

Constant Voltage 4 Channel DMX/RDM Decoder

- Standard DMX/RDM interfaces; Set addresses via the digital display and buttons.
- RDM protocol; Browse parameters and change DMX addresses via a RDM master or via the mobile APP .
- DMX mode and customized mode can be switched.
- PWM frequency options: 300/600/1200/1500/1800/2400/3600/7200/10800/14400/18000Hz.
- 16bit (65536 levels)/8bit (256 levels) gray scale optional.
- Two dimming mode options: standard and smooth dimming.
- Set 1/2/3/4 DMX channel output.
- Provide 10 lighting effects, 8 speed levels of dynamic modes, and 255 brightness levels.
- Set screen timeout, LCD screen always on, and screen turning off after 30s of inactivity.
- Short circuit, over-temperature, over-current protection and auto recovery.
- D4A has green terminal DMX interfaces, D4B has RJ45 DMX interfaces.



16bit

RoHS

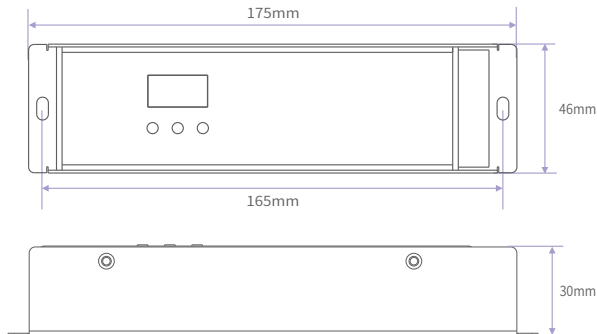


Product Parameters

Model	D4A	D4B
Input Signal	DMX512,RDM	
Input Voltage	12-48V $\overline{\text{---}}$	
Output Type	Constant Voltage	
Output Current	8A×3CH 6A×4CH Max.24A	
Output Voltage	4 × (12-48V $\overline{\text{---}}$)	
Output Power	288W@12V 576W@24V 864W@36V 1152W@48V	
Dimming Range	0-100%	
DMX Signal Port	Green terminal	RJ45
Working Temp.	-25°C-55°C	
Safety & Emc	CE, EN 55015: 2019/A11: 2020, EN IEC 61000-3-2:2019+A1: 2021, EN 61000-3-3: 2013+A1: 2019+A2: 2021, EN 61547-1: 2021	
	FCC Part 15 Class B	
Dimensions	L175×W46×H30mm	
Package Size	L187×W52×H36mm	
Weight(G.W.)	325g±5g	
Protection	Short circuit, over temperature, over current protection, auto recovery.	

Product Size

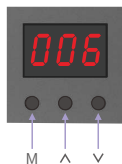
Unit: mm



Main Component Description



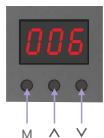
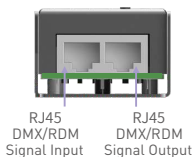
Digital display:



- Access Configuration: Long press the M button for more than 2s.
- Adjust Value: Short press ^ or V button.
- Exit Menu: Long press M button for 2s again to save the setting, then exit the menu.
- Long press M, ^ and V button simultaneously for 2s. When the screen displays RES, it has been reset to factory defaults.
- The display locks automatically after 15 seconds of inactivity.



Digital display:



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- The display locks automatically after 15 seconds of inactivity.

OLED Display Interface

DMX decoder mode



Long press M and V button simultaneously. When the screen displays "L-1", it enters the DMX decoder mode. Long press M button for 2s to enter the menu.

1. DMX address settings



Press ^ or V button to set the DMX address.
DMX address range: 001~512

2. Resolution



Short press M button to switch the menu to "r".
Press ^ or V button to select resolution and the third value on the screen will display 1 or 2.
Options: **r-1 (8bit)**
 r-2 (16bit)

3. PWM frequency



Short press M button to switch the menu to "F".
Press ^ or V button to select PWM frequency and the third value on the screen will display H or L.
Options: **F-4 (1800Hz)** F-0 (300Hz) F-1 (600Hz) F-2 (1200Hz)
 F-3 (1500Hz) F-5 (2400Hz) F-6 (3600Hz) F-7 (7200Hz)
 F-8 (10800Hz) F-9 (14400Hz) F-A (18000Hz)

4. Dimming mode



Short press M button to switch the menu to "d".
Press ^ or V button to select the dimming mode and the third value on the screen will display 1 or 2.
Options: **d-1 (Smooth dimming)**
 d-2 (Standard dimming)

