

# LTECH

## DMX512 DECODER

LT-924-OLED

**24**  
CHANNELS

OLED display

8 bit / 16 bit

4 kinds of DMX interfaces

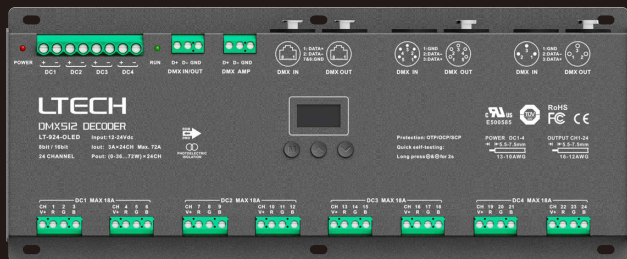
Dimming curve: 0.1-9.9

Short circuit / Over current / Overheat protection

**CAL**  
US  
E500585



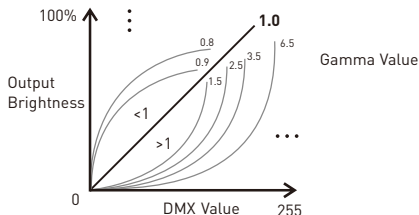
  
Photoelectric  
isolation



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

## Product introduction

1. Designed for Hi-power multiple channels application, 24 channels output, and Max. 3A current per channel, up to 1728W output power.
2. Easy operation with OLED screen and touch buttons.
3. 3 kinds of modes available: DIM, CT, RGB.
4. 3-pin XLR, 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 over temp. 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 custom 0.1-9.9 dimming curve.



3-pin XLR



5-pin XLR



RJ45



RDM

Photoelectric  
isolationShort circuit  
protectionOverheat  
protectionOver current  
protection

Display

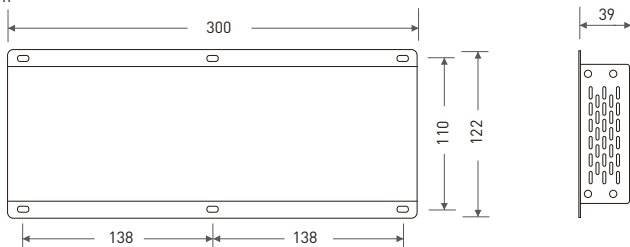
## Technical specs

|                           |                                                                               |
|---------------------------|-------------------------------------------------------------------------------|
| Model :                   | LT-924-OLED                                                                   |
| Input signal :            | DMX512/RDM                                                                    |
| Input voltage :           | 12~24Vdc                                                                      |
| Current load :            | 3A × 24CH Max. 72A                                                            |
| Output power :            | [0~36W...72W] × 24CH Max. 1728W                                               |
| DMX interfaces :          | 3-pin XLR, 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,<br>recover automatically. |
| Working temperature :     | -30°C~65°C                                                                    |
| Dimensions :              | 300×122×39mm(L×W×H)                                                           |
| Package size :            | 313×127×41mm(L×W×H)                                                           |
| Weight (G.W.) :           | 1180g                                                                         |

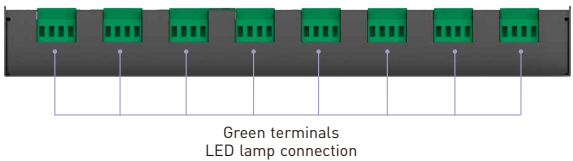
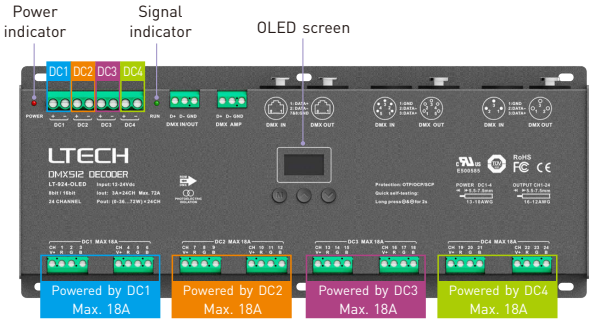


## Product size

Unit: mm



# Main component description



## OLED screen interface



Press "M" key, switch entries.

Long press "M" key, back to main page.

