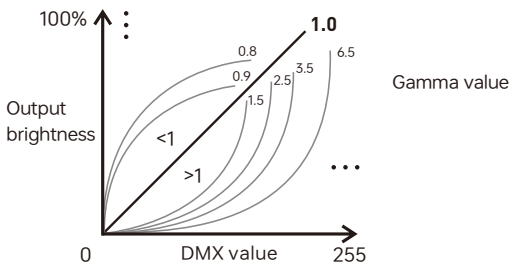


OLED display
8 bit / 16 bit
3 kinds of DMX interfaces
Dimming curve: 0.1~9.9
Short circuit / Over current / Overheat protection

[illegible]

Product introduction

1. Designed for Hi-power multiple channels application, 12 channels output, and Max. 5A current per channel, up to 1440W output power.
2. Easy operation with OLED screen and touch buttons.
3. 3 kinds of optional modes available: DIM, CT, RGB.
4. 3-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.



3-pin XLR



RJ45



RDM



Photoelectric
isolation



Short circuit
protection



Overheat
protection



Over current
protection



Display

Technical specs

Model :	D12
Input signal :	DMX512/RDM
Input voltage :	12-24Vdc
Current load :	5A × 12CH Max. 60A
Output power :	(0~60W...12W) × 12CH Max. 1440W
DMX interfaces :	3-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~55°C
Dimensions :	180×122×39mm(L×W×H)
Package size :	193×127×41mm(L×W×H)
Weight (G.W.) :	730g

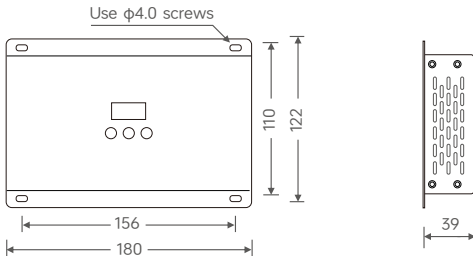


RoHS

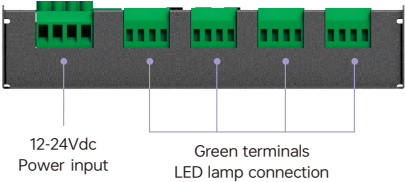
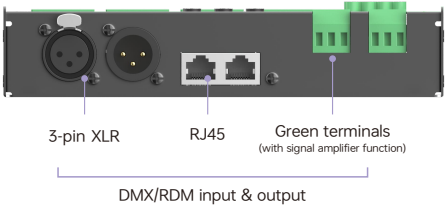
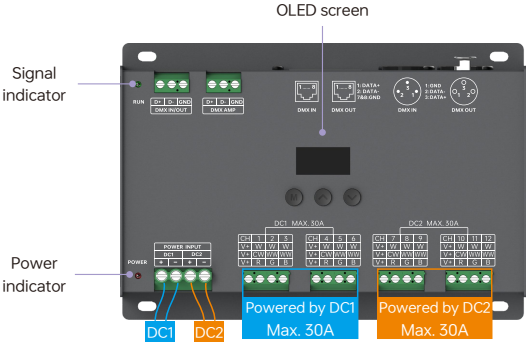
(5-Year)
(Warranty)

Product size

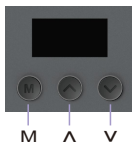
Unit: mm



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.

Option :