5. DMX channels



Short press M button to switch the menu to "C".
Press ^ or V button to select the channels and the third value on the screen will display 1, 2, 3 or 4.
Options: **C-4 (4 channel output occupies corresponding 4 DMX addresses)**
 C-1 (4 channel output occupies DMX address 1)
 C-2 (1 and 3 channel output occupy DMX address 1, 2 and 4 channel output occupy DMX address 2)
 C-3 (1 channel output occupies DMX address 1, 2 channel output occupies DMX address 2, 3 and 4 channel output occupy DMX address 3)

6. Screen timeout



Short press M button to switch the menu to "n".
Press ^ or V button to select screen timeout and the third value on the screen will display 1 or 2.
Options: **n-1 (Screen stays on)**
 n-2 (Screen turns off after 30seconds of inactivity)

Customized mode



Custom Mode Interface

1. Lighting effects



e.g. E-1 (no lighting effect)



e.g. E-A (7-color gradient)

Long press M and V button simultaneously. When the screen displays "L-2", it enters the customized mode. Long press M button for 2s to enter the menu.

Short press M button to switch the menu to "E".

Press $\wedge$ or $\vee$ button to select the lighting effect and the third value on the screen will display 1, 2, 3, 4, 5, 6, 7, 8, 9 or A.

Options: E-1 (No lighting effect) E-6 (Purple)
 E-2 (Red) E-7 (Cyan)
 E-3 (Green) E-8 (White)
 E-4 (Blue) E-9 (7-color jumping)
 E-5 (Yellow) E-A (7-color gradient)

2. Color-changing speed



Short press M button to switch the menu to "S".

Press $\wedge$ or $\vee$ button to select speed and the third value on the screen will display 1, 2, 3, 4, 5, 6, 7 or 8.

Default: S-5

Options: S-1 / S-2 S-7 / S-8

Speed levels, speed increases one by one

3. Brightness



Short press M button to switch the menu to "B".

Press $\wedge$ or $\vee$ button to select the brightness level and the third value on the screen will display 1, 2, 3, 4, 5, 6, 7 or 8.

B00-BFF, 255 levels, default maximum level is 255

Options: B00 / B01 BFF

Brightness levels, brightness increases one by one

4. Screen timeout



Short press M button to switch the menu to "n".

Press $\wedge$ or $\vee$ button to select screen timeout and the third value on the screen will display 1 or 2.

Options: n-1 (Screen stays on)

n-2 (Screen turns off after 30 seconds of inactivity)

Fault code



F-0: Over-temperature protection

F-1: Over-temperature warning

F-2: Short circuit/over-current protection

Address setting table

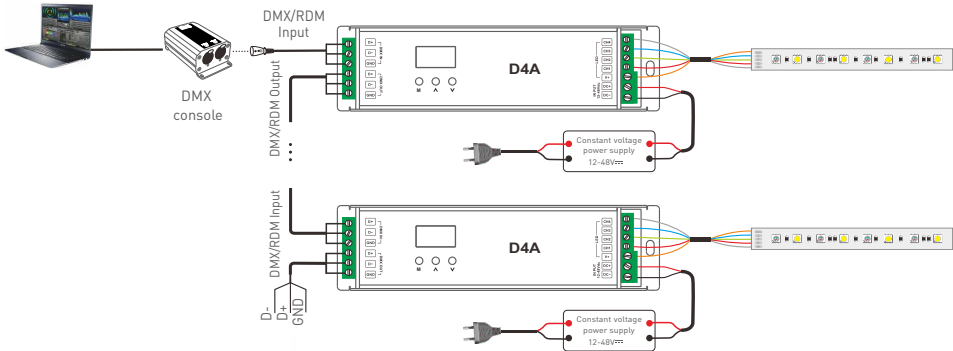
Mode	C-1[Dimming]	C-2[CT/CT2]	C-3[RGB]	C-4[RGBW]
Channel 1	001	001	001	001
Channel 2	001	002	002	002
Channel 3	001	001	003	003
Channel 4	001	002	003	004