Press "^" or "v" key, parameter adjustment.

Exit: back to previous page.

### 1. DMX address settings

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

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

No flicker in video camera.

Available :

Std (standard)

High

Mid (middle)

Low

Smoother 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 "v" key to choose.

Available : DIM

CT/CT2

RGB

### 4. Grey scale

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

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

Available : 8bit

16bit (choose 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 "v" key to choose.

Available : 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.

Available : Std (standard)

Smo (smooth)

\* It is recommended to use standard.

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

## 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 without operating in two minutes .

Screen: ON+black

**Screen: ON+black**

Screensaver open and black without operating in two 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 [∧&∨]  
EXIT & ∨

Brightness setting  
(range: 0~255)  
Press "∧" or "∨"  
to next page.  
Press "∨" to exit.

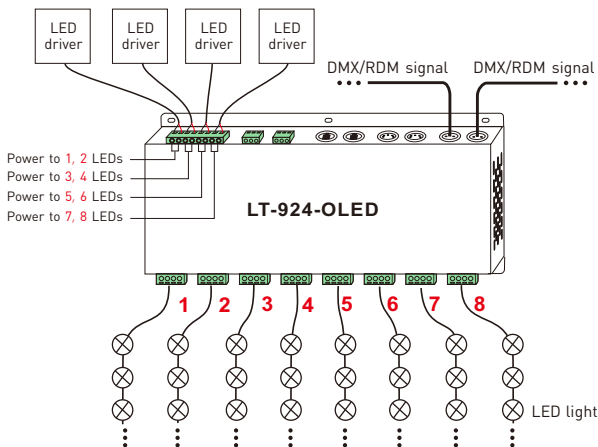
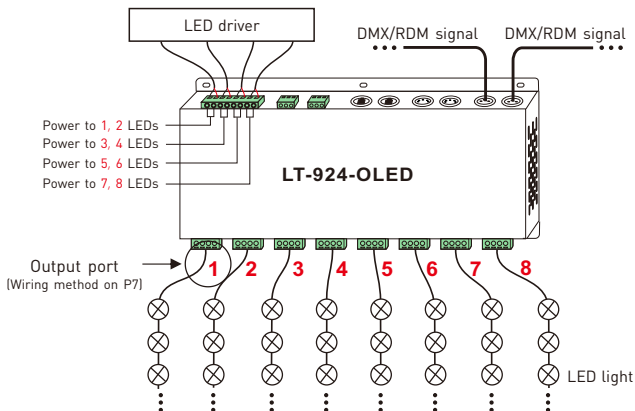
ALL: 255  
[∧&∨]  
EXIT & ∨

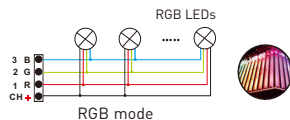
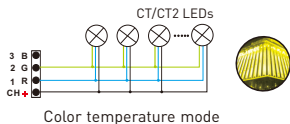
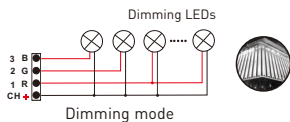
Change all value  
simultaneously.  
(on the last page)