Std (standard)
High
Mid (middle)
Low

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 "v" 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 "v" 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 "v" 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
```

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.

7. Tool

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

Press “^” or “v”
key to enter submenu

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

Press “^” or “v”
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 “v”
to next page
Press “v” to exit

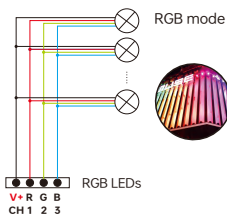
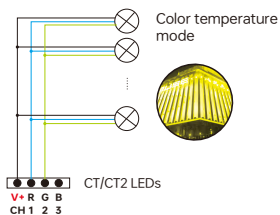
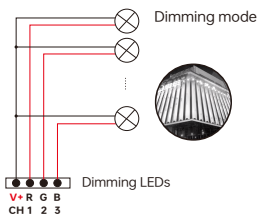
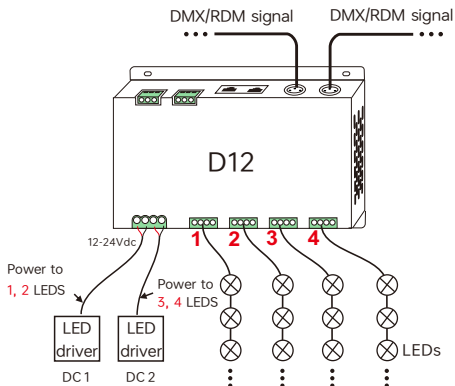
```
ALL: 255
      [^&v]
      EXIT &v
```

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.

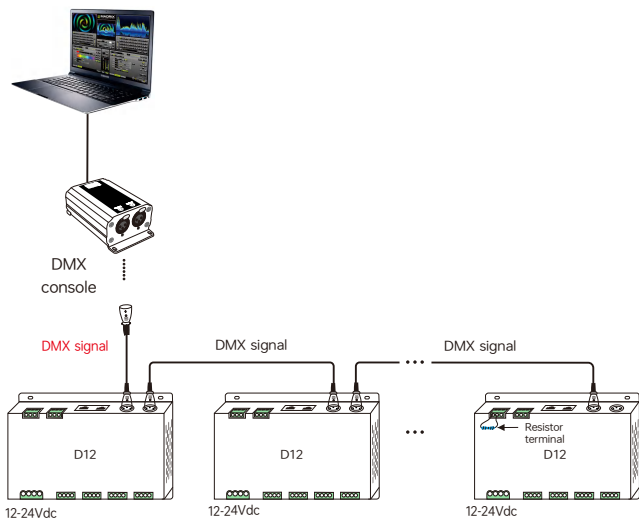
Wiring diagram

1. Connecting LED lights:



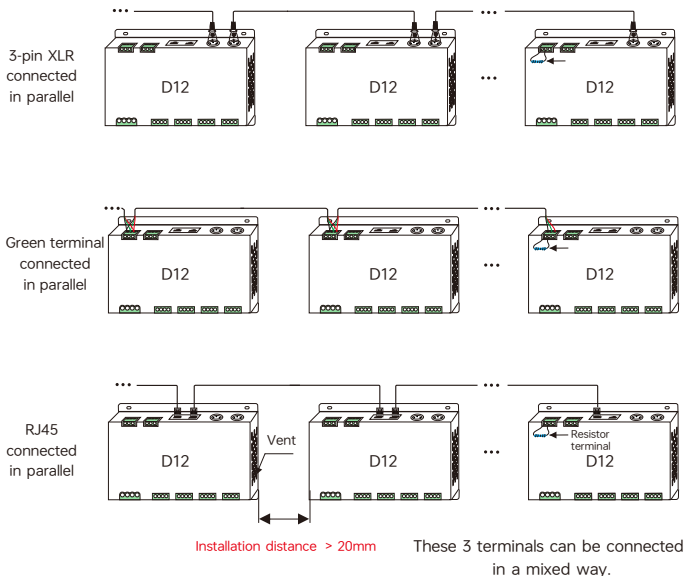
2. DMX console connection:

D12 is equipped with 3 kinds of DMX terminals for users' selection. The following diagram takes 3-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 90-120 Ω terminal resistor at the end of each line.

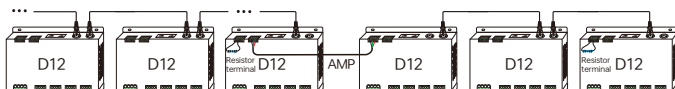
3. The connection diagram of 3 kinds of DMX/RDM terminals:



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.



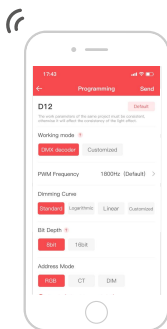
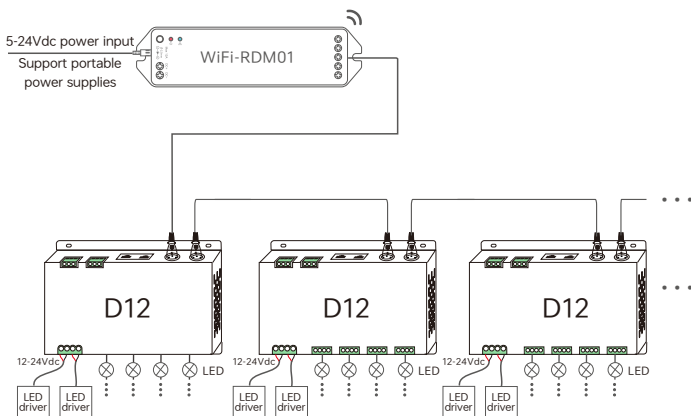
