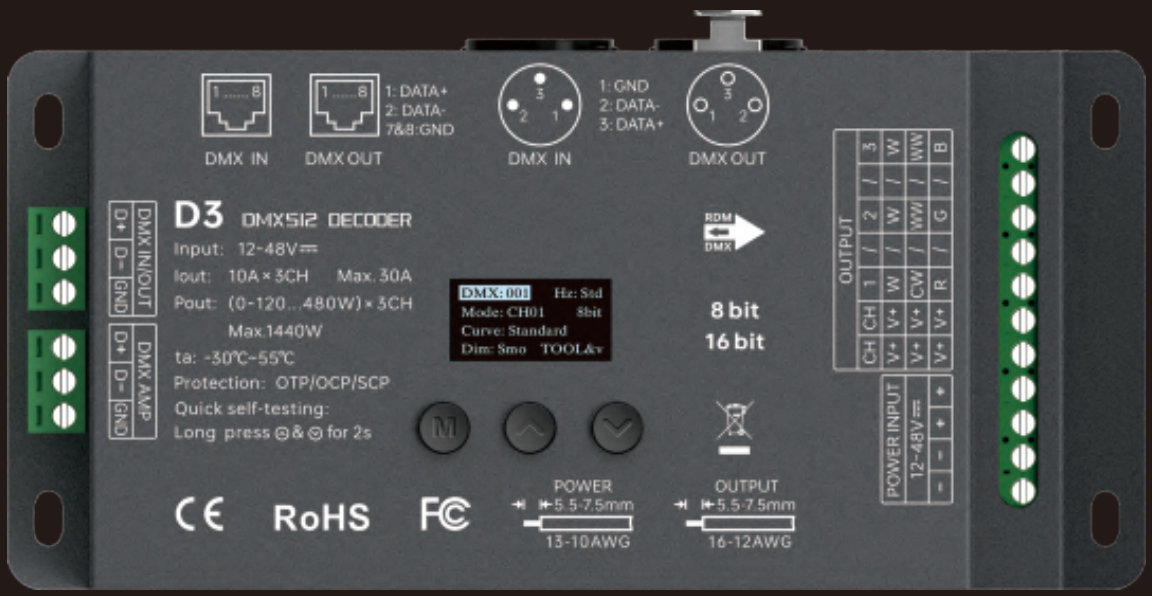
3
CHANNELS

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

D3

DMX512 DECODER



RDM DMX · FC · CE · RoHS · 5-year warranty

Product introduction

1、Designed for Hi-power multiple channels application, 3 channels output, and Max. 10A current per channel, up to 1440W output power.

2、The human-computer interaction interface is composed of an OLED screen and 3 buttons, which displays rich content and is simple and fast to operate.

3、The number of DMX channels can be set to CH01/CH02/CH03, which can realize independent address independent channel control, or one address to control multiple channels.

4、The PWM frequency can be set to 300/600/1200/1500/1800/2400/3600/7200/10800/14400/18000Hz;

5、Features three DMX interfaces: 3-pin XLR, green terminal, and RJ45, enhancing signal transmission efficiency and interference resistance. The green terminal additionally provides signal amplification.

6、With the operations can be completed via the RDM master console, such as parameters browsing & settings, DMX address settings,equipment recognition, etc.

7、DMX master control mode;

8、With firmware upgrade function.

9、With short circuit, over current and over temp. protection, as well as warning function when a fault occurs.

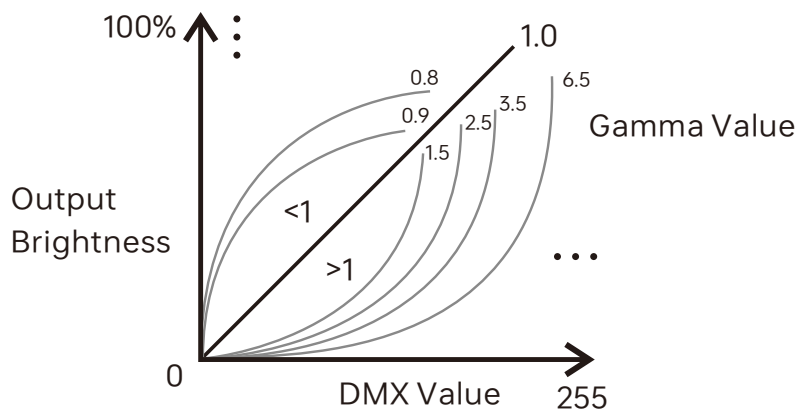
10、With power-on state management and fast self-testing function.

11、16bit (65536 levels) / 8bit (256 levels) grey level available.

12、Available for standard, linear, LOG or custom 0.1-9.9 dimming curve.

13、The device has 10 built-in personalized lighting effects. You can enter the setting interface of the DMX master mode and select different lighting effects to achieve precise output control of other decoders.

14、Parameters can be set and modified through the RDM master control or mobile phone APP, eliminating the need for high-altitude operations.



