



General

|                  |                         |
|------------------|-------------------------|
| Product Type     | Constant Voltage Driver |
| Length (mm)      | 180                     |
| Width (mm)       | 122                     |
| Height (mm)      | 39                      |
| Housing Material | Metal                   |
| Mounting         | Surface mounted         |
| Weight (g)       | 730                     |

Electronics

|                                |              |
|--------------------------------|--------------|
| Input Domain                   | DC           |
| Input Voltage                  | 12 ~ 24V DC  |
| Output Voltage                 | 12 ~ 24 V DC |
| Output Current (mA) max/output | 3000         |
| Output Current Max. (A)        | 48           |
| Output Power (W)               | 1152W @ 24V  |
| LED Outputs                    | 16           |

Lighting

|             |      |
|-------------|------|
| Color Range | RGBW |
|-------------|------|

Control

|                      |         |
|----------------------|---------|
| Output Signal        | PWM-CV  |
| Control              | DMX     |
| RDM Support          | Yes     |
| Dimming Range        | 0~100%  |
| Driver Configuration | Digital |
| Number of Channels   | 16      |

Environmental

|                       |              |
|-----------------------|--------------|
| Operating Temperature | -30 ~ +65 °C |
| Ingress Protection    | IP20         |

CE IP20 5<sup>year</sup> warranty

Disclaimer

Due to the technical evolution and improvement of our products, the data provided in this document may be updated on a regular basis, and as such, confirmation of this information is strongly recommended prior to the order process. OneEightyOne is not responsible for any discrepancies in this document following changes in our products. We reserve the right to make technical changes to our products and to change information, at its sole discretion, without notice.



LTECH

# DMX512 DECODER

LT-916-OLED

16  
CHANNELS

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



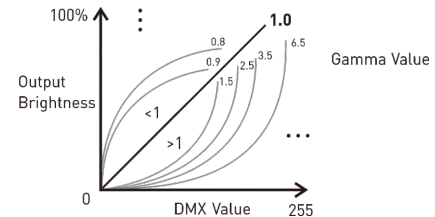
www.ltech-led.com

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## Product Introduction:

1. Designed for Hi-power multiple channels application, 16 channels output, and Max. 3A current per channel, up to 1152W output power.
2. Easy operation with OLED screen and touch buttons.
3. 4 kinds of mode optional: single color, color temperature, RGB, RGBW.
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 short circuit protection and over current protection, as well as warning function when fault.
8. With fast self-testing function.
9. 16bit (65536 levels) / 8bit (256 levels) grey level optional.
10. Multiple dimming curve (0.1~9.9) optional.



5-pin XLR



RJ45



RDM



Photoelectric  
Isolation



Short Circuit  
Protection



Over Current  
Protection



Display

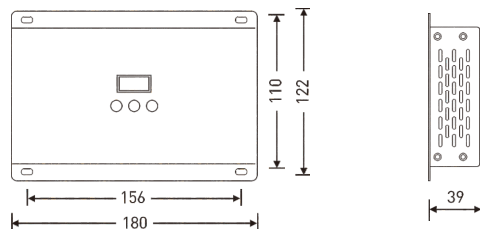
## Technical Specs:

|                           |                                          |
|---------------------------|------------------------------------------|
| Model :                   | LT-916-OLED                              |
| Input Signal :            | DMX512/RDM                               |
| Input Voltage :           | 12~24Vdc                                 |
| Current Load :            | 3A × 16CH Max 48A                        |
| Output Power :            | [0~36W...72W] × 16CH Max. 1152W          |
| DMX Interface :           | 5-pin XLR, RJ45, Green terminal          |
| Control Mode :            | Dimming/CT/RGB/RGBW                      |
| Dimming Curve :           | 0.1~9.9                                  |
| Grey Level :              | 8bit (256 levels) / 16bit (65536 levels) |
| Photoelectric Isolation : | Yes                                      |
| Protection:               | Short circuit / Over current             |
| Working Temperature :     | -30℃~65℃                                 |
| Dimensions :              | L180×W122×H39mm                          |
| Package Size :            | L193×W127×H41mm                          |
| Weight [G.W.] :           | 730g                                     |