Address setting table

Mode		DIM	CT/CT2	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/CT2	RGB
Address Quantity		8	16	24
Resolution		16bit	16bit	16bit
Channel	1	001 002	001 002	001 002
	2	001 002	003 004	003 004
	3	001 002	003 004	005 006
	4	003 004	005 006	007 008
	5	003 004	007 008	009 010
	6	003 004	007 008	011 012
	7	005 006	009 010	013 014
	8	005 006	011 012	015 016
	9	005 006	011 012	017 018
	10	007 008	013 014	019 020
	11	007 008	015 016	021 022
	12	007 008	015 016	023 024

Work with RDM editor

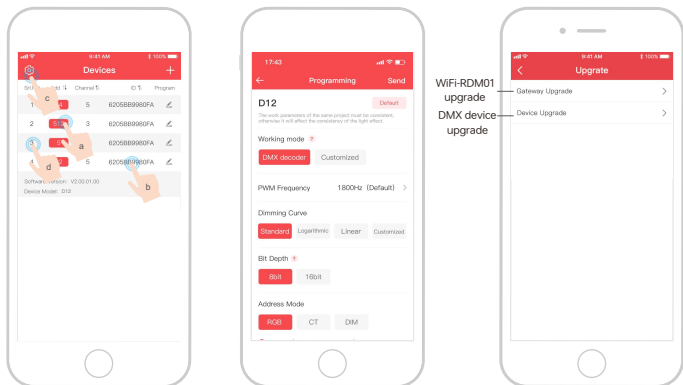
D12 can work with LTECH RDM editor (Model: WiFi-RDM01) to realize changing the parameters by long-range setting, wiring diagram as below:



RDM editor App interface instruction

Download the App, setting the D12 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.

Supporting WiFi-RDM01 upgrade and DMX driver upgrade.

Attention

- Product installation and commissioning should be done by a qualified professional.
- Our company products are and not lightningproof non-waterproof(special models excepted). Please avoid the sun and rain. When installed outdoors, please ensure they are mounted in a waterproof enclosure or in an area equipped with lightning protection devices.
- Good heat dissipation will prolong the working life of products. Please ensure good ventilation.
- Please check if the working voltage used complies with the parameter requirements of products.