3-pin XLR

RJ45

RDM

Short circuit protection

Overheat protection

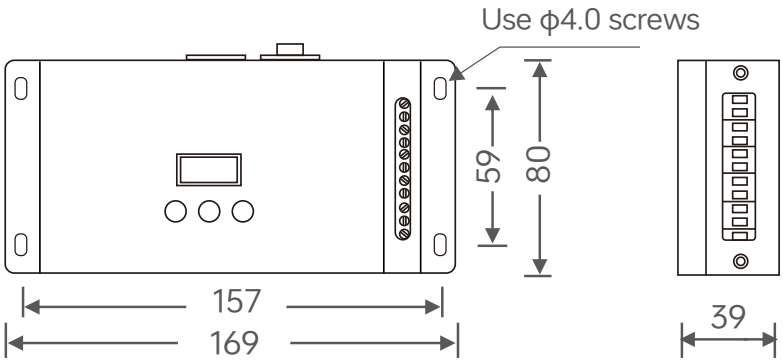
Over current protection

Display

Technical Specs

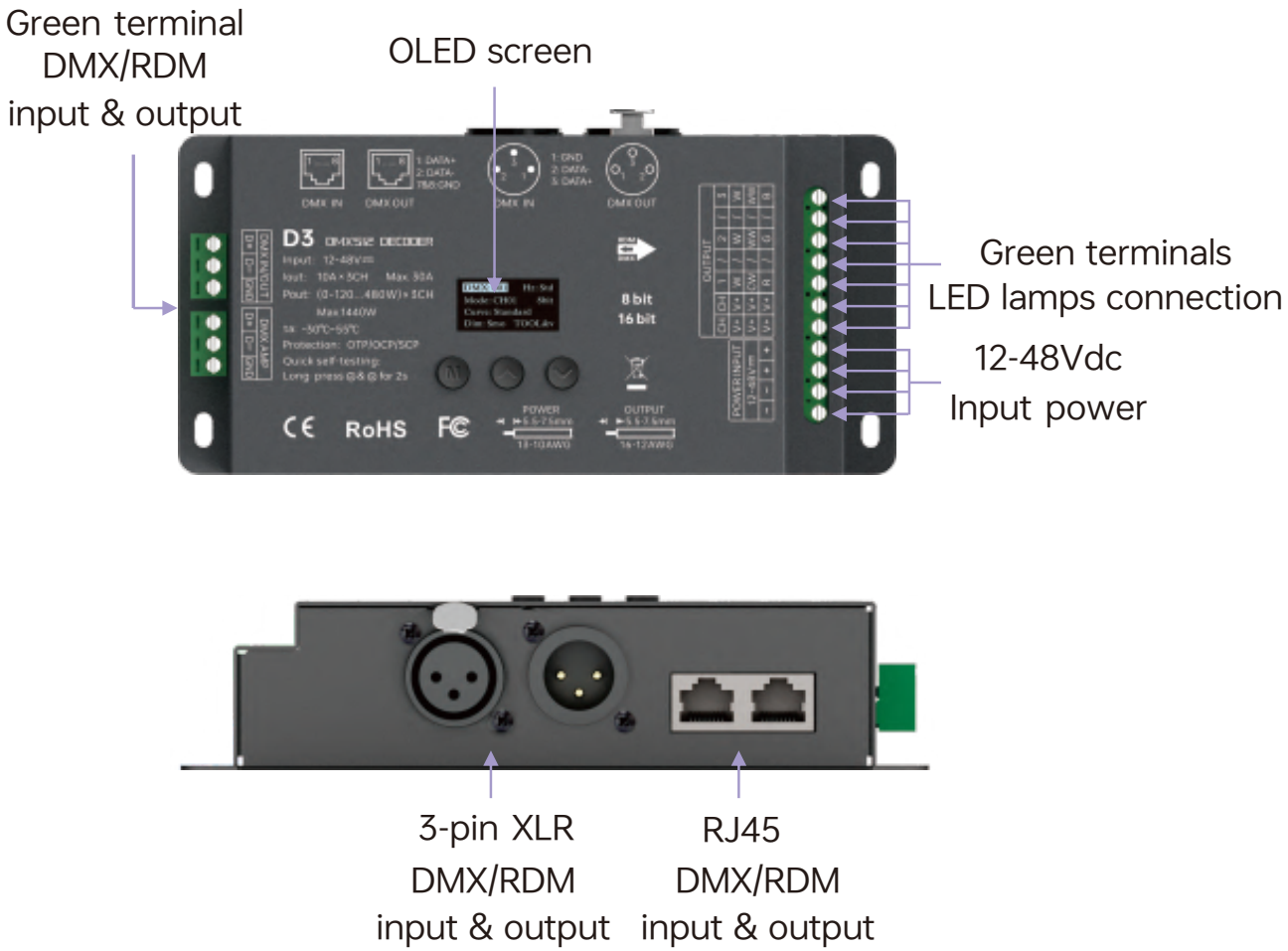
Model:	D3
Input Signal:	DMX512/RDM
Input Voltage:	12- 48Vdc
Current Load:	10A × 3CH Max. 30A
Output Power:	(0~120W...480W) × 3CH Max. 1440W
DMX Interface:	3-pin XLR, RJ45, green terminal
Control Mode:	DIM/CT/RGB
Dimming Curve:	0.1~9.9, standard, linear, LOG
Grey Level:	8bit (256 levels) / 16bit (65536 levels)
Protection:	Short circuit / Over current / Over-heat protection, recover automatically
Working Temperature:	-30°C~55°C
Dimensions:	L169×W80×H39mm
Package Size:	L182×W91×H41mm
Weight (G.W.):	550g

Unit: mm

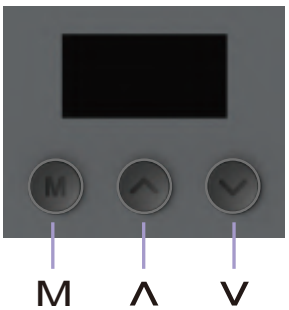


RDM DMX FC CE RoHS 5-Year Warranty

Main Component Description



OLED Screen Interface

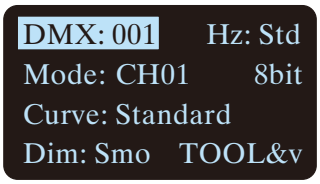


Press "M" key, switch entries.

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

Press " " or " " key, parameter adjustment.
Exit: back to previous page.

1、DMX address settings

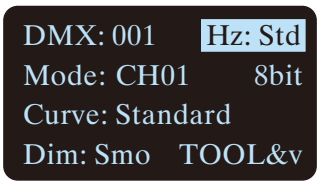


Main page

Press “∧” or“∨” key to set DMX address.

Range: 001~512,Default display 001

2、PWM frequency



Press M and press “∧” or“∨”key to select

Available:

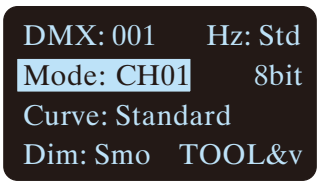
300Hz 600Hz 1200Hz

1500Hz 1800Hz 2400Hz

3600Hz 7200Hz 10800Hz

14400Hz 18000Hz Std(acquiesce)

3、Number of DMX channels

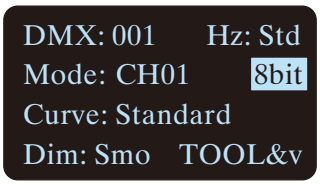


Press M and press “∧” or“∨”key to select

Available:

CH01、CH02、CH03(acquiesce)

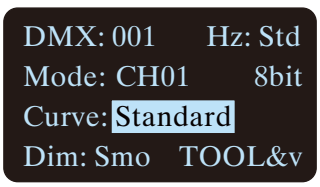
4、Grey scale



Press M and press“∧” or“∨”key to select

Available: 8bit、16bit, 8bit(acquiesce)

5、Dimming curves

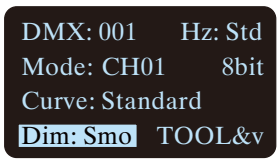


Press M and press“∧” or“∨”key to select

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



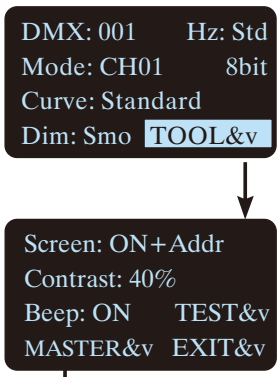
Press M and press“∧” or“∨”key to select

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



Press “∧” or“∨” key to enter submenu.

Screensaver
Screen brightness
Buzzer switch

Test
Quit

Press M and press“∧” or“∨”key to selectThe Test submenu is displayed

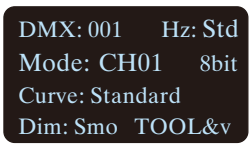
Control Mode

Screen: ON+Addr

Screensaver open and display addres without operating in two minutes

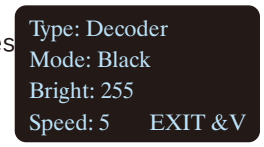
Screen: ON+black

Screensaver open and black without operating in two minutes

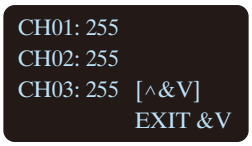


Screen: OFF

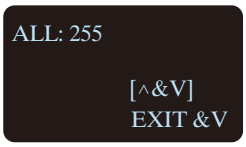
Screensaver not enable



Can set
Light display effect
Speed class
Brightness level



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

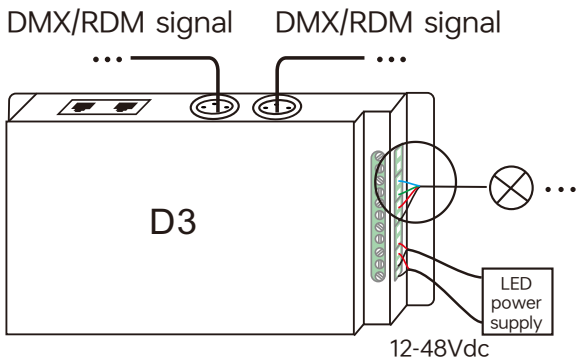


Change all value simultaneously. (on the last page)

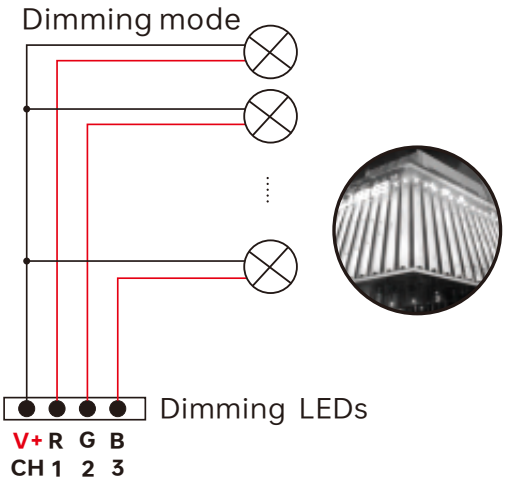
* Fast self-testing function: press “∧” or“∨”keys simultaneously for 2-3 seconds under any page, decoder will enter self-testing function