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

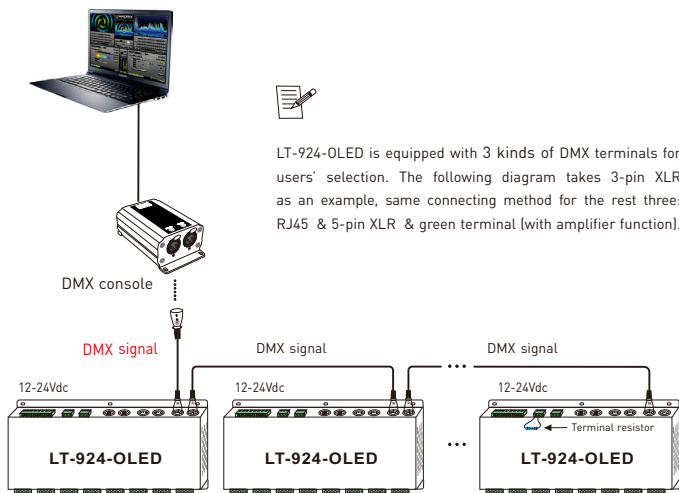
## Wiring diagram

### 1. Connecting LED lights:



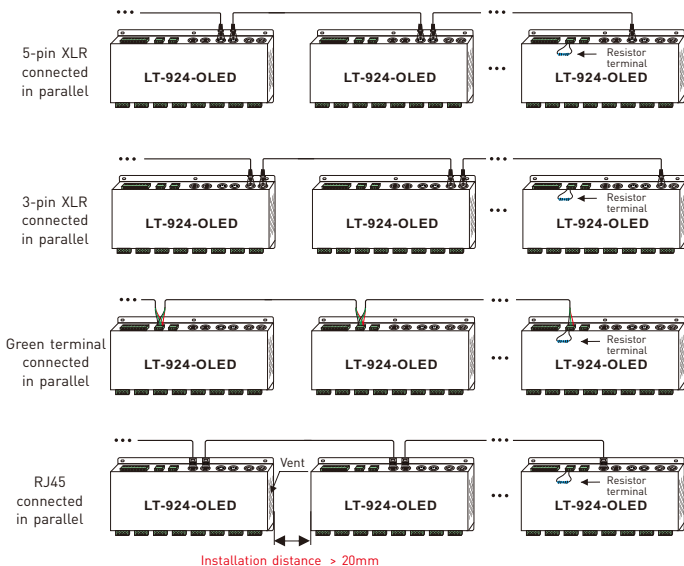


## 2. DMX console connection:



\* 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 4 kinds of DMX/RDM terminals:

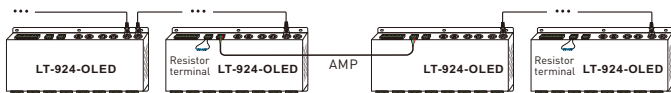


These 4 terminals can be connected in a mixed way.

- \* **Installation attentions:** 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

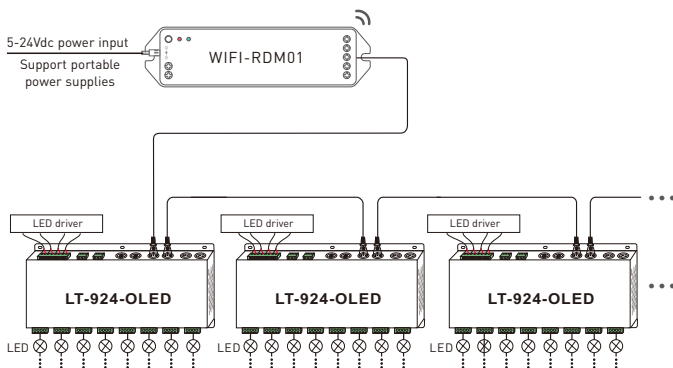
| Mode             | DIM  | CT/CT2 | RGB     |
|------------------|------|--------|---------|
| Address quantity | 8    | 16     | 24      |
| Resolution       | 8bit | 8bit   | 8bit    |
| Channel          | 1    | 001    | 001 001 |
|                  | 2    | 001    | 002 002 |
|                  | 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 |
|                  | 13   | 005    | 009 013 |
|                  | 14   | 005    | 010 014 |
|                  | 15   | 005    | 010 015 |
|                  | 16   | 006    | 011 016 |
|                  | 17   | 006    | 012 017 |
|                  | 18   | 006    | 012 018 |
|                  | 19   | 007    | 013 019 |
|                  | 20   | 007    | 014 020 |
|                  | 21   | 007    | 014 021 |
|                  | 22   | 008    | 015 022 |
|                  | 23   | 008    | 016 023 |
|                  | 24   | 008    | 016 024 |