- The diameter of wire used must be able to load the light fixtures you connect and ensure the firm wiring.
- Before you power on products, please make sure all the wiring is correct in case of incorrect connection that causes damage to light fixtures.
- If a fault occurs, please do not attempt to fix products by yourself. If you have any question, please contact your suppliers.

Warranty Agreement

- Warranty periods from the date of delivery: 5 years.
- Free repair or replacement services for quality problems are provided within warranty periods.

Warranty exclusions below:

Following conditions are not within the guarantee range of free repairing or replacement services:

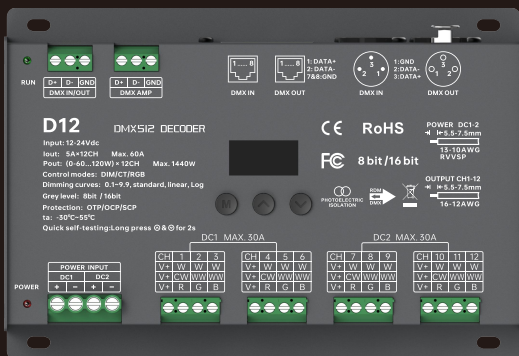
- Beyond warranty periods.
 - Any artificial damage caused by high voltage, overload, or improper operations.
 - Products with severe physical damage.
 - Damage caused by natural disasters and force majeure.
 - Warranty labels and barcodes have been damaged.
 - No any contract signed by our company.
1. Repair or replacement provided is the only remedy for customers. Our company is not liable for any incidental or consequential damage unless it is within the law.
 2. Our company has the right to amend or adjust the terms of this warranty, and release in written form shall prevail.
- * 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.



OLED显示屏
8 bit / 16 bit
3种DMX接口
调光曲线: 0.1-9.9
短路、过流、过温保护