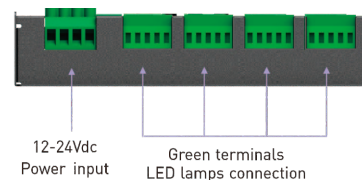
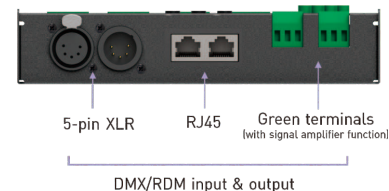
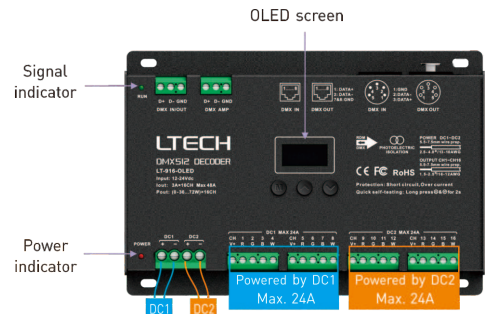


Product Size:

Unit: mm



### Main Component Description:



## OLED Screen Interface:



M   ^   v

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

### 1. DMX Address Setting

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

Main page

Press "^" or "v" key to set DMX address.  
Range: 001-512

### 2. PWM Frequency

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

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

Optional :

Std (standard)  
High  
Mid (middle)  
Low

Smooth and delicate,  
human eye  
is comfortable.

\* It is recommended to  
use standard.

No flicker in  
video camera.

### 3. Mode

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

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

Optional : Dim  
CT  
RGB  
RGBW

### 4. Grey Level

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

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

Optional : 8bit

16bit (choose it if master controller  
support this function)

### 5. Dimming Curve

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

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

Optional : Standard  
Linear  
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: RGBW 8bit  
Curve: Standard  
Dim: Smo TOOL&v

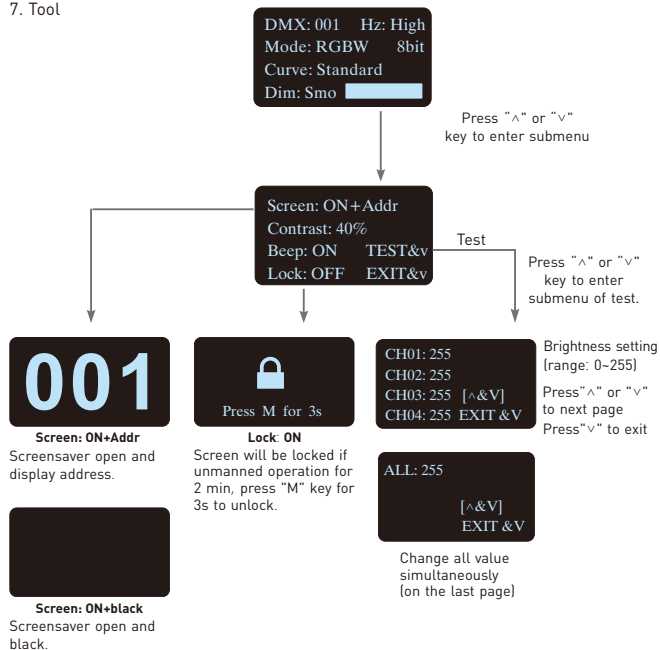
Press "^" or "v" key to choose.

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.