| Mode             | DIM   | CT/CT2  | RGB     |
|------------------|-------|---------|---------|
| Address quantity | 16    | 32      | 48      |
| Resolution       | 16bit | 16bit   | 16bit   |
| Channel          | 1     | 001 002 | 001 002 |
|                  | 2     | 001 002 | 003 004 |
|                  | 3     | 001 002 | 003 004 |
|                  | 4     | 003 004 | 005 006 |
|                  | 5     | 003 004 | 007 008 |
|                  | 6     | 003 004 | 007 008 |
|                  | 7     | 005 006 | 009 010 |
|                  | 8     | 005 006 | 011 012 |
|                  | 9     | 005 006 | 011 012 |
|                  | 10    | 007 008 | 013 014 |
|                  | 11    | 007 008 | 015 016 |
|                  | 12    | 007 008 | 015 016 |
|                  | 13    | 009 010 | 017 018 |
|                  | 14    | 009 010 | 017 018 |
|                  | 15    | 009 010 | 019 020 |
|                  | 16    | 009 010 | 019 020 |
|                  | 17    | 011 012 | 021 022 |
|                  | 18    | 011 012 | 023 024 |
|                  | 19    | 011 012 | 023 024 |
|                  | 20    | 013 014 | 025 026 |
|                  | 21    | 013 014 | 027 028 |
|                  | 22    | 013 014 | 027 028 |
|                  | 23    | 015 016 | 029 030 |
|                  | 24    | 015 016 | 029 030 |

\* When you select CT2, the DMX address represents brightness, color temperature and constant power output respectively.

## Work with RDM editor

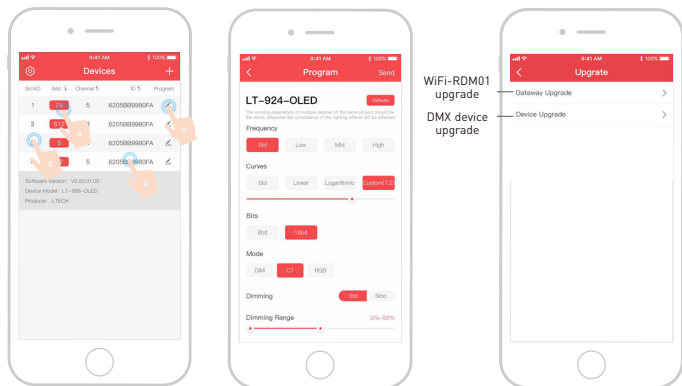
LT-924-OLED can work with LTECH RDM editor (Model: WiFi-RDM01) to realize changing the parameters by long-range setting, wiring diagram as below:



## RDM editor App interface instruction

Download the App, setting the LT-924-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 "✎", enter edited interface.
- d: Click "No.", issue the recognizing command.

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.

# LTECH 雷特

## DMX512 DECODER

LT-924-OLED



OLED显示屏

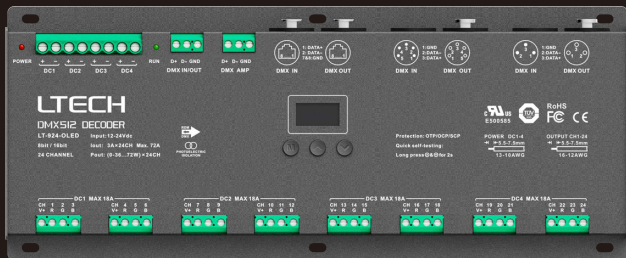
8 bit / 16 bit

4种DMX接口

调光曲线: 0.1-9.9

短路、过流、过温保护

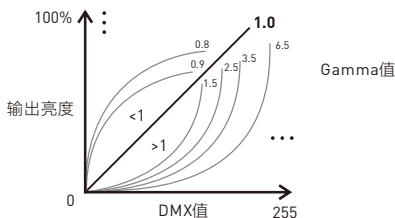
CALUS  
E500585



[www.ltech.cn](http://www.ltech.cn)

## 产品介绍

- 1、本产品为大功率多通道应用而设计，共有24个通道输出，每通道最大3A电流，总功率可高达 1728W；
- 2、使用OLED 屏和轻触按键组成人机界面，显示内容丰富，操作简单快捷；
- 3、具有3种模式选择：调光、色温、RGB；
- 4、提供3针XLR、5针XLR、绿色端子、RJ45四种具有光电信号隔离功能的DMX接口，提高信号传输效率和抗干扰能力，其中绿色端子还有信号放大功能。
- 5、具有RDM远程管理协议，通过RDM主控可对其进行参数浏览与设置、DMX地址修改、设备识别等操作；
- 6、具有固件升级功能；
- 7、具有短路、过流、过温保护与自动恢复功能，并有故障警示提示功能；
- 8、具有上电状态管理及快速自测功能。
- 9、16bit[65536级]/8bit[256级]灰度级可选。
- 10、标准、线性、对数及自定义0.1~9.9等调光曲线可选。