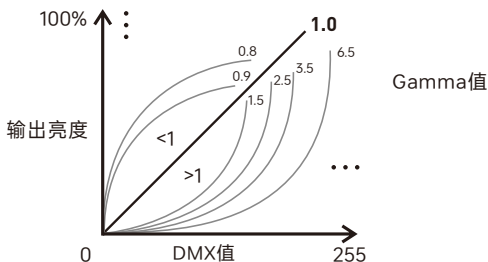
D12

DMX512 DECODER



产品介绍

- 1、本产品为大功率多通道应用而设计，共有12个通道输出，每通道最大5A电流，总功率可高达1440W；
- 2、使用OLED屏和3个按键组成人机交互界面，显示内容丰富，操作简单快捷；
- 3、具有调光、色温、RGB 3种模式选择；
- 4、提供3针XLR、绿色端子、RJ45三种具有信号隔离功能的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



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：	D12
信号输入：	DMX512/RDM
输入电压：	12- 24Vdc
负载电流：	5A×12路 Max. 60A
输出功率：	(0~60W...120W)×12路 Max. 1440W
DMX接口：	3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℃~55℃
产品尺寸：	L180×W122×H39mm
包装尺寸：	L193×W127×H41mm
重量(毛重):	730g

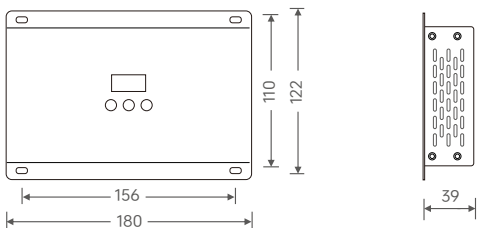


RoHS

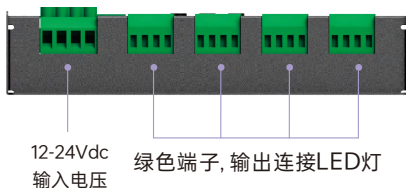
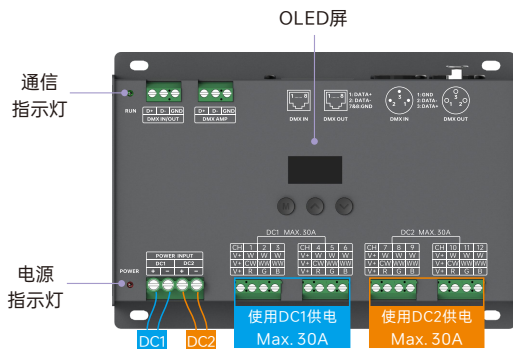
[质保5年]

产品尺寸

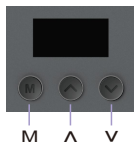
单位: mm



部件图

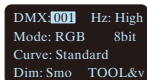


OLED屏界面图



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



主显示界面

按^或v键，进行DMX地址设置
范围：1~512

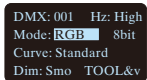
2、PWM频率



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



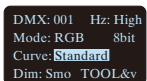
按^或v键进行选择
可选项：DIM(调光)、CT(色温)、RGB

4、灰度等级



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



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

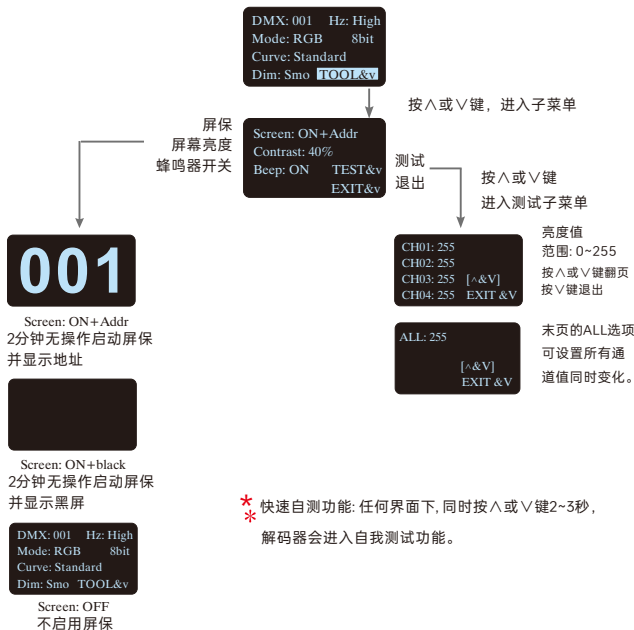
可选项: Std (标准)

Smo (平滑)

* 推荐使用标准

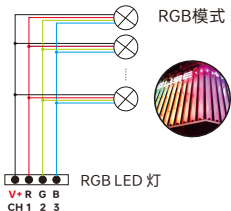
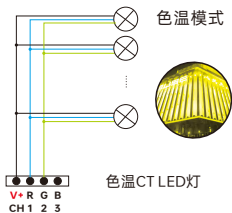
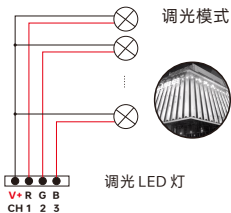
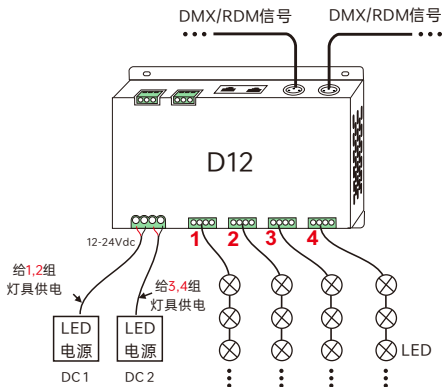