Load Parameters

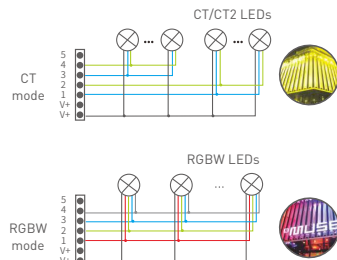
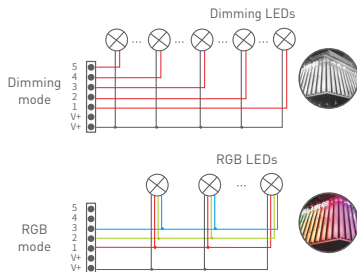
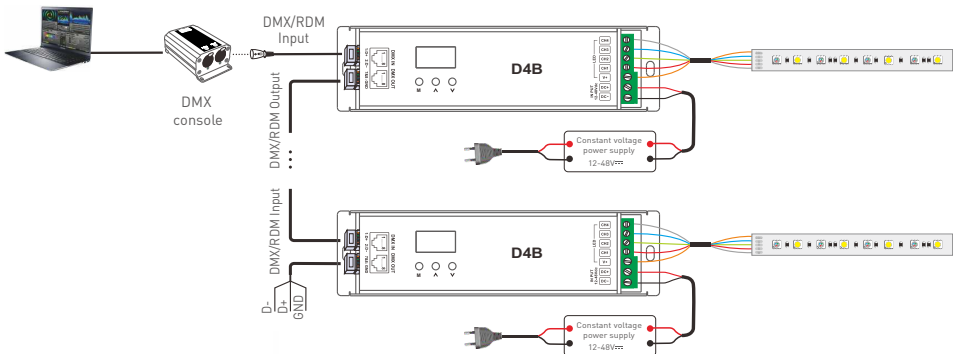
At different PWM frequencies and different voltages, the max. load current and the total power of each channel vary. Before you do the wiring, please strictly follow the load parameters in the table below to operate.

Max. current/ power/ Voltage	Frequency	300Hz [F=0]	600Hz [F=1]	1.2kHz [F=2]	1.5kHz [F=3]	1.8kHz [F=4]	2.4kHz [F=5]
12V		6A×4CH/288W 8A×3CH/288W	6A×4CH/288W 8A×3CH/288W	6A×4CH/288W 8A×3CH/288W	6A×4CH/288W 8A×3CH/288W	6A×4CH/288W	6A×4CH/288W
24V		6A×4CH/576W 8A×3CH/576W	6A×4CH/576W 8A×3CH/576W	6A×4CH/576W 8A×3CH/576W	6A×4CH/576W 8A×3CH/576W	6A×4CH/576W	6A×4CH/576W
36V		6A×4CH/864W	6A×4CH/864W	6A×4CH/864W	6A×4CH/864W	6A×4CH/864W	5A×4CH/720W
48V		6A×4CH/1152W	6A×4CH/1152W	6A×4CH/1152W	6A×4CH/1152W	6A×4CH/1152W	5A×4CH/960W
Max. current/ power/ Voltage	Frequency	3.6kHz [F=6]	7.2kHz [F=7]	10.8kHz [F=8]	14.4kHz [F=9]	18kHz [F=A]	/
12V		6A×4CH/288W	4A×4CH/192W	3.5A×4CH/168W	3A×4CH/144W	2.5A×4CH/120W	
24V		5A×4CH/480W	3.5A×4CH/336W	3A×4CH/288W	2.5A×4CH/240W	2.5A×4CH/240W	
36V		4.5A×4CH/648W	3A×4CH/432W	2.5A×4CH/360W	2.5A×4CH/360W	2A×4CH/288W	
48V		4A×4CH/768W	3A×4CH/576W	2.5A×4CH/480W	2.5A×4CH/480W	2A×4CH/384W	

