, 4 LEDS

LED power supply   LED power supply

LEDs

Single color LEDs

3 B
2 G
1 R
CH +

Dimming mode

Color temperature LEDs

3 B
2 G
1 R
CH +

CT mode

RGB LEDs

3 B
2 G
1 R
CH +

RGB mode

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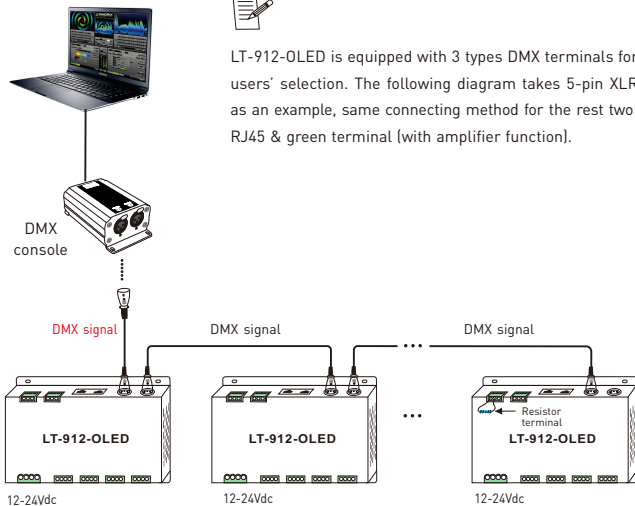
LT-912-OLED is equipped with 3 types DMX terminals for users' selection. The following diagram takes 5-pin XLR as an example, same connecting method for the rest two: RJ45 & green terminal (with amplifier function).
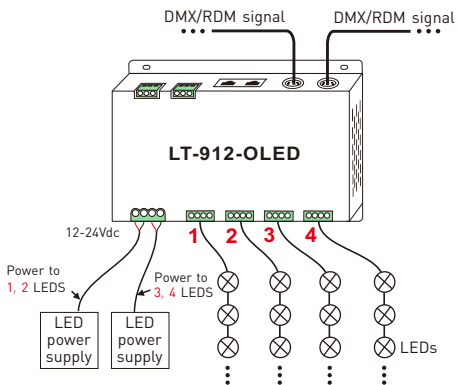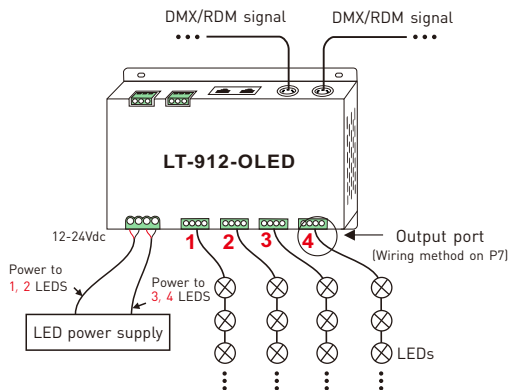
DMX console

DMX signal   DMX signal   DMX signal

LT-912-OLED   **LT-912-OLED**   **LT-912-OLED**

Resistor terminal

12-24Vdc   12-24Vdc   12-24Vdc

✳ 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:

5-pin XLR
connected
in parallel

Green terminal
connected
in parallel

RJ45
connected
in parallel

Installation distance > 20mm

These 3 terminals can be connected in a mixed way.
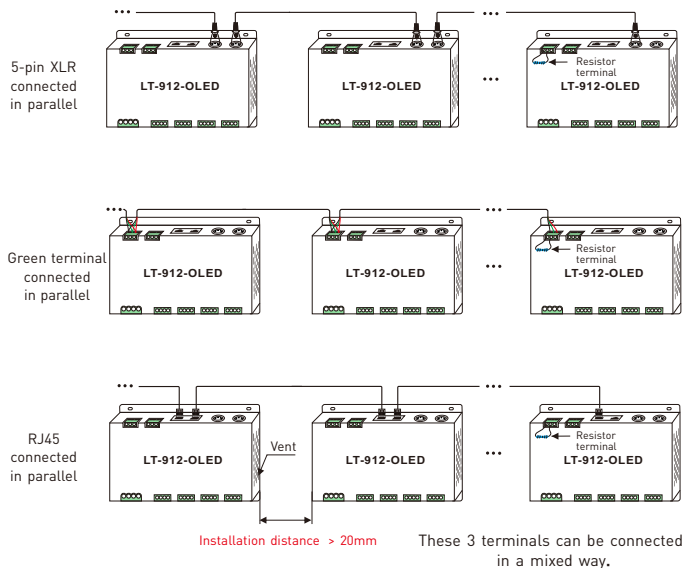
✳ **Installation attention :** please reserve enough ventilation distance between decoders (>20mm), be sure not to block the vent, or will affect lifetime of decoder for poor heat dissipation.

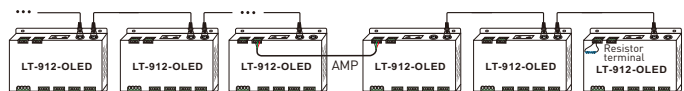## 4. The connection diagram of AMP signal amplifier terminal:

✳ 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.
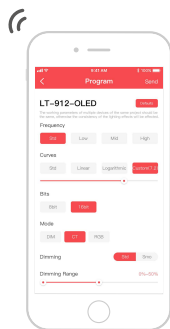
Address setting table

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

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:
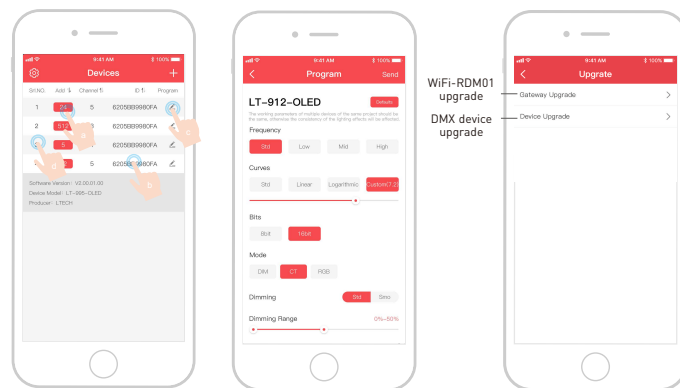
5-24Vdc power input
Power bank supply is available

WIFI-RDM01

LT-912-OLED

LT-912-OLED

LT-912-OLED

12-24Vdc

LED power supply

LED power supply

LED

12-24Vdc

LED power supply

LED power supply

LED

12-24Vdc

LED power supply

LED power supply

LED

LT-912-OLED

Frequency
Std   Low   Mid   High

Curves
Std   Linear   Logarithmic   Custom7.0

Bits
8bit   16bit

Mode
DIM   CT   RGB

Dimming   SM   Sine

Dimming Range   0%~50%

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.

Devices   +

Sr.NO.   Addr   Channel   ID   Program
1   5   62050809980FA
2   62050809980FA
3   62050809980FA
    5   62050809980FA

Software Version: V3.00.03.00
Device Model: LT-995-OLED
Producer: LTECH

Program   Send

LT-912-OLED   Details

Frequency
Std   Low   Mid   High

Curves
Std   Linear   Logarithmic   Custom7.0

Bits
8bit   16bit

Mode
DIM   CT   RGB

Dimming   SM   Sine

Dimming Range   0%~50%

Upgrate

WiFi-RDM01 upgrade — Gateway Upgrade
DMX device upgrade — Device Upgrade

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

Supporting WiFi-RDM01 upgrade and DMX driver upgrade.

✱ No further notice if any changes in the manual.
   Product function depends on the goods.
   Please feel free to contact your supplier if any question.