Wiring Diagram

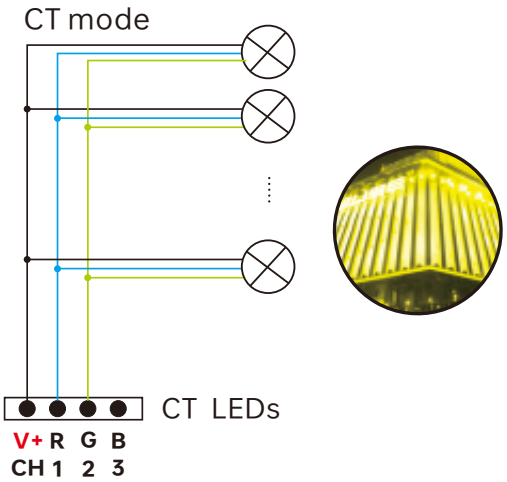
1 Connecting LED lights:



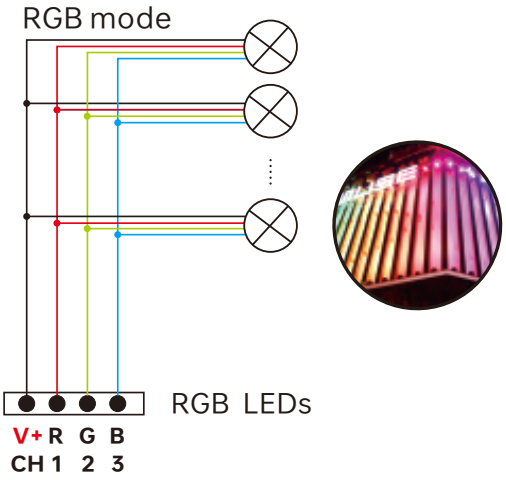
Dimming mode



CT mode

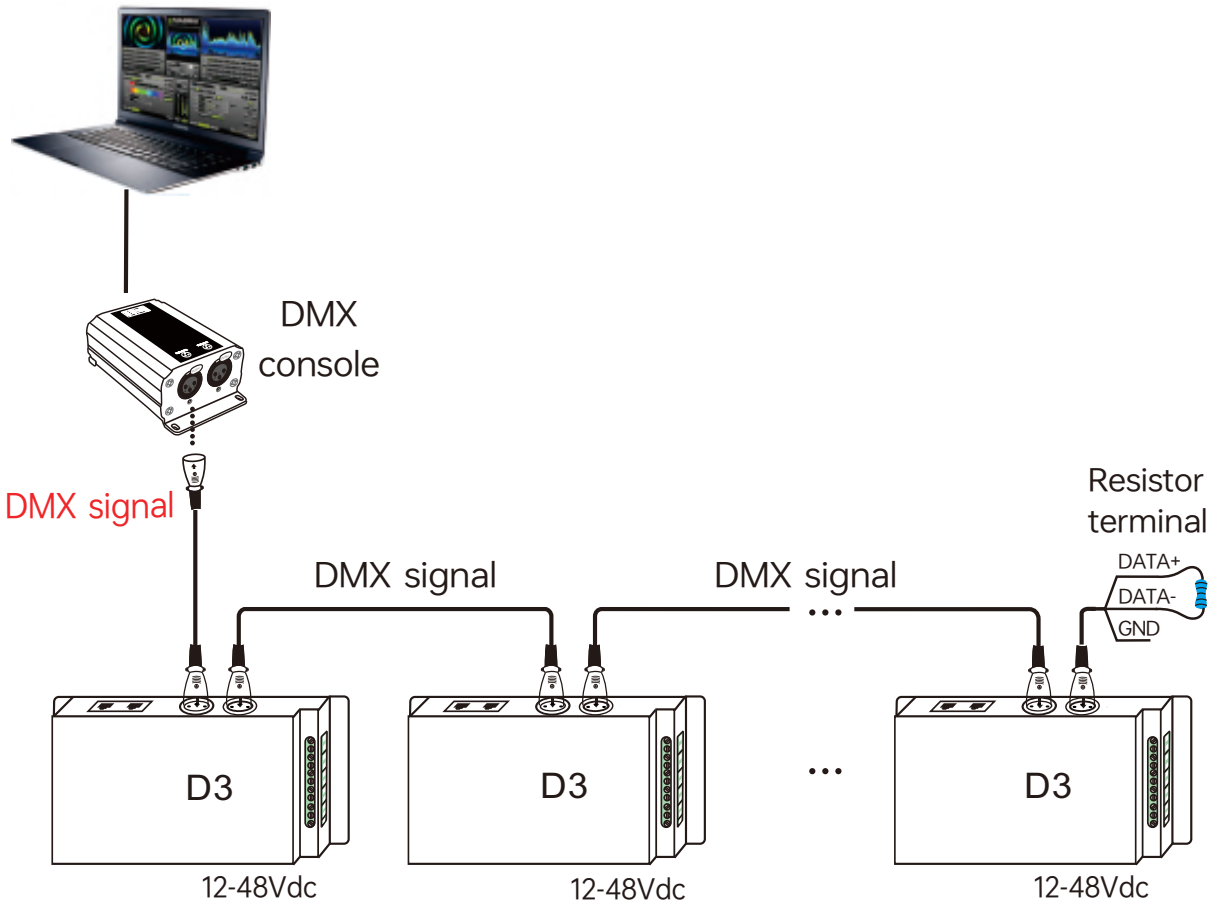


RGB mode

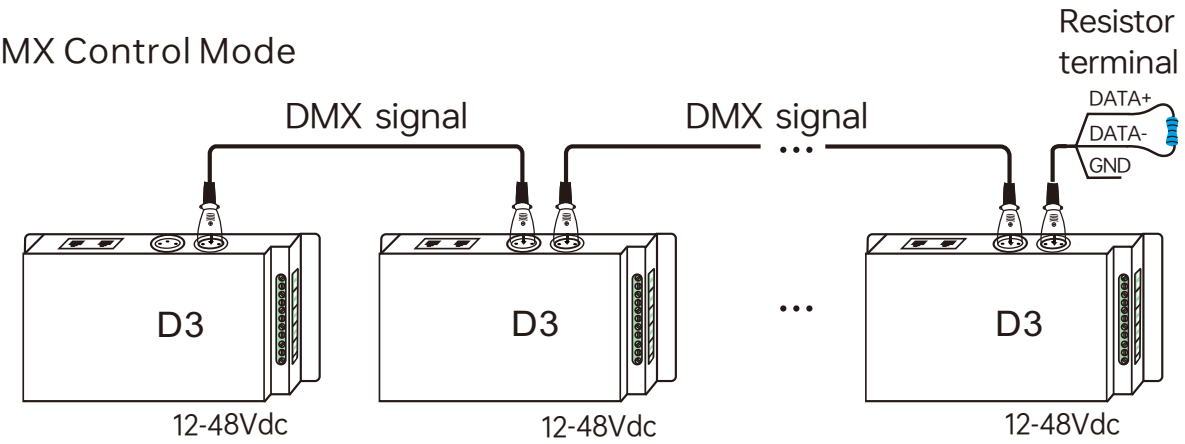


2. DMX console connection:

D3 is equipped with 3 types 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).