D4A Wiring Diagram



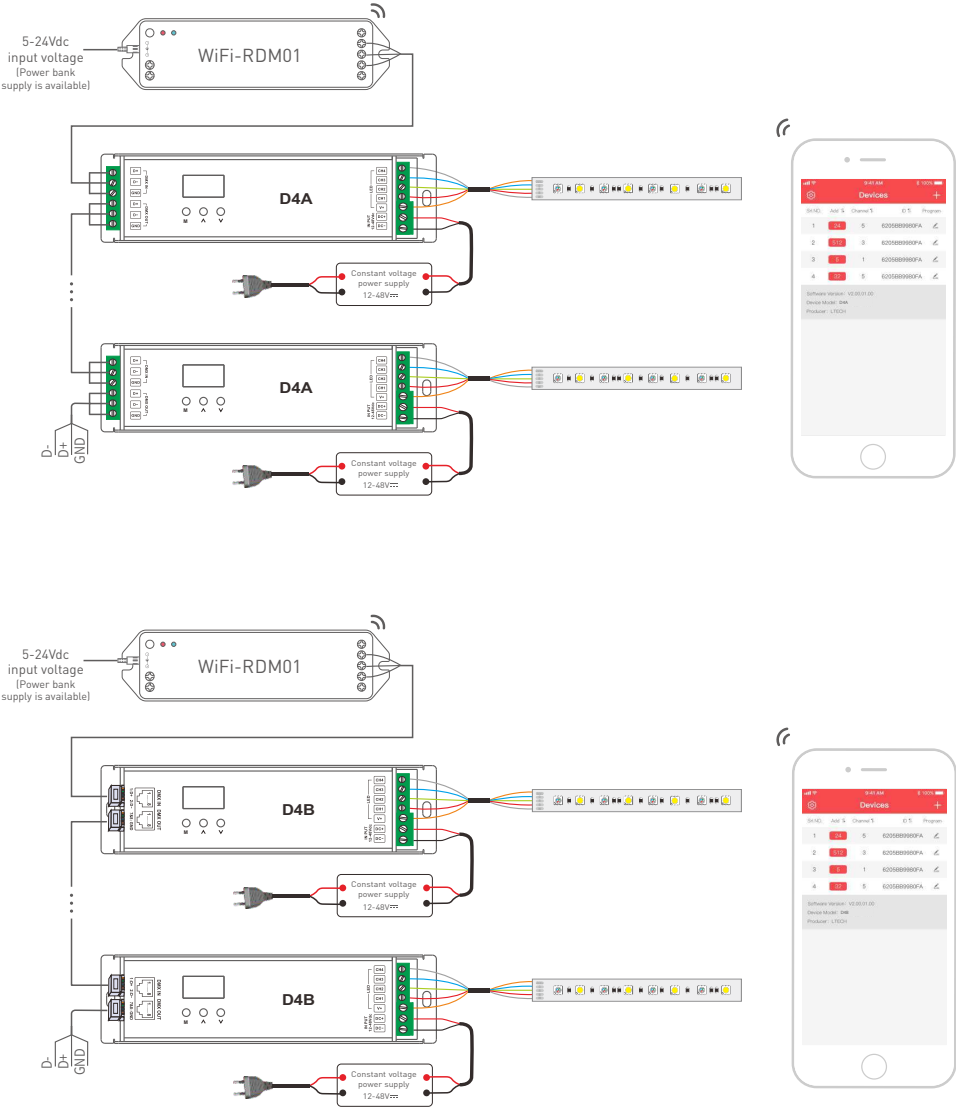
D4B Wiring Diagram



- * When more than 32 DMX decoders are connected, DMX signal amplifiers are needed and signal amplification should not be more than 5 times continuously. If you need to modify the parameter settings of connected DMX/RDM decoders that exceed 32, you can add 1 RDM signal amplifier. Or you can add 1-5 DMX signal amplifiers after completing the parameter settings.
- * If the recoil effect occurs because of long signal line or poor quality wires, please try to connect a 0.25W 90-120Ω terminal resistor at the end of each line.

Use with RDM Editor

D4A, D4B can work with the address editor that complies with standard RDM protocol.
It is recommended to use LTECH's RDM editor [model WiFi-RDM01], which can achieve more functions such as remote browsing and parameter setting.
Wiring diagram as below:



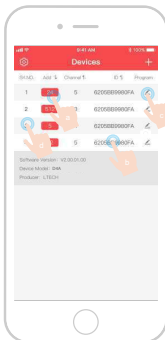
RDM editor App interface instruction

1.Download the App, setting the D4A, DAB parameters dimming range after well connecting the RDM editor, more details, please check the manual of WiFi-RDM01.



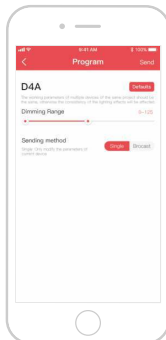
APP

2.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.

c: Click“”, ente edited interface.



d: Click“No.”, issue the recognizing command.



Supporting WiFi-RDM01 upgrade and DMX driver upgrade.

Attentions

- This product must be installed and adjusted by a qualified professional.
- LTECH 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 water proof enclosure or in an area equipped with lightning protection devices.
- Good heat dissipation will extend the life the product. Please install the product in a environment with good ventilation.
- When you install this product, please avoid being near a large area of metal objects or stacking them to prevent signal interference.
- Please keep the product away from a intense magnetic field, a high pressure area or a place where lightning is easy to occur.
- Please check whether the working voltage used complies with the parameter requirements of the product.
- Before you power on the product, please make sure all the wiring is correct in case of incorrect connection that may cause a short circuit and damage the components, or trigger an accident.
- If a fault occurs, please do not attempt to fix the product by yourself. If you have any question, please contact the supplier.
- * 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.