3针XLR



5针 XLR



RJ45



RDM



光电隔离



短路保护



过温保护



过流保护



显示

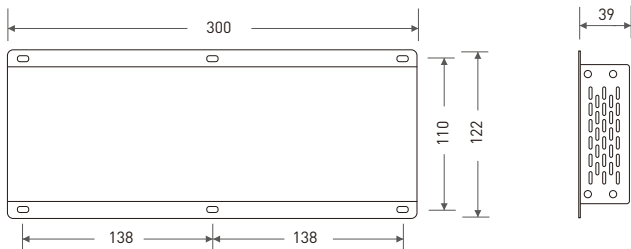
## 性能参数

|         |                              |
|---------|------------------------------|
| 产品型号：   | LT-924-OLED                  |
| 输入信号：   | DMX512/RDM                   |
| 输入电压：   | 12- 24Vdc                    |
| 负载电流：   | 3A×24路 Max. 72A              |
| 输出功率：   | [0~36W...72W]×24路 Max. 1728W |
| DMX接口：  | 3针XLR, 5针XLR, RJ45, 绿色端子     |
| 控制模式：   | 调光/色温/RGB                    |
| 调光曲线：   | 0.1~9.9, 标准, 线性, 对数          |
| 灰度等级：   | 8bit(256级)/16bit(65536级)可选   |
| 光电隔离：   | 有                            |
| 保护：     | 短路、过流、过温保护, 可自动恢复            |
| 工作温度：   | -30°C~65°C                   |
| 产品尺寸：   | L300×W122×H39mm              |
| 包装尺寸：   | L313×W127×H41mm              |
| 重量(毛重): | 1180g                        |

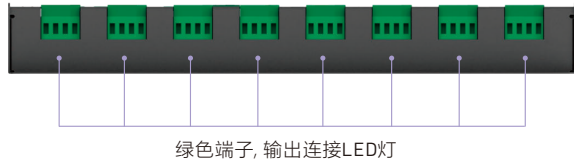
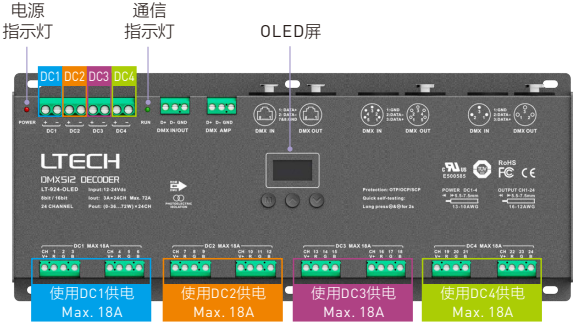


## 产品尺寸

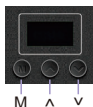
单位：mm



# 部件图



# OLED屏界面图



按M键，切换条目

长按M键，返回至主显示界面

按^或v键，调整参数

EXIT: 返回至上一级菜单

## 1、DMX地址设置

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

主显示界面

按^或v键，进行DMX地址设置

范围：1~512

## 2、PWM频率

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

按^或v键进行选择

可选项：

Std(标准) 拍摄无闪烁  
High(高)  
Mid(中)  
Low(低)  
平滑细腻 \* 推荐使用标准  
人眼舒适

## 3、模式

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

按^或v键进行选择

可选项：DIM(调光)、CT/CT2(色温)、RGB

## 4、灰度等级

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

按^或v键进行选择

可选项：8bit

16bit (主控支持此功能时，可使用)

## 5、调光曲线

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

按^或v键进行选择

可选项：Standard(标准)

Linear(线性)

Log(对数)