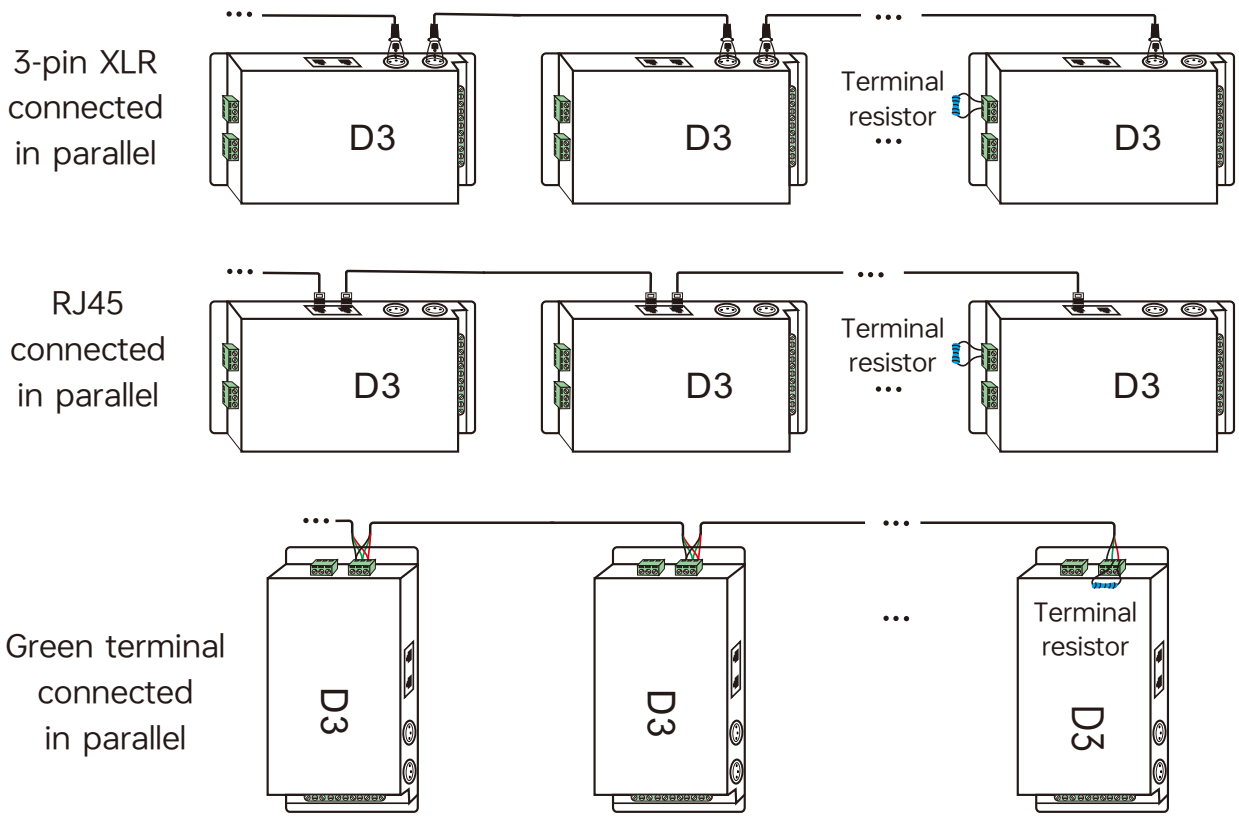


3.DMX Control Mode



* 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.

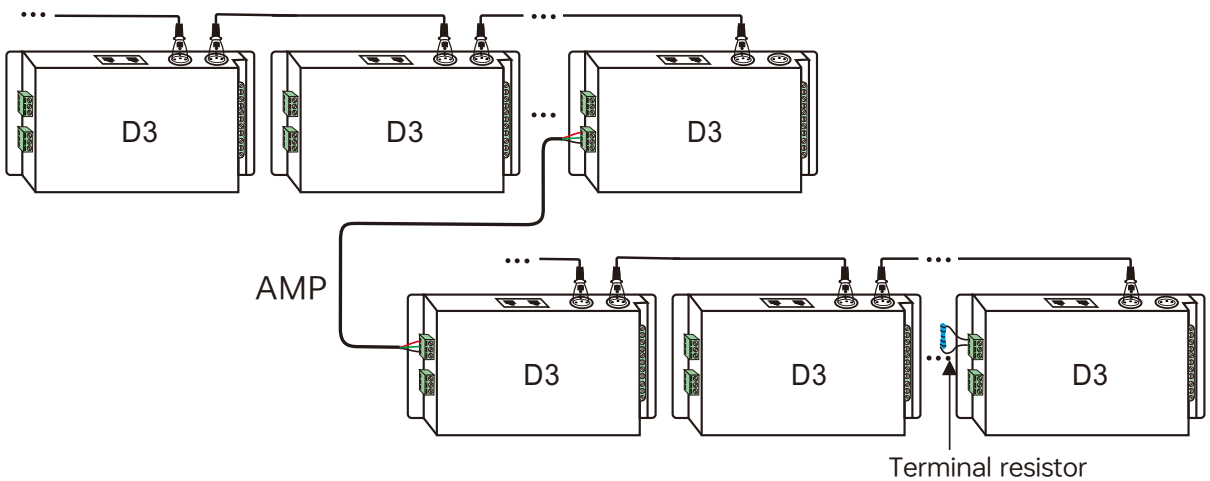
4. The connection diagram of 3 kinds of DMX/RDM terminals:



These 3 terminals can be connected in a mixed way.

5. 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.



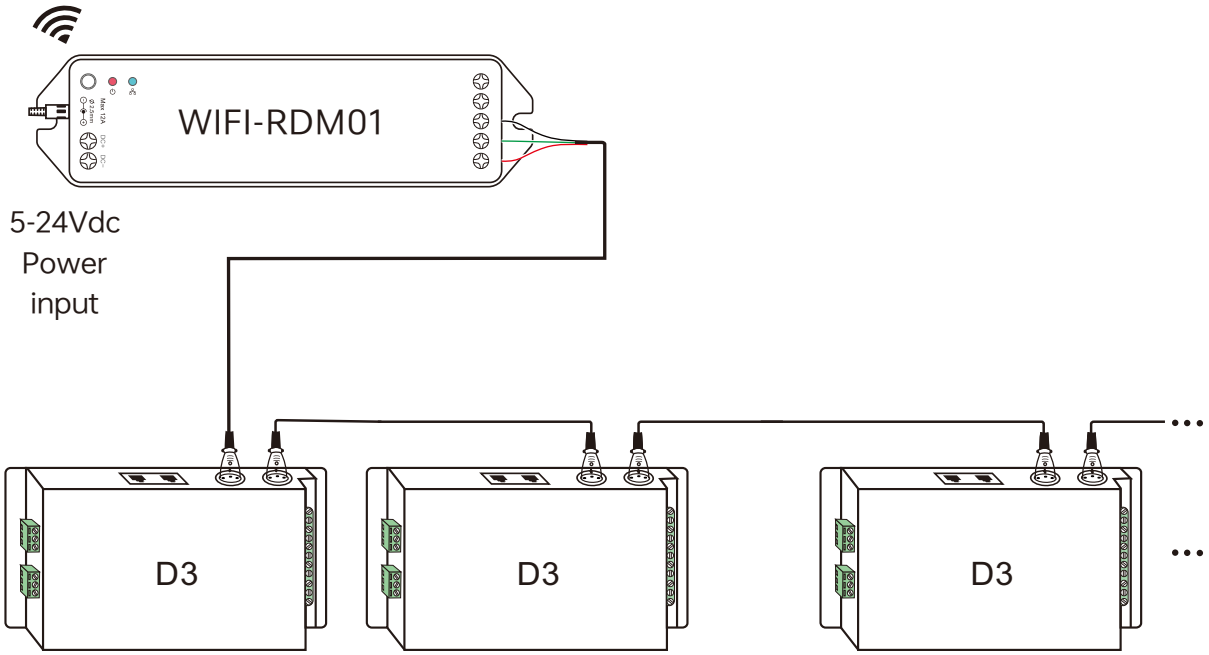
Address setting table

Mode		DIM	CT/CT2	RGB
Address Quantity		1	2	3
Resolution		8bit	8bit	8bit
Channel	1	001	001	001
	2	001	002	002
	3	001	001	003