Warranty Agreement

Warranty periods from the date of delivery : 5 years.

Free repair or replacement services for quality problems are provided within warranty periods.

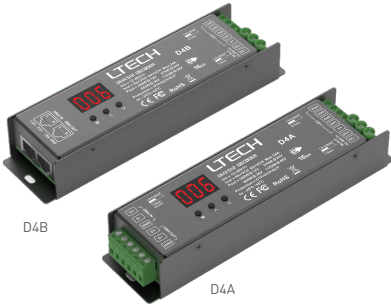
Warranty exclusions below:

- 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 LTECH.

1. Repair or replacement provided is the only remedy for customers. LTECH is not liable for any incidental or consequential damage unless it is within the law.
2. LTECH has the right to amend or adjust the terms of this warranty, and release in written form shall prevail.

4通道DMX/RDM恒压解码器

- 标准的DMX/RDM接口，使用数码管和轻触按键设置参数；
- 具有RDM协议，通过RDM主控或手机APP可对其进行参数浏览、DMX地址修改；
- 可切换DMX模式/自定义模式；
- 可设置300/600/1200/1500/1800/2400/3600/7200/10800/14400/18000Hz PWM频率；
- 16bit(65536级)/8bit(256级)灰度级可选；
- 可设置选标准与平滑两种调光模式；
- 可设置1/2/3/4 DMX通道输出；
- 可设置10种灯光效果、8档动态模式速度、255个亮度等级；
- 支持屏显时间设置，数码管常亮与30s内无操作将熄灭；
- 短路、过温、过流保护，可自行恢复；
- D4A具有绿色端子DMX信号端口，D4B具有RJ45 DMX信号端口。

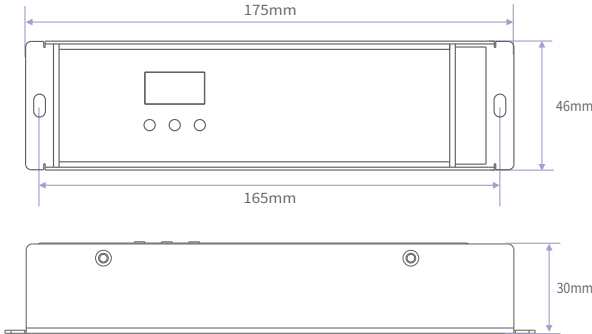


技术参数

型号	D4A	D4B
输入信号	DMX512,RDM	
输入电压	12-48V ̳	
输出类型	恒压	
输出电流	8A×3CH 6A×4CH Max.24A	
输出电压	4×(12-48V ̳)	
输出功率	288W@12V 576W@24V 864W@36V 1152W@48V	
调光范围	0-100%	
DMX信号接口	绿色端子	RJ45
工作温度	-25°C-55°C	
安规和电磁规格	CE,EN 55015: 2019/A11: 2020, EN IEC 61000-3-2:2019+A1: 2021, EN 61000-3-3: 2013+A1: 2019+A2: 2021, EN 61547-1: 2021	
	FCC Part 15 Class B	
产品尺寸	L175×W46×H30mm	
包装尺寸	L187×W52×H36mm	
重量(毛重)	325克±5克	
保护	短路、过温、过流保护,可自行恢复	

产品尺寸

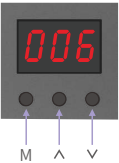
单位:mm



产品部件图



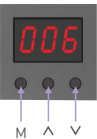
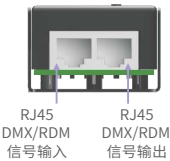
数码管:



- 进入配置: 长按M键2秒以上
- 调整数值: 短按^或V键
- 退出菜单: 再次长按M键2秒, 保存配置并退出
- 恢复出厂: 同时长按M、^、V键2秒后显示RES, 即表示已恢复到出厂设置
- 数码管无操作15秒, 进入锁定状态



数码管:



- 进入配置: 长按M键2秒以上
- 调整数值: 短按^或V键
- 退出菜单: 再次长按M键2秒, 保存配置并退出
- 恢复出厂: 同时长按M、^、V键2秒后显示RES, 即表示已恢复到出厂设置
- 数码管无操作15秒, 进入锁定状态