0.1~9.9

\* 推荐使用standard,

有特殊要求时可使用0.1-9.9

## 6、调光加强

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

按^或v键进行选择

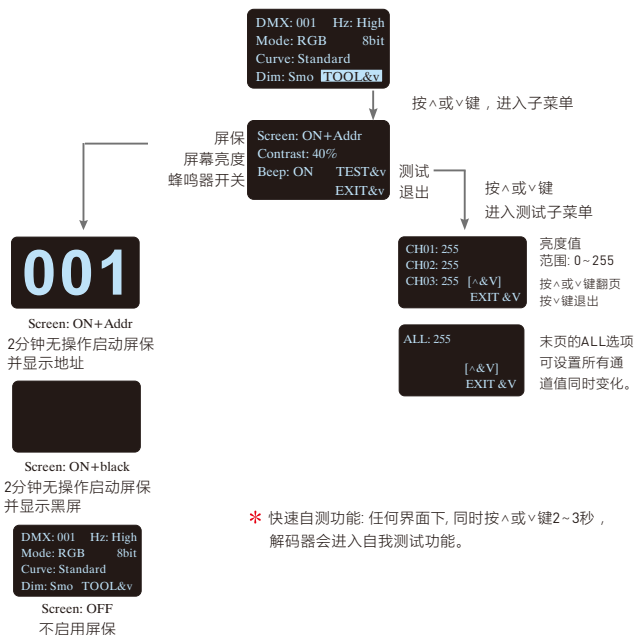
可选项: Std(标准)

Smo(平滑)

\* 推荐使用标准

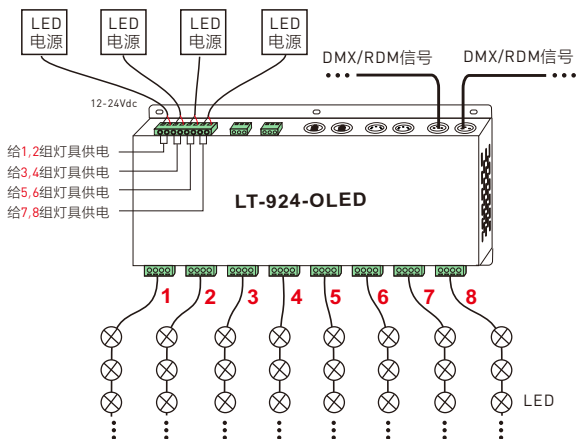
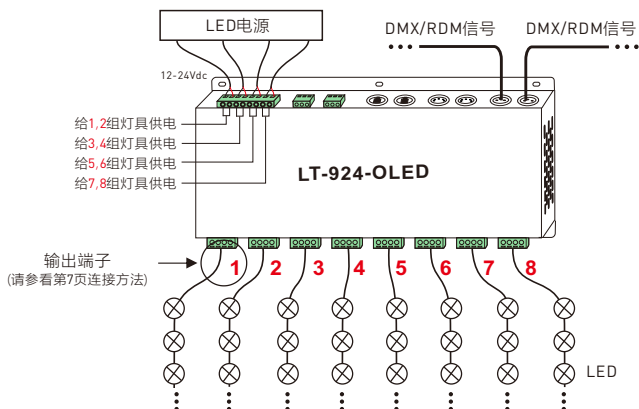
Smo: 该选项做了平滑处理, 实现调光无闪烁  
与动态效果更柔和