Mode		DIM	CT/CT2	RGB
Address Quantity		2	4	6
Resolution		16bit	16bit	16bit
Channel	1	001 002	001 002	001 002
	2	001 002	003 004	003 004
	3	001 002	001 002	005 006

Work with RDM Editor

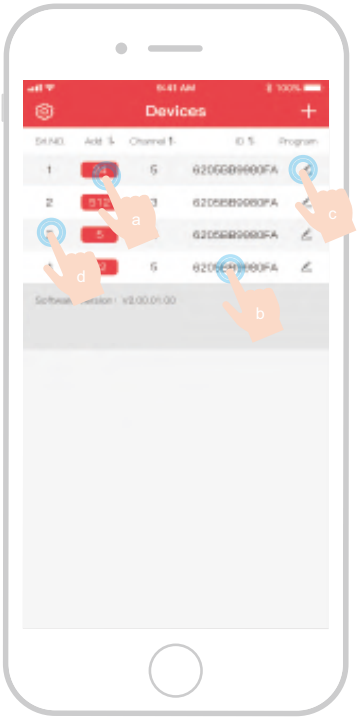
D3 can work with LTECH RDM editor (Model: WiFi-RDM01) to realize changing the parameters by long-range setting, wiring diagram as below:



RDM editor App interface instruction

Download the App, setting the D3 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.

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.

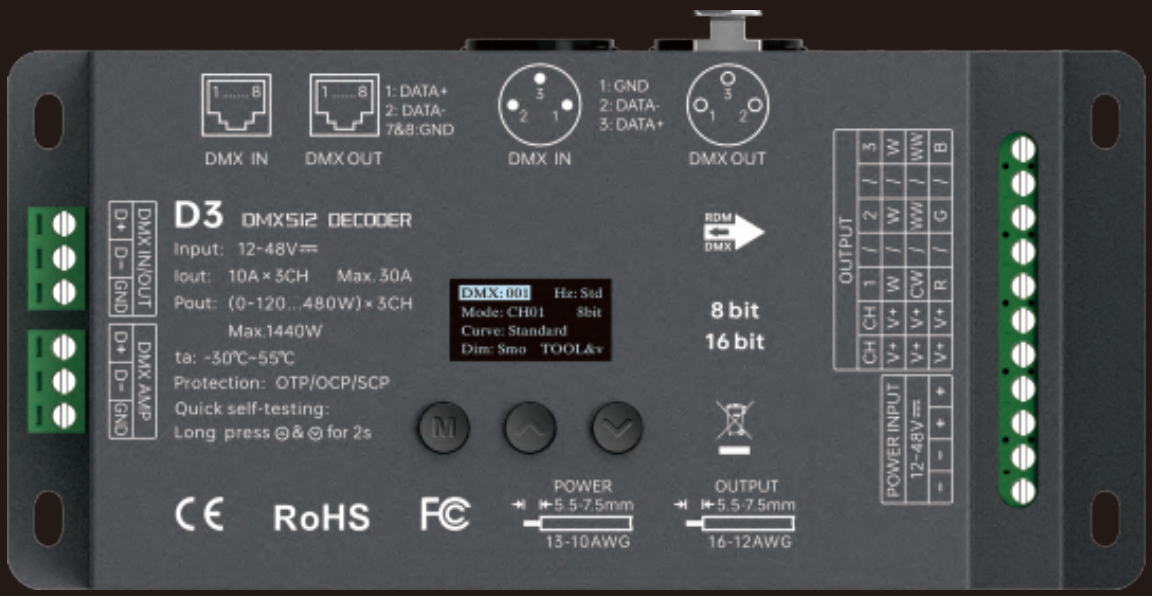
* This manual is subject to changes without further notice. Product functions depend on the goods. Please feel free to contact our official distributors if you have any question.

3
CHANNELS

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

D3

DMX512 DECODER



RDM DMX　FC　CE　RoHS　质保5年

产品介绍:

1、 本产品共有3个通道输出，每通道最大10A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、 DMX通道数量可设置CH01/CH02/CH03,可实现独立地址独立通道控制，也可以实现一个地址控制多个通道;

4、 可设置300/600/1200/1500/1800/2400/3600/7200/10800/14400/18000Hz PWM频率;

5、 提供3针XLR、绿色端子、RJ45三种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。

6、 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;

7、 具有DMX主控模式和解码模式;

8、 具有固件升级功能;

9、 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;

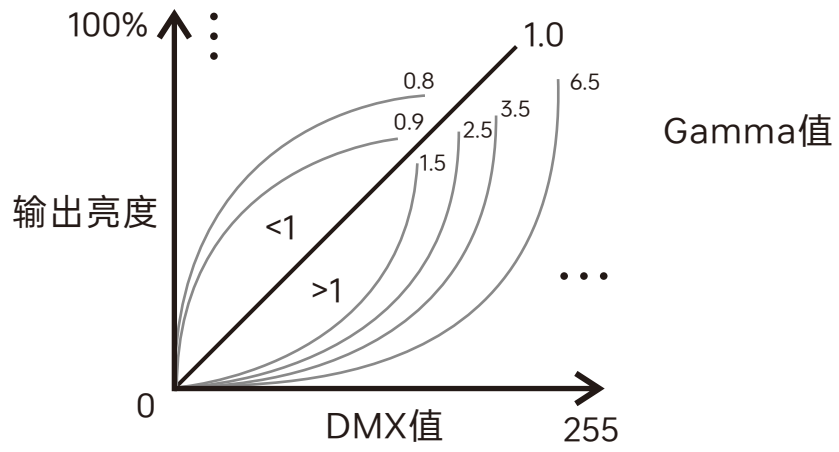
10、具有上电状态管理及快速自测功能;

11、 16bit(65536级)/8bit(256级)灰度级可选;

12、标准、线性、对数及自定义0.1~9.9等调光曲线可选;

13、设备内置 10 种个性化灯光效果，支持脱机同步播放，可通过 DMX 主控模式设置界面选择不同灯光效果，实现对其他解码器的精准输出控制。

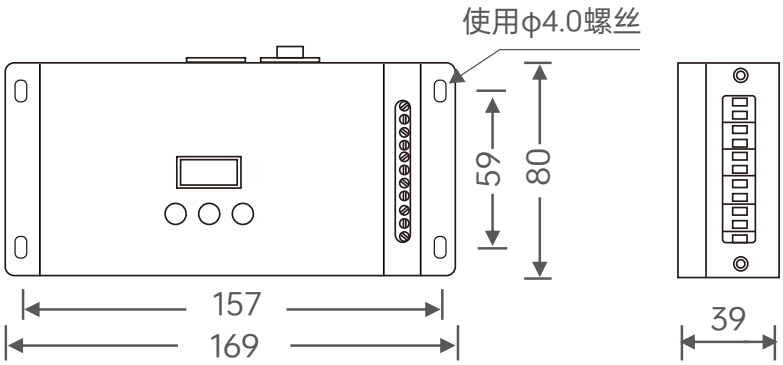
14、可通过RDM主控或手机APP进行参数设置与修改，免高空作业



性能参数:

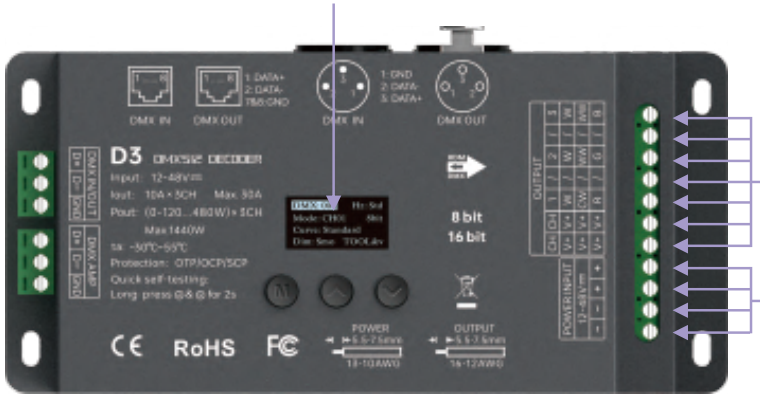
产品型号	D3
输入信号:	DMX512/RDM
输入电压:	12- 48Vdc
负载电流:	10A×3路　Max. 30A
输出功率:	(0~120W...480W)×3路　Max. 1440W
DMX接口:	3针XLR, RJ45, 绿色端子
控制模式:	DIM/CT/RGB
调光曲线:	0.1~9.9,标准,线性,对数
灰度等级:	8bit(256级)/16bit(65536级)可选
保护:	短路、过流、过温保护,可自动恢复
工作温度:	-30℃~55℃
产品尺寸:	L169×W80×H39mm
包装尺寸:	L182×W91×H41mm
重量(毛重):	550g