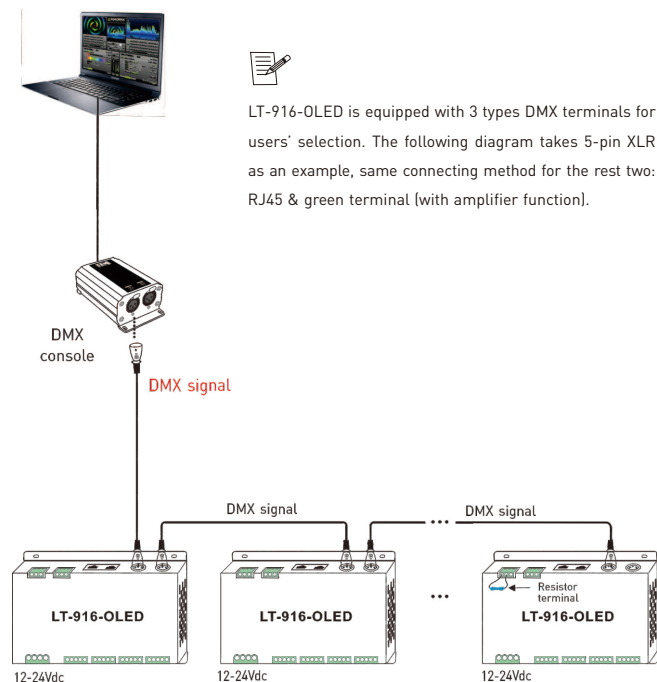
## 7. Tool



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

## Wiring Diagram:

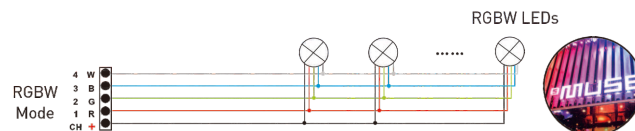
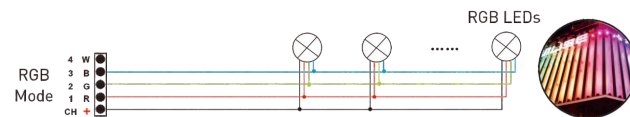
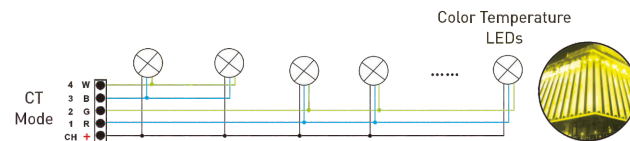
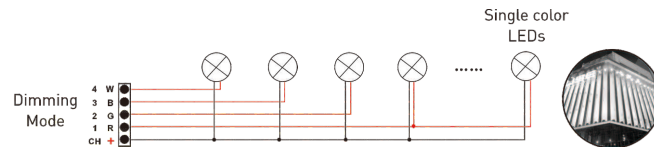
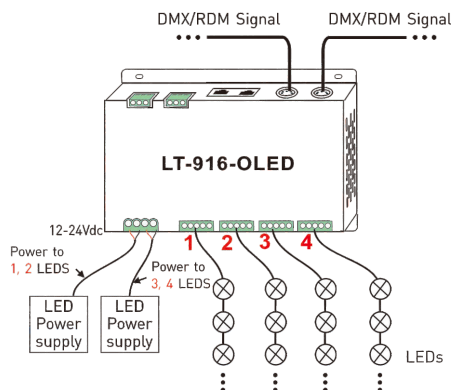
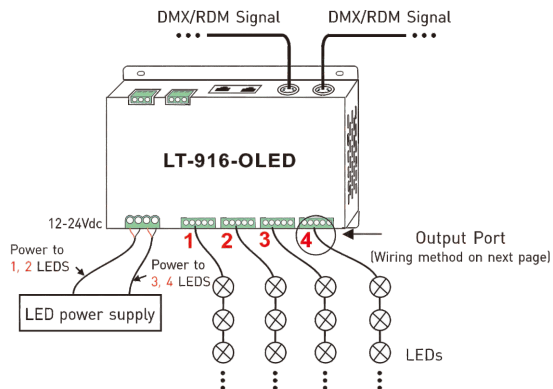
## 1. DMX console connection:



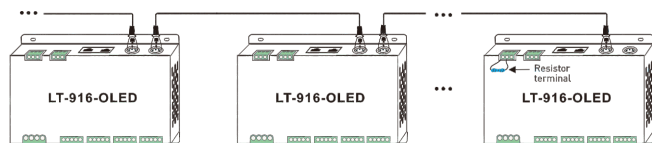
LT-916-OLED is equipped with 3 types DMX terminals for users' selection. The following diagram takes 5-pin XLR as an example, same connecting method for the rest two: RJ45 & green terminal (with amplifier function).

\* 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.

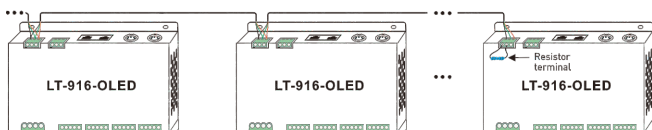
## 2. Connecting LED lights:



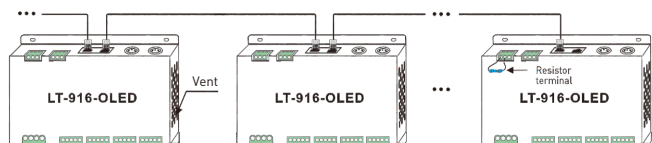
### 3. The connection diagram of 3 kinds of DMX/RDM terminals:



5-pin XLR Connected in Parallel



Green Terminal Connected in Parallel



Installation distance > 20mm

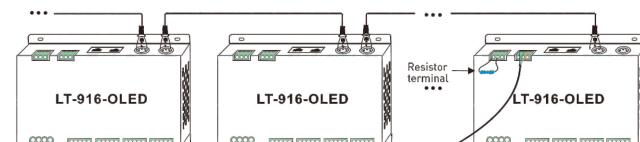
RJ45 Connected in Parallel

These 3 terminals can be connected in a mixed way.