地址数码管界面图

DMX模式



同时长按M和V键，数码管显示“L-1”时，进入DMX模式
长按M键2秒即可进入菜单

1.DMX地址设置



按^或V键进行选择，进行DMX地址设置
范围：1~512

2.分辨率



短按M键，将菜单切换到“r”
按^或V键进行选择，第三个数码管显示1或2
可选项：
r-1 (8bit)
r-2 (16bit)

3.PWM频率



短按M键，将菜单切换到“F”
按^或V键进行选择，第三个数码管显示H或L
可选项：
F-4 (1800Hz) F-0 (300Hz) F-1 (600Hz) F-2 (1200Hz)
F-3 (1500Hz) F-5 (2400Hz) F-6 (3600Hz) F-7 (7200Hz)
F-8 (10800Hz) F-9 (14400Hz) F-A (18000Hz)

4.调光模式



短按M键，将菜单切换到“d”
按^或V键进行选择，第三个数码管显示1或2
可选项：
d-1 (平滑)
d-2 (标准)

5.通道



短按M键，将菜单切换到“C”
按^或V键进行选择，第三个数码管显示1~4
可选项：
C-4 (4路输出分别为对应通道)
C-1 (4路输出均为通道1)
C-2 (1、3路输出均为通道1,2、4路输出均为通道2)
C-3 (1路输出为通道1,2路输出为通道2,3路和4路输出均为通道3)

6.屏显时间



短按M键，将菜单切换到“n”
按^或V键进行选择，第三个数码管显示1或2
可选项：
n-1 (数码管常亮)
n-2 (30s内无操作将熄灭)

自定义模式



自定义模式界面

同时长按M和V键,数码管显示“L-2”时,进入自定义模式
长按M键2秒即可进入菜单

1.灯光效果



例:E-1 (灯光效果无)

短按M键,将菜单切换到“E”

按∧或V键进行选择,第三个数码管显示1~9或A

可选项: E-1 (无) E-6 (紫色)
E-2 (红色) E-7 (青色)
E-3 (绿色) E-8 (白色)
E-4 (蓝色) E-9 (七色跳变)
E-5 (黄色) E-A (七色渐变)



例:E-A (七色渐变)

2.速度



短按M键,将菜单切换到“S”

按∧或V键进行选择,第三个数码管显示1~8

默认值: S-5

可选项: S-1/S-2·····S-7/S-8

速度等级,依次递增

3.亮度



短按M键,将菜单切换到“B”

按∧或V键进行选择,第三个数码管显示1~8

B00-BFF,255个等级,默认最大255

可选项: B00/B01·····BFF

亮度等级,依次递增

4.屏显时间



短按M键,将菜单切换到“n”

按∧或V键进行选择,第三个数码管显示1或2

可选项: n-1 (数码管常亮)

n-2 (30s内无操作将熄灭)

故障码



F-0:过温保护

F-1:过温警告

F-2:短路/过流保护

模式地址设置表

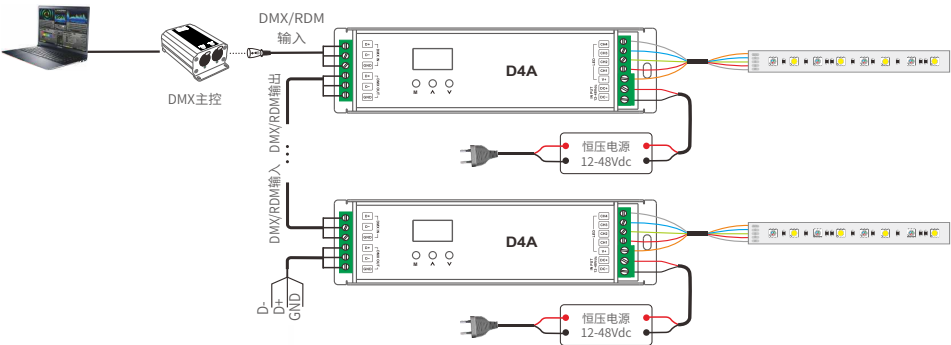
模式	C-1(调光)	C-2(色温)	C-3(RGB)	C-4(RGBW)
通道1	001	001	001	001
通道2	001	002	002	002
通道3	001	001	003	003
通道4	001	002	003	004