Smo: 该选项做了平滑处理, 实现调光无闪烁与动态效果更柔和

7、工具项



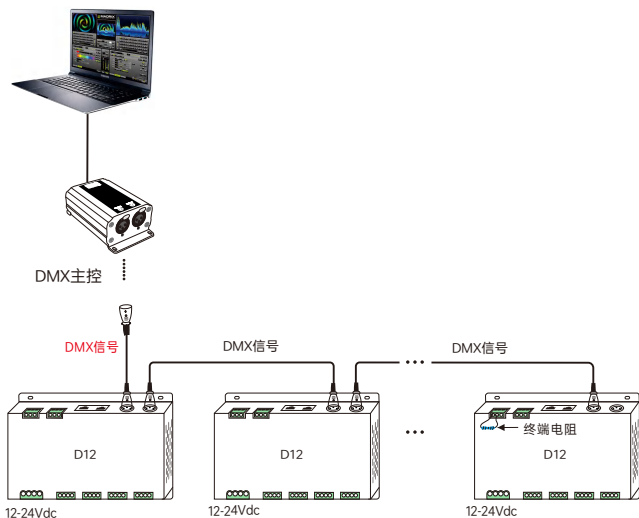
连接示意图

1. 连接LED灯



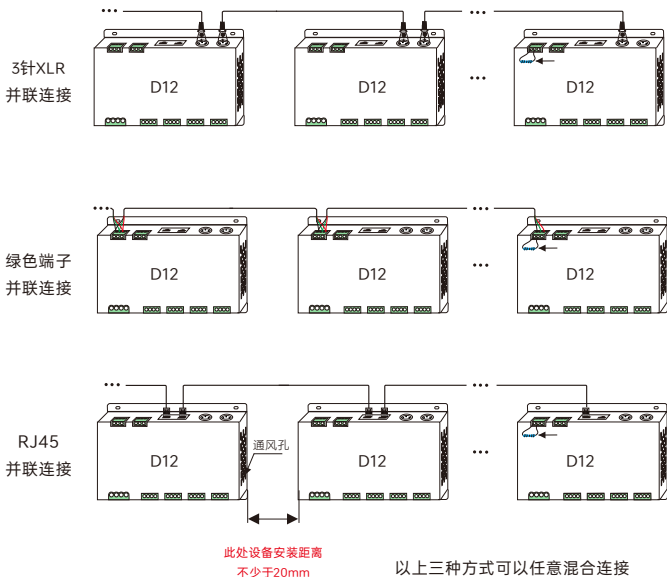
2. DMX解码模式连接

本DMX解码器提供三种DMX端子供用户选择, 本连接图以连接3针XLR端子为例, 也可根据实际情况选择3针XLR、RJ45或绿色端子 (具有信号放大功能)。



✱ 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。

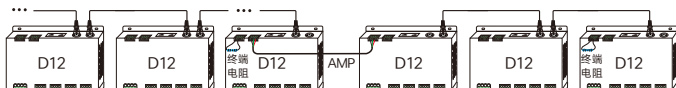
3 三种DMX端口的连接示意图



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。



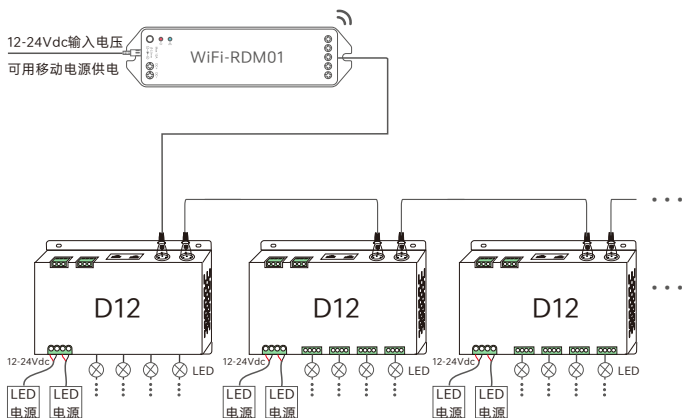
模式地址设置表

模式		DIM	CT/CT2	RGB
地址数量		4	8	12
分辨率		8bit	8bit	8bit
通道数	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

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

与RDM编辑器配合使用

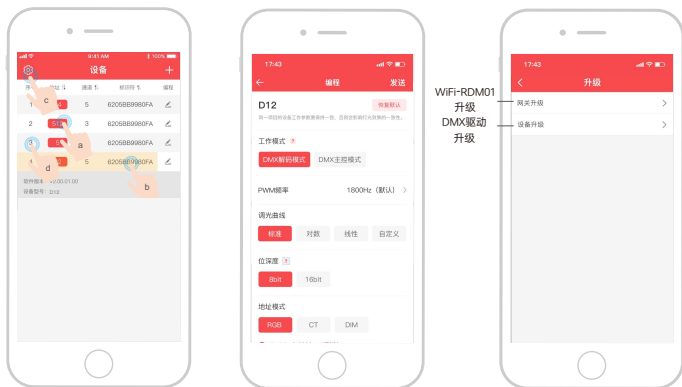
D12可以与我司RDM编辑器（型号WiFi-RDM01）配合使用，以实现手机远程浏览与设置参数、固件升级等，连接图如下：



RDM编辑器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D12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

注意事项

- 请由具有专业资格的人员进行调试安装；
- 我司产品（专有型号除外）不能防水防雷，需避免日晒雨淋，如安装在户外，请用防水箱和防雷装置；
- 良好的散热条件会延长产品的使用寿命，请把产品安装在通风良好的环境；
- 请检查使用的工作电压是否符合产品的参数要求；
- 使用的电线直径大小必须能够负载连接的LED灯具，并确保接线牢固；
- 通电调试前，应确保所有接线正确，避免因接线错误而导致灯具损坏；
- 如果发生故障，请勿私自维修；如有疑问，请联系供应商。

保修条例

- 自出厂之日起保修服务期为5年。
- 在保修服务期内出现产品质量问题我司将给予免费修理或更换服务。

非保修条例：

属下列情况不在免费保修或更换服务范围之内：

- 已经超出保修期限的；
- 过高电压、超负载、操作不当等人为造成的损坏；
- 产品外形严重损坏或变形；
- 自然灾害以及人力不可抗拒原因造成的损坏；
- 产品保修标签和产品唯一条形码损坏；
- 无我司签订的合同或发票凭证。

1. 修理或更换是我司对客户的唯一补救措施。我司不承担任何附带引起的损害赔偿，除非在适用法律范围之内。

2. 我司享有修正或调整本保修条款的权利，并以书面形式发布为准。

* 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。