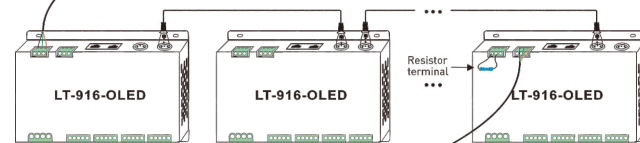
**\*Installation Attention :** please reserve enough ventilation distance between decoders (>20mm), be sure not to block the vent, or will affect lifetime of decoder for poor heat dissipation.

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

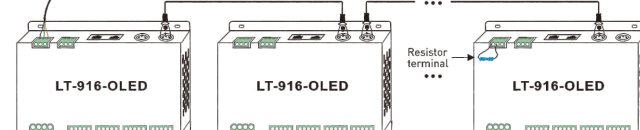
**\*** Connecting with green terminal or an extra amplifier will be needed when more than 32 decoders are connected or use overlong signal wire(as shown below). Signal amplifier should not be more than 5 times continuously.



AMP



AMP



Address setting table

| Mode             |    | DIM  | CT   | RGB  | RGBW |
|------------------|----|------|------|------|------|
| Address Quantity |    | 4    | 8    | 12   | 16   |
| Resolution       |    | 8bit | 8bit | 8bit | 8bit |
| Channel          | 1  | 001  | 001  | 001  | 001  |
|                  | 2  | 001  | 002  | 002  | 002  |
|                  | 3  | 001  | 001  | 003  | 003  |
|                  | 4  | 001  | 002  | 003  | 004  |
|                  | 5  | 002  | 003  | 004  | 005  |
|                  | 6  | 002  | 004  | 005  | 006  |
|                  | 7  | 002  | 003  | 006  | 007  |
|                  | 8  | 002  | 004  | 006  | 008  |
|                  | 9  | 003  | 005  | 007  | 009  |
|                  | 10 | 003  | 006  | 008  | 010  |
|                  | 11 | 003  | 005  | 009  | 011  |
|                  | 12 | 003  | 006  | 009  | 012  |
|                  | 13 | 004  | 007  | 010  | 013  |
|                  | 14 | 004  | 008  | 011  | 014  |
|                  | 15 | 004  | 007  | 012  | 015  |
|                  | 16 | 004  | 008  | 012  | 016  |

| Mode             |    | DIM        | CT         | RGB        | RGBW       |
|------------------|----|------------|------------|------------|------------|
| Address Quantity |    | 8          | 16         | 24         | 32         |
| Resolution       |    | 16bit      | 16bit      | 16bit      | 16bit      |
| Channel          | 1  | 001<br>002 | 001<br>002 | 001<br>002 | 001<br>002 |
|                  | 2  | 001<br>002 | 003<br>004 | 003<br>004 | 003<br>004 |
|                  | 3  | 001<br>002 | 001<br>002 | 005<br>006 | 005<br>006 |
|                  | 4  | 001<br>002 | 003<br>004 | 005<br>006 | 007<br>008 |
|                  | 5  | 003<br>004 | 005<br>006 | 007<br>008 | 009<br>010 |
|                  | 6  | 003<br>004 | 007<br>008 | 009<br>010 | 011<br>012 |
|                  | 7  | 003<br>004 | 005<br>006 | 011<br>012 | 013<br>014 |
|                  | 8  | 003<br>004 | 007<br>008 | 011<br>012 | 015<br>016 |
|                  | 9  | 005<br>006 | 009<br>010 | 013<br>014 | 017<br>018 |
|                  | 10 | 005<br>006 | 011<br>012 | 015<br>016 | 019<br>020 |
|                  | 11 | 005<br>006 | 009<br>010 | 017<br>018 | 021<br>022 |
|                  | 12 | 005<br>006 | 011<br>012 | 017<br>018 | 023<br>024 |
|                  | 13 | 007<br>008 | 013<br>014 | 019<br>020 | 025<br>026 |
|                  | 14 | 007<br>008 | 015<br>016 | 021<br>022 | 027<br>028 |
|                  | 15 | 007<br>008 | 013<br>014 | 023<br>024 | 029<br>030 |
|                  | 16 | 007<br>008 | 015<br>016 | 023<br>024 | 031<br>032 |