带载容量表

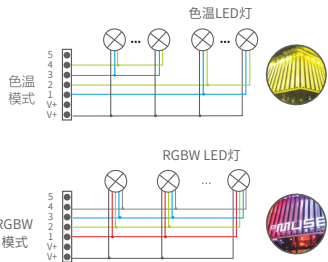
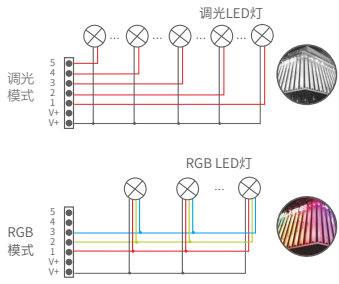
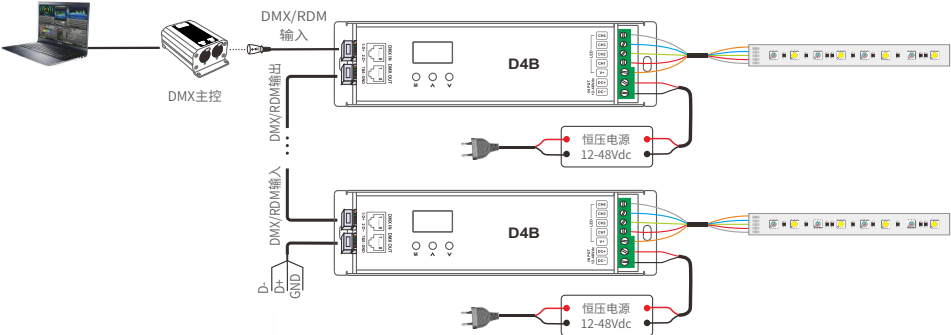
不同PWM频率、不同电压下，每路最大带载电流和总功率不同。接线前，请严格按照表格中的带载参数进行操作。

最大电流/功率 电压 \ 频率	300Hz (F=0)	600Hz (F=1)	1.2kHz (F=2)	1.5kHz (F=3)	1.8kHz (F=4)	2.4kHz (F=5)
12V	6A×4CH/288W 8A×3CH/288W	6A×4CH/288W 8A×3CH/288W	6A×4CH/288W 8A×3CH/288W	6A×4CH/288W 8A×3CH/288W	6A×4CH/288W	6A×4CH/288W
24V	6A×4CH/576W 8A×3CH/576W	6A×4CH/576W 8A×3CH/576W	6A×4CH/576W 8A×3CH/576W	6A×4CH/576W 8A×3CH/576W	6A×4CH/576W	6A×4CH/576W
36V	6A×4CH/864W	6A×4CH/864W	6A×4CH/864W	6A×4CH/864W	6A×4CH/864W	5A×4CH/720W
48V	6A×4CH/1152W	6A×4CH/1152W	6A×4CH/1152W	6A×4CH/1152W	6A×4CH/1152W	5A×4CH/960W
最大电流/功率 电压 \ 频率	3.6kHz (F=6)	7.2kHz (F=7)	10.8kHz (F=8)	14.4kHz (F=9)	18kHz (F=A)	/
12V	6A×4CH/288W	4A×4CH/192W	3.5A×4CH/168W	3A×4CH/144W	2.5A×4CH/120W	
24V	5A×4CH/480W	3.5A×4CH/336W	3A×4CH/288W	2.5A×4CH/240W	2.5A×4CH/240W	
36V	4.5A×4CH/648W	3A×4CH/432W	2.5A×4CH/360W	2.5A×4CH/360W	2A×4CH/288W	
48V	4A×4CH/768W	3A×4CH/576W	2.5A×4CH/480W	2.5A×4CH/480W	2A×4CH/384W	