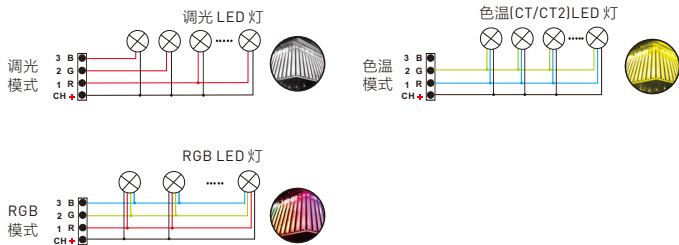
## 7、工具项



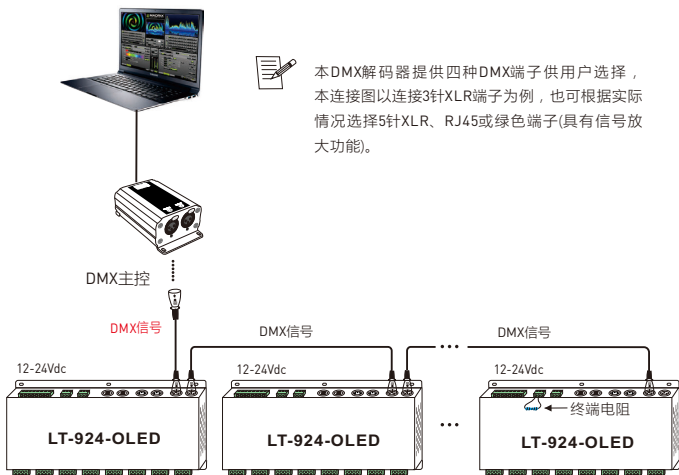
# 连接示意图

## 1. 连接LED灯



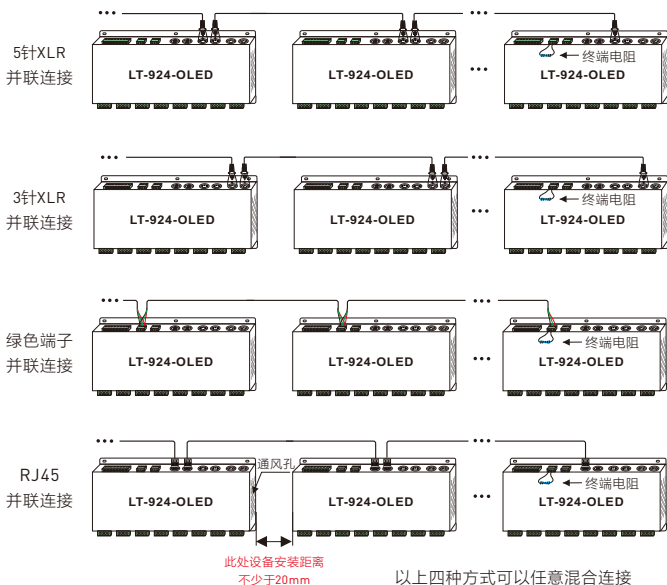


## 2. DMX系统连接



\* 当信号线较长或者线材质量等原因造成信号反冲效应影响使用，可以尝试在每路信号线末端连接0.25W 90-120Ω终端电阻解决。

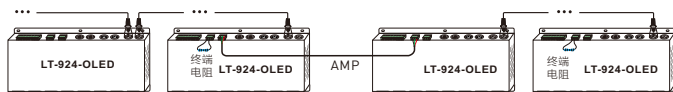
### 3. 四种DMX端口的连接示意图



\* 安装注意事项：请在解码器与解码器之间预留通风距离（最少20mm），切勿堵塞通风孔，否则会因设备散热不畅影响使用寿命。

### 4. AMP信号放大端子连接图

\* 当DMX解码器过多（超过32台），或信号线过长，需加信号放大器或使用绿色端子接口进行信号放大（见下图），信号放大不能连续超过5次。



模式地址设置表

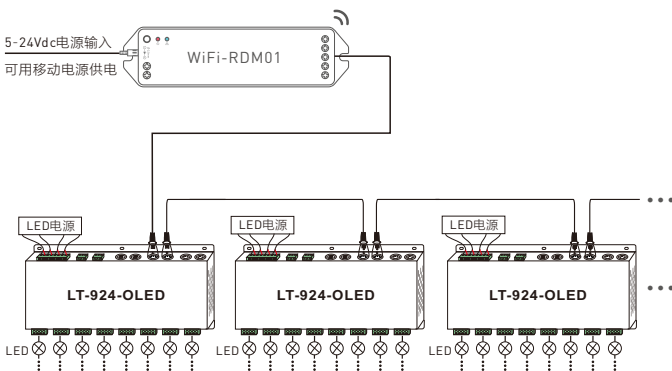
| 模式   | DIM  | CT/CT2 | RGB  |
|------|------|--------|------|
| 地址数量 | 8    | 16     | 24   |
| 分辨率  | 8bit | 8bit   | 8bit |
| 通道数  | 1    | 001    | 001  |
|      | 2    | 001    | 002  |
|      | 3    | 001    | 003  |
|      | 4    | 002    | 004  |
|      | 5    | 002    | 005  |
|      | 6    | 002    | 006  |
|      | 7    | 003    | 007  |
|      | 8    | 003    | 008  |
|      | 9    | 003    | 009  |
|      | 10   | 004    | 010  |
|      | 11   | 004    | 011  |
|      | 12   | 004    | 012  |
|      | 13   | 005    | 013  |
|      | 14   | 005    | 014  |
|      | 15   | 005    | 015  |
|      | 16   | 006    | 016  |
|      | 17   | 006    | 017  |
|      | 18   | 006    | 018  |
|      | 19   | 007    | 019  |
|      | 20   | 007    | 020  |
|      | 21   | 007    | 021  |
|      | 22   | 008    | 022  |
|      | 23   | 008    | 023  |
|      | 24   | 008    | 024  |