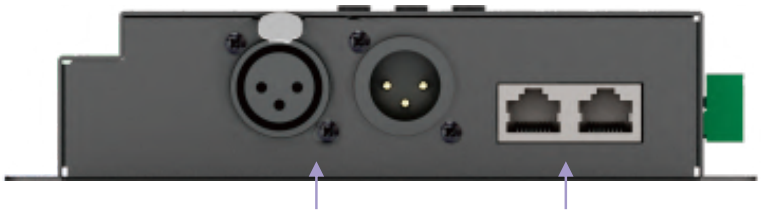
单位: mm



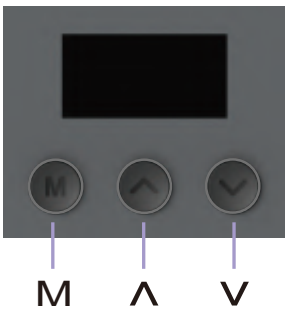
RDM DMX　FC　CE　RoHS　质保5年

部件图:





OLED屏界面图:



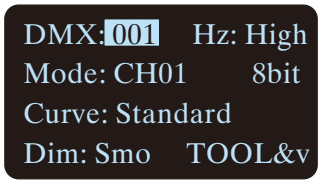
按M键，切换条目

长按M键，返回至主显示界面

按Λ或V键，调整参数

EXIT: 返回至上一级菜单

1、DMX地址设置

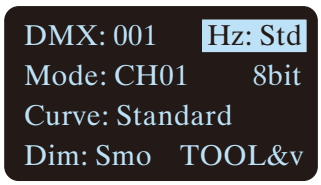


主显示界面

按∧或∨键，进行DMX地址设置

范围：1~512

2、PWM频率



短按“M”按∧或∨键进行选择

可选项：

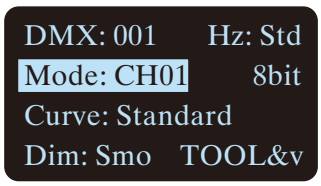
300Hz 600Hz 1200Hz

1500Hz 1800Hz 2400Hz

3600Hz 7200Hz 10800Hz

14400Hz 18000Hz Std(默认)

3、DMX通道数量

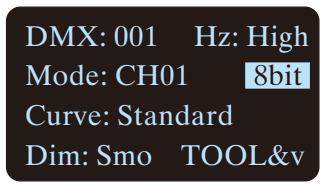


短按“M”按∧或∨键进行选择

可选项：CH01、CH02、CH03(默认)

✱ 具体通道数量设置详情请看P9

4、灰度级

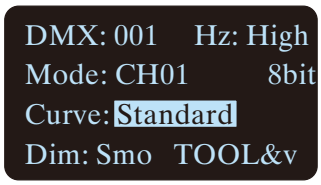


按∧或∨键进行选择

可选项： 8bit (默认)

16bit

5、调光曲线



按∧或∨键进行选择

可选项： Standard(标准)

Linear(线性)

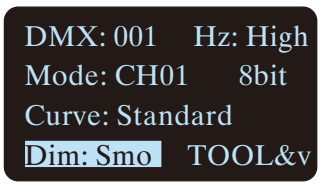
Log(对数)

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



按∧或∨键进行选择

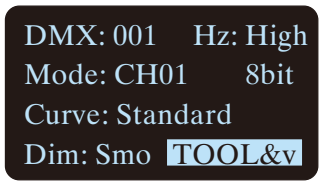
可选项： Std(标准)

Smo(平滑)

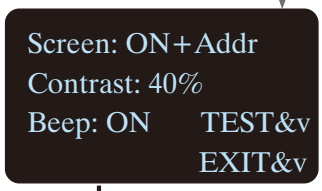
✻ 推荐使用标准

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



按∧或∨键，进入子菜单



屏保

屏幕亮度

蜂鸣器开关

测试

退出

按∧或∨键

进入测试子菜单

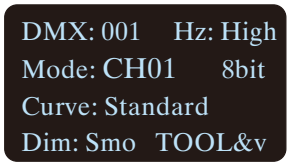
主控模式

Screen: ON+Addr

2分钟无操作启动屏保并显示地址

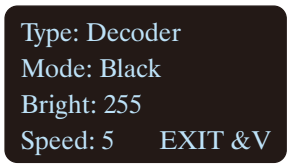
Screen: ON+black

2分钟无操作启动屏保并显示黑屏



Screen: OFF

不启用屏保

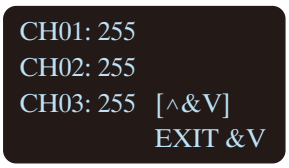


可设置

灯光显示效果

速度等级

亮度等级



亮度值

范围: 0~255

按∧或∨键翻页

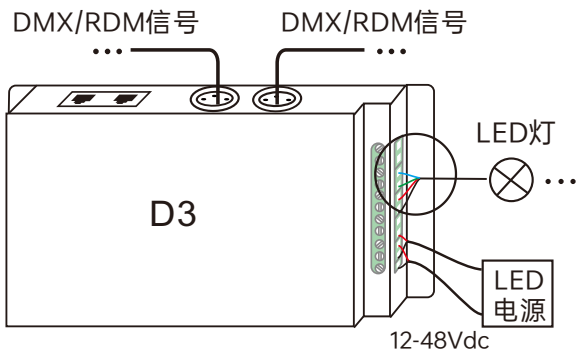
按∨键退出

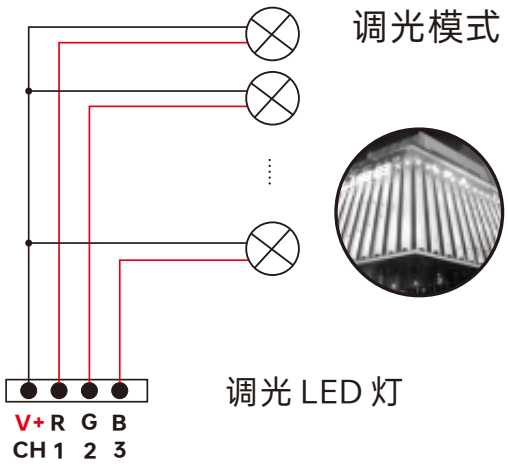
末页的ALL选项可设置所有通道值同时变化。

✻ 快速自测功能: 任何界面下, 同时按∧或∨键2~3秒，解码器会进入自我测试功能。

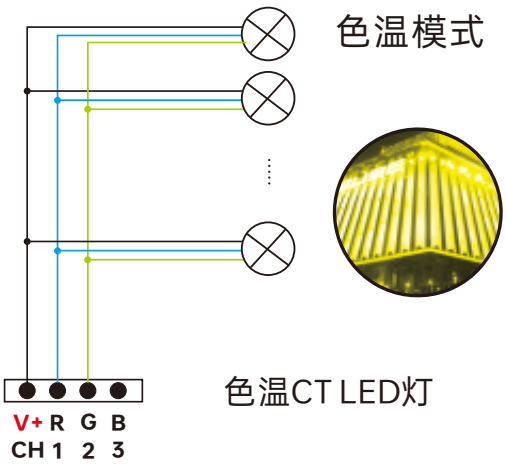
连接示意图:

1 连接LED灯

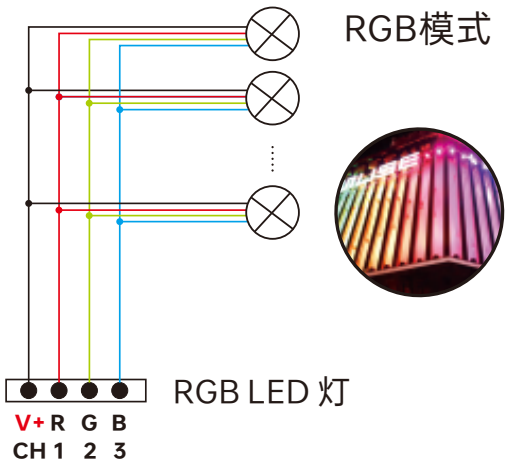




调光 LED 灯



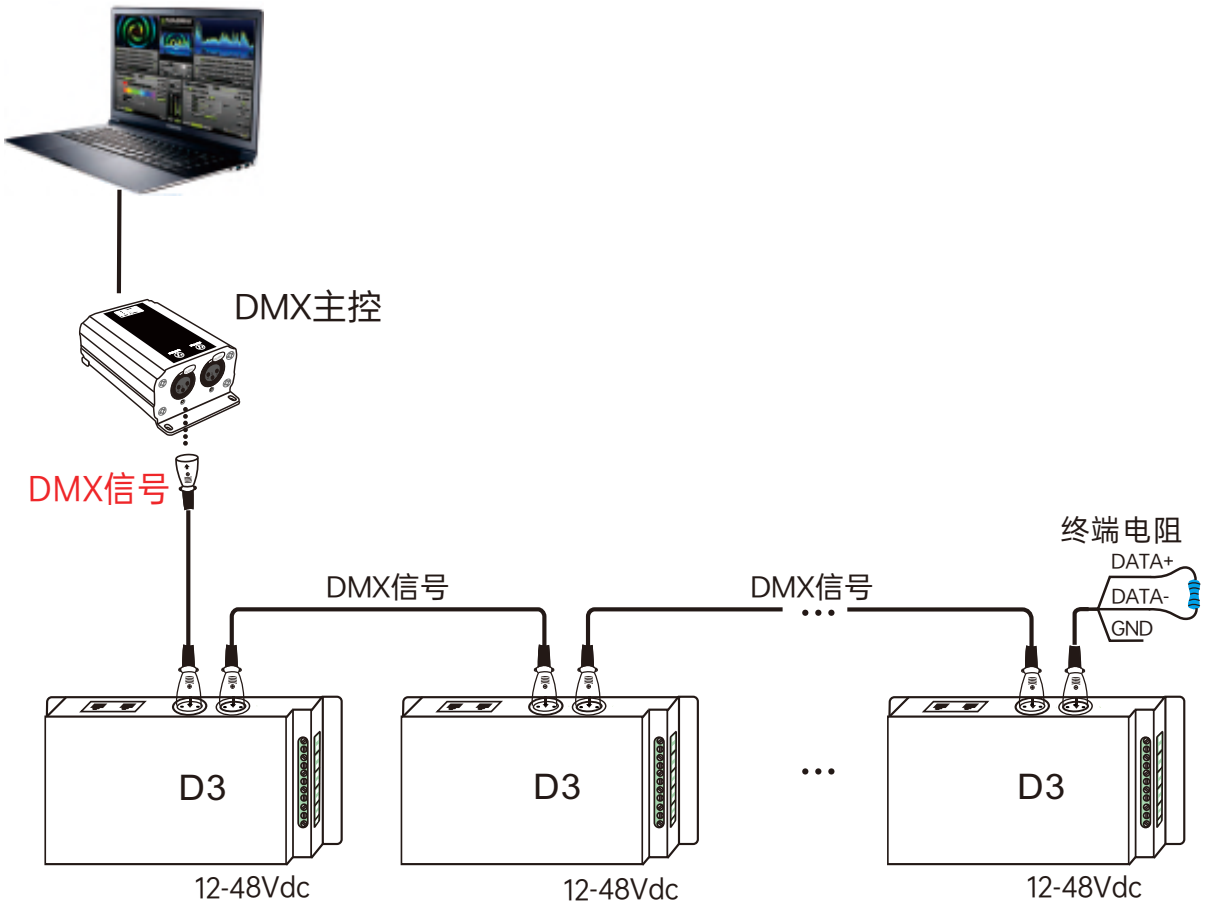
色温CT LED灯



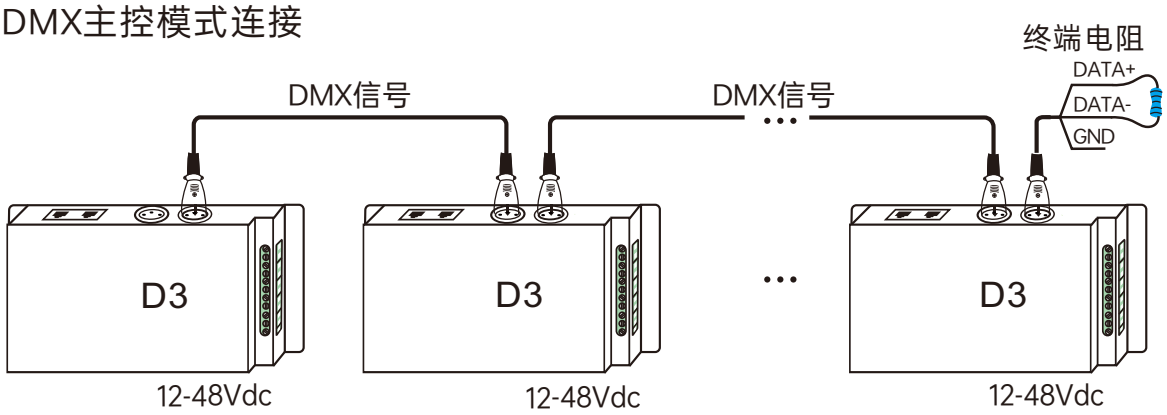
RGB LED 灯

2. DMX解码模式连接

本DMX解码器提供3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RJ45或绿色端子 (具有信号放大功能)。