D4A连接示意图



D4B连接示意图

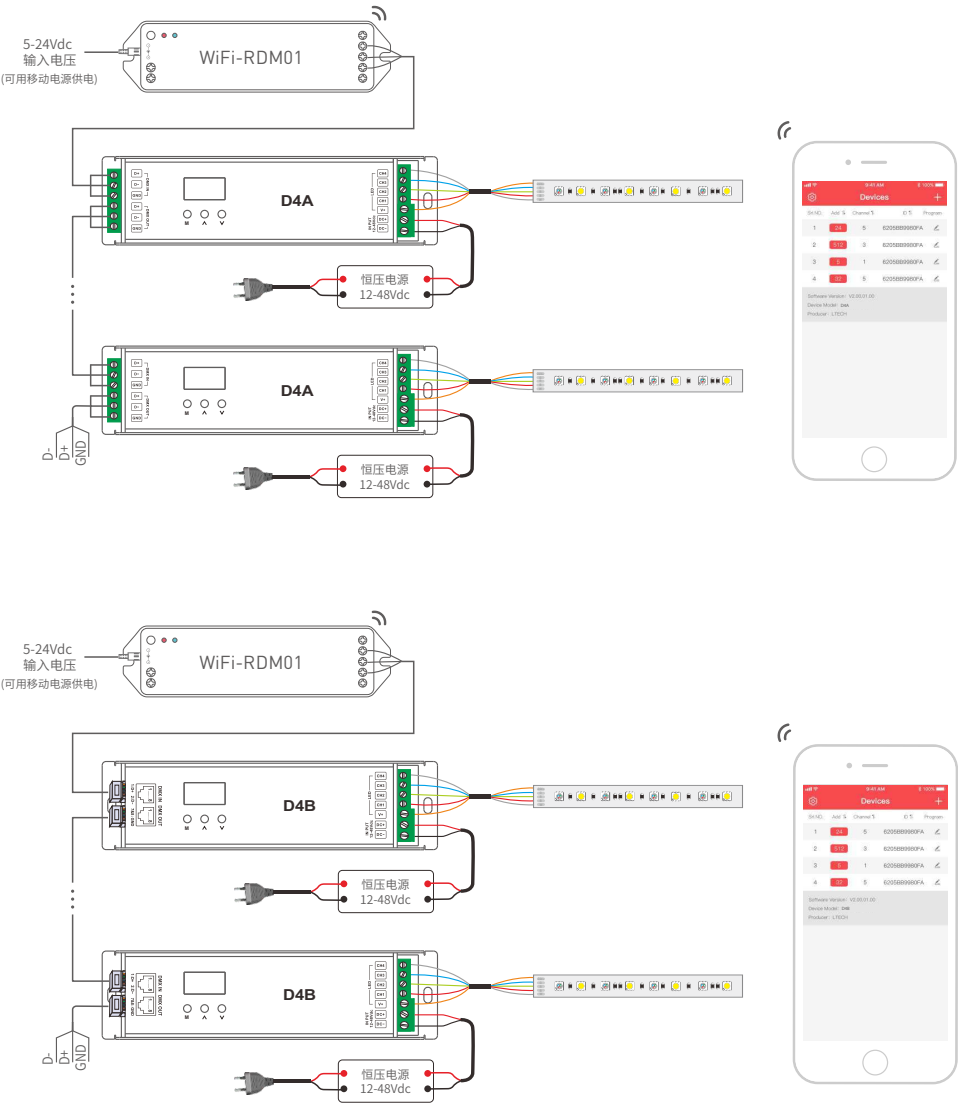


- * 超过32台DMX解码器连接需加DMX信号放大器，信号放大不能连续超过5次。当超过32台DMX/RDM解码器连接时，如需修改其参数设置，可添加1台RDM信号放大器，或者将其参数设置完成后，再添1~5台DMX信号放大器。
- * 当信号线较长或者线材质量等原因造成信号反冲效应影响使用，可以尝试在每路信号线末端连接0.25W90-120Ω终端电阻去解决。

搭配RDM编辑器使用

D4A、D4B可以与遵从标准RDM协议的地址编辑器配合使用。

建议使用LTECH的RDM编辑器(型号WiFi-RDM01),可实现手机远程浏览与设置参数等更多功能,连接图如下:



RDM编程器APP界面介绍

1.手机下载APP,与RDM编辑器连接成功后,即可通过APP设置D4A、D4B的调光范围等参数,具体请参看WiFi-RDM01的使用说明书。



APP

2.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:点击编辑按钮“”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

- 本产品请由具有专业资格的人员进行调试安装;
 - 雷特产品(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;
 - 安装时,避免靠近大面积金属物体,或堆叠摆放,以免信号干扰影响使用;
 - 避免安装在雷区、强磁场和高压区域;
 - 请检查使用的工作电压是否符合产品的参数要求;
 - 通电调试前,确保所有接线正确且牢固,以免短路损坏部件,触发事故;
 - 如果发生故障,请勿私自维修;如果有疑问,请联系供应商。
- * 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,请与供应商联系。

保修协议

- 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雷特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:
- 已经超出保修服务期;
 - 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;
 - 无雷特签订的合同或发票凭证。
- 1.修理或更换是雷特对客户唯一补救措施。雷特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.雷特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。