| 模式   | DIM   | CT/CT2     | RGB        |
|------|-------|------------|------------|
| 地址数量 | 16    | 32         | 48         |
| 分辨率  | 16bit | 16bit      | 16bit      |
| 通道数  | 1     | 001<br>002 | 001<br>002 |
|      | 2     | 001<br>002 | 003<br>004 |
|      | 3     | 001<br>002 | 005<br>006 |
|      | 4     | 003<br>004 | 007<br>008 |
|      | 5     | 003<br>004 | 009<br>010 |
|      | 6     | 003<br>004 | 011<br>012 |
|      | 7     | 005<br>006 | 013<br>014 |
|      | 8     | 005<br>006 | 015<br>016 |
|      | 9     | 005<br>006 | 017<br>018 |
|      | 10    | 007<br>008 | 019<br>020 |
|      | 11    | 007<br>008 | 021<br>022 |
|      | 12    | 007<br>008 | 023<br>024 |
|      | 13    | 009<br>010 | 025<br>026 |
|      | 14    | 009<br>010 | 027<br>028 |
|      | 15    | 009<br>010 | 029<br>030 |
|      | 16    | 011<br>012 | 031<br>032 |
|      | 17    | 011<br>012 | 033<br>034 |
|      | 18    | 011<br>012 | 035<br>036 |
|      | 19    | 013<br>014 | 037<br>038 |
|      | 20    | 013<br>014 | 039<br>040 |
|      | 21    | 013<br>014 | 041<br>042 |
|      | 22    | 015<br>016 | 043<br>044 |
|      | 23    | 015<br>016 | 045<br>046 |
|      | 24    | 015<br>016 | 047<br>048 |

\* 当选择模式为CT2时，DMX地址分别表示亮度及色温，恒功率输出。

## 与RDM编辑器配合使用

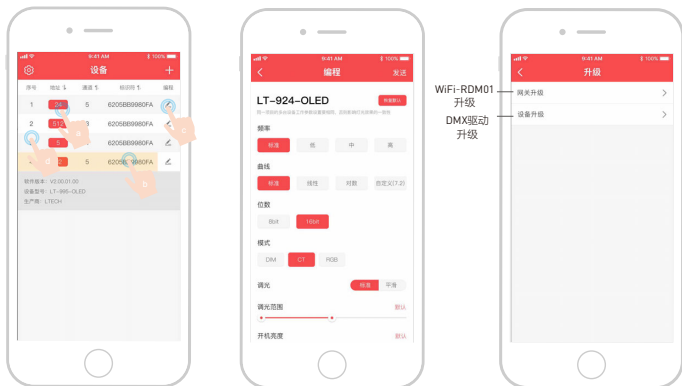
LT-924-OLED可以与我司RDM编辑器（型号WiFi-RDM01）配合使用，以实现手机远程浏览与设置参数、固件升级等，连接图如下：



## RDM编程器APP界面介绍

手机下载APP，与RDM编辑器连接成功后，即可通过APP设置LT-924-OLED所有参数如频率、位数、曲线、模式、调光范围、屏保等参数，具体请参看WiFi-RDM01的使用说明书。

配套使用WiFi-RDM01后，即可实现先安装再用APP设置参数及进行固件升级，随心更改，免高空作业。



- a: 点击“地址”对应方框可编辑地址；
- b: 点击“标识符”出现产品详细信息；
- c: 点击编程按钮“”则进入编辑界面；
- d: 点击序号发出识别命令。

在APP进行固件升级

\* 本说明书的内容如有变更，恕不另行通知。  
若内容与您使用的功能有所不同，则以实物为准。  
如有疑问，欢迎向我司授权的经销商咨询。