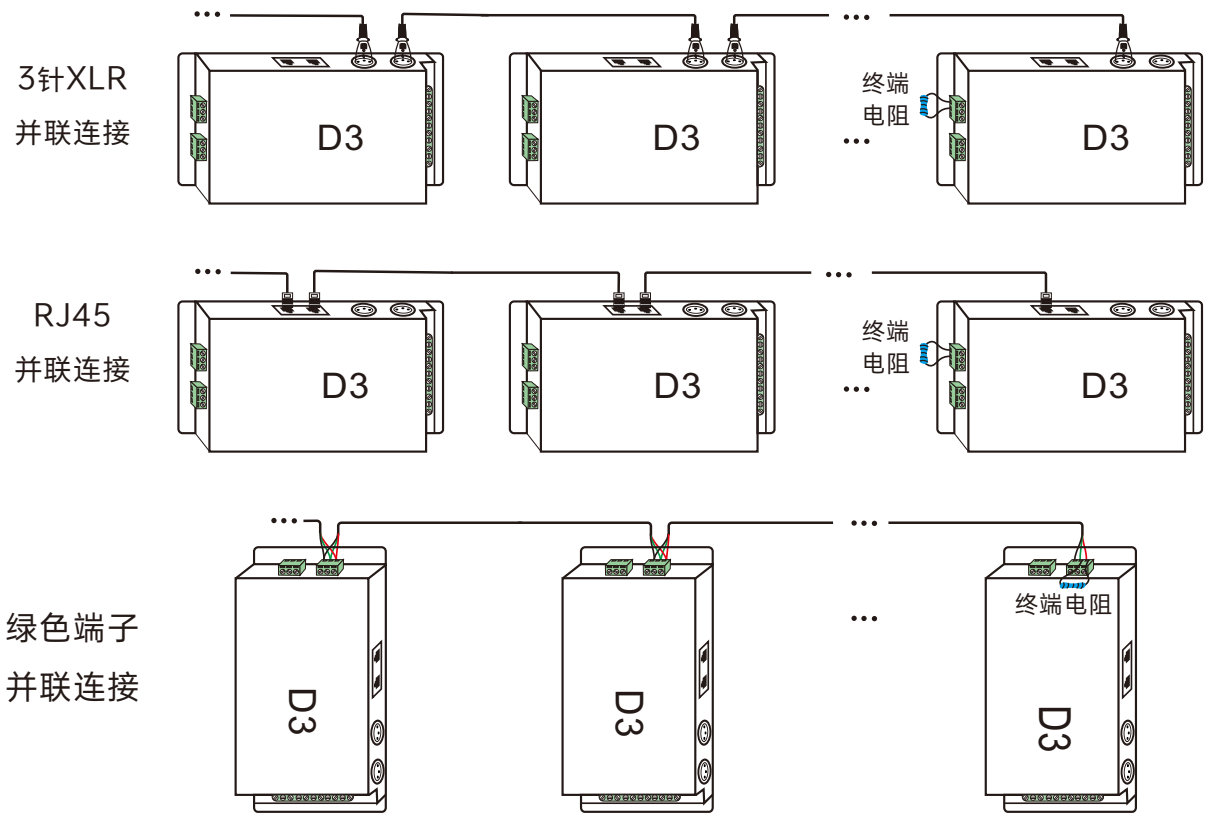


3. DMX主控模式连接



✻ 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。

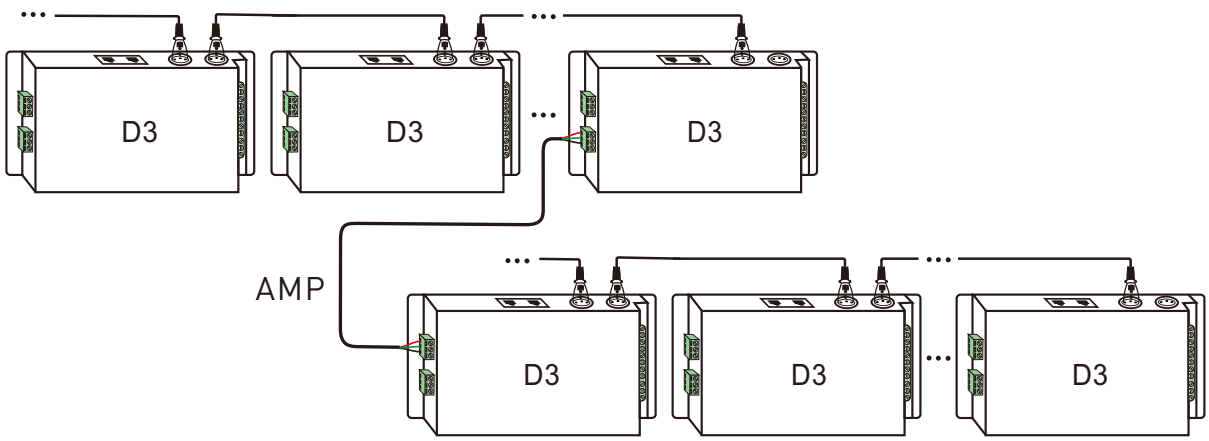
4. 三种DMX端口的连接示意图



以上三种方式可以任意混合连接

5. 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。



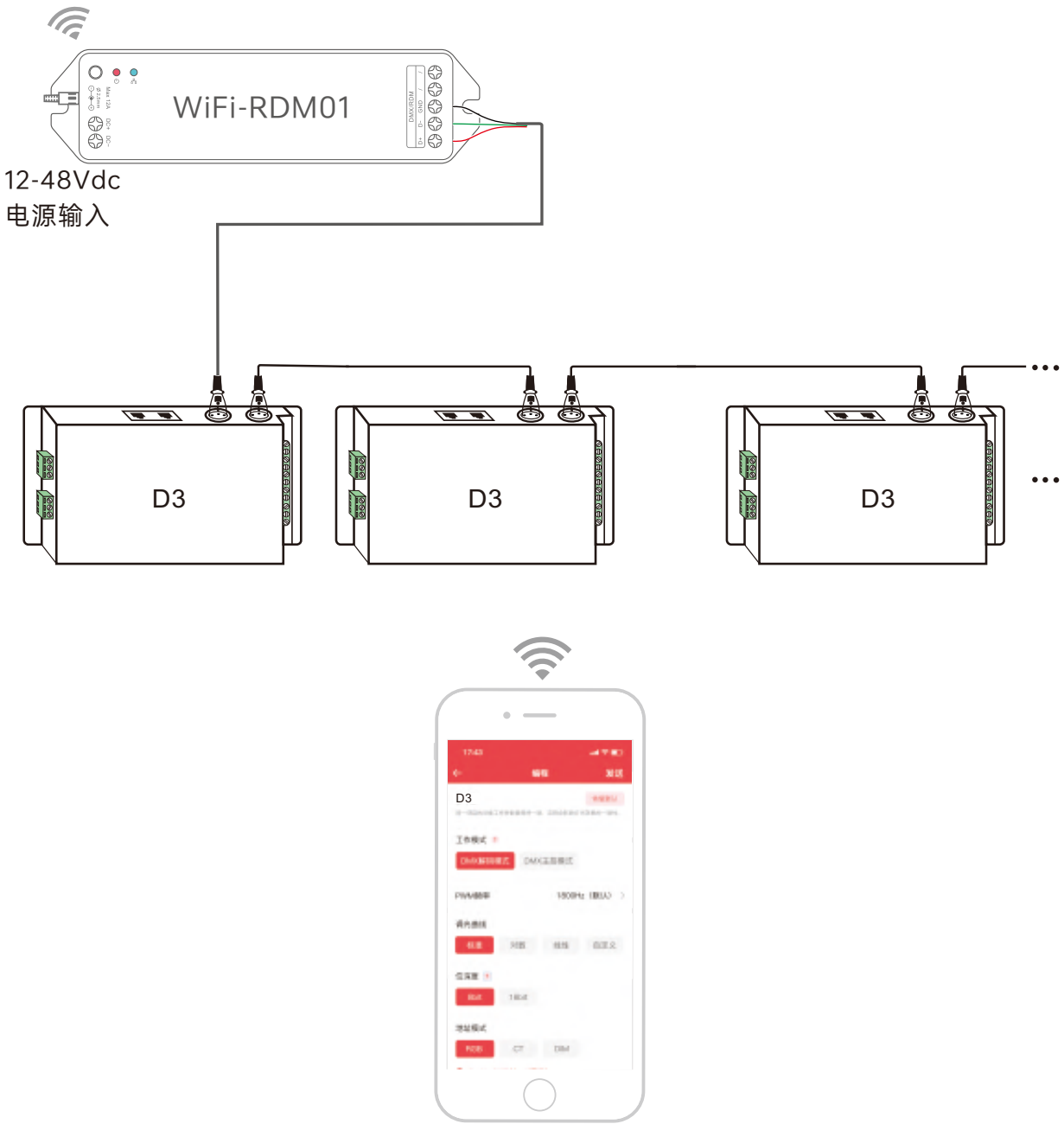
模式地址设置表

模式		DIM	CT/CT2	RGB
地址数量		1	2	3
分辨率		8bit	8bit	8bit
通道数	1	001	001	001
	2	001	002	002
	3	001	001	003

模式		DIM	CT/CT2	RGB
地址数量		2	4	6
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	001 002	005 006

与RDM编辑器配合使用:

D3可以与我司RDM编辑器（型号WiFi-RDM01）配合使用，以实现手机远程设置更改D3参数的功能，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D4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。

在APP进行固件升级

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。

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足够负载连接的 LED灯具，并确保接线牢固；
- 通电调试前，应确保所有接线正确， 以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；如果有疑问，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责任，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。